Governance of Urban Green Spaces in Lahore: Discourses and Institutional Change

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Declaration

I confirm that the work submitted is my own, except where work which has formed part of jointly authored publication has been included. The contribution of the author and the other authors to this work has been explicitly indicated below. I confirm that appropriate credit has been given within the thesis where reference has been made to the work of others.

The work presented in chapter six has been published on June 19, 2019 in the Journal 'Sustainability' as 'Prospects of Public Participation in the Planning and Management of Urban Green Spaces in Lahore: A Discourse Analysis'. This paper is a part of the PhD research conducted by me under the supervision and co-authorship of Jon. C. Lovett.

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Abstract

This study investigates the prospect of a transition from monocentric to polycentric governance of urban green spaces in Lahore. Monocentric governance is a linear and hierarchical structure where power and authority are retained by the central government. Contrary to this approach, polycentric governance denotes a structure comprised of many autonomous centres of decision-making. Governance of common-pool resources as a socio-ecological system is a complex and multi-dimensional process which requires a holistic approach such as polycentric governance. In a polycentric order, actors at different levels interact with each other and thereby effectively address the complexity of the system. However, many developing countries lack institutional structures and policies that can facilitate the participation of non-state actors in the governance of green spaces. The exclusion of non-state actors from the governance make these green spaces inaccessible to the general public through regulatory slippage or elite capture and raise issues regarding environmental and social sustainability.

This study uses a historical institutional analysis, combined with Q-methodology to unpack the discourses of governance and prospects of institutional change in Lahore. The historical institutional analysis reveals that the governance of urban green spaces in Lahore has been locked in rigid institutions and asymmetrical power relations due to the political-economic interests of the actors. Further, Q-methodology with a range of stakeholders reveals four discourses relating to institutional change: 'Public Participation as Efficient Management', 'Anti/Pro-Administrative', 'Leadership and Capacity building', and 'Decentralization or Elite capture'. The emergence of various discourses indicates the contested nature of the current landscape, where different actors have different interests and preferences. The principal barrier to institutional change is asymmetrical power relations between state and non-state stakeholders. However, the discourses indicate that the governance of urban green spaces is in the process of a transformation. Most of the non-state stakeholders are involved in collaborations, sharing resources and information and hence contributing to social learning processes. The

emergence of a public participation discourse indicates a shift in power dynamics with the potential to bring institutional change.

Table of Contents

List of Tables

List of Figures

Chapter 1. Introduction

1.1 Introduction

The 20th century has witnessed many efforts to find effective solutions to govern common-pool resources (e.g. forests, fisheries, water), which are threatened by increasing demands and needs of human populations. In the 1970s and 1980s, the idea of national governments controlling natural resources gained currency (McKay, 2004; Marshall, 2005). It was thought by the advocates of this approach that national governments could counter citizens' demand for resources (Hardin, 1968). It was argued that if this demand remains unchecked and unconstrained, it will lead to the destruction of the resources and as described by Hardin (1968), result in the tragedy of the commons. This approach, termed as monocentric governance, is characterised as a linear, hierarchical system of governance where power and authority are retained by the central government. However, this approach failed to gain greater acceptability as it led to public inaccessibility to the resources and thereby making it challenging to maximise or sustain their resultant benefits (Duit and Galaz, 2008; Marshall, 2005; Ostrom *et al.*, 1961; Ostrom, 2008; Ostrom, 2010). Ostrom *et al.* (1961) acknowledge the advantage of a monocentric system in reducing the transaction costs for the provision of collective goods. However, they argue that a monocentric system becomes ineffective at local levels due to complex bureaucratic and hierarchical structures. Ostrom *et al.* (1961) contend that this complexity renders monocentric arrangements unsuitable to localised public interests. It is argued that the governance of common-pool resources instead needs a holistic approach which engages a wide-ranging formal and informal institutions representing a broader set of actors at multiple levels of governance (Olsson et al., 2006; Ostrom, 2008; Agrawal, 2001; Armitage et al., 2010; Berkes, 2009; Foster, 2011; Imperial and Kauneckis, 2003; Janssen et al., 2006; Marshall, 2005; Pahl-Wostl, 2007; Andersson and Ostrom, 2008).

The quest for governance arrangements fully suited to local conditions led to development of 'multilevel' governance systems, linking horizontally as well as vertically, and, thereby, instrumental in coordinating the whole system (Olsson et al., 2006; Ostrom, 2008; Agrawal, 2001; Armitage et al., 2010; Berkes, 2009; Foster, 2011; Imperial and Kauneckis, 2003; Janssen et al., 2006; Marshall, 2005; Pahl-Wostl, 2007; Andersson and Ostrom, 2008). Gunningham (2009: 146) describes this shift as 'distinctively polycentric', indicating that the change in governance approaches allows better coordination at multiple levels and scale. Polycentric governance allows decision making consistent with local level preference and so more responsive to local demands and interests. Implicit in Ostrom's idea of polycentricity is the primacy of pluralism and diversity, promoting a culture of negotiation and commonly agreed solutions. In other words, social heterogeneity and diversity in the form of peoples' capabilities, knowledge and preferences become a resource instead of creating social disorder (Aligica, 2014). In natural resource governance, multilevel and polycentric systems provide solution for local issues with the support of higher-level institutions for coordination and information sharing thereby reflecting features of both centralised and decentralised governance (Duit and Galaz, 2008; Andersson and Ostrom, 2008). The present research investigates the prospects of polycentric governance as institutional design, necessary for the governance of common-pool resources in an urban context of a developing country. This study is using urban green spaces as a case study to understand the potential of polycentric arrangement for environmental and socially sustainable green spaces while addressing the issue as a socio-ecological problem.

1.2 Urban Green Spaces- A Case Study

Green spaces play a vital role for the well-being of a city, accruing all kinds of social and economic benefits to environmental gains (Bolund and Hunhammar, 1999; Tyrväinen and Miettinen, 2000; Chiesura, 2004; Bowler et al., 2010; Wolch et al., 2014). The United Nations has urged to "protect, restore and promote sustainable use of terrestrial ecosystems", under the

Sustainable Development Goals (UN, 2017 p, 48), thereby making green spaces and the ecosystem services part of the global agenda. However, with the current trend of urbanisation, rising population and resulting land-use changes, the UN global agenda remains a big challenge especially in the developing world where these spaces are on the decline in the cities (Fuller and Gaston, 2009; Haq, 2011; Kabisch and Haase, 2013; Kabisch et al., 2015). Therefore, maximising their positive aspects for human welfare through equitable distribution and sustainable use is a huge challenge for the policy-makers and practitioners given increasing pressure on space, resources and development (Colding et al., 2006; Borgström et al., 2006; Lyytimäki and Sipilä, 2009; Baycan-Levent and Nijkamp, 2009). The planning and management of urban green spaces are mostly centralised, using monocentric approaches. In many countries, the state monopoly over these resources increases the public inaccessibility, which raises questions relating to environmental justice and social equity (Smith, 2019; Boonchuen, 2002; Jennings et al., 2012; Wolch et al., 2014; Kabisch and Haase, 2014; Heynen et al., 2006; Ernstson, 2013). Such conditions need a different approach, preferably an approach which oversees an engagement of diverse stakeholder to identify needs, issues and their solutions that otherwise get ignored if approached through a traditional top-down planning method (Agrawal, 2003; Armitage *et al.*, 2009; Trimble and Plummer; Plummer *et al.*, 2012). This process requires organising governance at different levels, with polycentric institutional arrangements also featuring a network of individuals and organisations with self-organising capabilities (Berkes et al., 2000; Agrawal, 2001; Folke et al., 2005; Ostrom, 1990). The governance of urban green spaces has various decision-making centres at multiple-levels and scales such as development, land use, nature conservation, environmental degradation, climate change, and social functions in the city, all at cross-purposes instead of lending support to achieve a common goal. This disorder can be eased through changing the institutional design in favour of a polycentric order which can bring about a real change (Carlisle and Gruby, 2017; Marshall, 2009; McGinnis and Ostrom, 2012; Ostrom, 2010; Ostrom et al., 1961). The polycentric system lays the foundation of a conducive

relationship between actors from local groups to the national government working in a coordinated manner to achieve the goal of sustainable resource management yielding better policies and plans. The new arrangement can enhance collaboration and participation from all actors sharing power and responsibilities for sustainable urban green spaces (Carlisle and Gruby, 2017; Marshall, 2009; McGinnis and Ostrom, 2012; Ostrom, 2010; Ostrom et al., 1961). Researchers have found advantages and positive outcomes following a participatory approach, including provision of legitimacy to the governance regime, greater transparency to its action, a more equitable distribution of resources, increased political efficiency and the empowerment of individuals and civil society (Rydin and Pennington, 2000; Newman, 2005; Fung, 2006; Newig and Fritsch, 2009). The practice of non-state stakeholders' involvement has achieved a varying degree of success in many cities of the developed world over the years (Avritzer, 2009; Ernstson et al., 2010; Firth et al., 2011; Abay, 2014; Dang, 2018). Similarly, the practices in the realm of green spaces such as urban farming, allotment, community gardening and public parks pursued in a bottom-up fashion are multiplying especially in cities in the global North (Smit et al., 1996; Twiss et al., 2003; Ernstson et al., 2010; Rosol, 2010; Foster, 2011; Colding and Barthel, 2013). This approach hence is a part of efforts to not only achieve ecologically sustainable system through proper management and safeguarding of green spaces in cities but also ushering in a new form of intervention in urban politics and planning to create a just and equitable society (Foster, 2011; Colding, 2011; Radywyl and Biggs, 2013; Ismail and Said, 2015; Rutt and Gulsrud, 2016). However, in the global South, public engagement in local decision-making seems to have made only a little headway given the complexity of the issues and lack of political will to allow a change (Shackleton et al., 2002; Denhardt et al., 2009; Chado and Johar, 2016). In this regard, power politics is the main obstacle in the way of letting people engage and power-sharing. Various studies have underlined that with the strong presence of central government, the federal bureaucracy, weak local government and nominal involvement of civil society and the private sector, it is not possible to create effective environmental governance (Buchy and Hoverman, 2000; Singleton, 2000; Nelson and Agrawal, 2008). By

considering the politics on urban green spaces, this study explores the possibilities of transition from a monocentric system towards polycentric institutional arrangement featuring multi-stakeholders in the governance and management of green spaces in Lahore.

1.3 Statement of Problem

In the annals of history, Lahore (Fig 1.1) has been depicted as a 'City of Gardens'. The Mughal emperors and then British rulers built some of the most famous gardens and green belt in Lahore. These green spaces with their unique architecture, with different water features, impressive walkways, orchards and excessive plantation as its hallmark, continue to receive the admiration of historians (Dickie and Zaki, 1985; Koch, 1991; Wescoat Jr, 1994; Rehman, 2009; Rubin, 2009). Despite this historical background, the city cannot withstand its green structures, losing both in quantity and quality, which is quite behind international standards on the greenery. Lahore as the second largest urban centre of Pakistan faces all the challenges that are associated with a developing country (Mahboob and Atif, 1990; Qutub, 1992; Hussain and Baig, 1997; Mahmood *et al.*, 2011; Rana and Bhatti, 2018). With a rising population, urbanisation is a critical factor behind the land-use change, putting extra pressure on urban green spaces in Lahore (Shirazi, 2012; Shirazi and Kazmi, 2016). The diminishing quality and quantity of these green spaces have some severe consequences for the human and natural ecosystem, therefore, raising serious questions over the future governance of green spaces in Lahore (Shirazi, 2012; Shirazi and Kazmi, 2016).

In Lahore, Planning and management of urban green spaces are centralised and hierarchical. As highlighted in the previous section, the governance of urban green spaces needs an institutional design in favour of a polycentric order where all the actors from local groups to the national government work in a coordinated manner. The new arrangement will allow enhanced collaboration and participation from all actors sharing power and responsibilities for sustainable urban green spaces. Most developing countries like Pakistan with regard to public participation have little in common

with the classic model of participation by Arnstein (1969). According to Arnstein (1969), real participation can be achieved if the people are engaged at the two highest levels; agenda-setting and decision making, followed by implementation. In this 'ladder of participation', empowerment is possible when citizens and authorities have equal rights in this process. Lahore lacks this concept of public participation when compared with the Arnstein (1969) model, as here the public engagement has not gone beyond informing level (Hameed and Nadeem; Qureshi *et al.*, 2009; Nadeem and Fischer, 2011). Although the literature on public participation is replete with advantages for citizens and the government, moving up the participation ladder seems to be a big challenge for policymakers and practitioners in Lahore.
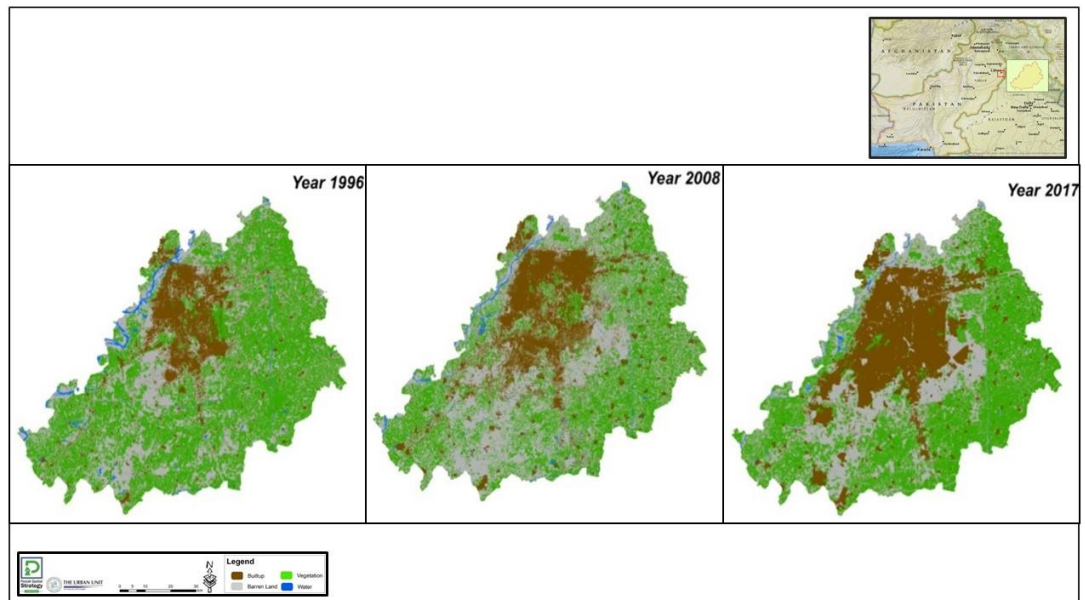
Figure 1.1 Land cover change in Lahore
Source: Urban Unit, 2017

1.4 Research Aim and Research Questions

This research is based on the theoretical framework of polycentric governance that can provide a good institutional design for the governance of green spaces in an urban context. Hence, this study intends to find out the prospects of institutional change towards polycentric arrangement for the governance of urban green spaces in Lahore. Traditional approaches of command-and-

control, as well as policies and management style, have been criticised for being inadequate, for taking into account complexities and uncertain nature of the existing systems (Faruqee, 1996; Ahmed, 2001; Hasan, 2007; Rizvi, 2011). Therefore, the focus of this research is to examine the potential of institutional change from command-and-control approaches to more bottom-up and participatory approaches in the governance arrangement. The new institutional arrangements can bring in its wake an array of new actors with self-organising abilities and empowered in the decision-making process.

Therefore, with this broader aim in place, the study presents its primary question as;

Q- What are the prospects of institutional change in governance arrangement from a monocentric, hierarchical system to polycentric governance for urban green spaces in Lahore?

This thesis, using urban green spaces in Lahore as a case study, looks at three inter-linked research sub-questions to address study's objectives (Fig 1.2). These questions address the underlying issues regarding the implementation of polycentric and collaborative processes as a transitional design while also having their implications at a theoretic-analytical level.

Q1. How have the institutions for governance of urban green spaces been developed in Lahore? What are their implications for urban green spaces as a socio-ecological system?

The objective of the first sub-question of this study is to provide the context for the overarching problem of the institutional inertia that depicts an anachronistic, highly centralised system of urban green spaces. It is critical to understand the origin of the current institutional design if a new beginning is to be made towards more environmentally and socially sustainable systems. Therefore, this study will use historical institutional analysis to provides a complete background of institutional development in Lahore and examine various factors, in the course of history, that hindered or facilitated the participatory approaches for the governance of urban green spaces.

Q2. What discourses surround the institutional arrangement for the governance of urban green spaces in Lahore, and what are their implications?

The second sub-question of the thesis will explore the prevailing discourses for the governance of urban green spaces in Lahore. This study takes discourses as a harbinger of change, characterised as a predominant pattern of thought and semantics on the part of stakeholders. Therefore, discourses will be helpful to understand stakeholders' perception and preferences towards institutional design, as well as their related problems and adequate solutions to them. Discourses can either undermine or strengthen an institution given their ability to mobilise power, and thus prompting a change in policy and institutional dynamics (Foucault, 1980; Hajer, 2002; Phillips *et al.,* 2004; Arts and Buizer, 2009). Therefore, this study focuses on discourses as an analytical component to determine stakeholders' perceptions and preferences for the governance of urban green spaces.

Q3. What factors enable and impede institutional change for polycentric governance for urban green spaces in Lahore?

The objective of the third question is to provide an analysis to evaluate the likelihood of change in institutional design from public ownership or state management to a polycentric system in the context of urban green spaces of Lahore. This sub-question will examine various factors that can facilitate or hinder this transition in Lahore by focusing on actors and their actions. These interactions among actors ultimately underline power dynamics concerning setting priorities, goals and policy formulation. Therefore, revealing actors' underlying preferences, practices, relationships, power and shared meaning for the governance of urban green spaces will provide a way to understand the prospects of institutional change in Lahore.

To answer these questions, this study will operationalise two approaches through analytical dualism; historical institutional analysis and discourse analysis, both deal with power dynamics in the system (detail in chapter four). Given the dual focus on both agency and structure, this research will provide a detailed account on explicit and implicit forms of power and provide a

nuanced analysis of the complexity associated with the transition towards polycentric governance for urban green spaces in Lahore.
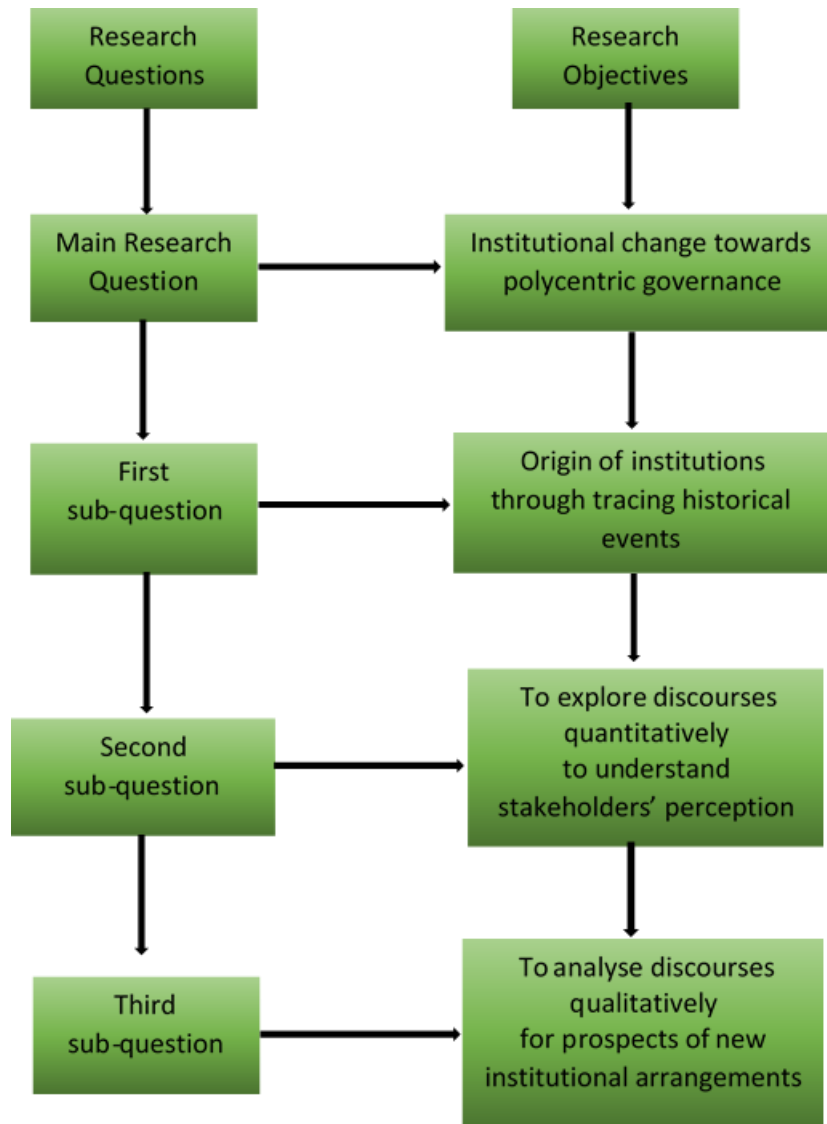
Figure 1.2 Research questions and objectives

1.5 Organisation of the Thesis

This thesis comprises eight chapters (Fig 1.3). The first chapter has provided an introduction, unveiling the background and motivation behind the research. It has further discussed the research objectives and its inter-linked research questions. The chapter is concluded by giving an overview of the thesis.

The second chapter will review the literature, concepts and theories relevant to urban green spaces for providing a theoretical and conceptual framework

for this research. This chapter will include various definitions, typology and multifunctional roles of urban green spaces. Through the chapter, various planning concepts which integrate green spaces as a part of the urban planning process will be discussed. Furthermore, this chapter will also highlight the limitation of urban planning theories and models which underlines the need for governance as a holistic approach to gain environmentally and socially sustainable urban green spaces. The chapter will conclude by suggesting polycentric, collaborative governance as a theoretical framework for urban green spaces in Lahore, which offers a promising prospect for change.

The third chapter will delineate the concept of polycentric governance as the main theoretical framework of the thesis. It will also elaborate theories on the institutional change that is important to understand the process of transition from monocentric governance to polycentric governance. Through reviewing the literature on polycentric governance and institutional change, the chapter will also discuss some knowledge gaps in the literature which this study will address during the conduct of this research.

Chapter four will furnish the details of the research design and methodology applicable for analysis of urban green spaces in Lahore. This chapter will provide the research philosophy based on ontology and epistemology, which has been used in the study. This chapter will also present detail for both quantitative and qualitative tools for data collection and analysis. Before the conclusion, the other research considerations such as positionality of the researcher, ethical considerations, validity of research and limitation will be discussed.

Chapter five will cover in-depth the process of path dependency to examine the development of institutions in Lahore. This chapter will use document analysis as a methodological approach to trace the historical events around institutional development in Lahore. In the process, it will identify different contextual factors which hinder/ facilitate public participation in the governance process. This chapter will discuss to what extent the institutions

in Lahore have been locked into power asymmetries and its implications for urban green spaces.

Chapter 1
Introduction

Literature Review

Chapter 2
Urban Green
Spaces

Chapter 3
Polycentric Governance
&
Institutional Change

Chapter 4
Methodology

Analysis

Chapter 5
Historical Institutional
Analysis

Chapter 6
Discourse Analysis
(Semi-Quantitative)

Chapter 7
Discourse Analysis
(Qualitative)

Chapter 8
Conclusion
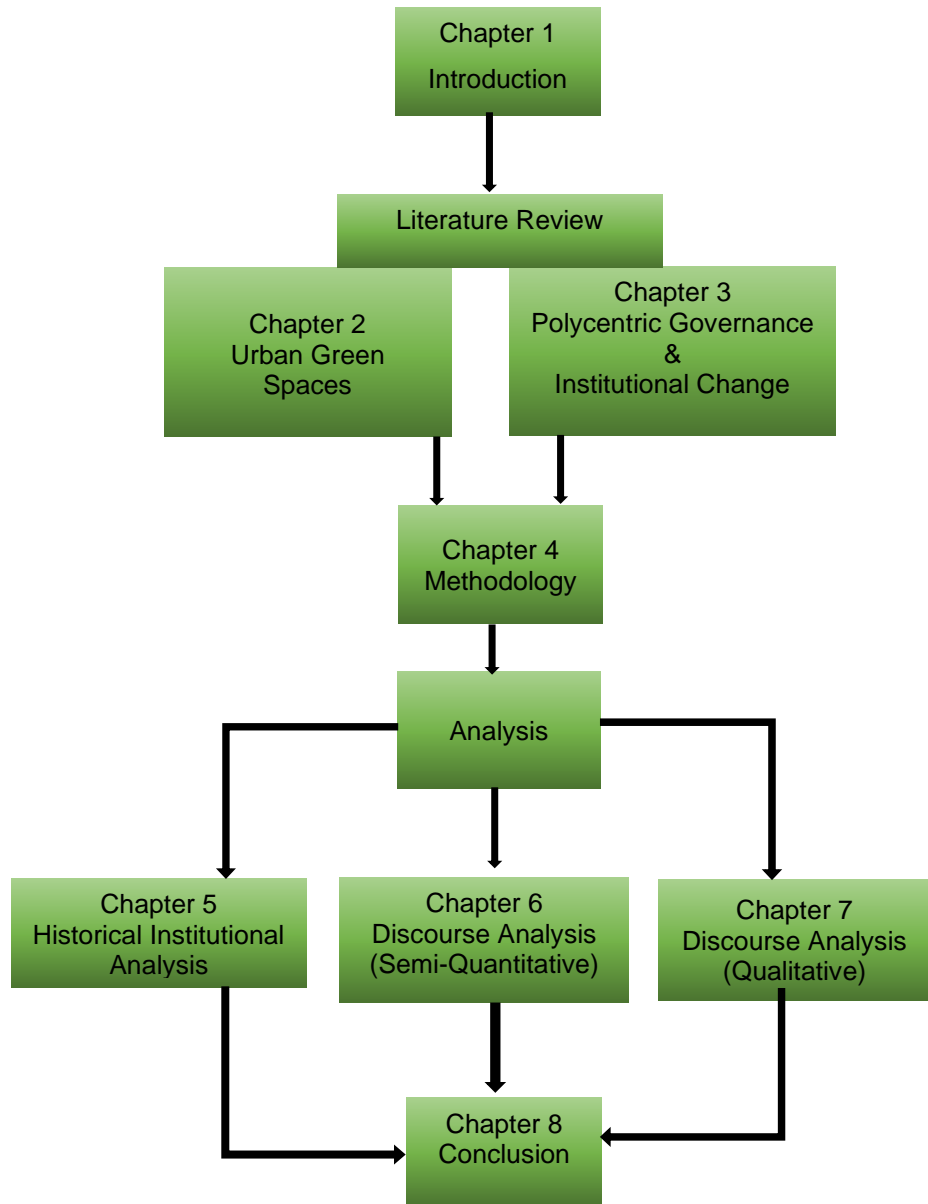
Figure 1.3 Thesis organisation

Chapter six will explore various prevailing discourses on governance and management of the urban green spaces in Lahore. The chapter will provide a detailed account on Q-methodology for identifying discourses for urban green spaces in Lahore. Further, through the chapter, the results will be discussed in the light of existing literature and with its implication on the governance of urban green spaces in Lahore. Overall this chapter will contribute empirically,

gauging various discourses which have an impact on governance and desired institutional change.

Chapter seven will examine the prevailing discourses qualitatively with their explanatory power to understand how problems are being framed and how institutions can develop in response to this problem-framing. It will investigate participants' views, underlying preferences, practices, actions and interactions to understand the prospects of institutional change in Lahore. Therefore, this chapter, through an in-depth analysis of discourses, will identify different factors which can facilitate or hinder the institutional change.

Chapter eight will provide a summary and conclusion of the study with the prospects for developing a new institutional design for governance and management of urban green spaces in Lahore. Overall, it will be helpful to identify what institutional conditions are necessary to bring about change in socio-ecological systems. It will draw out lessons and identify recommendations for policy and practice to support environmentally and socially sustainable green spaces in Lahore.

Chapter 2. The Governance of Urban Green Spaces

2.1 Introduction

Urban green spaces are vital for a liveable city as they offer numerous environmental, social and economic benefits for residents to improve their quality of life. The governance of urban green spaces as a social-ecological system poses challenges for practitioners and policymakers. The complexity of planning and managing urban green spaces has increased due to the uncertainty of the ecological system and the social and political complexity in an urban context. This chapter provides a literature review of urban green spaces with its implication on planning and governance. The first section of this chapter will provide green spaces' definitions and typology. Section two will give an in-depth account of the benefits of green spaces in an urban context. Section three will explain the main approaches for spatial planning for urban green spaces and, in the process, it will identify their shortcomings and limitations, underlining the need for governance approach for sustainable urban green spaces. Section four will explain the various perspectives that have influenced and shaped up the current governance discourse on urban green space at a global level. This section will also explain the central concept of this study, collaborative governance of urban green spaces which provides the 'lens' through which the planning and development of green spaces are viewed. The conclusion of the chapter will provide a summary and the justification of using polycentric, collaborative governance as a theoretical framework for this study.

2.2 Urban Green Spaces: Definitions and Typology

Different terms are attributed to urban green spaces, explaining them from different perspectives of how they are conceptualised and valued. The most commonly referred terms include green space, open space and public space (Taylor and Hochuli, 2017). Dunnet *et al.* (2007: 8) defines urban green space as "predominantly unsealed, permeable, soft surfaces such as soil, grass,

shrubs and trees together with buildings and hard covered surfaces belonging to them". This definition explains green spaces as large covered areas with vegetation, along with some concrete structures inside them. Coles and Grayson (2004: 2) provide a more comprehensive definition of urban green spaces as:

> public green space located in urban areas, mainly covered by vegetation which are directly used for active or passive recreation, or indirectly used by virtue of their positive influence on the urban environment, accessible to citizens, serving the diverse needs of citizens and thus enhancing the quality of life in cities or urban regions.

Various definitions of urban green spaces (Taylor and Hochuli, 2017) highlight its two main characteristics; these are the areas covered with vegetation, and secondly, they are easily accessible for human use. Based on these two characteristics, the scope of urban green spaces expand beyond parks and gardens and includes different types of land with vegetation, including natural and man-made features (Dunnet *et al.*, 2007; Rall *et al.*, 2015). The new additions have come to highlight a few important forms of green spaces which have been neglected earlier (Rall *et al.*, 2015). The typology of green space varies, subject to the social, political and environmental context of the city. A review of the available literature has revealed that Lahore has different types of urban green spaces (Nespak, 2004). The main categories include the following:

- Public parks at different levels: regional parks, town parks, neighbourhood parks, mohalla parks,
- sports and playgrounds at city and community level,
- theme and amusement parks,
- semi-private spaces such as green spaces in residential, institutional and industrial areas,
- street trees, roadside plantations, riverside and plantation along the canal,
- graveyards.

Although a variety of green spaces exist in Lahore, investigations conducted on this count brings to fore that among the various forms of urban green spaces, much emphasis is given to parks and main roads plantation. The types of green spaces present in a city are the most important factor in their characterisation and the functions they provide to benefit to the city residents.

2.3 Benefits of Urban Green Spaces

The benefits accrued from various types of green spaces include environmental, social, economic and structural benefits.

2.3.1   Environmental Benefits

Green space provides an array of environmental and ecological benefits. Research has shown that urban green spaces provide a healthy city environment by improving air quality (Tyrväinen *et al.*, 2005; Rakhshandehroo *et al.*, 2015; Baycan-Levent and Nijkamp, 2009). In addition to this primary environmental function, urban green spaces provide shade, windbreaks and enhance ventilation within the city (Tyrväinen *et al.*, 2005; Rakhshandehroo *et al.*, 2015; Baycan-Levent and Nijkamp, 2009). Urban green spaces reduce noise pollution, which is a hallmark of an urban centre (Rakhshandehroo *et al.*, 2015; Bolund and Hunhammar, 1999). Another vital function of urban green spaces is to mitigate the heat island effect (Sani and Badri, 1988; Takano et al., 2002; Oliveira et al., 2011; Yu and Hien, 2006; Park et al., 2017). A study conducted in Beijing shows that 50% green cover in a city can significantly reduce the summer heat effect (Li *et al.*, 2004). Urban green space can mitigate the effects of some of the disasters such as storms, earthquake, floods, debris flow, and droughts (Bao and Chen, 2004; Tang *et al.*, 2008).

Another important function of urban green spaces is the provision of natural habitats for birds and other wildlife (Jansson, 2014; Zhang *et al.*, 2015). Surprisingly, cities can be rich in species and biodiversity as compared to the surrounding countryside (Beatley, 2000; Breuste *et al.*, 2008). However, this is only possible when these green spaces are managed with some conscious

efforts to ensure a well-connected network of green spaces (Konijnendijk et al., 2013; Breuste et al., 2008; Herzog, 2016).

2.3.2 Social Benefits

Besides environmental and ecological services, urban green space contributes immensely in social spheres, thereby, benefitting human society (Chiesura, 2004). Green spaces attract residents for recreational pursuits and hence, a source of social integration (Tyrväinen *et al.*, 2005; Zhou and Parves Rana, 2012). Urban green spaces go a long way in preserving neighbourhood relationships and social cohesion within the community by providing an opportunity for connectivity among residents (Zhou and Parves Rana, 2012; Konijnendijk et al., 2013; Yu and Hien, 2006). In multicultural societies, urban green spaces are an ideal source of social integration. These urban spaces in such societies are considered to be the best places for people to interact with each other socially, supporting a wide range of activities that promotes communal sense (Chen & Jim, 2008; Maas et al., 2009). Urban Green Space Taskforce (Taskforce, 2002) recognises that some urban green spaces host national and cultural festivals and other local celebrations and thereby, providing opportunities for greater social integration among the people interacting during these activities. However, It is also recognised that if some cultures are neglected or excluded in the parks' provision, it could lead to the potential for conflict among social groups (Low *et al.*, 2009). Given these cultural advantages, a good quality green space tailor-made to the needs, preferences and physical capabilities of the local community can play a significant role in overcoming issues regarding social inequity within the society (Wolch et al., 2014; Van Herzele and Wiedemann, 2003)

Cultural and historical features of parks and green spaces, as well as artefacts, endow a city with a unique identity. Urban green spaces also harbour burial grounds, monuments, historical buildings and hence regarded as a part of cultural, historical and national heritage (Taskforce, 2002). Therefore these spaces can be recognised as the ideal places for the display of cultural legacies and historical landmarks to the entire world which has the real potential of not only brightening the prospects of tourism but, also a sense

of belonging and pride among the local communities. Cultural moorings give people emotional attachment and sense of ownership, which also encourage citizens to engage in their neighbourhood and city-level parks and green spaces (Konijnendijk *et al.*, 2013). Another determinant from the cultural side is respect for the local landscape, which allows the local values to be preserved in ecological design (Tzoulas *et al.*, 2007). Educational functions of urban green spaces are also drawing attention from scholars (Thompson, 2002). For children, urban green spaces are an important source of environmental education as they find nature unfolding before their eyes (Zhou and Parves Rana, 2012; Jansson, 2014; Thompson, 2002).

Nature has a significant influence on both physical and mental health of a human being as evident many recent scientific studies establishing its measurable effects (Jansson, 2014; Kaplan, 1993; Ulrich, 1984). Even Groenewegen *et al.* (2006) called them as 'Vitamin G'. As human beings experience nature, the phenomenon highly contributes to the psychological and mental health of residents (Zhou and Parves Rana, 2012). Encounters with nature give a unique sense of relaxation (Tyrväinen *et al.*, 2005). Sentiments such as pleasure, enjoyment, relaxation, comfort and calmness are being promoted in this encounter (Ekkel and de Vries, 2017; Nutsford *et al.*, 2013). Research has established the myriad advantages of green spaces on mental health such as relieving mental fatigue (Nutsford *et al.*, 2013; Shanahan *et al.*, 2015) enhancing cognitive faculties, improving work stamina (Lottrup *et al.*, 2013) and decreasing stress (Jansson, 2014). Research indicates that when people get involved in physical activity in a park or green space, they feel more refreshed, energetic and reduce tension, confusion, anger and depression (Korpela *et al.*, 2010; Lee *et al.*, 2015). People living close to green spaces are healthier (Jansson, 2014; Konijnendijk *et al.*, 2013). Indeed closeness to green space encourages people to walk and directly affects their health and life span (Takano *et al.*, 2002). Moreover, closeness to green space helps young people counter obesity (Nielsen and Hansen, 2007). People regularly exercising in green spaces are less likely to become obese and have a better health condition (Coombes *et al.*, 2010).

2.3.3 Economic Benefits

The benefits of green spaces can be defined as "the total amount of welfare that nature generates for society", which includes all its social, environmental and financial dimensions (Rodenburg *et al.*, 2001: 106). Urban green space has some direct and indirect economic advantages. The direct economic benefits are accrued from the produce of urban agriculture and horticulture industry (Driver *et al.*, 1980). In addition to these, employment opportunities and tourism are also direct benefits (Hobden *et al.*, 2004). Travel and tourism are a rapidly growing industry with the potential of contributing jobs in the city. Urban open space attracts tourists and promotes outdoor recreation, bringing an additional and direct source of revenues to its management organisations (Konijnendijk *et al.*, 2013; Dodds and Joppe, 2001). Nowadays, towns compete for investment and attracting businesses, and green spaces can play a significant role in this regard (Konijnendijk *et al.*, 2013). A study has found enterprises' preference for urban green spaces, parks and recreation when picking a new business location (Serret *et al.*, 2014; Lottrup *et al.*, 2013). In a study of small, local stores in the USA, people were willing to pay more in areas where trees and other green elements were well maintained (Wolf, 2009).

However, more significant benefits are those gained through indirect means without any market-price (Tyrväinen and Väänänen, 1998). Various studies have found a direct relation between green spaces and nearby property values (Jansson, 2014; Kong et al., 2007; Czembrowski and Kronenberg, 2016). Crompton (2001), through his research, finds a 20 percent increase in prices of residential schemes located close to green space. In an urban environment, if the urban green space designed strategically, they can work as technology (Li *et al.*, 2015). Urban green spaces can be used strategically for flood control, rainwater retention and natural purification (Baycan-Levent and Nijkamp, 2009; Zhang *et al.*, 2012; Mentens *et al.*, 2006). The concentration of trees contributes to reducing the heat-island effect, saving the energy expenses that would otherwise be needed for this purpose (Zhang *et al.*, 2014). Urban green space on another level benefits by accommodating

organic waste which serves as fertilisers, thereby, helping urban green space meets needs for soil amelioration (Deelstra and Girardet, 2000).

In order to highlight the value of urban green spaces, numerous studies have measured a monetary value to indirect benefits of green spaces (Schäffler and Swilling, 2013; Lo and Jim, 2010; Tyrväinen, 1997; Zhang et al., 2012). Natural capital accounting is being practised as means of showing the monetary value of ecosystem services at different levels by quantifying the flow of services from these assets (Hein et al., 2015; Obst, 2015). A report on natural capital accounting of green spaces of London has estimated the cost avoided by NHS at £950 million annually (VividEconomics, 2017). This value is based upon the prospects of disease prevention and improved mental health due to access to parks and extra physical activity (VividEconomics, 2017). Similarly, recreation in parks accrues an annual economic benefit of £930 million (VividEconomics, 2017). Hence, by highlighting the real value of the urban green spaces' services through giving them monetary value, it is emphasised to include them in broader planning agendas and policy-making process (VividEconomics, 2017; Obst, 2015).

2.3.4   Structural Benefits

The natural landscape, including urban green spaces, benefits urban planning and design by defining the urban structure and urban form (Tyrväinen *et al.*, 2005). The concept of using green space to define urban structure and city development has adopted in different forms such as the Linear City Garden City, Green Belt Plan, all along with history. As an architectural tool, parks and urban green spaces are mostly used in urban planning to separate urban zones (Tyrväinen *et al.*, 2005). Plants are used to form walls, canopies or flower bed of different heights and densities with architectural features (Tyrväinen *et al.*, 2005). Likewise, vegetation and urban green spaces have roles in traffic engineering to organise traffic on more efficient and smooth lines. Using urban green space in planning and designing the traffic network is an established practise going on for a considerable time (Zhu *et al.*, 2006). Well-designed streets and public spaces defined by green spaces to promote

a safer environment by reducing vehicle speeds and use and by encouraging walking and cycling (Tyrväinen *et al.*, 2005; Lwin and Murayama, 2011).

In a nutshell, urban green spaces are beneficial in more than one way to the city and its population. However, the city planners have a very little consideration to urban green spaces with its ecosystem services benefitting to both ecological and social systems in the city (Cilliers, 2015; Cilliers and Timmermans, 2014). Most often, the urban green space planning is one-sided, focusing on economics and aesthetic benefits much to the exclusion of ecological and social benefits as perceived by different stakeholders (Yli-Pelkonen and Niemelä, 2005). Urban green spaces need a balanced approach with acknowledgement of the difference of interests and preferences between stakeholders over urban green spaces and its associated benefits (Buizer and Van Herzele, 2012). Hence, the main objective of urban green space planning needs to be balancing out competing and conflicting interests, needs and demands. Therefore it needs to design policies and plans that ensure integration of park and all other types of green spaces, with their associated benefits, as demanded by different stakeholders in the system (Buijs et al., 2018; Buizer and Van Herzele, 2012; Buijs et al., 2016)

2.4 Development Models and Theories: A Substantive Aspect of Urban Green Spaces' Planning

Conventionally, urban green spaces' planning is a part of urban land-use planning. Therefore, urban green spaces' planning depends on broader urban planning procedures and policies, and to what extent it promotes the natural landscape in the city. The urban green space as a part of spatial planning mainly uses quantifiable measures of land for the estimated population (Roy *et al.*, 2012; Badiu *et al.*, 2016; Fuller and Gaston, 2009). There are some international recommended quantitative standards to measure the adequacy of the green spaces for the provision of a safer and healthier environment (Badiu *et al.*, 2016). For example, the World Health Organisation (WHO) has suggested $9m^2$ green space per capita for healthy quality life (WHO, 2012).

Natural England's (2010) recommends 20m^2 per capita as a standard in the UK. It also emphasises to the provision of green spaces within 300 meters of accessibility for the residents (ANGSt, 2010). As regard to developing countries, these international standards are not observed, resulting in many environmental and social problems (Gupta *et al.*, 2016). In Lahore, there is a lack of research on the per-capita provision of green space. However, the Master plan 2021 has set a target for Lahore at 5 m^2 per capita (Nespak, 2004) which is already very low when compared to international standards.

The expansion of the ecological knowledge and concerns about environmental quality provide different theories and models on spatial arrangements of urban green space for the development and sustainability of cities (Badiu *et al.*, 2016; Niemelä, 1999; Cowell and Lennon, 2014). Ecological planning is based on the idea of making changes in the landscape, in a way, that can balance out the human action with the natural processes, and not to detriment each other (Niemelä, 1999). Greater focus on ecological knowledge in planning, however, is not a new phenomenon. Much of the credit in this regard goes to some well-known regional planners such as Patrick Geddes and Benton MacKaye for introducing Garden City Theory (Baycan-Levent and Nijkamp, 2009). Later, Ian McHarg further developed the ecological approach through his work 'Design with Nature, which has been followed by many scholars all over the world. With the advent of different ecological approaches, many green space models have been surfaced such as garden city (Richert and Lapping, 1998), green heart, green wedges (Thayer, 1994; Kühn, 2003), green belt (Kühn, 2003), green infrastructure (Benedict and McMahon, 2002).

2.4.1 Linear City

In 1882, the concept of the linear city (Fig 2.1) was conceived by Spanish civil engineer Arthuro Savia Y Mata. This concept envisages an elongated urban formation along with the transportation system. This urban model features green spaces as an important planning tool running parallel to the city in the form of parks, gardens and forest land and some cases it also includes vast agricultural lands (LeGates, 2004). Mata believed that this concept could

manage urban growth more efficiently by spreading the population on a linear basis as compared to the concentric form of the city liable to urban sprawl (LeGates, 2004). The Linear City concept was applied by many countries including Spain (19th century), Soviet Union (1920s), and some cities in Poland.

Figure 2.1 Linear city concept
Source: Soderholm, 2016

2.4.2 Garden City

Initially, the "Garden City" concept (Fig 2.2) was put forth by social thinker Ebenezer Howard in 1898, which later became the leading model of modern urban planning (Sharifi, 2016; Clark, 2003). It was the first time someone projected the concept of a city where people live in harmony with nature. The garden cities harbour areas of residence, industry and agriculture in a well-proportionate manner. It features public parks, recreational areas, green belts and agricultural lands, extending from centre towards periphery areas as network connecting the residential areas (Clark, 2003). Letchworth (UK) was the first area to embrace the garden city as a practical approach in 1903. However, its extensive application was witnessed in 1944 when the concept was applied in Greater London. After this plan, it became a popular concept followed in many small and large cities (Clark, 2003).

2.4.3 Green Belt

Greenbelt (Fig 2.3), has its origin from Howard's utopian city, but later in 1930, it became a useful land-use planning tool to deal with the rapid urbanisation

of the city. The greenbelt concept was evolved and developed in the UK though later it was adopted by other countries (Kühn, 2003). In London, the government created greenbelt zones to check urban sprawl and provide recreational opportunities for the local population (Amati and Taylor, 2010).
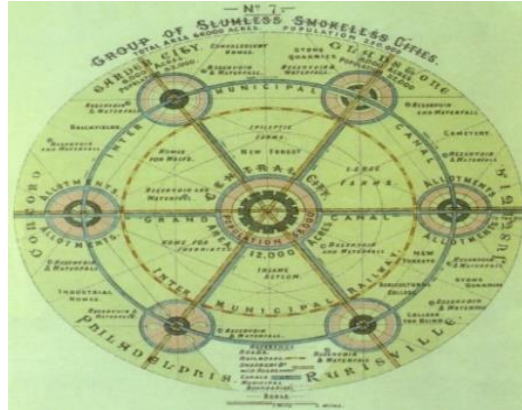
Figure 2.2 Garden City
Source: Howard, 1902
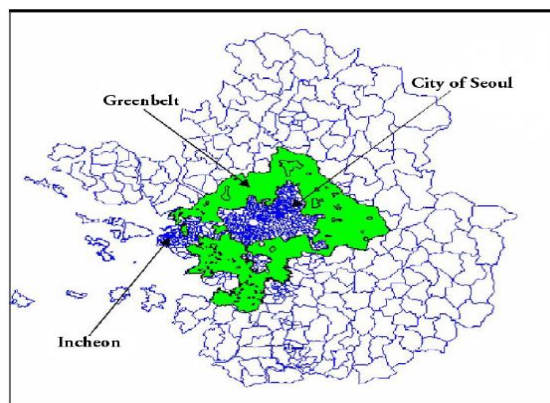
Figure 2.3 Green belt in Seoul
Source: Bengston and Youn, 2006

2.4.4 Greenway/ Green Wedge /Green Finger

The concept of Greenways refers to open spaces parallel to natural or man-made linear structure in the city. The idea of Greenway was first introduced in America in 1987. The idea was based upon greenbelts which further extended to connects parks and natural landscape with populated areas (Searns, 1995). This concept gained currency in parts of the world including China and Europe. However, in Europe, it has been known as Green wedges, and Green Fingers (Fig 2.4). The green wedge and green finger to a great extent are variants of greenbelts though all of them have a common objective, controlling urban sprawl. However, the main advantage of the green wedge/finger model

over the greenbelts model lies in their functions that promote accessibility to green space for residents primarily in the inner-city (Caspersen *et al.*, 2006). Green Wedges and Green Fingers are very popular in Copenhagen (Denmark), and many other European cities, like Stockholm (Sweden) and Helsinki (Finland) also applied Green Finger model as its urban greening policies.
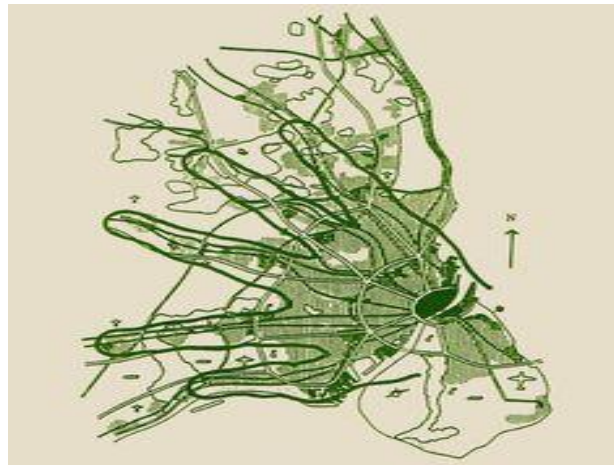
Figure 2.4 Green Finger Plan
Source: Vejre *et al.,* 2007

2.4.5 Green Structure/ Green Infrastructure

The concept of Green Structure (Fig 2.5) emerged in Europe in the 1980s as an urban planning model. It includes all types of green spaces such as public parks, gardens, sports grounds, allotments, recreation fields and woodlands in the form of network (Tjallingii, 2005). The green structure has become a vital part of the urban planning that provides not only physical infrastructure in the urban natural environment but also a social infrastructure meant for social activities and benefits (James *et al.*, 2009). Some prominent examples benefitting from the Green Structure are the Dutch cities, which included this structure as the main component of their Nature Policy Plan (Beatley, 2000). In 1999 America too adopted the concept as Green Infrastructure, meant to perform both ecological and social functions by integrating various natural and man-made features. Most developed countries use urban green infrastructure (UGI) to develop networks of urban greenspaces based upon four fundamental principles: networking of inter-linked greenspaces, promoting multifunctionality of greenspaces, combining nature and built environment in

the city, and social inclusion through public participation (Buijs et al., 2018; Buijs et al., 2016; Pauleit et al., 2019). However, UGI planning approaches despite its successful implementation across Europe and elsewhere still faces some real challenges (Davies and Lafortezza, 2017; Buijs et al., 2018). UGI planning lacks the adaptive capacity to deal with governance issues due to its limitation to take into account efforts by active local groups (Buijs et al., 2018; Buijs et al., 2016; Buizer and Van Herzele, 2012).
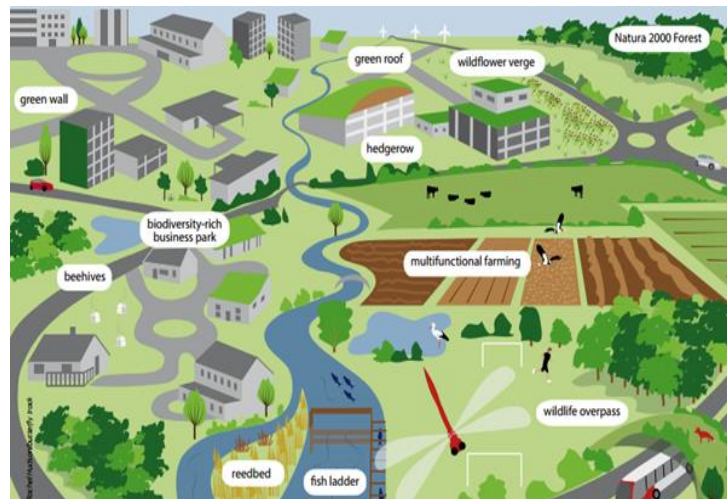
Figure 2.5 Green Infrastructure

Source: European Commission, 2013 (European Commission,

Maruani and Amit-Cohen (2007), in a study of a comparative classification framework for urban green spaces' spatial models, identifies nine models for planning (Fig 2.6). However, they found that no one model can perform all the functions and fulfil all the needs of society. They argue that in an urban context, it is crucial to employ the ecological model as regenerative measures. However, they also emphasised that in addition to the inherent characteristics of these models, it is essential to consider some external factors such as prevailing institutional design and arrangements. In other words, having a useful set of urban green spaces is not only a matter of planning, but it needs a holistic governance approach (Maruani and Amit-Cohen, 2007).

In summary, a significant shift is noticeable in urban planning theories and models which depicts a major change of perspective, from expert-driven technical solutions to more emphasis on addressing politically embedded societal issues (Schmitt and Wiechmann, 2018; Mazza, 2002). In the

emerging situation, planning has become part of governance practices, registering a shift from the physical to the political aspect of the planning
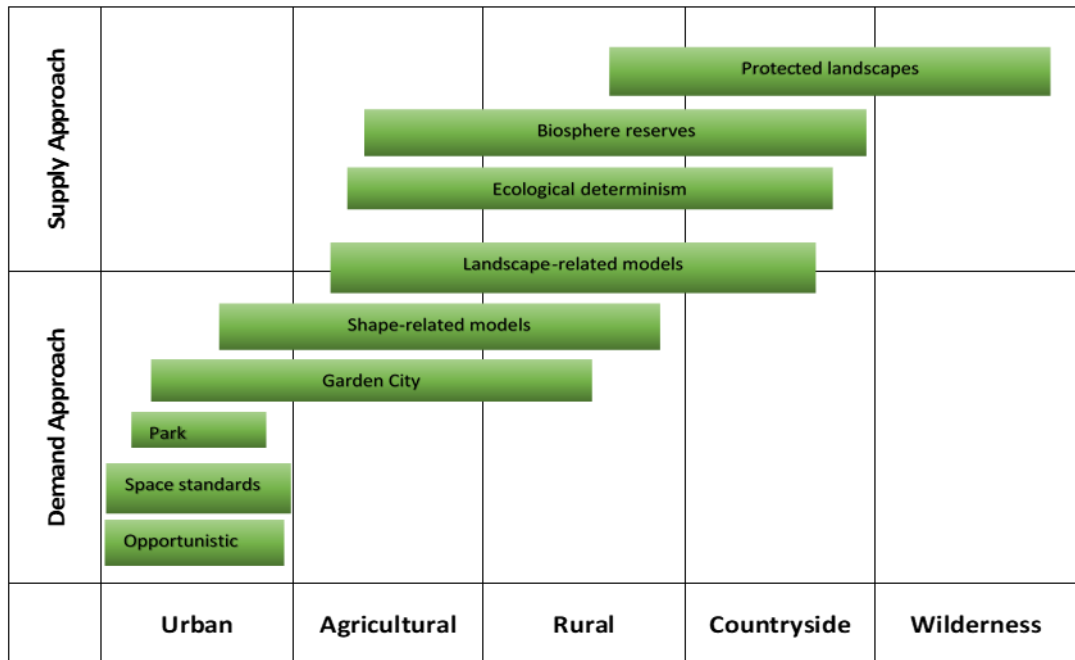
Figure 2.6 Classification of planning models

Source: Maruani and Amit-Cohen, 2007

process (Schmitt and Wiechmann, 2018; Buijs et al., 2018; Buizer and Van Herzele, 2012). Healey (2003: 104) characterises planning as "a governance activity occurring in complex and dynamic institutional environments, shaped by wider economic, social and environmental forces that structure, but do not determine, specific interactions". This shift shows planning as more of a function of governance which cannot merely be done by experts and trained planners (Healey, 2006; Healey, 2003)

2.5 Collaborative Governance of Urban Green Spaces

The concept of sustainable urban development and its three dimensions (socio-cultural, environmental and economic) has brought into limelight the urban green space and the multiple benefits accruing from these resources (Chiesura, 2004). The planning of urban green spaces as a land resource, mostly inclined to its economic dimension, thereby ignoring essential aspects

such as environmental and social issues (Wolch *et al.*, 2014; Rigolon, 2016; Jennings *et al.*, 2012). The concept of social sustainability in planning ensure fair access to natural vegetation enabling people to benefit from the tripartite dimensions of green spaces (Wolch *et al.*, 2014; Rigolon, 2016; Jennings *et al.*, 2012)

The planning of urban green spaces is much more complicated as compared to non-urban green spaces falling under the rural category. In rural areas, people depend directly on these green spaces for their livelihood (e.g. agriculture, forests) and hence are more forthcoming in providing their feedback (Heubach *et al.*, 2011). As such, it becomes a rather simple and straightforward practice with the local people to develop institutions, norms or taboos that support those services and hence their survival (Heubach *et al.*, 2011). However, urban citizens are far less dependent on their local ecosystems along with the fact that urban green spaces provide less tangible benefits such as space for recreation and improved air quality (Konijnendijk et al., 2013; Nicholls, 2004; Thompson, 2002; Tyrväinen et al., 2005). This scenario renders the choice of green areas' utilisation more of a matter of taste and culturally nurtured values, mostly imbibed by those with the higher level of economic and cultural interest (Özgüner, 2011). However, neglecting the values of others can cause unfair outcomes underline the planner's inclination towards economic factors while ignoring other stakeholders in this process.

Furthermore, the urban context introduces heterogeneity of land-use, which result in competition over each patch of land (Cadenasso *et al.*, 2007; Swyngedouw and Heynen, 2003). A variety of services, such as housing, transport, industry and commerce, sanitation systems, along with urban parks and greenery are locked in competition for land use, making the available urban space a rare and profitable commodity (Cadenasso *et al.*, 2007; Swyngedouw and Heynen, 2003). The management of urban green spaces is prone to the politics of the city, creating chances for the more powerful stakeholders and thereby, resulting in unfairly distributed and inaccessible green spaces (Smith, 2019; Boonchuen, 2002; Jennings et al., 2012; Wolch et al., 2014; Kabisch and Haase, 2014; Heynen et al., 2006; Ernstson, 2013).

The urban green spaces as a traditional public good (non-rivalrous and non-excludable) are considered an accessible resource for all sections of society. Hess and Ostrom (2003) have divided the resources into four categories of goods based upon their characteristics of being rival and excludable. These categories are; public goods, private goods, common goods and club goods (Fig 2.7) Public goods are resources that are non-rival and non-excludable. The non-exclusivity refers that it is very difficult to exclude someone from using a good. Whereas the non- rivalry implies that the consumption of a good by one person does not limit the consumption by another person. Therefore, the consumption of such goods cannot be differentiated by the wealth or social status or the preferences of individuals in society (Hess and Ostrom, 2003). However, most of the resources are not unlimited, so their use by each additional user reduces the available amount to others and thus leads to competition in their use.

	Excludable	Non-Excludable
Rival	Private Goods "Typical goods" (e.g. Food, clothes etc.)	Common goods "Common-pool resources" (e.g. Mines, fisheries, forests etc.)
Non- Rival	Club goods "Artificially scarce goods" (e.g. Cable, TV, Private parks, Cinemas etc.)	Public goods "Collective goods" (e.g. Air, News, Sunshine etc.)

Figure 2.7 Types of goods/resources
Source: Hess and Ostrom, 2003

The urban green spaces are a traditional public good for being non-rivalrous and non-excludable. However, they share these properties only up to a point. Under conflicting development priorities, limited government budgets, and increasing urbanisation, urban green spaces become open access or private good. The results in this regard are quite evident, either permitting the use of the green spaces only for a privileged class or ineffective management, which results in depletion or degradation of resource. It ultimately hinders public

access to these green spaces by diminishing the quality and quantity of public spaces. Foster (2011) terms the ineffective management of these resources a regulatory slippage. According to her, the slippage results when a government lacks a mechanism and resources to enforce its regulatory standards for both quality and quantity of urban green spaces. In turn, the resource starts degrading and lose its attraction for its users. The prime examples of regulatory slippage can be vandalised equipment, broken infrastructure, waterlogged grounds, scant grass, polluted water in ponds and lakes, and littering in the parks. In this situation, parks and green spaces become liable to criminal activity and hence considered unsafe and dirty (CABE, 2005). The conditions mentioned above can lead to 'tragedy' on the part of users as they end up having parks and green spaces plummeting both in quality and quantity. A local government could resort to regulatory slippage when confronting a resource crunch, and there are competitions for funds to meet local needs (Foster, 2011). In such a competition urban green spaces and parks becomes a low priority area, getting hardly any attention from the state (Foster, 2011; Dempsey and Burton, 2012).

Privatisation or commodification of green spaces is another strategy adopted by the local state to overcome their financial problems; selling green spaces to private parties or resort to partial privatisation or commercialisation of parks (Boonchuen, 2002; Landrum, 2005; Wade, 2005; Smith, 2019). From a neoliberal state's perspective, privatisation and commercialisation of green spaces are more profitable and beneficial for government as an austerity measure (Boonchuen, 2002; Landrum, 2005; Wade, 2005; Smith, 2019). Privatisation results only in localising the benefits green spaces to a group of people or stakeholders instead of making sure benefits reach out to the maximum users and groups. This trend showing exclusion of the social and moral claims of disadvantageous groups of society raises some questions for social equity and environmental justice (Smith, 2019; Boonchuen, 2002; Landrum, 2005; Wade, 2005). Several studies have highlighted this point showing how giving preference to wealthy and affluent over the poor, ethnic minorities or the less privileged in the distribution of urban green spaces has

led to environmental and social injustice, thus denying the people the opportunity to reap both tangible and intangible benefits of green spaces (Jennings *et al.*, 2012; Wolch *et al.*, 2014; Kabisch and Haase, 2014; Heynen *et al.*, 2006; Ernstson, 2013).

Ostrom (2010) establishes that successful governance of natural resources can be performed through common property systems as opposed to private or state property regimes. These communal governance arrangements exhibit different features of community groups and other stakeholders in collaboration with the government. Yandle (2003: 180) described this concept as a "spectrum of institutional arrangements in which management responsibilities are shared between the users (who may or may not be community-based) and government" and "bundling of property rights" thereby providing a platform where local level resource users and community organisations and state come together and closer not only in decision-making but also in the management of resources.

Schlager and Ostrom (1992) contend that natural resource governance involves five property rights components. This bundle of rights is; access, withdrawal, exclusion, management, and alienation, which assume great importance in case of governance of commons. As such, how these rights are developed and applied have a significant impact not only on the natural resources and ecosystems but also on society as a whole, especially in terms of benefits generated and social equity issues (Schlager and Ostrom, 1992; Colding, 2011; Colding and Barthel, 2013).

Table 2.1 Bundles of rights associated with positions for natural resource management

	Owner	Proprietor	Claimant	Authorised User	Authorised Entrant
Access	X	X	X	X	X
Withdrawal	X	X	X	X	
Management	X	X	X		
Exclusion	X	X			
Alienation	X				

Source: Ostrom and Schlager, 1996

The application of the rights, as mentioned above, can be exercised at several distinct levels. Such as the right to access or withdrawal is most relevant on an operational level. The operational level implies day-to-day conduct (actions) of individuals concerning the resources appropriation, provision, monitoring and enforcement (Ostrom and Hess, 2010). A group of decision-makers in order to plan for the undertaking of operational activities such as formulation of operational rules or policies interact with each other. This level of interaction, described as collective-choice level, can be witnessed in various situations where different actors collectively forge what operational rules will be including. It flows from the constitutional level as to who will participate in the collective choice decision-making process and at what platform it will be executed and adjusted (Ostrom, 1990; Ostrom and Hess, 2010). The combination of bundles of rights over resource transform local users and organisation at various positions; authorised entrant, authorised user, claimant, proprietor, and the owner (Table 2.1). For successful governance, local users and their representatives' institutions must possess property rights that transform them into claimant and proprietors with secure management, exclusion and alienation rights (Ostrom, 1990; Ostrom and Hess, 2010; Colding, 2011; Colding and Barthel, 2013; Colding et al., 2013). Ostrom (1990) contends that for effective management of common-pool resources it is essential to involve the individuals being affected by changes at the local level and to be allowed to participate in drawing and altering the rules at the collective choice and constitutional level.

Researchers have highlighted that green spaces as common goods need some planning and management strategies based upon the collective responsibility of an array of stakeholders' groups, ensuring broader participation to promote environmental and social equity (Fig 2.7) (Azadi *et al.*, 2011; Haq, 2011; Buijs *et al.*, 2016; Buizer *et al.*, 2015; Buizer and Van Herzele, 2012; Colding, 2011; Colding and Barthel, 2013; Colding *et al.*, 2013; Colding *et al.*, 2006). Broader participation in urban green planning will empower the people in the real sense, resulting in more democratic

governance as well as execution of fully informed and legitimate green plans (Baycan and Nijkamp, 2007; Colding and Barthel, 2013; Dennis and James, 2016). In this context, public participation is both: the right of people and their responsibility to protect the environment. It is stressed upon in the Stockholm Declaration on the Human Environment 1972:

> Man has a fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well-being, and he bears a solemn responsibility to protect and improve the environment for present and future generations (Handl, 2012).

Much research has established that people at the grass-root level organise solutions to the issues missed by the government (Agyeman and Evans, 2004; Schukoske, 1999). These local and community-based solutions are meant to replace the hegemonic and biased solutions by governing bodies, and targeting unfulfilled societal needs (Agyeman and Evans, 2004; Schukoske, 1999). The resultant creativity not only meant to address the social needs but transform social and power relationships among various stakeholders by empowering the people (Agrawal *et al.*, 2008). As the public and government authorities collaborate, it paves the way for understanding each other's needs and perspective. Such a collaborative environment ultimately lays the foundation of the planning process that takes into account different subtleties of an area (Azadi *et al.*, 2011). Involvement of stakeholders affects the whole governance cycle from policymaking to planning and management of green spaces (Azadi *et al.*, 2011).

Studies purpose that collaborative governance is a pre-requisite of good governance of urban green spaces' (van der Jagt et al., 2017a; Buizer et al., 2015; Schicklinski, 2017; Rutt and Gulsrud, 2016). The engagement of society can contribute to not only in managerial roles but also become a source of funding for the green spaces. In developed countries, philanthropists' funds are a good source of urban green space development and management as a part of the individual type of social participation (CABE, 2006). Since 1984,

the National Lottery Heritage Fund and National Trust in partnership have contributed 950 million to UK parks and green spaces (National Trust, 2019).
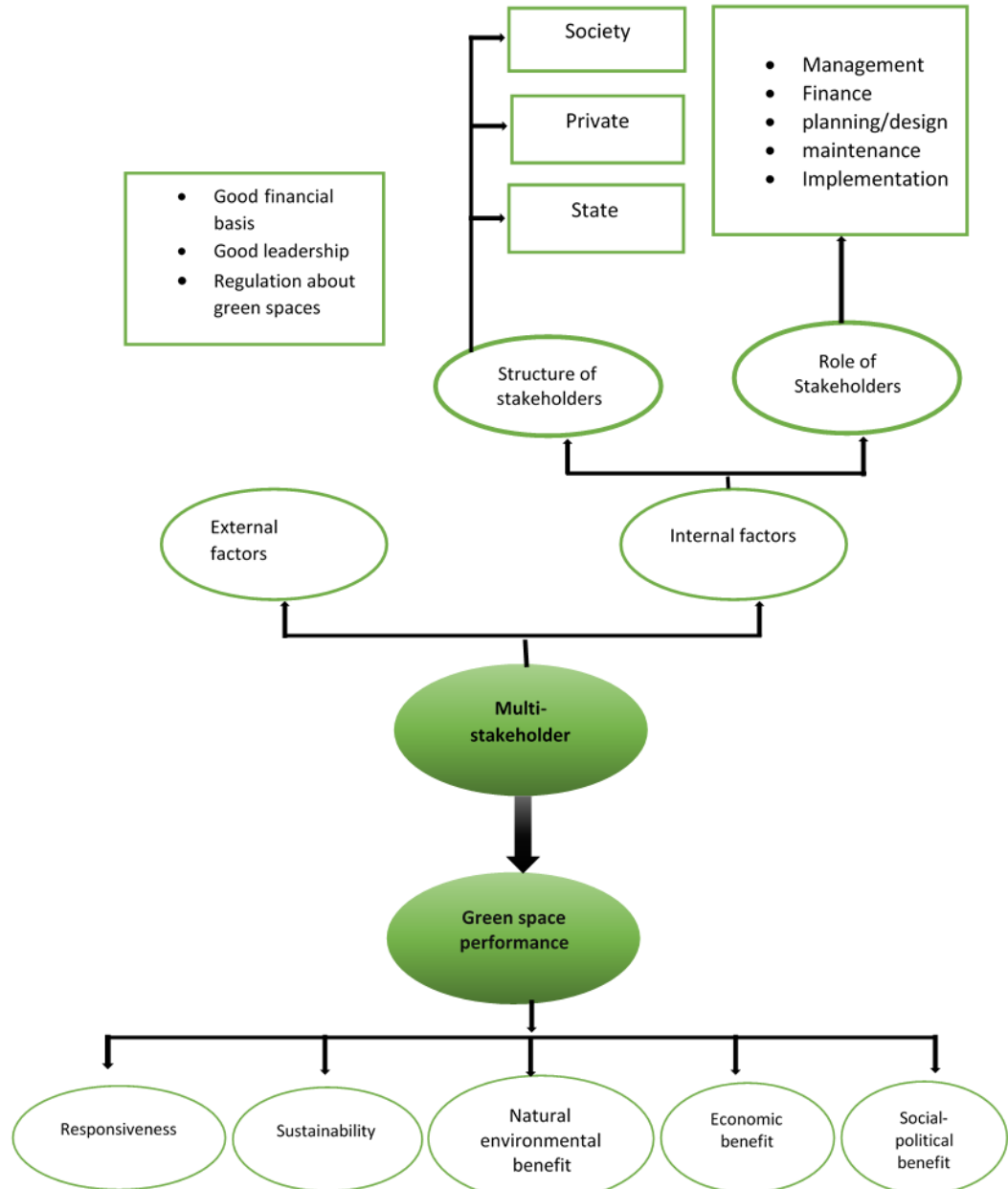
Figure 2.8 Multi-stakeholders' governance for urban green spaces
Source: Azadi, 2011

Likewise, NGOs and other civil society institutions participate in the business coalition with private actors to mobilise state resources (Pincetl, 2003). NGOs

have become partners with public actors and local authorities showing strong inter-dependence between actors in the park's planning processes (Schicklinski, 2017). Public participation is also evident where people are engaged in the management of green spaces as on their own such as urban gardening, allotments, community gardens (Buijs *et al.*, 2018; Buizer *et al.*, 2015; Colding and Barthel, 2013; Colding *et al.*, 2013; Mathers *et al.*, 2015). This process of collaboration can take many forms such as formal or informal, vertical or horizontal, intra and inter-organisation featuring a wide array of actors (Azadi *et al.*, 2011; Buijs *et al.*, 2018; Buizer *et al.*, 2015). The process of collaboration can be effective by enhancing public participation, developing networks among different stakeholders (Azadi *et al.*, 2011; Buijs *et al.*, 2018; Buizer *et al.*, 2015; Baycan and Nijkamp, 2007). These stakeholders can be identified as the resident's groups, NGOs, local environmental agencies, the business sector, private developer and local authorities (Azadi *et al.*, 2011). Still, the government is the main actor in the planning of urban green spaces. Nevertheless, in a collaborative set up, its primary role is to provide an enabling environment for stakeholder's participation (Azadi et al., 2011; Innes and Booher, 2003; Osborne and Gaebler, 1993). For example, in the planning of urban green spaces, private developers may have a great interest in value-added planning while citizens can be confined to day to day activities in green spaces. On the other hand, environmentalists are mainly concerned about protecting nature in the city (Altherr *et al.*, 2007). Here the government has a key role to play as a facilitator to reach a consensus among stakeholders and develop a policy which is mutually agreed (Altherr *et al.*, 2007). However, in most cases, there is a lack of coordination among government agencies and other stakeholders, and so constitutes the biggest obstacle in greening cities (De Sousa, 2003).

2.6 Conclusion

Following a paradigm shift in the urban planning systems, collaborative planning and management have emerged as the most preferred approach, featuring multi-stakeholder involvement in the governance of urban green

spaces. The concept of different stakeholders, along with multiple centres of power makes governance a complex process and hence constitutes a challenge to be tackled. Therefore, the present study using the idea of polycentric, collaborative governance as a theoretical model allows investigating the actions and activities of wider stakeholders in the context of the study area. By examining the actors and their interdependencies, the study aims to explore the prospect of any institutional change towards polycentric governance and thereby to lay the foundation of a system that promotes adaptive, efficient, sustainable and equitable green spaces. In-depth detail of polycentric governance and prospects of institutional change has been included in the next chapter while discussing its literature in detail.

Chapter 3. Polycentric Governance and Institutional Change

3.1 Introduction

This chapter will discuss the theories of polycentric, collaborative governance and institutional change regarding their potential interrelations for this study. This study focusses on polycentric governance as an approach in assumption that new system has the potential to integrate stakeholders' diverse interests for better outcomes for the governance of urban green spaces. The chapter will first introduce polycentric and collaborative governance with primary focus on its structural and functional aspects. It will be followed by a review of the advantages of a polycentric arrangement along with the limitations and challenges for this system of governance. The second section will provide an overview of theories on transformation towards polycentricity as an institutional change process. Further, the third section will identify some knowledge gaps which this study aims to fill in the course of this study.

3.2 Polycentric Governance

The polycentricity is the outcome of a paradigm shift in the concept of the government to governance as witnessed since the 1970s and the1980s (Ostrom, 1990; Ostrom, 2008; Agrawal, 2001; Armitage et al., 2009; Ostrom, 2010; Ostrom, 2015; Carlisle and Gruby, 2017; Berkes, 2009). Harrington *et al.* (2008: 200) describe 'government' as hierarchical structures with authority and power and 'governance' as the devolution of power downward and horizontally to the society. This shift lay the foundation of a more legitimate, effective and responsive government while taking cognisance of local circumstances (Gunningham, 2009). As the research proceeded towards their quest for an ideal form of governance, they found these systems complex instead of being merely local (Berkes, 2003; Plummer and Arai, 2005; Berkes, 2009; Armitage et al., 2010; Ostrom, 2010). Different studies found that a centralized governance system has a likelihood that the state and its

bureaucracy do not take cognizance of changes in local conditions (Agrawal and Gibson, 1999; Duit and Galaz, 2008; Allen and Gunderson, 2011). While, decentralisation, on the other hand, maybe more amenable to local conditions, yet it is observed that they fall short of coordinating among actors and garner knowledge due to lack of institutional capacity (Berkes, 2004; Duit and Galaz, 2008). The environment and natural resources' governance need a holistic approach which engages a wide range of formal and informal institutions and actors from various levels and their interactions. It brings to fore how power is exercised in decision-making, and who gets legitimacy and influence in the final outcome (Berkes, 2004; Armitage, 2005a; Ostrom et al., 2007; Pahl-Wostl, 2007; Olsson et al., 2008; Ostrom, 2010). The quest for a governance
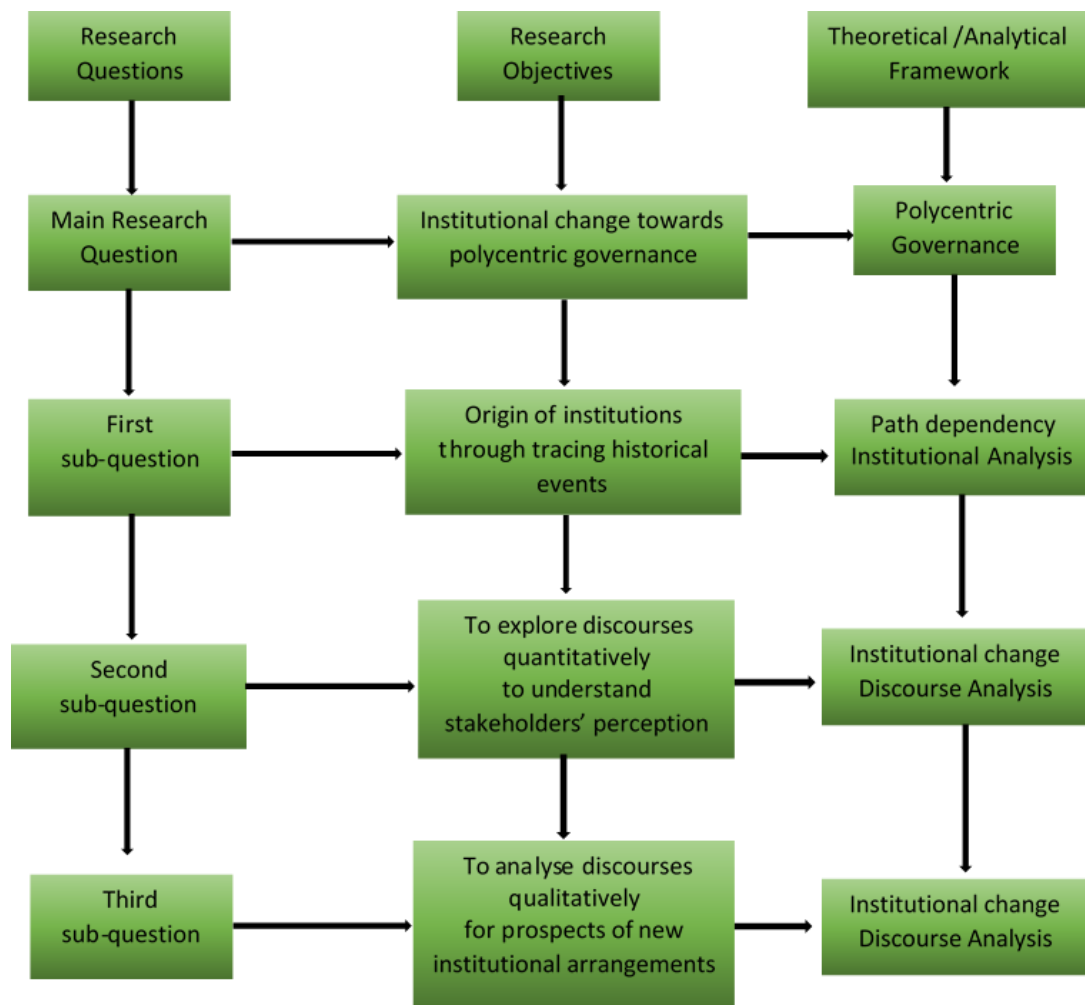
Figure 3.1 Theoretical framework of the study

arrangement fully suited to local conditions led to the development of 'multilevel' governance systems, linking horizontally as well as vertically (Armitage, 2005a; Berkes, 2004; Olsson et al., 2008; Ostrom, 2010; Ostrom et al., 2007; Pahl-Wostl, 2007). Gunningham (2009:146) describes this shift as 'distinctively polycentric', showing the change in governance approaches allows better coordination at multiple levels and scale. McGinnis (2011: 171) defines polycentricism as:

> a system of governance in which authorities from overlapping jurisdictions (or centres of authority) interact to determine the conditions under which these authorities, as well as citizens subject to these jurisdictional units, are authorized to act as well as the constraints put upon their activities for public purposes.
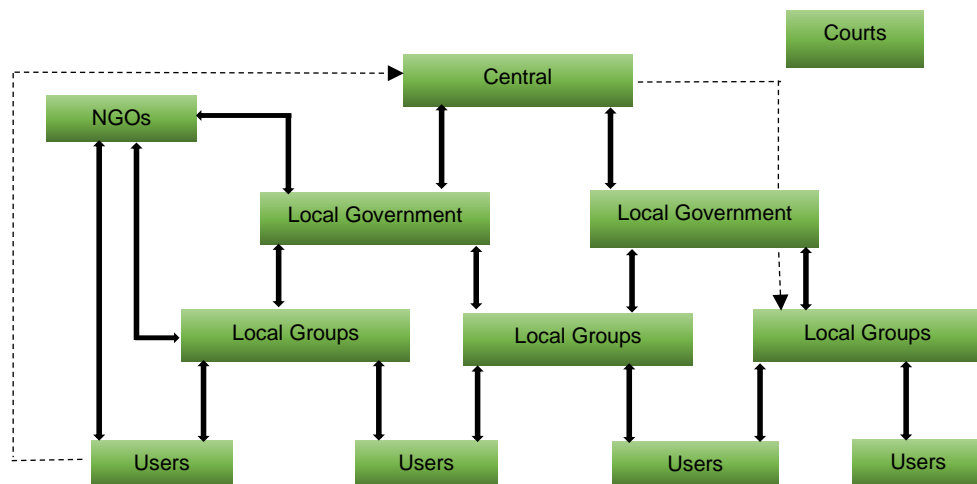
Figure 3.2 The conceptual framework of polycentric governance
Source: Andersson and Ostrom, 2008

Multilevel and polycentric governance systems reflect features of both centralised and decentralised governance (Andersson and Ostrom, 2008; Duit and Galaz, 2008; Ostrom, 2008; Ostrom, 2010). Based on the roles of actors in the governance process, both multilevel and polycentric governance concepts demonstrate distinctive characteristics. Multi-level governance mostly focusses on state actors (Wurzel et al., 2019) while polycentric governance concept gives precedence to the self-governance, and, therefore, advocates the existence of autonomous decision-making centres caters to self-organisation at local levels (Ostrom, 2008; Ostrom, 2010; Ostrom et al.,

2007). As to this present study on the governance of urban green spaces as land use planning and management, the government, given its ownership, authority, and control over public land resources, is the most significant stakeholder. However, local communities, private enterprises, and non-governmental organizations also take part in land use decision-making processes in the present time (Azadi et al., 2011; Rasool and Sinha, 1995). This multi-stakeholder's configuration allows this study to optimise its scope by integrating these two parallel trends that coordinate vertical and horizontal capabilities of governance process across all levels and scales. Such a combined multilevel-polycentric governance perspective provides a framework to examine the role of formal institutions by traditional authorities as well as self-governed informal institutions. In brief, in the context of this study, polycentric governance involves joint relationship between stakeholders in the public, private and voluntary sectors, informal groups and individuals in communities to address the issue in a complex society.

3.2.1 Structural and Functional Characteristics of Polycentric Governance

Polycentric governance is comprised of multiple, autonomous decision-making centres, working in a coordinated manner in a system (Ostrom *et al.*, 1961; Ostrom, 2008; Duit and Galaz, 2008; Ostrom, 2010). The real strength of polycentric governance lies in its plurality with diverse scales and interests, as opposed to any sole decision-making unit with limited ability to deal effectively with the complexies presents by socio-ecological systems (Blomquist, 2009). As discussed by Ostrom *et al.* (1961) and further explained by (McGinnis and Ostrom, 2012) the main characteristics of a polycentric governance system are; the prevalence of several autonomous units, working independently but also interact with other units through means of cooperation, competition, conflict, and conflict resolution.

3.2.1.1 Structural Characteristics of Polycentric Governance

The polycentric governance structure comprises different types of organisations, representing the government, private, and civil society, functioning at multiple levels with overlapping jurisdiction and roles and

capacities. Therefore, the polycentric system involves governance at various levels and scales instead of being concentrated at one level, be it centralised or decentralised (McGinnis and Ostrom, 2012; Pahl-Wostl *et al.*, 2013). National laws, as framed by the government, allow local groups to devise own rules governing their activities besides ensuring coordination between user groups (Pahl-Wostl *et al.*, 2013). A government also helps in establishing complementary, overlapping systems as part of its enforcement and monitoring regimes, making sure the application of local rules (Pahl-Wostl *et al.*, 2013). Lockwood *et al.* (2009) found that for effective governance of natural resources, at community level, the role of government should be supportive rather than absent or controlling. In another study of green spaces' protection, Logan and Wekerle (2008) furnish instances of involvement of provincial and federal governments in the fulfilment of its initiatives for development and protection of greenspaces. The study explains governments measure to overcome the shortage of funds by reaching out to a range of private actors, including private landlord, NGOs', local user groups, and relevant agencies to keep managing conservation through a range of mechanisms (Logan and Wekerle, 2008).

According to the definition of polycentricity, the only organisations with authority to frame rules and norms independently in a specific area are, in fact, decision-making centres (McGinnis and Ostrom, 2012). Therefore legislatures, administrative agencies, and other local and public bodies have the status of decision-making-centre. In natural resource management other stakeholders such as corporate sector, the voluntary organisation and community organizations perform essential role in a polycentric system either they have authority to make rules or not, but on the other hand, they can influence the policies or render technical and financial support, yet they perform significant supportive role in the governance (McGinnis and Ostrom, 2012). These actors lend technical expertise or provide a good or service in a polycentric system (Carlisle and Gruby, 2017). It gives real strength to the system when these supporting actors join a decision-making centre, in their capacities, yet they are never the part of decision-making centres (Carlisle

and Gruby, 2017). In brief, the polycentric governance system is described as not a very tidy and static system having a well-defined connection between decision-making centres. Instead, it is a dense web of some fixed and other transitory and supporting actors from various sectors which are the linchpin in any polycentric governance arrangement (Carlisle and Gruby, 2017).

3.2.1.2 Functional Characteristics of Polycentric Governance

For an effective polycentric governance system, the main requirement is how far multiple-centres of decision-making engage with each other through various relations such as cooperation, competition, conflict and conflict resolution (Carlisle and Gruby, 2017; Carlisle, 2018). Green (2007: 2101) explained polycentricity as "functionally connected and balanced" cities, firms, or people. In other words, decision-making centres, no matter how independent they are from one another, their decisions are based upon actions, or experiences of other members of the system (Green, 2007). Out of the four processes mentioned above, cooperation holds the key as it covers collaboration as part of any joint action (Green, 2007). Hence, through cooperative processes and collaboration it becomes easier to achieve gains promised by polycentricity which may not be possible when pursued independently. A study conducted by Da Silveira and Richards (2013) found that when in a polycentric system, members lacked incentives for cooperation, due to increased competition for resource use, compromised the effectiveness and adaptability of the system. These nested institutions for their survival and longevity require coordination across administrative, jurisdictional and political levels, finding expression in collaborative forms of governance (Carlisle, 2018; Ostrom, 2011). The collaboration can be in the form of formal or informal ways (Imperial and Kauneckis, 2003; Innes and Booher, 2003). Innes and Booher (2003) outlined Institutional capacity, public willingness for participation and the role of the government as the key factors behind successful and thriving collaborative arrangements.

3.2.1.2.1 Institutional Capacity

A collaborative process needs comprehensive and collective efforts and the advent of new and transformative thinking that all stakeholders agree to embrace change (Healey, 2003). Bringing about change is not possible without investing in institutional capacity building. Here, Institutional capacity building in particular with the focus on helping all stakeholders develop learning capacities so that they can contribute in tackling complex issues needs foremost attention (Healey, 2003; Innes and Booher, 2003). Kim (2010) refers Institutional capacity as institutional capital, a collective term denoting to social, intellectual and political capital. Social capital implies production of "social organisation such as social trust, networks, and norms that facilitate coordination and cooperation for mutual benefit" (Putnam, 2000 : 67). Putnam (2000) describes social capital as trust-building and suggest that trust in a collaborative system can be deepened through time, interdependence and continuous dialogues among the stakeholders.

Intellectual capital is about being knowledgeable (Nahapiet and Ghoshal, 1998; Kim, 2010) which citizens can seek through interaction among actors, which possess different levels of knowledge. Social capital also a source of new knowledge (Nahapiet and Ghoshal, 1998; Kim, 2010). Networking based upon trust and reciprocity encourage engagement among the people in cooperative interaction. It is emphasised that greater benefits can be gained when both intellectual capital and social capital are present in the system (Nahapiet and Ghoshal, 1998; Kim, 2010).

3.2.1.2.2 Public Willingness

Political capital denotes to the willingness of all actors to take part in the decision-making process and its implementation (Khakee, 2002). Political capital explains attitudes and activities that inspire people to get involved in a democratic environment. It aims to develop an active citizenry fully empowered to participate in the decision-making process that not only helps the system's advancement but also improve their quality of life (Booth and Richard, 1998; Khakee, 2002). Skelcher and Sullivan (2008) identified two factors for achieving active public involvement; a leadership committed to present itself as a credible representative of the community and the

development of participative skills with the support of voluntary organisations which ultimately involve disadvantaged sections in the decision-making process. Civil society can play an important role in pursuit of empowering the citizenry through supporting efforts at the citizen's control over their lives (Skelcher and Sullivan, 2008; Booth and Richard, 1998). In some countries people's organisations from voluntary sector and Non- Governmental Organisations (NGOs), were the vanguard of steady shift from hierarchical to a more democratic setting (Booth and Richard, 1998). The emergence of this countervailing power of NGOs has turned out to be a real turning point that strengthened public participation in the system (Richards and Smith, 2002). Nevertheless, the growth of civil society needs more collaboration between NGOs and government in a congenial atmosphere instead of controlling and checkmate each other (Waddell and Brown, 1997; Islam, 2013).

3.2.1.2.3 Role of Government

Power asymmetries among different stakeholders can be a big challenge in pursuit of active collaboration (Barnaud and Van Paassen, 2013; Reed and Bruyneel, 2010). There are many studies believe that the attainment of this goal is not possible if the government does not play a role of facilitator (Kooiman *et al.*, 2008; Pierre, 2009). Therefore, in this approach, the state does not have a diminishing or authoritative role instead, it paves the way for collaborative governance. However, in some cases government could itself limits the efforts towards attainment of collaborative governance by acerbating power asymmetries (Reed and Bruyneel, 2010). How power is regulated among stakeholders, in fact, determine the success and failure of the collaborative governance (Barnaud and Van Paassen, 2013; Reed and Bruyneel, 2010). The stakeholders or actors involved in collaborative arrangement draws power from three main sources which are: authority, resource, and discursive legitimacy (Purdy, 2012; Van Assche *et al.*, 2017). Authority implies legally and socially accepted right for decision-making (Greenwald, 2008; Purdy, 2012).The resources can be categorised as financial, technology, knowledge, culture and skills. Discursive legitimacy again lends power to an organisation dominating with its discourse (Foucault,

1980; Dryzek and Berejikian, 1993; Hajer, 2002; Clement, 2010; Van Assche *et al.*, 2017). This power asymmetry is pronounced in less democratic governments where state by using its resources and authority instead of empowering civil society seek to restrain it (Brinkerhoff, 1999). If the government seeks to maintain its power and authority while turning its back on the civil society and networking, it will fail to secure public support and hence legitimacy (Foley and Edwards, 1996; Brinkerhoff, 1999). Sometimes government goes after superficial façade of consultation with people, to gain legitimacy (Harrison *et al.*, 2004). However, with such skewed measures the government will fall short of receiving legitimacy nor will it nudge closer to the attainment of collaborative governance arrangement (Foley and Edwards, 1996; Brinkerhoff, 1999). A study shows that in Greater London Authority, the efforts toward a collaborative approach crumbled due to the lack of government's will including superficial consultation, the lack of incentives for public participation and marginalising environmental NGOs in the process (Harrison *et al.*, 2004). However, power regulation facilitates joint efforts to thrive or empowering the less powerful, making them part of decision-making and leading to mutual gains. Actors with stakes in the shared resources exhibiting differences in power and values, are liable to entrap into conflict during the decision-making process, but as long as these groups stay away from an extreme situation which make the entire process dysfunctional, their rivalry can bring the best out of them (Dietz *et al.*, 2003) in terms of knowledge and learning nudging the system to change. Their contending philosophies and perspectives can bring new visions into the system through deliberation and conflict resolution process (Imperial and Kauneckis, 2003; Olsson *et al.*, 2008). However, when this competition exceeds its limits can be damaging to ongoing cooperation and governance (Warner, 2000). This point highlights the importance of developing specialised institutions with the mandate of conflict resolution and managing competition or conflict over resources while promoting cooperation among various subgroups in the system which ultimately leads to the functional polycentric system to gain its promised advantages (Carlisle and Gruby, 2017; Marshall, 2009; Carlisle, 2018).

3.2.2   Advantages of Polycentric Governance:

Polycentric systems have several advantages as a form of governance ushering in effective, equitable, and sustainable outcomes by way of developing cooperation of actors at multiple levels and scales (Ostrom, 2010; Ostrom *et al.*, 1961). These advantages have been classified in three broader categories; enhanced adaptive capacity; minimises and mitigates risks by overlapping institutional arrangement; and to create institutions which are ecological and socially fit in a given context (Marshall, 2009; Toonen, 2010; Carlisle and Gruby, 2017).

3.2.2.1 Adaptive Capacity

One significant advantage enjoyed by polycentric governance is its enhanced adaptive capacity through plurality and increased participation (Blomquist, 2009; Sovacool, 2011; Thiel *et al.*, 2019). Plurality is a pre-condition for polycentric governance, enabling better choices to be made. Adaptive capacity is reflected in new institutions as well as experimentation with multiple interventions liable to create innovation (Folke *et al.*, 2005; Pahl-Wostl, 2007; Blomquist, 2009; Thiel *et al.*, 2019). The institutional diversity allows social learning and hence allows decision-makers to learn from the successes and failure of others, and in the process building up more effective institutional capabilities through iteration (Folke *et al.*, 2005; Pahl-Wostl, 2007; Blomquist, 2009; Carlisle and Gruby, 2017; Thiel *et al.*, 2019). However, to realise these advantages it is essential to develop rule and norms that allow new and smaller units to join hands in the decision making process with experimental and problem-solving attitude (Ostrom, 2010). While at the local level prevalence of smaller units enhance social learning through trial and error method, the establishment of larger units have the capability creating a system of checks and balances against the strategic behaviour of non-contributors or local tyrants, or any discriminatory behaviour (Carlisle and Gruby, 2017; Carlisle, 2018; Thiel *et al.*, 2019). This feature makes polycentricity a suitable approach for systems where government lack adequate resources to implement and enforce policies at various level. This situation can be alleviated through polycentric arrangements which provide

complimentary back-up institutions against the organisational and institutional gaps (Ostrom, 2008; Carlisle and Gruby, 2017; Carlisle, 2018; Thiel *et al.*, 2019).

3.2.2.2 Risk Mitigation

In a polycentric system, redundancy is a result of the prevalence of diverse nature of institutions, featuring actors from the private sector and government being dispersed spatially. The commons' literature contends that redundancy by way of duplicity of authority or decision-making centres result in the creation of safety nets which "can ensure that twice as many resources are thrown towards a particular problem" (Sovacool, 2011:3833). However, the presence of wide-ranging actors offering different responses and solutions is likely to create resilience within the governance environment instead of redundancy, showing yet another positive outcome of the polycentric arrangement (Sovacool, 2011). In brief, the benefits derived from the polycentric governance in mitigating and managing catastrophic development are far higher as compared to economic cost, if any, of creating duplicity (Carlisle and Gruby, 2017; Carlisle, 2018; Marshall, 2009; Marshall *et al.*, 2016).

3.2.2.3 Institutional Fit

The polycentricity provides an effective institutional fit by integrating context-specific decisions taken at the sub-system level, which will be followed by system-wide decisions at higher levels (Blomquist and deLeon, 2011; Epstein *et al.*, 2015). As such, institutional fitness allows different human interests and behaviours finding expression in the decision-making processes at different levels and scales. Institutional fit can further be augmented if the system is imbued with Institutional heterogeneity, a condition where actors from the private sector, NGOs and government, all working towards the same end, functional at different levels and multiple jurisdictions, but contributing knowledge and experience towards system (Blomquist and deLeon, 2011; Carlisle and Gruby, 2017; Carlisle, 2018). According to Epstein *et al.* (2015) institutional fit provides an arrangement which ushers in an institutional realignment at the level of eco-system, dealing with its spatial, temporal

characterise but also resulting in institutional congruence when it comes to institutions dealing with actors and interests and values; all working towards context-specific problem solving and yet completing and supporting each other.

3.2.3 Limitation of Polycentric Governance

Achieving polycentric governance is a challenging process as several factors impede the institutional change and increase the cost of the transition process (Brown et al., 2009; Armitage, 2005a; Meinzen-Dick *et al.*, 2002; Raymond, 2006; Imperial, 1999; McGinnis, 2005; Gallemore *et al.*, 2015). The main challenge is the power asymmetries among different stakeholders engaged in the pursuit of active collaboration (Barnaud and Van Paassen, 2013; Reed and Bruyneel, 2010; Ansell and Gash, 2008; Emerson *et al.*, 2012). How power is regulated among stakeholders determines the success and failure of the polycentric governance (Barnaud and Van Paassen, 2013; Reed and Bruyneel, 2010). Koontz (2019) contends that authority and resources are the main sources of power and hence contribute, causing an imbalance in power among different actors. Thus, a collaborative process can be influenced by government or the funding bodies with pre-conceived preferences as to the lead roles in a given project (Koontz, 2019). In some cases, governments may not be willing to cede authority with communities or resource users (Pinkerton, 1992; Spaeder and Feit, 2005; Wong, 2013; Pinkerton, 1999) or might go after superficial consultation with people, to gain legitimacy (Harrison *et al.*, 2004). These limitations have either stalled or delayed many governance transitions to co-management (Ayers, 2016; Lu et al., 2012). Many studies are contending that the fulfilment of this goal is not possible if the government is not facilitating this change (Kooiman *et al.*, 2008; Pierre, 2009). Dempsey *et al.* (2016) identify lack of political commitment, organisational barriers (e.g. reluctance to change working practices), and leadership crisis as some of the factors which hindered successful partnership for the management of urban green spaces in Shielfield, UK. Similarly, Pinkerton (1999) identifies the bureaucratic mindset and its biases as the main reason behind the failure of the collaborative process. Regulating the power structure is the biggest

challenge for a polycentric system which may lead to elite capture and exacerbate social inequities (Morrison *et al.*, 2019).

The polycentric system with the multiple centres of power paves the way for greater accountability (Ostrom, 2008; Marshall, 2009; McGinnis, 2011; Ostrom, 2010; Sovacool, 2011; Carlisle and Gruby, 2017). However, normative critics consider the polycentric regimes not suitable for accountability and fairness (Blomquist and Schlager, 2005). It is argued that under polycentric arrangements with dispersal of decision-making powers across wide-ranging actors and overlapping jurisdiction may not allow the traditional mechanism of accountability to work, be it elections or public hearing or any other forum (Adger et al., 2005; Blomquist and Schlager, 2005; Skelcher and Sullivan, 2008; Carlisle and Gruby, 2017). Furthermore, the transparency and accountability in a system can be achieved through information-sharing, social learning and capacity building of participants which increase the transaction cost of this process (Bryson et al., 2006; Thomson and Perry, 2006). As such stakeholders may not be willing to take part in the system when the transaction cost is high and potential benefits are plummeting (Imperial, 1999; McGinnis, 2005; Ayers *et al.*, 2017).

The prospect of polycentric governance is very much dependent upon the commitment of the stakeholders in this process (Ostrom, 1990; Lachapelle *et al.*, 2003). Many scholars have discussed the role of informal institutions based upon the values, traditions, customs, and norms, in the process of transition (North, 1991; Helmke and Levitsky, 2004; Cleaver, 2002). Cultural and traditional constraints such as asymmetric gender representation hinder the creation of local institutions, and it is quite often stated as a barrier for the management of common-pool resources in most developing countries (Kabeer, 1994; Molians, 1998; Agarwal, 2001). Many studies also underline socio-economic factors as an obstacle in citizens' participation in the management of natural resources (Hobbs and White, 2012; Kabisch *et al.*, 2016; Sundeen et al., 2007). These findings are widespread where external livelihood opportunities may result in a lack of public participation in natural resource management (Kim *et al.*, 2014; Armitage, 2005b; Agrawal and Gupta, 2005). Raiser (2001) argues that public willingness is the key to the

success of collaborative governance. Hence, the prospects of the polycentric system largely depend upon the combination of formal and informal institutions. Thus, building formal institutions alone will not serve their purpose if they are not accompanied by the right political conditions good enough to sustain the appropriate informal institutions (Raiser, 2001).

3.3 Transformation to Polycentric Governance; An Institutional Change

Crona *et al.* (2011: 45) has defined natural resource governance as:

> broader system of formal or informal institutions in which the management actions are embedded and which provide the essential direction, resources, and structure needed to meet the overarching resource governance goals.

Thus, it's the institutions that matter in governance and provide its legitimacy (Paavola and Adger, 2005). As such, demand to improve governance or any aspect of it, cannot be met until and unless changes in the institution are accompanied with it. In other words, without institutional change, environmental problems cannot be solved (Connor and Dovers, 2004).

North (1991: 3) defines institutions as "the rules of the game in a society or, more formally, are the humanly devised constraints that shape human interaction". Most scholars further drew a line between the between formal rules, which according to them, originate from bureaucratic and hierarchical organizational structures (North, 1991; Knight, 1992; Coleman and Coleman, 1994). By contrast, informal rules are the ones generated through social norms and enforced by other individuals, making them internalised (North, 1991; Knight, 1992; Coleman and Coleman, 1994). Hence, both formal and informal institutions provide guidelines as to how people need to act and how to cooperate in any collective pursuit (North, 1991; Knight, 1992; Coleman and Coleman, 1994).

Institutions are considered as fixed or permanent structures. However, sometimes they can be challenged or even replaced as necessitated by the

actions of actors in a system (Gasper, 2006). According to Knight (1992), what lies at the heart of an institutional change is a bargaining problem that results in the asymmetries of power in a society. Bargaining is the process through which rational actors use strategic games to gain control over resources which may cause conflict and asymmetries in the system (Knight, 1992). Institutional change results when the actors alter their position in the light of unfolding distributional gains or when social outcomes of institutional arrangement change are contrary to their expectations (Knight, 1992).

Scholars while explaining theories of institutional change seek to draw a line between slow and disruptive changes based on either exogenous or endogenous characteristics (Lindegaard, 2013; Hernes and Weik, 2007; Koning, 2016; Mahoney and Thelen, 2010). North (1990), argues that institutions change can be triggered by any external variable such as environmental crisis, development pressure or globalisation, terming it as exogenous change disrupting the equilibrium. Contrary to this, change can occur from within the system when new ideas emerge and start permeating within a political system, which in turn result in new policy agendas (Mahoney and Thelen, 2010).

3.3.1   Radical Change

Theoretically, radical change can be explained based on a punctuated equilibrium where "periods of stability may be linked by periods of rapid change during which the institutional framework is challenged" (Baumgartner and Jones, 2010: 12). Institutional stability is a result of a Path dependent process which results in institutional lock-in. Institutional inertia implies a barrier to change in natural resource governance (Heinmiller, 2009; Marshall and Alexandra, 2016). Bringing change becomes very difficult overtime in any Path dependent system, as positive feedback processes reinforce a specific trajectory hence further strengthens the most powerful actors (Pierson, 2000). The distribution of rights and resources grossly affects the level of power different actors wield making them opt for a rule that perpetuates their supremacy over resources and power equation access, ensuring the bargaining power to maintain their chosen institution (Knight, 1992). These

power asymmetries create differences and inequalities with certain groups start controlling the actions of those with less power, consciously or unconsciously (Knight, 1992). However, change still can take place despite this rigidity and institutional stability. The time in which these changes take place is called critical junctures; a period which allows major shocks interrupting the status quo, and in its wake, giving rise to a new trajectory to be followed (Gorges, 2001; Capoccia, 2015).

3.3.2 Gradual Change

As opposed to the radical change, based upon path dependency model, some scholars believe in a middle ground which recognises change as a more continuous and gradual process (Mahoney and Thelen, 2010). Mahoney and Thelen (2010) focus on endogenously driven change which may occur due to political and distributional struggles among the actors vying to influence institutional rules which they interpret according to their own will and liking making them more contestable. Endogenous institutional change is wrought by institutional innovations and new organisational entities coming to forefront through a bottom-up social dynamics, epitomising a change which is opposed to top-down change enacted by political actors (Mahoney and Thelen, 2010). Institutional change of this nature has been described as an "emergent"— distinct from a planned change (Thiel *et al.*, 2019). This kind of change sometimes comes out of self-organising capabilities of actors, to gain legitimacy in the system, such as civil rights movements or women's rights movements across the world (Schneiberg and Lounsbury, 2008).

Power plays a key role in institutional change (Lindegaard, 2013). Institutions change depends upon as to who gains supremacy after a contest: struggle, conflict, and negotiation over institutions (Campbell, 2010: 108). Therefore, an in-depth analysis of power can also reveal the dynamic behind a change, explaining what drives struggle, conflict and negotiation over institutions (Lindegaard, 2013). Lindegaard (2013) based on Foucault's idea of power (Foucault, 1980; Foucault, 1991; Foucault, 2012), identifies three main types of power influencing institutional change; strategic games, governmentality, and power-knowledge. Strategic games represent a power flowing from the

actions of actors during any institutional change. Explaining the role of power in any transition, it will be useful to understand how actors' action and interaction affects the power landscape and restricting others' options and manoeuvre which ultimately lead to the establishment of their power and then institutional change (Lemke, 2002). The government refers to a more rational side of power, in which people and societies are governed in a highly regulated and systematised ways (Lindegaard, 2013; Lemke, 2002). Governmentality explains power in the same light and is contrary to the actor-based strategic games. However, most of its focus is on state governing its territory and population (Foucault, 1991). An essential source of power is that of power-knowledge (Foucault, 1980). Power-knowledge legitimises claims of actors and institution to dominance, authority, resources. Foucault notes that:

> discursive practices are not purely and simply ways of producing discourse. They are embodied in technical processes, in institutions, in patterns for general behaviour, informs for transmission and diffusion, and in pedagogical forms which, at once, impose and maintain them (Foucault 1977: 200).

This nexus between knowledge and power determines the ultimate or possible good and bad, underlining how discourse based knowledge, influence society's preferences and social norms (Foucault, 1980). Hence, this dimension of power can be quite influential in the final analysis and thus constitute important enough considerations of the efforts for institutional change.

While both exogenous and endogenous concepts are relevant, the more important issue is whether the institutional change has acquired the transformative threshold or not (Thelen, 2004; Campbell, 2005). For addressing this issue, it is essential to examine the different mechanisms of institutional change, underlining the outcome of the interaction between actors and institutions at the micro-scale with its outcome to be witnessed at a macro level (Thelen, 2004; Campbell, 2005; Mahoney and Thelen, 2010). The Institutional transformation becomes a reality only when actors engaging in a long-drawn out strategic struggle make the best use of their skill along with or without exogenous shocks creating an opening providing an opportunity for

change (Thelen, 2004; Campbell, 2005; Mahoney and Thelen, 2010). Kingdon (1984) depicts this opening as a window of opportunity or a critical moment suitable for the transition. He believes that changes are possible when problems, its solutions, and favourable political climate come closer and together at critical times (Kingdon, 1984). Nevertheless, the success of this transformation is highly dependent on how effectively the concerned actors react at the spur of the moment and avail this opportunity which according to Kingdom (1984) is highly short-lived.

3.4 Knowledge Gap

As the concept of polycentric governance system has gained currency, different researchers have contributed to develop literature covering from theoretical underpinning to citing advantages of polycentric process (Marshall, 2009; Neef, 2009; Bixler, 2014; Jordan et al., 2015; Ayers, 2016; Carlisle and Gruby, 2017; Carlisle, 2018; Jordan et al., 2018; Morrison, 2017). However, this lacks the application of institutional analysis on the governance of common-pool resource in an urban context of a developing country. There are few studies which explore the transition towards polycentric governance from a centralised system while recognising its power dynamics (McCord et al., 2017; Morrison et al., 2017).

Most studies of urban green spaces use the concept of polycentricity on a micro level, such as local neighbourhood parks and community gardens treating them as self-governed resources (Firth *et al.*, 2011; Holmer *et al.*, 2003; Rosol, 2010). However, urban green spaces as a case of natural resource governance are a very complex system showing interactions at multiple levels and across scales (Buijs et al., 2018; Berkes, 2004; Blomquist, 2009; Borgström et al., 2006). The present research seeks to bridge this gap by exploring the prospects of polycentric governance as a collaborative process involving multiple actors at the city level. In the context of Pakistan and the study area, in particular, the application of the polycentric collaborative governance theory on green space management has not been utilised and hence serves as a new research approach. This allows this research to draw

ideas and concepts practised in other places to develop an approach for the governance of urban green spaces in the study area.

3.5 Conclusion

This chapter has provided a theoretical foundation for this present study by reviewing the literature on polycentric governance, collaboration, and institutional change as the main framework for this study. This study does not hold that polycentric governance is a panacea regarding urban green spaces governance, yet it can provide a right solution in a socio-ecological system being adaptive and flexible and therefore, a good institutional fit. However, attaining polycentric condition in the shadow of a highly centralised system is a challenging task and therefore needs a transformation of institutional arrangement at multiple levels of governance.

Chapter 4. Research Methodology

4.1 Introduction

The purpose of this chapter is to give a detailed account of the research methodology that has been used to address the research questions in this study. This chapter will describe the research design and philosophy underlying its ontological and epistemological position in this thesis. Moreover, an overview of the methodology adopted in each empirical chapter will be provided through this chapter, while subsequent chapters will provide greater detail of the methods used in each, to answer the research questions. The chapter will also provide an account of the methods for data collection and the analytical framework for this study. The other research considerations, including the validity of research, positionality, ethics, and limitation with their implications on research, will also be discussed in this chapter.

4.2 Research Design

The research design refers to the methodological approach adopted in a study to address the specific research questions (Creswell *et al.*, 2007). This research examines the prospects for polycentric governance in the urban context of a developing country. The research design for this dissertation is predominantly qualitative, following a mixed-methods approach. The aim of combining quantitative and qualitative methods is complementary to make research credible and trust-worthy and also enhance the knowledge base of the study. Use of quantitative methods (Q-methodology) is a means to ensure that the information obtained in this research represents the experiences and ideas of the participants whilst attempting to minimise influence from the researcher's preferences. Q methodology provides a way of capturing participants views and opinions through the use of statistical and mathematical computer-based programmes, as much as possible keeping the researcher detached and objective in the analysis of the perspectives of the participants. However, a limitation that Q-methodology faces is that it provides

a 'skeleton' of subjectivity, which can only be fully interpreted through the supporting interviews, explaining the remarks and thoughts of participants to expand the knowledge gained by the participants (Kampen et al., 2014). To overcome this limitation, this study has complimented the quantitative methods with qualitative methods to gain a deeper insight into the topic under study. In order to fully comprehend this governance process, it is important to find the stakeholders' perceptions, opinions and experiences in the prevailing socio-political context. A qualitative, interpretive inquiry has an advantage as it provides an opportunity to gain insight into the system, utilising the perceptions and views of research participants as a starting point (Ritchie *et al.*, 2013). It is a useful technique, by using various methods such as observation, interviews, to provide a detailed account of multiple actors at various levels and scales and their relationships and interdependencies in the complex system (Ritchie *et al.*, 2013). Hence, this study uses a mixed-method approach not only to increase the validity and credibility of this research by complementing these two methodologies. Secondly, this combination becomes a source of rich information, revealing how participants perceive the governance of urban green spaces in Lahore.

As such, this thesis follows a pragmatic approach with a single case study strategy. A case study has the advantage to "place people, organisations, events and experiences in their social and historical context" (Veal, 2006: 111). The case study enables to develop a greater understanding of the complex system through exploring actors and their interactions with potential to improve the system (Merriam, 1988; Baxter and Jack, 2008). In other words, the study develops its contextual conditions which give an in-depth understanding of it, in its natural setting (Baxter and Jack, 2008; Yin, 2003). Hence, given the suitability of this approach, the urban green spaces in Lahore has been selected as a case study to reveal the nuances and complexities of governance of urban green spaces. The rationale behind the selection of Lahore lies in its historical, political and socio-economic context, which goes a long way in serving the purpose of the study.

- The first and foremost reason for selecting Lahore as a case study comes from my personal connection to this area. I have been a resident of Lahore for most of my life. As such, I am very familiar and well-versed with the area and its problems relating to environment and development. Lahore has witnessed all issues concerning urban green spaces such as rapid urbanisation, depletion of green spaces and especially unsustainable nature of these spaces providing an impetus for the current study.

- Secondly, I have been previously engaged academically with these issues during my Master programme. The desire for seeking more in-depth knowledge motivated me for doing PhD study focussing on lack of public participation in governance, sustainable land-use trends. My previous study time also coincided with political activism on urban green spaces in Lahore with some stakeholders marching on the roads to preserve these spaces. This experience made me look for exploring areas hitherto untouched in this part of the world especially and helped not only finalise the topic being adopted by me in the current study but also in developing my theoretical assumptions.

- Lahore being the provincial capital is also more relevant for a case study as compare to other cities as it has no dearth of information on its social, political and economic transformations. Furthermore, historically Lahore has been named the 'City of Gardens', rich with information relating to urban green space planning and development, therefore, making it an accessible case to study.

4.3 Research Philosophy

The research philosophy used in this study is based on the ontological and epistemological philosophies which lend richness and depth to data, thereby, helps in answering the research questions with more clarity (Holden and Lynch, 2004). This research has adopted a qualitative approach which uses research participant as a starting point while focusing to explore a viewpoint from inside a system (Ritchie *et al.*, 2013). In research, theoretical

assumptions that underlie ontological and epistemological philosophies are so polarised that some researchers characterise them as "paradigm war" (Johnson and Onwuegbuzie, 2004. p.14). In this plethora of philosophical debates, at one extreme there exists a reality which is independent of human perception and at the other extreme lies social constructivism, implying reality is created through how individuals view the world (Johnson and Onwuegbuzie, 2004). However, in practice attaining such position is quite difficult and can be taken more of a continuum rather than water-tight compartmentalisation (Klein, 2004). A third approach 'critical realism' highlights the merits of using both realist and constructivist perspectives (Yeung, 1997; Bhaskar *et al.*, 1998). As a third paradigm, it accepts the reality of an out-world unseen, while also acknowledging means of tracing knowledge of this reality "through language and concepts that are relative and changeable in time and space" (Danermark *et al.*, 2005. p. 39). As such any theory deals with a particular perspective, portray a partial, incomplete and faltering picture (Bhaskar *et al.*, 1998). In other words, the critical realist's position comprises knowledge of reality that cannot be looked into independently of the social actors engaged in the process of knowledge derivation (Yeung, 1997). Critical realists take new perspectives, contending viewpoints, as well as representing diverse voices very closely, offering a research pragmatism that eschews debate over what is real and what is constructed (Dobson, 2002; Modell, 2009)

The present research's aim and objectives lean more towards critical realism, a more pragmatic and flexible approach to deal with the present research problem. The position is taken in this thesis as critical realist within a social constructionist paradigm is best suited to realise its overarching aims given the complexity of governance of urban green spaces as a socio-ecological system with its multi-actor system on various levels and scales. What is fundamentally important for this research is its knowledge claims, through socially constructed discourses, which gives coherence and meaning to people's voices and explore their way of seeing at reality differently.

4.4 Research Methodology

This study has followed a more methodological pragmatism by using predominantly qualitative approaches, along with some quantitative aspects such as statistical techniques. As such, this study employed different methodology for different research questions, also showing a recourse to triangulation for this study. Triangulation is a method used by qualitative researchers in their studies to check and establish validity and therefore reliability (Rocco *et al.*, 2003). Triangulation provides a mean to discover and confirm the inferences during research by using different sources of information to achieve valid and reliable results for the study (Hussein, 2009). Denzin (2017) has recognized four methods of triangulation; data triangulation; methodological triangulation; theoretical triangulation; and researcher triangulation. Of these four methods, the present study relies on data triangulation and methodological triangulation. Methodological triangulation has been an ideal way of analysing the data obtained from different sources. The objective of adopting both quantitative and qualitative methodologies is to avoid the biases of a single-method strategy. Therefore, this study has used both qualitative and quantitative methods to enhance the credibility of the study. For data triangulation, this study has collected data through different sources (interviews with participants, ranking exercises, documents, observation and photographs, documents) to establish the authenticity of results and also to enable a researcher to understand a phenomenon in greater depth.

The methodology used in Chapter five traces the historical trajectory of the current configuration of the Lahore's institutional structures for the management of urban green spaces depending mainly on Institutional Analysis and Development framework besides using the concepts of polycentric, collaborative governance (Ostrom, 1990; Ostrom, 2008). The assumption underlying institutionalist analyses is that institutions are important to determine the actor's decisions in any political context as they are the rules which govern human interaction (North, 1991). Historical institutionalism brings to fore institutional development over time, exploring

how different factors and processes led to specific outcomes and has effects on actors within the system. On the other hand, it also gives insight into how the actors made choices and what made these actors devise particular choices in historical contexts, and how these choices make a difference on subsequent outcomes (Lindegaard, 2013). Pierson and Skocpol (2002) note that historical institutionalists mainly relied on secondary sources for deriving much of their data. This applies to this study as well, though effort has been made to include primary sources, especially to supplement the empirical strength of the analysis. The main source of information in the given case study is historical documents, Newspaper, reports, archives records, interviews and direct observations. As access to official documents is quite difficult in Pakistan, more reliance was placed on other sources such as newspaper articles, and reports, literature on the Lahore's political, social, environmental, and institutional systems to overcome the paucity of data and to understand the institutional arrangement around urban green spaces in Lahore.

For the research, an abductive approach has been applied to let researcher explore existing theory with predetermined questions or concepts of interest, as well as for developing a new or broader theory to investigate contextual factors that emerged during data collection (Dubois and Gadde, 2002). Data collection efforts were buttressed by theory on polycentricism and collaboration, and the concept of public participation.

Chapter six employs Q-methodology to undertake discourse analysis for developing an understanding of actors' perspective on governance and management of urban green spaces in Lahore. This chapter explores various discourses underlining the scope of the polycentric governance for urban green spaces in Lahore. Institutionalisation takes place when actors accept a shared definition of reality through a linguistic process that defines the social reality (Scott, 1987). Therefore, language is essential to institutionalisation, which connects discursive practices to organisational practices (Foucault, 1980; Berger and Luckmann, 1991; Lindegaard, 2013). Based on this rationale, the study evaluates prevailing discourses and prospects of

development of institutions for public participation, conducive for urban green spaces governance. This chapter employs a semi-quantitative approach, Q methodology, in its exploration of discourses among stakeholders for urban green spaces.

William Stephenson (1935) originally used Q-methodology to study and analyse subjectivity in the domain of psychology (Brown, 1980; Barry and Proops, 1999; Watts and Stenner, 2012). Q-methodology seeks to measure subjectivity through a factor analysis as opposed to conventional survey and questionnaire methods (Brown, 1980; Barry and Proops, 1999; Watts and Stenner, 2012). Thus, contrary to the developing analysis based on variables (such as age, gender), it reveals pattern within and across individuals, by taking them as variables (Brown, 1980; Barry and Proops, 1999; Watts and Stenner, 2012). Q-methodology is a unique method, as it combines elements from both qualitative and quantitative inquest, especially the strengths of both methods to bring out empirical discoveries in a qualitative design (Stephenson, 1953). This method is applicable to the social constructionist paradigm as it elicits the views and perspectives of the participants. Q-methodology does not attempt to impose meaning a priori. Instead, it allows participants to express their perspective on a given topic (Watts and Stenner, 2012). Therefore, this study has adopted Q-methodology as the research tool because it not only sits well with present research for being exploratory and abductive, dealing effectively with the ontological and epistemological position but also suitable for researching marginalised voices in a given area supposed to be highly complex, controversial and laden with perceived power asymmetries.

Chapter seven uses qualitative analysis to give a detailed account of the discourses previously explored in chapter six, leading to its interpretation. Interpreting discourses gives insight into an individual's reality, providing an understanding and explanation for it (Dryzek and Berejikian, 1993; Hajer, 2002). This process is helpful to find inconsistencies and discrepancies as well as similarities within a narrative and between narratives. The interpretation of data in the light of the theoretical position identifies dominant

and subordinate discourses, explaining their shared understanding, which emerges as social realities (Hajer, 2002). For this study, the process of interpretation begins with the predetermined discourses, previously explored in chapter six. The transcripts have been stored and coded according to the main themes (discourses emerged in chapter six) in the NVivo database. For example, public participation is a theme emerged as a result of Q-methodology. The further inductive coding of the transcript will be helpful to explore as to how did this discourse emerge. What are the problems associated with the discourse? What solutions do stakeholders' offer for the problem? Moreover, what are the opportunities and barriers in this process? This detailed coding in discourse analysis will provide the means to answer the research questions and objectives set out for the study (chapter one).
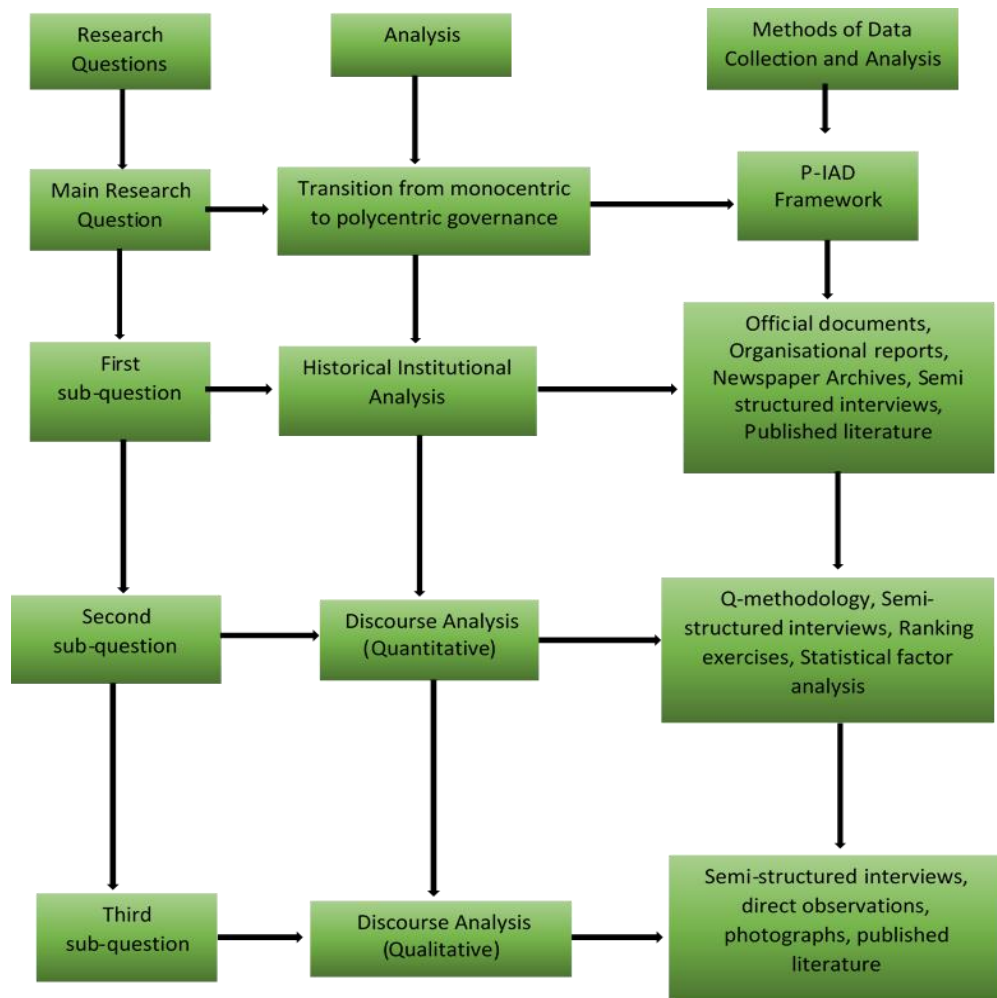
Figure 4.1 Methods for data collection and analysis

4.4.1 Data Collection

This study has benefitted from two main types of data: primary and secondary data. The primary data was collected through four main processes: semi-structured interviews, ranking exercises (Q-sorting), direct observation including photographs and documents. The fieldwork for data collection was conducted from July 2017 to November 2017

4.4.1.1 Semi-structured interviews

 Primary data was collected through 30 semi-structured interviews conducted with stakeholders of urban green spaces in Lahore. Semi-structure interviews are exploratory and allow the researcher to look deeply into the participants' perspective (Patton, 2005). The process enables collecting some comprehensive data that can unravel the complex and dynamic phenomena along exploring certain areas that provide a context within which the action or phenomenon happens (Patton, 2005).

To conduct interviews, the first task was to identify the stakeholders of urban green spaces in Lahore. Stakeholders were defined as those who are either affected by or can affect a decision. Stakeholder analysis is a reliable method to determine and identify those people, groups and organisations who have significant and legitimate interests in a specific urban issue (Reed *et al.*, 2009). For this study, stakeholders were identified by reviewing the literature on urban green spaces and developing an interest-influence matrix for these stakeholders. According to this matrix, any individual or group or organisation who have some interest in or power to influence or can be influenced through this system was categorised as a stakeholder in this study (Reed *et al.*, 2009). These included users, community groups, government organisations, civil society, and private developers (Table 4.1). As to the selection of participants for the study, purposive sampling has been used (Tongco, 2007; Etikan *et al.*, 2016). This kind of sampling is mainly based upon the theoretical assumptions of the study while selecting respondents who can serve the needs of a particular study (Nagy et al., 2010). Therefore, in applying the purposive sampling technique in this study, the researcher primarily undertook the selection taking into consideration the needs of the study based on its

theoretical framework and previous research experience. The theoretical framework used in this study is based upon polycentric governance featuring multiple-stakeholders, and accordingly, this study in its purposive sampling has made sure to give representation to all of these stakeholders' groups.

Table 4.1 Stakeholder Analysis for urban green spaces in Lahore

Stakeholders' Group		Organizations/Institutions/ Public	Influence	Interest
Government Stakeholders		Parks and Horticulture Authority	High	Low -Medium
		Punjab Forestry Department		
		Lahore Walled City Authority		
		Metropolitan Corporation Lahore		
		Environmental Protection Department		
		Politician		
		Department of Planning and Development		
		Cantonment Board, Cantt		
Non-governmental Stakeholders	Private	Expert (landscape and horticulture)	Medium-High	Low-Medium
		Lahore Chamber of Commerce		
		Private Developer		
	Civil Society	International NGOs with local partners	Low -Medium	High
		Local Environmental group		
		Academia		
		Media		
		Users		

According to the chosen criteria, 13 participants were selected representing various governmental organisations taking part in activities relevant to the town planning and the development of urban green spaces in Lahore (Table 4.1). In addition to this, different non-governmental organisations and institutions have been chosen, which can contribute towards urban green spaces and city planning in their own ways. These institutions comprised research institutions (Department of Geography, and Department of Environmental Sciences at Punjab University), Two Non-governmental Organisations (World Wide Fund for Nature and Indus Consortium) Local Environmental groups (Shajar Doost (Friends of Trees) and Save Lahore

Movement), one private developer, one participant has been selected from Lahore chamber of commerce, two participants from the media (one representative from electronic and one from print media) two private experts (one horticultural expert, one urban planner). Five participants have been selected for user group based on their gender (three females, two males), age (representing youth, middle and elderly group) and their closeness with city level and community parks.

An interview schedule (Appendix C-2) was prepared using a governance arrangement approach (Arts and Buizer, 2009). It is an integral part of the interviewing process as it provides consistency in data collection while at the same time, maintains the flow and meaningful conversation (Patton, 2005). Five pilot interviews were conducted through skype before going to fieldwork. Few minor amendments and adjustments were made in the interview scheduled based on these pilot interviews. The flexibility in questions allowed the interviewees to be more expressive and elaborate their point of view at great length. In total, 30 interviews were conducted from various stakeholders' groups. These interviews were held at various venues in Lahore such as participants' offices, homes and parks depending on the convenience and safety of participants and researcher as well. The average length of the interview was 35 minutes. The interviews were recorded and transcribed from Urdu to English by using a naturalised approach for transcription. This approach is consistent with the aim of this method, where the language and knowledge are essential for discourse formation (Da Silva Nascimento and Steinbruch, 2019).

4.4.1.2 Ranking Exercises (Q-sorting)

After conducting interviews, primary data was also collected through ranking exercises as part of Q-methodology. The sample size in Q-sorting process is not required as large as for other quantitative traditional techniques such as surveys. For example, Barry and Proops (1999) establish that a statistically significant result can be gained by using a population sample comprised of only 12 participants. This study aimed to complete ranking exercises with the same respondents who participated in the semi-structured interviews.

However, only 22 out of 30 participants agreed for Q-sorting when approached in the second phase. To fill this gap, some additional participants were included who represented the same stakeholder group. In total, 27 Q-sorts were collected due to time restriction in fieldwork.

In the Q-sorting process, participants were asked to rank the selected statements (extracted from interviews, detail in chapter six) according to agreed and least agreed on statements (Appendix C-4). This process is known as Q-sorting (Watts and Stenner, 2012). A distributional grid and 48 squared cards, with printed statements on each of them, were used to conduct ranking exercises. These statements were extracted from the participants' interviews by using a matrix based on discourse elements and types of claim (detail in chapter six, section 6.2.2) (Dryzek and Berejikian, 1993). The statements were in both English and Urdu language on both sides of the card. The cards were randomly numbered. For the distributional grid, a 9-point scale was selected ranging from agreed to least agreed statements. The participants were asked to arrange the cards in all cells of the grid in a forced quasi-normal distribution (Watts and Stenner, 2012). The ranking pattern made by the participants was recorded on a paper. A brief interview followed this ranking exercise to understand the viewpoint of participants and their opinion about this process. The participants were also asked for any additional information they wanted to provide. The process of Q-sorting and complementary interview provides a holistic approach to understand the stakeholders' perspective (Brown, 1993; Barry and Proops, 1999; Watts and Stenner, 2012).

4.4.1.3 Direct Observation

Direct observation, informal conversations, and photography supplemented the data collection for this study. Direct observation provides an opportunity to observe what people say and do in a given context (Taylor-Powell and Steele, 1996; Kawulich, 2012). The data collected through observation include detailed descriptions of physical features of parks and green spaces, people's activities there, behaviours, actions. During fieldwork, many visits were made to different types of green spaces and parks (include four city-level parks, ten

community level parks, one Ladies' park, two graveyards, a Canal Heritage Park, and roadside green belts). These visits aimed to observe these green spaces by way of walking around and making notes of the condition of the different component of the park and also talking informally with park users. Moreover, during these visits, the physical landscape was captured through the eye of the camera. However, the on-site observation in the form of direct observations, photography and informal discussion does not comprise a more substantial part of the data used in this study. Nevertheless, they generated a vivid picture of planning and policies on the ground, which could be triangulated with the information provided by interviews and documents. Many scholars note that direct observation when used with other methods not only support the findings but also lends credence to the emerging findings (Turnock and Gibson, 2001; Yin, 2003; Kawulich, 2012).

4.4.1.4 Documents

The present study has also benefitted from various kind of document as a primary and secondary source, supplementing empirical strength of the analysis. This study extensively covers the historical context of institutional development and provide information on conditions upon which the current institutional design of green space planning and development is based. Hence, document analysis constitutes the most suitable choice for this kind of study. Urban development and planning documents and relevant laws, policies, regulations, are the major data sources for this study. Primary documents have been given preference, though in some cases, the original hard copies of reports were difficult to access, or they have been missing from the record. In this case, where accessibility to primary documents was denied, the study has to rely on secondary documents, or obtained information through other reliable studies or reports. For instances, the original text of two previous Master Plans was missing. However, an analysis or summary of these plans has been collected from the present Master Plan for further usage. The main sources of information in the given case study include governmental documents, archived newspaper records, organisational websites and published reports (Appendix E-1).

4.4.2   Data Analysis

The analysis in this study is based upon the theoretical proposition, which serves as a guide in this analytical process. As such, this study has adopted the polycentric theory of governance to develop an understanding of the concept of governance for urban green spaces in Lahore. As per the polycentric theory, polycentricity becomes functional when all the stakeholders are involved in collaborative action or it requires participation from all the stakeholders (Ostrom, 2008; Ostrom, 2010; Carlisle, 2018; Carlisle and Gruby, 2017). The proposal here is that participation must be collaborative including citizens, interest groups, private organisations, and government in a common framework where all are working together and still all are acting independently of each other (Carlisle, 2018; Innes and Booher, 2003; Carlisle and Gruby, 2017). Various studies have found that it is hard in developing countries to create effective collaborative governance in the presence of powerful central governments with minimal involvement of private sector and civil society (Roberts and Addison, 2015). Due to strong central government and the federal bureaucracy, governments are only playing a minimum role towards community mobilisation and public participation (Roberts and Addison, 2015). To understand these power asymmetries in the evolution of institutions for the collaborative process, this study is using the analytical framework proposed by Clement, which draws on the politicised institutional arrangements (Clement, 2010). Hence it is considered quite relevant and useful in studying the management of green spaces in the context of a developing country where power asymmetries affect governance structure at various levels. Clement extended the IAD framework developed by Ostrom and colleagues by adding two more variables, thereby, adding a political ecology perspective to it which is relevant to this thesis. She identified the 'political-economic context' and 'discourses' as new external variables, mobilising contextual factors (Clement, 2010) (Fig.4.2). The mobilising factors interact with institutions in a variety of ways and are instrumental in shaping power dynamics and distribution (Clement, 2010).
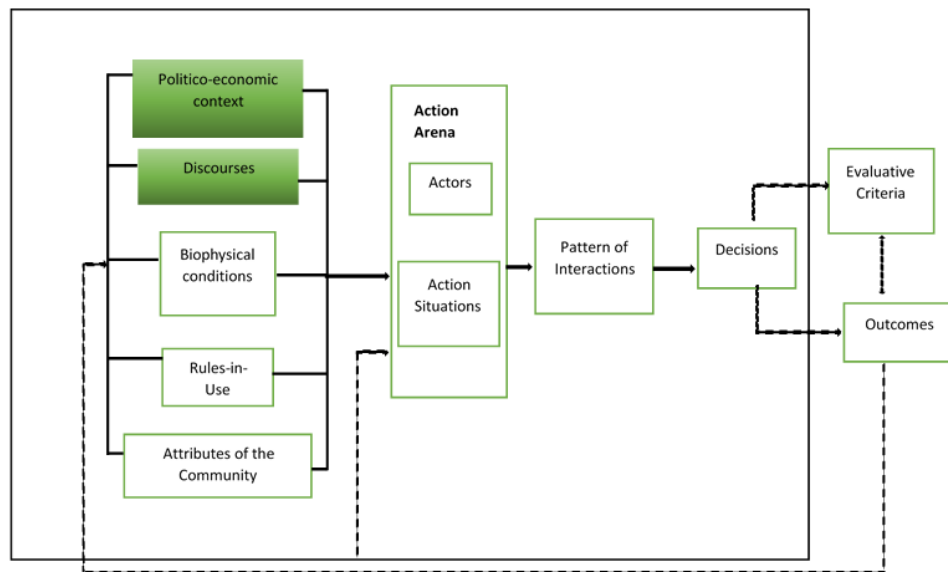
Figure 4.2 Politicised-IAD framework

Source: Clement 2010

Clement (2010) introduced the political economy to the original IAD Framework (Ostrom, 2011) to understand power and interests more explicitly (Clement, 2010). Institutions are from where the distribution of power takes place and are the linchpin in continuously shaping the political-economic structures. However, on the other hand, the political-economic context, in its way, underpin institutions' creation and functioning in this dual arrangement (Clement, 2010; Lindegaard, 2013). The political-economic factors ultimately have an impact on the institutional design, implementation and outcomes at various levels (Agarwal, 2001; Ribot *et al.*, 2006; Clement, 2010). The political economy analysis not only deals with concerns of power, scale, and history but also reveals how the actor at different levels manipulate their power to gain their interest. This kind of analysis will help delineate the general limits within which institutional change can take place (Clement, 2010).

Hence, to evaluate power dynamics it is essential to take note of not only visible but hidden forms of power including the prevalence of particular discourses dealing with thought, feeling, perception, and action (Clement, 2010; Foucault, 1980; Bourdieu, 1977). Clement (2010) like political economy

category also included 'discourse' variable in her 'politicised' IAD Framework. Discourse is "a specific ensemble of ideas, concepts, and categorisations that are produced, reproduced and transformed in a particular set of practices and through which meaning is given to physical and social realities" (Hajer, 1995. p.60). The discourses are also a source of power and knowledge, and significantly affect the meaning and legitimacy of the institutions which ultimately shape actors' beliefs and values (Foucault, 1980; Hajer, 1995; Gaventa and Cornwall, 2008; Clement, 2010). Discourse analysis also underlines struggles not only over resources but also meaning, as it highlights meaning, logic, representation, and knowledge harboured by different actors (Dryzek and Berejikian, 1993; Hajer, 2002). The extended IAD framework articulates that it is not only changing overarching rules but modifications in prevailing discourse in a way which legitimise these rules (Clement, 2010). Hence, analysing discourses enable to develop an understanding of how problems are being framed and how institutions develop in response to this problem-framing and hence how institutional change may be achieved through a discursive shift (Dryzek and Berejikian, 1993; Dryzek, 1994; Hajer, 2002).

Based on the above discussion, this study has used two analytical frameworks; historical institutional analysis and discourse analysis, both deals with power dynamics in the system and thereby provide a way to understand the potential of institutional change towards polycentric governance system.

4.5 Positionality

It is important to be aware of the researcher's positionality in the analysis of qualitative data (Ungar, 2003; Yin, 2003). Positionality implies how researchers manage to conduct the research process keeping their neutrality intact and without getting biased based on their power and perception (Palaganas *et al.*, 2017). Hence, it is imperative to understand the very concept of positionality which involves a significant degree of reflexivity on the part of a researcher and one's research process (Palaganas *et al.*, 2017).

My personal experience, background and education have some bearing on my research. I am a Pakistani, middle-age woman who completed most of her education in Lahore. I have been a student of natural science throughout my academic career. My previous research on urban green spaces as a part of the M. Phil programme raised some new questions and inspired me to do PhD. However, I found these questions need to be addressed but from a different perspective. This pursuit brought me into the realm of social science, which exposed me to entirely different methods. Hence, my educational background together with the aims and objectives of my present study fully justify the selection of the given research philosophy for my thesis.

Being a native to study area has some advantages and challenges. I found it very easy to access participants (only a few exceptions where the official process took some time) for interviews. Some people at the beginning of interviews were reluctant after knowing that I belong to an overseas University, but my native style of dressing and use of Urdu language made them comfortable to converse in a free environment. My association with an overseas university also led participants to consider me as an outsider in the system. This positionality allows them to discuss issues freely without fear of being identified.

Regardless of my previous experience, interviews with PHA and some city officials were difficult to manage. I had to seek approval from gatekeepers of four organisations before the start of fieldwork. In this regard, permission was sought from the Parks and Horticulture Authority, Lahore Development Authority, Environmental Protection Department and Lahore Cantonment Board. Lahore Development Authority that is primarily responsible for development in Lahore has denied giving access to any document and permission for interviewing any official. Hence, I gathered the information which is related to these actors from the related documents such as the planning and development report, or the information provided by other interviewees. Seeking permission from PHA turned out to be the biggest challenge. Due to bureaucratic, lengthy processes, it took almost two and a half months to get its approval. However, PHA refused to allow any

opportunity for participant observation in their meetings or discussions. PHA also restricted the accessibility to the participants by allowing only selected individuals to be interviewed. Another group of stakeholders that was challenging to access were the politicians (elected representatives). They were always either busy in their local politics or pre-occupied in the upcoming elections. On numerous occasions, interviews were postponed at the eleventh hour for some later day. Overall, this non-supportive attitude showed some limited cultural awareness and lack of unfamiliarity to support academic research. This is also evident when some bureaucrats have questioned the suitability of my gender for the present research as I come across the following question on many occasions: "Why as a female you are interested in this research topic"? However, I found the other civil society members at the other extreme, highly enthusiastic about engaging with this research and avoiding any secrecy or defensiveness altogether. They also invited me to participate in a few workshops conducted by them on urban forestry during my field trip.

I am quite well versed with the current system of governance of urban green spaces being a native of Lahore city and previously being a researcher in this field. Hence, there was a possibility of carrying some pre-conceived notions to my research reflecting my biases which can sometimes influence the process and cause research to be nudged in a desired direction. With this realisation, I made it a point to use a methodology which provides me means to remain objective and distant from the research participants, all along the data collection and analysis process. The distance that I maintained with the participants, therefore, was not a preference but, a necessity, to prevent biases to influence the process and so providing an ethical barrier between the participants' and my own experiences.

I was conscious of this problem from the very beginning and hence adopted a methodology that can minimise any chance of interference. Use of Q-methodology provides a means to capture participants' perspectives through some statistical and mathematical programmes and therefore allowing the researcher to remain objective (Webler *et al.*, 2009; Mckenzie *et al.*, 2011; Watts and Stenner, 2012). Again, I used an approach where the data

collection starts with a pre-structured, theoretically informed interview schedule. During data collection, I observed all the ethical considerations and give the participants an opportunity to speak freely. In the second phase of data collection, the Q-sorting process itself provides a degree of objectivity as well as ensures to keep research detached from the process. As participants themselves do the ranking of each statement according to their viewpoint, this method minimises the chance of imposing my own meaning or unduly influencing the participants' responses. In the next step, I entered the Q-sort into the computer software in the same order as constructed by each participant. The number of factors extracted in this process is statistically approved methods. The interpretation of factors has been carried out through a systematic process where statements have been explained on the basis of their scoring within a factor or among factors, therefore, making the data collection and analysis process more transparent and credible for research (detail in chapter six).

4.6 Research Ethics

Ethical considerations are essential as they explained how the research and research process could be influenced and its impact on the participants (Munhall, 1988; Long and Johnson, 2000; Yin, 2003). These considerations also play a big part in lending validity and reliability to the data collected and the subsequent research findings (Long and Johnson, 2000). To conduct this research, ethical approval was taken from the University of Leeds Ethics Review Committee in March 2017 (AREA 16-085) (Appendix B-1). A research protocol was prepared with the following guidelines; Research should be original investigation pursued to gain knowledge and understanding; Researchers need to exhibit professionalism; observe transparency and make sure safety and well-being of people associated with the research; and research methods and results will be liable to scrutiny and debate through making it more accessible.

Before data collection process three documents were prepared which includes; a letter of Invitation; information sheet, which explains the aims and

objectives of the study for the benefit of participants and why they have invited to participate in this research (Appendix A-1); consent form shows participants willing to take part in the research after going through terms and conditions of the research (Appendix A-2).

During fieldwork, before starting the interview, the participants were being enlightened as to the research topic and methods to be used in the study. Based on this information, participants were given the liberty to ask questions regarding their role and what is being done. The participants were also informed that their role is voluntary and that they could withdraw at any point before data analysis.

While following ethical considerations, the main concern for the researcher is to ensure confidentiality and anonymity for participants (Lancaster, 2017). As such a statement guaranteeing full anonymity and confidentiality was provided to the participants. To preserve anonymity, all interview recordings and transcripts were given codes, and metadata was kept safely at a separate place. To give credibility to research material, at the end of the interviews, all the participants were asked if they want to review the copy of the interview transcript. Only one participant availed this offer but did not show any desire to make any amendment in the transcript.

4.7 Research Validity

In any qualitative research, validation of the findings is the main concern of the researcher throughout the entire process of data collection and analysis (Golafshani, 2003; Whittemore et al., 2001; Pandey and Patnaik, 2014). Validity as far as qualitative research is concerned implies credibility or authenticity being invoked from researcher, readers and participants of the study (Pandey and Patnaik, 2014). Therefore, in order to maintain validity regarding this research relied upon several strategies.

4.7.1   Triangulation

This research has used both methods and data triangulation during the conduct of this research. For method triangulation, this study has used both

qualitative and quantitative methods to study the phenomenon from different ways to ensure consistency of its findings. The data triangulations were also the part of this study where it has collected data from various sources such as documents, interviews, ranking exercises, photos, newspaper articles to understand the phenomenon in great depth. It also has provided the opportunity to compare the findings through different sources to lend credibility to the study.

4.7.2 Participant's Feedback

Participants' feedback was an important step to measure the accuracy of data. During the interview process, the participants were offered to review interview transcripts to assess either it represents their viewpoint. A similar opportunity was provided to participants during the ranking exercise when participants were asked to record their feedback on the representation of their viewpoint and their satisfaction with the data collection process. In both cases, participants expressed their satisfaction and enjoyed this experience.

4.7.3 Thick Description of the Findings

This research has provided a detailed and elaborate account of every step of the research process to invoke a feeling of shared experiences with readers, enlightening them with a real context and setting. While analysing interviews, the inclusion of quotes from the participants' interviews has been extensively used to help readers to understand the phenomenon from the point of view of participants of the research.

4.7.4 Clarification of Bias

I have fully ensured to reflect my personal concerns and biases openly while giving my positionality in the research (section 4.5).

4.8 Research Limitation

Every study, no matter how well it has been done is not without some limitations. Limitations are those issues that emerge during research though

not in the researcher's control (Wiersma, 2000). This study also faced several limitations that need to be mentioned here.

This study has used urban green spaces as a case study within the specific context of Lahore. The case study approach, while having numerous benefits, also carry some limitations for its generalisation and replication of results (Wiersma, 2000). To acknowledge this limitation, conscious efforts have made to provide an elaborate and vivid description of the case study to guide the other researchers.

Another limitation associated with discourse analysis is the significance of its results for a specific period. Discourse can change over time in response to a change in policies and social conditions. This shows that the views and realities explored through participants may, therefore, represent a snapshot in time or may not be relevant in future.

This study also has some limitations by way of access to documents and participants involved in this study. One main governmental organisation dealing with land development projects outrightly denied permission to access its archives and members. More importantly, the organisation primarily related to green spaces and parks in Lahore (Parks and Horticultural Authority) was also extremely inflexible in giving access to its corridors. The proverbial bureaucratic red-tape was at display at every step in getting permission for accessing their members or documents which turns out to be a lengthy process. Moreover, several older versions of Master Plans were missing. However, the current Master Plan was helpful with the inclusion of summaries and analysis of the missing plans.

The study also faced a methodological limitation in Q-study. The results of Q-study showed a low explanatory variance, though the results of Q-methodology were statistically significant. A large p-set (additional ranking exercises) would have been ideal, but choices need to be made when faced with limitation such as time-constraints, financial issues and geographical distance.

4.9 Conclusion

This chapter has provided a detailed account of the research process, which includes the research philosophy drawn from its ontological and epistemological position and justification for selecting critical realism as an approach for this research. The chapter has also explained the sources and process of data collection on the one hand and how it has been used for the analysis on the other. As this study employs a mixed-method approach, a detailed account of the methodology for each chapter has been provided. Furthermore, this chapter has also outlined the analytical framework and related concepts to be utilised in the course of data analysis throughout the thesis. Besides, it has also discussed the ethical considerations and positionality of the researcher for the validity of the research.

Chapter 5. Institutional Path Dependence and Governance of Urban Green Spaces in Lahore

5.1 Introduction

Through the case study of Lahore, an urban centre of Pakistan, this chapter will examine the prospects of transition from a well-entrenched command and control system to more democratic participatory governance of its urban green spaces. It is argued that command and control systems produce rigid institutions which can hinder change and innovation and reinforce power to certain actors (Duit and Galaz, 2008; Marshall, 2005; Ostrom *et al.*, 1961; Ostrom, 2008; Ostrom, 2010). Therefore, to facilitate sustainably managed socio-ecological systems, it is paramount to understand the historical origins of institutional rigidity (Pahl-Wostl, 2007; Janssen, 2006). Hence, this chapter builds on the concept of institutional path dependence to examine the historical mechanisms underlying the genesis of institutions and power asymmetries in Lahore.

From a historical perspective, this chapter will explore the development of institutions for the governance of urban green spaces in Lahore. This chapter will first discuss conceptual, analytical and methodological approaches to analyse governance over time in Lahore. The historical analysis has consisted of details from three historical phases: pre-colonial Mughal, the colonial era and post-independence period. The colonial time period will be discussed as a critical juncture, explaining various institutional developments which trigger a path dependent trajectory, continuing till today. The fourth section will explore the continuation of institutional path dependence after independence with various steps taken by actors to strengthen this process at constitutional and collective choice levels. It will also explain the impact of these processes on the operational level in Lahore for urban green spaces. The fifth section will summarise the path dependence process while identifying missed opportunities and lessons learnt in the process, suggesting a new institutional

design, marking a transition to the sustainable governance of urban green spaces in Lahore.

5.2 The Concept of Path Dependence

The concept of path dependence suggests that events that occur at a certain point in history can affect successive events and developments (Mahoney and Thelen, 2010; Pierson and Skocpol, 2002; Pierson, 2000). It explains both the antecedents to the present arrangements and how institutions can be difficult to adapt or change in ways that may be more sustainable (Capoccia and Kelemen, 2007). The critical juncture (Fig 5.1) constitutes a period of uncertainty and instability in which different options for radical institutional change are available to actors (Collier and Collier, 1991). The selection of one path, while rejecting the other rival paths, automatically restricts future choices available to actors (Collier and Collier, 1991; Capoccia and Kelemen, 2007). The historical juncture is characterised as critical as it has the potential to give rise to a change and lead to a Path dependent institutional trajectory.
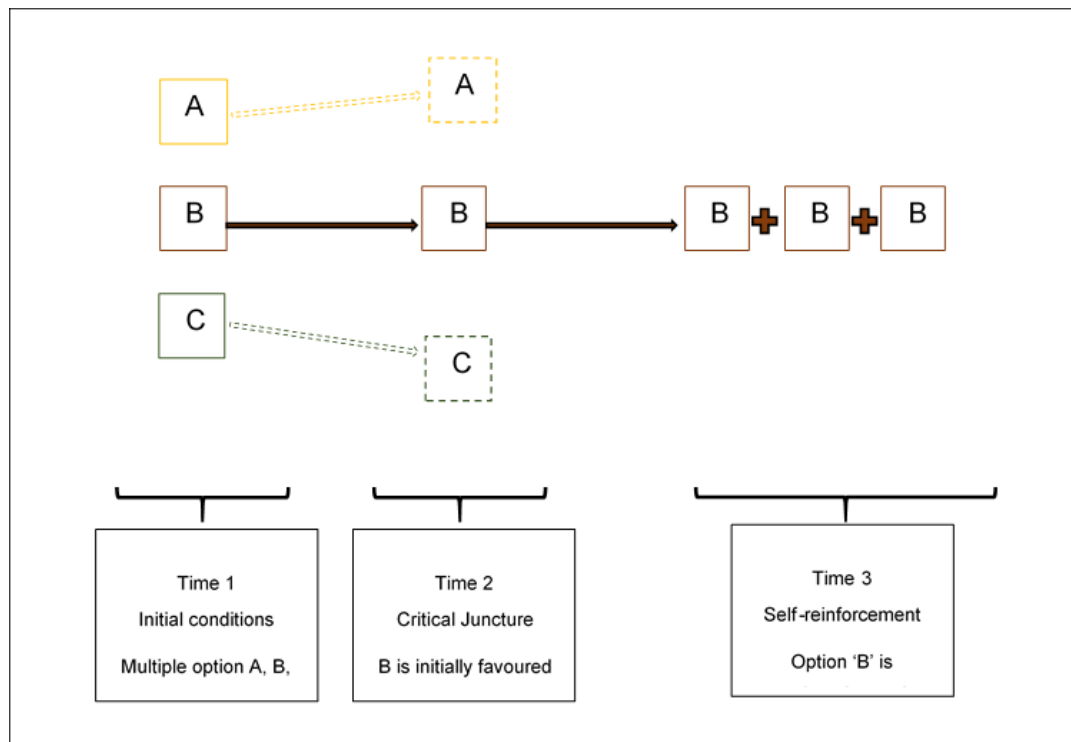
Figure 5.1 Illustration of Path Dependence trajectory

Source: Mahoney, 2000

Pierson (2000) has used the term 'increasing returns' to explain the persistence of Path dependent trajectory. The path-dependence process creates a self-reinforcing mechanism that increases the costs of adopting alternatives choices (Pierson, 2000). Actors who have more gains from these institutions have higher stakes in maintaining the status quo. Hence, they use the power and resources at their disposal, including material rewards as well as more intangible goods, such as access to political power and privilege, to impede any path-breaking actions (Pierson, 2000). In Path dependent analyses that employ a power perspective, once the institution develops, it is reinforced by power dynamics which works like a vicious circle where an advantaged group does everything to expend the institution which in its turn continue to benefit the same group. Therefore, it will be important to examine the persistence of institutional structures and power relations created by them and their influence on governance and management of green spaces through a historical lens.
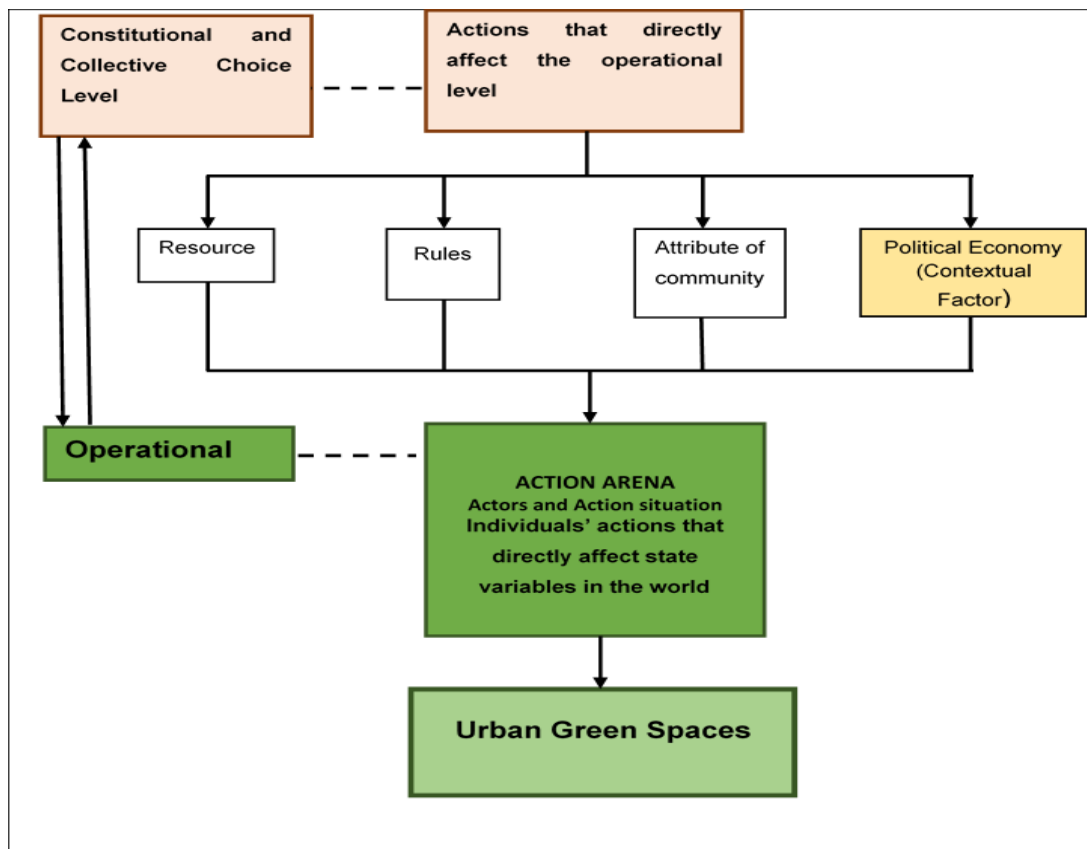
Figure 5.2 P-IAD framework

Source: Clement (2010), slightly modified by author

5.3 Analytical Framework

This chapter provides a historical antecedent of the current configuration of the Lahore's institutional structure that ultimately influences the governance and management of urban green spaces. To achieve its objective, this study uses the Institutional Analysis and Development framework (Ostrom, 2009; Ostrom and Basurto, 2011). This framework provides a set of general variables, applicable to a wide variety of settings. The variables are the biophysical conditions, the community attributes and the rules-in-use. Clement (2010) proposes adding two more variables to amend the framework. These are political economy and discourses. She named them as 'mobilising contextual factors' which can mobilise power in the system (Clement, 2010). In this political milieu, institutions affect the political-economic structures that have supported their creation and functioning and are also instrumental in power distribution. Using the framework purposed by Clement (2010) (detail in chapter four, section 4.4.2), this chapter illustrates the role of political economy as a contextual factor that mobilises power and contributes to the formation of rigid institutions in Lahore.

A prominent feature of the IAD framework is its linkages across governance levels. The IAD provides a three-tier multi-layered hierarchical structure, namely 'constitutional', 'collective choice' and 'operational' for organising the institutional analysis (Fig 5.2). Operational rules determine the day-to-day decision based on the actions of different actors in a system. These rules are designed by collective choice rules which ensure their enforcement as well (Ostrom, 2011; McGinnis, 2011). Thus, a difference between operational rules and collective rules is to practice a rule and to determine who has the right to practice it (Ostrom, 2011; McGinnis, 2011).

On the other hand, collective choice rules are designed by constitutional choice level (Ostrom, 2011; McGinnis, 2011). Constitutional choice level, thus, decides who will take part in collective choice decision-making processes (Ostrom, 2011; McGinnis, 2011). The working of this multi-level structure determines how institutions and decisions shaped up at the next, downward

level in hierarchical order and vice versa with the lower levels in their turn exerting an influence over the upper levels. This feature of IAD makes it more suitable to use in this research in the light of the assumption that, throughout history, most relevant institutional development and power phenomenon occurred at a higher level. It is the lowest, operational level which is the focus of this present research as Lahore city is the unit of analysis for this study. However, the institutional development at provincial and state level have some greater influence on urban green spaces in Lahore, therefore, the relevance of higher levels (i.e. collective-choice and constitutional) enhanced as the research progressed.

5.4 Methodological Approach

This chapter gives precedence to document analysis as a methodological approach to examine an institutional change in Lahore. Document analysis refers to a systematic procedure for analysing documentary evidence to address particular research questions (Bowen, 2009). Document analysis involves in-depth examination and interpretation of data to develop understanding, bring forth meaning and create knowledge in a particular context (Bowen, 2009). Hence, consistent with the objectives of this chapter, historical events have been traced, relying on documents analysis, as, the only realistic and practical approach (Thies, 2002).

Documents can be words and images created or recorded before the study for any other purpose or cause without any contribution of the researchers. As Merriam (1988: 118) highlights, "documents of all types can help the researcher uncover meaning, develop understanding, and discover insights relevant to the research problem". There are several kinds of documents categorised as primary and secondary sources of data. Documents providing personal and first-hand details of a phenomenon, to the exclusion of any prior interpretation or analysis, are considered as primary types of data (Frey, 2018). Personal letters or e-mails, photos, policies, newspaper articles, and advertisements are a few examples of primary sources of data. It is not an easy task to access these primary sources which may not be published and

Table 5.1 Methods for data collection

Documents	Data collection	Data Analysis
Constitutional Records	Historical records (Electronically Accessed)	To trace historical events and provide chronological origin and development of institutions
Governmental Document Five-year development plans since independence, Master plans of Lahore, Government policies, Laws and Acts 1947-2017	Retrieved from web sources of relevant government organisations	urban green spaces planning and development
Organisation Data PHA (Parks and horticulture Authority) LDA (Lahore Development Authority) EPD (Environment Protection Department) MCL (Metropolitan Corporation of Lahore)	Retrieved from hard copies and official web sites of these organisations	Urban green spaces' planning and development Public participation in the decision-making process
Published Reports	Accessed electronically	Evaluate Environmental Impact Assessment on Lahore Compare Urban green spaces in Lahore with international standards
News Paper 2007-2017	Electronic Archives	Reports on the role of Civil Society for urban green spaces Reported Court decisions on urban green spaces
Published Literature	Hardcopies Electronic archives	Contextual data for the research, Urban green spaces' planning and development institutional development of public participation
Semi-structured Interviews	Fieldwork (July 2017 to November 2017)	Urban green spaces' planning and development Public participation in the decision-making process

may be under the administrative control of any organisations (Frey, 2018). The present research has faced similar limitations where direct access to official documents was quite difficult in Lahore, and some cases almost impossible. However, other sources such as newspaper articles, web-based information, reports from government and non-governmental organisations

and published literature has been used to supplement the study (Table 5.1). Identifying documents is the primary task in this kind of analysis. For this purpose, the research requires a systematic approach to narrow down the list of potential documentary sources through conducting a preliminary search (Frey, 2018). Setting inclusionary criteria is one important pre-requisite of ensuring systematic document selection and minimising the chances of irrelevant data collection (Frey, 2018). As such this research followed a systematic pattern. The documents have been short-listed keeping in mind the topic of study, which is the governance of urban green spaces. Another parameter to inclusionary criteria has been the selection of documents on historical events in their chronological order. The geographic representation constitutes another important parameter to consider in the inclusionary criteria. As such for this study, the unit of analysis is Lahore which remains the main focus of the data collection process. Following this exercise of data collection document analysis has been reviewed and interpreted using the analytical framework (section 5.3) to gain meaning and empirical knowledge to study.

5.5 A Glimpse of Pre-colonial Lahore

This history of Lahore, according to some historical accounts, has witnessed many conquering nations such as Hindu, Moghul, Persian, Afghan, Sikh and British (Hoodbhoy and Nayyar, 1985; Rahmaan, 2017). Throughout history, Lahore holds a position as an intellectual centre of the Indian subcontinent. However, it acquired the status of the provincial capital of Punjab in the wake of partition of the Sub-continent after the exit of the British government (Rahmaan, 2017).

5.5.1   Administrative Structure

In pre-colonial India, the Mughal rulers' established a centrally hierarchical administrative structure, based on military or warrior bureaucracy to assert the authority of the rulers and, more importantly, to collect revenue from the population of this vast empire (Singh, 1988).

As the Mughal emperors lacked in logistical and infrastructural capacity to centralise control over land, they relied upon alliances at different levels of intermediaries, starting from higher-level *jagirdars* (Landlord) to lower-level leaders and *zamindars* (Landholders)*. This extensive networking allowed the Mughals to establish a semblance of indirect rule all over the empire (Habib, 1963; D'souza, 2002). Apart from collecting revenue, these intermediaries were also called upon to maintain law and order by suppressing any insurgence (D'souza, 2002). Mughal emperors, while understanding the need to counter the threats of revolt from either peasantry or disaffected local and regional powerholders, actively accommodated elites who could use their social, economic and military force to minimise threats and keep the system at peace. The elite in return gained power not only in the form of economic advantages but also gained political legitimacy and greater power, by their association with the rulers of the time (Habib, 1963).

Mughal's approach to administering the urban areas was in line with their quest for security and stability. They established the office of Kotwal, which has been their ever-lasting contribution in the realm of administration. Kotwal was appointed under the directive of the Emperor, enjoying extraordinary powers and controls almost everything in the city, from maintaining security to municipal functions and from markets to commercial and economic life of the cities. However, the urban administration, he runs had neither any public backing nor any legal status. In fact, it was an administration imposed from the top with local representatives have nothing to do (Habib, 1963).

5.5.2 Urban Political Ecology under Mughals

Under the Mughal rule, the agrarian system provided the basis for towns and cities to establish as trade centres where mostly agrarian products ended up in the towns and cities from the rural areas (Habib, 1963; Richards, 1981). The land revenue system was designed in such a manner that Mughal used to get the lion's share of the surplus money, leaving hardly anything for the peasants (Habib, 1963; Richards, 1981). Mughal consumption and expenditure patterns revealed that it was the urban centres, where the wealth of the rulers and elite classes was disbursed. Their investments were in two

main areas; firstly, their primary interest was investing in precious metals and jewels; and secondly spending on significant architectural structures (Habib, 1963; Richards, 1981). They built magnificent structures in and around Lahore which historians considered being an attempt to impress their subjects with their power and greatness rather than for utilitarian concerns (Rehman, 2014a; Rehman; Rehman, 2009). In this era, Lahore was called the 'City of Gardens'; the city had more area laid out as gardens compared to build structures. It was not only the ruler class that patronised gardens in Lahore, but the trend was followed at a sub-imperial level representing the local gentry and upper classes. Thereby changing the very character of the urban landscape (Rehman, 2009; Rehman, 2014a; Rehman, 2014b). As such, there were tomb gardens, pleasure gardens as well as residential gardens, much depending upon the usage of the park (Rehman, 2014a; Rehman, 2014b; Koch, 2008). Mughal gardens had great political symbolism and relevance as they underline either dynastic ambitions and territorial claims (Koch, 2008; Rehman, 2014a; Rehman, 2014b; Wescoat, 1991; Wescoat and Wolschke-Bulmahn, 1996). Tomb-gardens and Palace gardens were then the vehicles to portray dynastic symbolism. In tomb gardens, attempts were made to replicate Islamic symbols of paradise on earth (Latiff and Yaman, 2017; Dickie and Zaki, 1985). The spirituality of the place was evident from the fact that successors used to perform pilgrimage to a dynastic tomb when entering or leaving the city. Palace gardens were a place where kings held a *darbar*, and so had political significance. Each level of the garden had some political function and represented an immediate political environment of the king. These gardens also underlined political demarcation of the territories the Mughals occupied (Wescoat and Wolschke-Bulmahn, 1996; Wescoat, 1991; Wescoat Jr, 1994).

These gardens were also designed in a way to address to lessen the harsh climatic condition for rulers and their patronage (Ali, 2013; Ali, 2011). Their architectural features with its lush green landscape, excessive use of water, its open pavilions and subterranean rooms provided natural insulation against

hot and humid summer heat besides enabling circulation of breeze (Ali, 2013; Ali, 2011).

The vastness of architecture and these gardens underlined the Mughal mindset. A Mughal court chronicles, revealed by Koch (1991) about an officer claiming that great buildings were necessary for an effective ruler:

> It is evident that an increase in such things [i.e. buildings and external show] creates esteem for the rulers in the eyes [of the people] and augments respect [for the rulers] and [their own] dignity in the [people's] heart (Koch, 1991: 13).

The edifice of Mughal's political empire was based upon their economic approach, showing Moghul state apparatus as parasitic with Moghul state and aristocracy using their income in a highly unproductive manner (Habib, 1963). Maddison (2013) quoted Francisco Pelsaert who describes the socio-economic conditions in India as:

> the rich in their great superfluity and absolute power, and the utter subjection and poverty of the common people - poverty so great and miserable that the life of the people can be depicted or accurately described only as the home of stark want and the dwelling place of bitter woe (Maddison, 2013: 03).

The parasitic nature of the military-administrative structure was one of the main sources of peasant opposition to Mughal rule in the early eighteenth century (Bayly, 1988; Habib, 1963). As these eighteenth-century changes got unleashed, it was Punjab's urban sector with its big cities at the receiving end. As is evident from the fact that all their grandeur and accumulated wealth were targeted in the peasant revolt. The historic city of Lahore witnessed a great fall. An estimated population decline from half a million to around 85,000 in 1849, shows how cities were destroyed as a result of these uprisings (Naqvi, 1971). It was also the time when Lahore was also invaded by rulers which destroyed its Mughal heritage, especially its gardens (Naqvi, 1971).

Punjab, as opposed to most other parts of pre-British India, witnessed a dismantling of the social structure due to peasantry uprising and hence required a different institutional design to survive and thrive along with, major continuities in later periods (Habib, 1963). The growing momentum of a peasant uprising in the 18th century led to the emergence of a new class of

landholders, who were still in the process of self-organisation and so saw an opportunity in aligning with British Raj (Ali, 2004). The removal of the top elite from the social scene and rise of a new leadership paved the way for the British colonial regime to thrive, and new institutional design at the end of the Mughal period. Hence, the next section deals with British colonial state efforts at institutional development to achieve their goals in the Subcontinent.

5.6 Colonial Era: Beginning of Path Dependency

After the exit of Aurangzeb Alamgir (Mughal emperor) in 1707 A.D, an extended period of upheaval and unrest dominated the history of India, which ultimately led to the fall of Mughals from grace. Mahrattas and Sikhs; Afghan and Persian attempts to conquer India failed (Ali, 2004). The authority of the British East India Company kept growing and stature until the British finally took over in 1857. Initially, it was the period of political ascendancy of the British East India Company, followed by the actual advent British Government in 1857 in the Sub-continent. Following the annexation of Punjab in 1849, maintenance of political stability along with the agricultural development were the twin challenges confronted by the new colonial master(Javid, 2011; LaPorte Jr, 1981). Unlike Mughals, the new rulers were more methodical and systematic, creating an enduring physical and institutional infrastructure to achieve their interests (Washbrook, 1981; Talbot, 2011) As such, the next century witnessed a series of adjustments and institutional changes (Fig 5.3) necessitated by economic and political expediencies of the British rulers as well as those dictated by its political-economic interests, which ultimately had far-reaching implication on the governance of urban green spaces in Lahore.

5.6.1 The Emergence of Power Elites in Punjab

The occupation of Punjab in 1849 and the period after that constitute a critical juncture in the history of Pakistan. The new British regime put in place institutional structures including bureaucracy, military and local elites to augment their objectives in the region by creating a Path dependent trajectory. The bureaucratic-legal structure that was enforced by the British was an attempt to create a system that was based on the political-economic interest

of the rulers in the Sub-continent. Therefore, the newly established system helped to distribute powers to certain local actors who were in the loop to further the politico-economic interests of the ruling class. In the emerging Path dependent course, the growing relationship between the state and Punjab's local elites is of pivotal importance as this forms the basis of future political order and continue to become a colonial policy in Punjab with minor adjustments over the time to protect its interests. As this relationship turns out to be a mutually beneficial the very *raison d'etre* behind this cooperation continues to be reinforced, thereby making it difficult to switch to alternative arrangements. However, this equation, on the other hand, led to the marginalisation of other forces in the regime's political patronage. The next sections will discuss the various factors which helped the British government in making local allies which later emerged as powerful actors in the production and reproduction of institutional structure.

5.6.2 Land Ownership- A Critical Juncture

With the old system of revenue collection dispensed by the colonial government due to its complex and vague nature, the colonial ruler's biggest worry was how taxes would be collected. This issue brought to fore the concept of "ownership" of land and with it, the entire structure of land rights (De-Gitika, 2016). The British developed a legal system to adjudicate the disputes arising out of its land-rights development that was not consistent with customary practice (Washbrook, 1981).

British ruler developed a new set of legal rights as private property for land ownership while ignoring the customary law (in the early phase) based on social relation, embedded in the culture of Indo-Pak (Washbrook, 1981; Talbot, 2011; Hosagrahar, 2012). The land became an alienable and saleable entity under colonial law by declaring it as private property and establishing its ownership rights. The concept of private property brought the law of eminent domain in its wake which empowers the government to buy land at a reasonable price - through the notion of common or public good - for construction of public buildings, roads, canals etc (De-Gitika, 2016). The British government already enacted this law in various presidencies before the

annexation of Punjab. However, in 1857, all these acts were repealed and replaced by Act VI of 1857, which aimed to unify the various laws under one general law for the acquisition of land for public purposes. This act was further amended in 1863, 1870 until 1894, when this act was finally repealed (De-Gitika, 2016).

The concept of public land was increasingly used by the colonial elite to implement their own ideas through spatial practices in the public realm, giving them higher authority over Indians (Glover, 2007). The public spaces came under greater government control and regulation and increasingly associated with the Municipal committees or authorities, dictating the formation and use of public space in Indian cities changing the physical landscape by imposing foreign imported ideas on native people (Glover, 2007; Malik, 2014; Hosagrahar, 2012). With these shifts, the parks, playgrounds, streets and open spaces became the sole preserve of urban elites (British civil servant, military officials) and the urban poor (native) being left out of this new equation (Rasool and Sinha, 1995). The municipal committees, headed by powerful bureaucrats, played a significant part to increase this gap in the urban areas (Hosagrahar, 2012; Malik, 2014; Rasool and Sinha, 1995).

Like any other colonial power, Britain ruled India to serve its own agenda. However, in the process, it addressed the issues of urban administration, unveiling new concepts of urban planning in the field of health and sanitation (Sheikh, 2018). In order to improve health and sanitation, they put in place a network of improved roads and landscaping with greater openness, order and beautification (Glover, 2007; Malik, 2014; Sheikh, 2018). Thereafter, the government imposed these new ideas on their Indian subjects keeping in mind only physical planning and civic design aspects without at all taking into account whether these imported ideals suited their socio-economic needs (Home, 1990). However, the outcome of the town planning carried out by the new colonial masters was not a homogeneous improvement of urban areas. Instead, different urban traits, spatial segregation and social segmentation emerged in society (Glover, 2007). The new rulers expanded cities outwardly
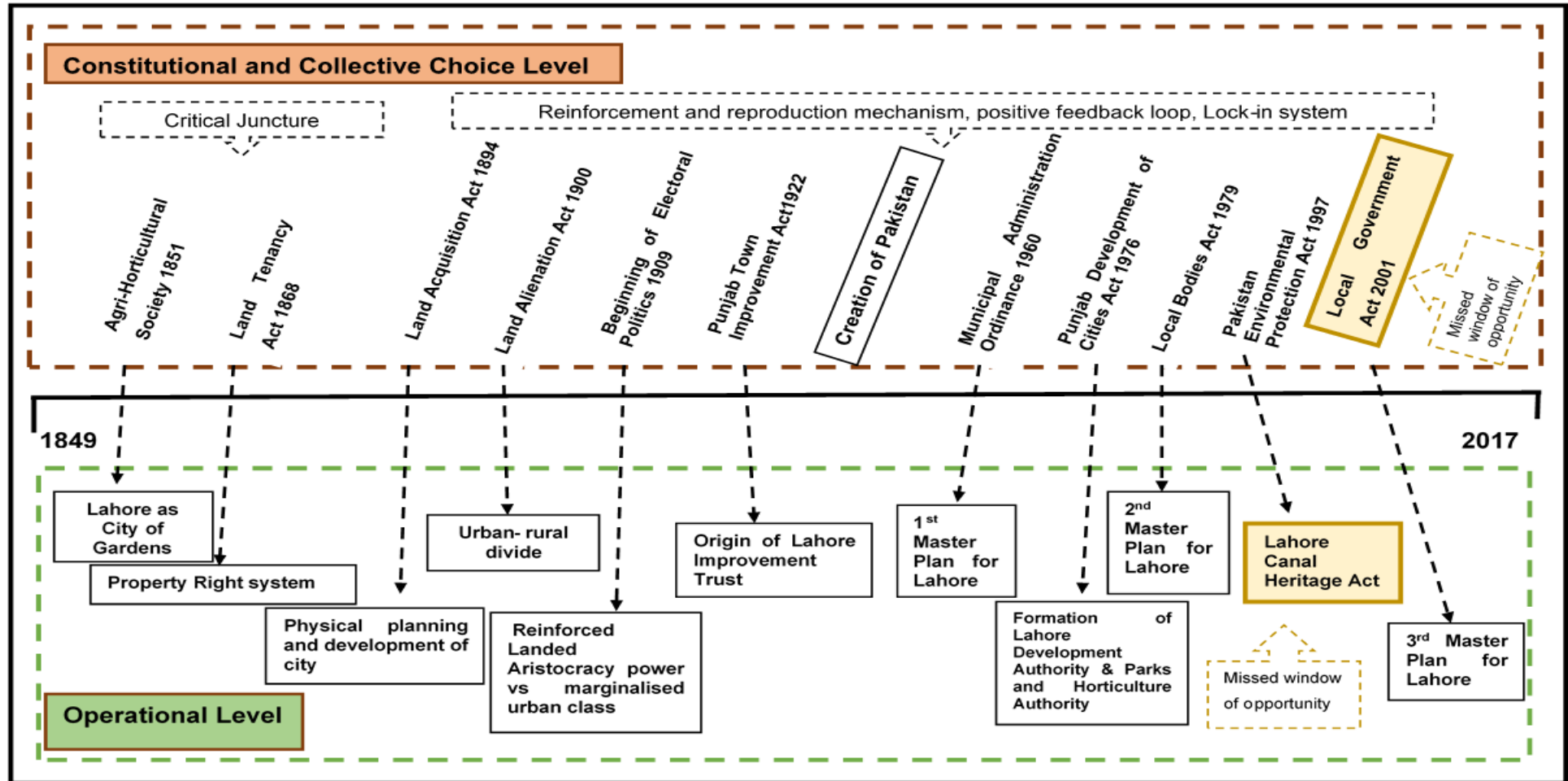
Figure 5.3 Historical Institutional Analysis

so that they could stay away from the local population following a diverse lifestyle different from the English ruling elite. Security and cultural concerns lie at the heart of this desire not to intermingle with the local neighbourhoods or adjoining areas. This trend not only allowed the new ruling class to follow their own lifestyle more freely but also security protocols in case of security threats such as mutiny at the local level (Qadeer, 1983). In Lahore new civil lines and a cantonment were built in the south and south-east of the city, away from the indigenous population (Qadeer, 1983; Merchant, 2017) underlining a willful separation of land uses through self-contained areas and planning. These areas were singled out for wide avenues with trees (the most important of these called "the Mall") and parks (Rehman, 2009). This architect reveals a design laid out poles apart from the local style. The cantonment was surrounded and hedged by a Building-Free Zone, which later adopted the form of Green Belt with the distance and green belt becoming something like a barrier between the English ruling class and native population (Rehman, 2009; Rasool and Sinha, 1995). It was an exclusive zone or landscape keeping the cantonment away from the hub of native settlements. This area was known for its vast gardens, polo and cricket pitches, and tennis courts and other open spaces insulating the rulers from disease and pollution while making even the use of parks only for the English people to the exclusion of the natives one (Rasool and Sinha, 1995; Rehman, 2009). With these unprecedented striking features, it is quoted by (Groote *et al.*, 1989: 16) that Lahore's Cantonment was built as "a Garden City half a century before this concept of planning got popular in England" and Letchworth and Welwyn Garden City were honoured as the first examples.

The Agri-Horticultural Society of Punjab (AHSP established in 1851, was instrumental in changing the physical landscape of Lahore. Most of its members were civilian and military bureaucrats (Rehman, 2014; Lally, 2015). Enjoying full backing of the government, its main functions included conducting scientific research to improve agriculture and create awareness among the local peasantry through cultivating the agricultural knowledge, implements and techniques. Another important function assigned to the AHSP

was to build nurseries and gardens all over the province, with a primary focus on Lahore. Distributing plants and seeds and conducting soil and climate suitability tests for imported plant species.
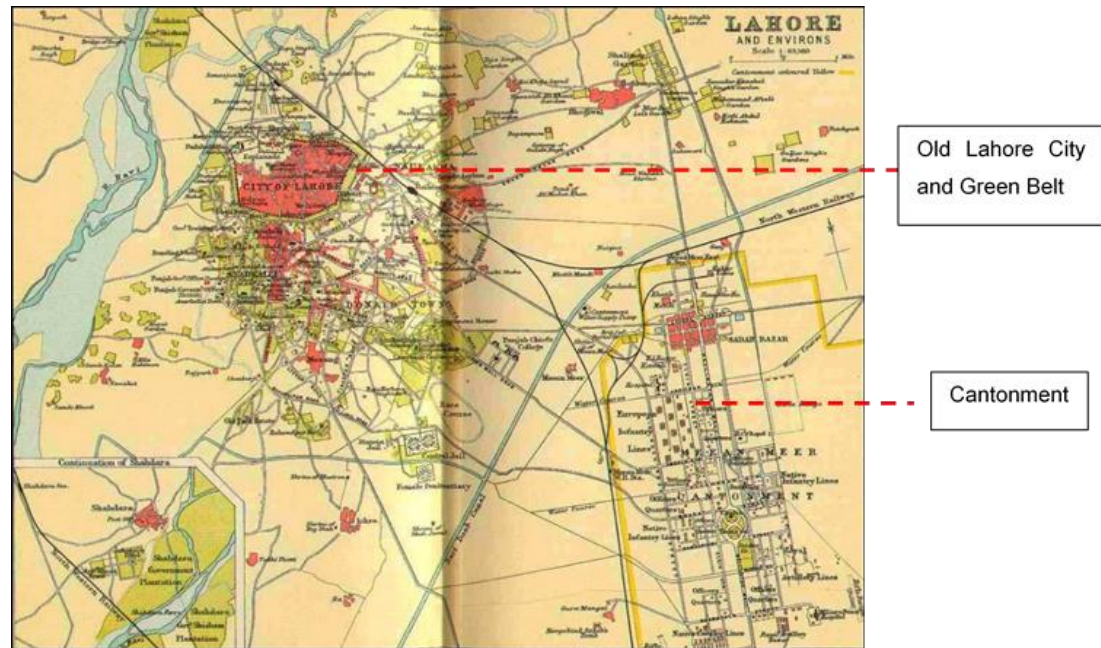
Figure 5.4 Lahore in 1893
Source: E-repository (Labels by Author)

The AHSP remained an almost exclusively European organisation (Rehman, 2014a; Rehman, 2014b; Lally, 2015). As a result of these efforts, the city of Lahore acquired a different physical landscape. On 15 April 1885, Lady Dufferin wrote in her account of India:

> Lahore is one of luxuriant foliage and flowers and cultivation… I don't feel that I have seen any town but… Gardens and roads with double avenues of trees and there were palms, and nurseries of roses and fertile-looking fields (Dufferin and Ava, 1890: 118).

Scots botanist Patrick Geddes who arrived in Lahore in December 1917, suggested at the need to adopt a people-centred planning approach (Munshi, 2000). Geddes (cited inMunshi, 2000: 489), while critical of the civic officers and engineers, contended: "Town Planning is not mere place-planning, nor even work planning. If it is to be successful it must be folk planning". He criticised a plan for Lahore for changing its social and cultural landscape (Munshi, 2000; Guha, 1992). Geddes contended that planning should be based upon local knowledge, consideration, and tact which can help the

planner to mobilise people to participate in development schemes. He gave precedence to municipal power and business method over considerations such as technical expertness and activity in the planning (Munshi, 2000; Guha, 1992). However, colonial powers had to watch their interests more than any other consideration. As such, most of the institutional development and engagement was necessitated by their colonial vested interest (Munshi, 2000; Guha, 1992).

However, the urban growth patterns spurred by the settlement of military and European population have largely influenced Lahore's landscape on both social and economic levels, changing Lahore while laying the basis of a great city in the making (Talbot, 2011). Once civil and military bureaucracy settled in Lahore, retail and commercial activities increased manifold. There came a boom for mega-projects like the establishment of railways and building projects, creating an increasing demand for the skills and products (Chattha, 2012). Modern education facilities and new educational institutions also led to the creation of a middle class like lawyers, teachers, doctors (Chattha, 2012). New housing neighbourhoods like Model Town Housing Society started developing to accommodate a rising new middle class impressed by the European way of living and architect. The concept of a Garden City, gaining roots at that time in Britain and Europe, was replicated in Lahore in the form of Model Town Housing Society with lavish green and infrastructure for the first time (Rahmaan, 2017; Rehman, 2009; Rehman, 2014a). So as the British were leaving the Sub-continent, Lahore represented three different classes inhabiting three different parts of the city: namely, the old city comprising lower class from the indigenous population; middle-class suburbs and upper-class establishments – all as if were watertight compartments concerning architect, social composition as well as the lifestyle of their residents and economic activities being pursued (Groote *et al.*, 1989; Tandon, 1968; Chattha, 2012).

More importantly, as the city developed and evolved, it caused a greater stratification in which social context and communal and religious identity became more relevant for the citizens (Tandon, 1968; Chattha, 2012). The increased material progress witnessed after the colonial rule not only

profoundly affected the society, it changed the outlook of different communities, thereby, sharpening the communal identities and awareness. The Hindu emerged as a trading and professional class benefited the most from the opportunities offered by the new rulers' schemes as well as by modern education facilities as opposed to the Muslims who mainly represent artisan class, were less forthcoming in availing these opportunities. Nevertheless, the rise of communalism did not result in political mobilisation until the late stages of British rule (Chattha, 2012).

With the dominating agrarian economy in Punjab and lack of urbanisation resulted in the absence of any capitalist class except an emerging urban middle class (Ali, 2004). More importantly, this middle class lacked political or social power the Colonial rulers cherished the most to preserve their rule and so became marginal to the interests of the colonial state when compared to its rivals the landed aristocracy (Ali, 2004). Therefore the colonial government took many steps, which enriched the patron-client relationship between the British government and these landed elites, marking the beginning of path dependency trajectory with its long-lasting impact (Javid, 2011), which has been discussed in the following paragraphs.

5.6.3 Land Tenancy Act 1868- A Positive Feedback Loop

For agricultural land, two systems of land ownership were introduced by the British government in colonial India. First, it was called as Permanent Settlement or Zamindari System (Cornwallis system) which gave ownership of land to the big landlord and authorised them to collect taxes from the small cultivators for the government. The scheme aimed at improving the agricultural system, but the results were entirely unintended for land tenants and peasants (Banerjee and Iyer, 2005). In later decades, under the notion of utilitarianism, the colonial ruler became more concerned about individual rights and economic efficiency, and therefore, preferred the ryotwari system over the Zamindari system. Under the ryotwari system, the government of Punjab collected direct taxes from the cultivators or group, and thereby, removing the big landowning as intermediaries from the process (Banerjee

and Iyer, 2005; Javid, 2011). However, the 1857 mutiny triggered a debate over the suitability of the tax collection scheme (Baqai, 2010; Hambly, 1964). Demand for a restoration of the pre-colonial order with the landed elite considered as sources of economic and political power (Baqai, 2010; Hambly, 1964; Javid, 2011). It was based on these calculations that Punjab Tenancy Act of 1868 was enforced on more durable basis that the proprietary rights endowed earlier on would not be liable to change or revoke except when superior proprietary rights could be established (Hambly, 1964). Another amendment made in the original arrangement (act) allowed original landlords greater leeway and power over cultivator even to evict the latter at will. Through the act, in fact, a balancing act was performed by which a compromise between a landlord class and a pro-peasant faction (Hambly, 1964). The way Land Tenancy Act adjusted these two systems (Zamindari and Ryotwari) indicated the way landed aristocracy would appear as a privileged class in future (Javid, 2011).

The Punjab Tenancy Act was a significant development, representing a critical juncture towards an ongoing and evolving process of path dependence in the Sub-continent. The local peasantry and the traditional landed aristocracy were the mainstays, for British regime, for political and economic sustenance. Given this mindset, an institutional framework in the form of the Tenancy Act had been established through which kept both the actors engaged, using them to achieve the goals of the colonial state. The new arrangement turned out to be a good beginning because as a result of its enforcement not only the British Colonial government had the ready support of aristocracy as allies with all their social, political, and economic clout to ensure peace and stability in the empire while wooing peasant proprietors at the same time ensuring a 'passive' loyalty to the state which in a way strengthened the hands of landed aristocracy in maintaining a strong support base for the colonial regime

5.6.4 The Canal Colonies-A Positive Feedback Loop

Between 1885 and 1926, in pursuit of its economic and political objectives, the Colonist government initiated an extensive irrigation system comprised of a network of canals and developed canal colonies around them to support the

agrarian economy in the region (Ali, 1979; Baqai, 2010; Talbot, 2011). Under this grand scheme, lands were distributed to military personnel, civilian administration and loyal members of Punjab landed aristocracy under different categories of land grants as a reward for their services (Ali, 1979; Baqai, 2010; Talbot, 2011; Ali, 2004). The landed classes by virtue of this largesse or preferential treatment excelled politically and economically over and above other segments of society. The canal colonies project and measures taken under its banner, explicitly show a positive feed-back to Path dependent institutional development in Punjab. On the one hand, it allowed the colonial government to expand its writ and bureaucratic influence visibly and on the other providing an excellent opportunity to landed elites to acquire and distribute patronage with British thereby, indicating concentration of power in these two actors in the emerging power equation.

5.6.5 Land Alienation Act 1900- A positive Feedback Loop

However, towards the late 19th century the political order was challenged in Punjab. Private property rights on land made it easy for the poor peasantry to sell their traditional land to urban moneylenders (Barrier, 1965; Talbot, 2011). A sudden surge in the alienation cases during the 1880s, which sparked tension and revolt between cultivators and urban moneylenders, forced the government to look at the situation closely (Barrier, 1965; Talbot, 2011). As a result, the Punjab Alienation of Land Act of 1900 was enacted. The new law not only limited the ownership of land to agricultural class but also placed strict restrictions on buying land for non-agriculturalist purposes, thereby, preventing the land from going into the hands of non-cultivators forever. It was another attempt to maintain the existing political order and protecting the landed classes in Punjab from the risk of losing their clout. It clearly shows that the colonial government was not ready to change the status of landed classes in Punjab against urban capitalism (Barrier, 1965; Talbot, 2011). The urban middle class that emerged in the cities as a rival and challenged the power of the landed aristocracy was, in fact, a by-product of the colonial law that declared land as private property. However, when this situation led to

disturbing the power equation between landed and urban capitalist class, British government swiftly change the institutional rules to reinforce power in favour of landed aristocracy without considering its impact on British government's doctrine of the free market economy. The Land Alienation Act proved to be a significant step taken by the British government as in return landed aristocracy used their social, economic and political influence to preserve the status quo thereby, produced a positive feedback loop that reinforces the path dependence trajectory.

5.6.6 The Introduction of Electoral Politics, Decentralisation and Public Participation- A Positive Feedback Loop

The British rulers took many steps to introduce a local government system in Punjab. Municipal committees were selected between 1862 to 1864, by nominations system from bureaucratic choices and overwhelmingly controlled by officials (Tinker, 1954). In 1882 Ripon reforms were introduced. Ripon firmly believed that "If local government is to have any vitality, then it should evolve out of local circumstances; if it has to be created artificially, at least it should be planned in detail by local administrators, and not be imposed ready-made by the central government" (cited in Tinker, 1954: 43). These reforms suggested by Ripon were meant to empower and educate local communities. This resolution passed in theory, but hardly anything happened on the ground or in reality (Tinker, 1954). In 1909 the British government granted the right to vote, but still, this opportunity was limited for landed class and then to literate class (Baqai, 2010; Javid, 2011; Talbot, 2011) therefore again strengthen the power of elites in the system. Another attempt was made to improve the system with Montage-Chelmsford Reforms with the Government of India Act in 1919. It recommended a system of diarchy by declaring local government as a transferred subject (Baqai, 2010; Javid, 2011; Talbot, 2011) however it did not bring any significant change in the system of local government (Baqai, 2010; Javid, 2011; Talbot, 2011). The legislative assemblies and district boards emerged as new actors to reinforce the British administrative structures (Baqai, 2010; Javid, 2011; Talbot, 2011).

However, to mitigate the failure of municipal bodies, the British government introduced the Punjab Town Improvement Act in 1922. Under the Act, the focus shifted towards Improvement Trusts with only nominated persons on its governing board (Malik, 2014). These trusts had the mandate to draft and implement schemes for urban development of the cities. It called for zoning, building regulations, acquisition of land for public purposes, and the collection of funds for local improvements (Malik, 2014). The Trusts were empowered to acquire land under the Land Acquisition Act, 1894, and sell them by dividing into smaller plots for the private owners while also responsible carrying out development in line with the prescribed rules. The motive behind creating an exclusive authority had a political intent as British were suspicious about the performance of the local government which was mostly comprising the Indian politicians (Malik, 2014).

Meanwhile, the development of two organisations at the local level for planning and development proved counterproductive as overlapping jurisdiction and the division of responsibilities resulted in mismanagement (Malik, 2014). The multiplicity of authorities ever since had been a chronic issue of governance even after independence. The analysis of performance of the Trust suggests that it was more of an extension of colonial political and ideological frame modelled as an 'efficient' department but not as an organisation interested in or committed to urban development of the city in the context of immediate spatial and socio-economic needs of the natives (Malik, 2014).

The breakout of World War II marked the beginning of agitations and communal riots throughout India. All the effort at constitutional reforms in the wake of India Act of 1935 came to grinding halt with the focus shifting to the changing local and international scenario with the maintenance of law and order and stability becoming a top priority (Hodson, 1985). Consequently, the Governor's rule was imposed in the provinces. Under the direct control of the all-powerful district administration, the municipal bodies, instead of providing civic services started war-related activities hence local government institutions could not survive anymore (Ali, 1980). The British government despite many

efforts could not resolve the problem till the dismemberment of Subcontinent resulting in the creation two independent states namely India and Pakistan, giving them a big opportunity to develop their institutions following the wishes of their respective people (Baqai, 2010; Hodson, 1985). The representative government in India was the outcome of consistent local demand. However, as an unforeseen consequence, it resulted in a national movement that ultimately forced the British government to withdraw from the Sub-continent. However, it became amply clear that the framework given by British for democracy was adequate yet to achieve the target but political and economic conditions owing to patron-client relations were hardly conducive to redistribute the power among disenfranchised masses in Punjab rather it meant to reinforce the existing power networks which continue their dominance even after independence.

5.7 Post-Independence Period: A Continuity of British Legacy – System Lock-in

The independence from colonial rulers provided a chance for Pakistan to develop its new institutional design. Unfortunately, Pakistan continued with its inherited institutions from colonial India which were comprised of the highly powerful administrative system in a bargain with political elites (Javid, 2012). These political elites with military and civil bureaucracy once again reinforced power network to preserve their personal and institutional interests therefore, created a rent-seeking culture, promoted corruption, nepotism with scant attention towards accountability and transparency (Javid, 2012; Hussain and Hussain, 2009). These forces used their networking and institutional support to keep most of the powers concentrated at the provincial or federal level as any devolution of power to local level could threaten their very survival and supremacy by making them more accountable to the people (Javid, 2012). These forces always tried to suppress any effort which could lead to the devolution of this concentrated power that's why in Punjab, not an honest effort can be seen to develop a good local government which can enhance public participation to begin a collaborative process.

5.7.1 Military-Political Institutions

In the course of history, Pakistan has witnessed three military and eight democratic regimes. All three military regimes in their own turn tried to bring local government institutions. It is criticised that the military took this step for seeking support and legitimacy (Jalal, 1990; Rizvi, 2000; Cheema *et al.*, 2006). Military institutions used the mechanism like electoral engineering and manipulation of party politics to reinforce the patron-client relationship between state and political actors (Jalal, 1990; Rizvi, 2000; Cheema *et al.*, 2006).

In 1958 the military introduced the 'Basic Democracy' (BD) system (Cheema *et al.*, 2006). Under this system, local government institutions were created in rural and urban areas with a system of the Electoral College responsible for the recommending national and provincial assemblies along with the President. This system, partly bureaucratic and partly political was designed to support the new military regime and in return provide patronage to those who secured a mandate for its leadership (Cheema et al., 2006; Rizvi, 1991; Aslam, 2019). This period significantly marked a point when in this path dependence course military regime replaced the role of the British government by making alliances with the landed class to achieve their vested interests.

In 1977 another military regime sought legitimacy through the introduction of decentralisation from provincial to a local level giving a so-called devolving power at the grass-root level (Aslam, 2019; Jalal, 1990). The concept of LGO 1979 given by the new military dictator, was different from BD (1959) of the previous military regime in structure but had the same objective (Aslam, 2019). Therefore, no real effort to share power at the local level existed (Aslam, 2019; Jalal, 1990; Cheema *et al.*, 2006). Under the Structural Adjustment Program of the International Monetary Fund in the 1980s and 1990s, an attempt was made by a military official seeking legitimacy both at home and abroad to introduce new reforms in the form of a very comprehensive Devolution of Power Plan of 2001 (DOPP) (Aslam, 2019; Alam and Wajidi, 2013). For the very first time in the history of Pakistan, this programme sought to reach out to the people at the lowest level, involving the

transfer of power from provinces to districts and further below to lower levels with political, administrative and financial devolution at the city level (Alam and Wajidi, 2013; Aslam, 2019). The DOPP changed the institutional design and allow Citizen Community Boards (CCBs) through voluntary and self-help initiatives to engage and mobilise the community in the development and improvement of service delivery (Alam and Wajidi, 2013; Mezzera *et al.*, 2010; Anjum and Ahmad, 2001). These boards were given the legal cover to let people participate in development activities, besides an allocation of funds earmarked in the budget to be carried over from year to year (Alam and Wajidi, 2013; Mezzera *et al.*, 2010; Anjum and Ahmad, 2001). However, The literature also found some shortfalls in the system such as a gap between provincial and local tier (Mezzera *et al.*, 2010), loyalty of local leadership to military, directly connecting the central and the local levels on both administrative and political areas sidestepping the provincial level altogether (Aslam, 2019; Cheema *et al.*, 2006; Mezzera *et al.*, 2010).

Apart from the military, there is little evidence that the elected government tried to develop a system in which power could be shared at local levels. In 1970 the newly democratic government dissolved all the local bodies and imposed a civilian martial law and the functions and powers of local governments were vested in administrators who used be a senior civil servant (Alam and Wajidi, 2013). This state of affairs continued, and administrators were running the local bodies throughout this democratic reign and till early the period of another martial law regime which began in 1977. The local government was declared a provincial subject in 1973 Constitution (still in place) and subsequently on this basis, all four provincial governments passed local government legislation in 1979 (Alam and Wajidi, 2013). This era witnessed some important legislative and institutional measures namely Punjab Development of Cities Act 1976 and A land acquisition act 1973 in Punjab, which was mostly the replica of administrative structures put in place by the British rulers to concentrate power in their own hands (Qadeer, 1996).

The local government system developed in military regime led to complications after the general election in 1988 and 1990s when new tiers of

the government at provincial and federal levels lack any political links with local government that was the result of a non-party election. This created a rift between the local and higher tiers as they vie for power and patronage (Cheema *et al.*, 2006). This rivalry had far-reaching effects such as politicians at a higher level (MNAs and MPAs) began encroaching the domain of locally designated representatives. The special development programmes that allowed these politicians to control the development funds further widened the gap (Cheema *et al.*, 2006). Finally, in 1993 and again in 1998 this conflict resulted in the dissolution of local government showing most paradoxically it was again democratic forces that have pushed local governments to backwaters (Cheema *et al.*, 2006). The political governments that assumed power thereafter never also took any pain to rectify the defects of the LG system to make it a real functional and effective system ensuring grass-roots participation in running the government, showing as if political leadership has little interest in empowering the people by devolving the power to local level and ensuring decision-making with public participation to lay the foundation off a sustainable development of the city. However, in 2015 local bodies election were held again but still at the time of the fieldwork of this study the local government was in its pre-mature stage.

The section above analyses the supremacy of landed elites as they joined the mainstream politics after independence and also their patronage with both military and civil bureaucracy creating once again power network which is more interested in preserving their personal and institutional interests than larger national interests (Hussain and Hussain, 2009). To gain benefit from this political elite-bureaucratic nexus, these forces always tried to accumulate their power at a central or provincial level and suppress any effort which could lead to the devolution of this concentrated power. Therefore, in Punjab not an honest effort can be seen to develop a good local government which can enhance public participation.

The next section will further explore the development of environmental institutional in Lahore and examines that either this institutional development

reinforces the Path dependent trajectory or provide any window of opportunity to change that track?

5.7.2   Environmental Institutions

The basic concept of environmental governance initiated in Pakistan after the Stockholm Declaration, 1972 and Pakistan first Ministry of the Environment was established in 1975. The Ministry's first achievement was its environmental law - the Pakistan Environmental Protection Ordinance (PEPO) 1983. It also led to the development of formal institutions, i.e. The Pakistan Environmental Protection Council (PEPC), headed by the president of Pakistan, and Pakistan Environmental Protection Agency at the federal level along with its subsidiaries in all provinces to enforce and protect the environment. This Ordinance made Environment Impact Assessment (EIA) compulsory for any development project which could have some negative impact on the environment, hence, making it mandatory to seek approval from Environmental Protection Agency EPA (GoP, 1997).

Pakistan presented its first National Conservation Strategy (IUCN, 1992) at the landmark Earth Summit in Rio de Janeiro 1992, and became a member of many international agreements on environment. Pakistan also signed the Rio Declaration and Agenda 21, making Pakistan obligatory to integrate environmental consideration at every level of decision-making and ensuring the development projects safeguard environmental protection and conservation and get clearance through EIA from the concerned authority (GoP, 1997). The ratification of the Convention triggered a chain reaction as a series of developments in Pakistan on climate change, and sustainable development issues were seen unfolding. The Pakistan Environmental Protection Act (PEPA) was another breakthrough enforced on 6th December 1997. The Act has a wide-ranging scope as it focuses on almost everything from a delegation of powers, regulations, implementation and enforcement mechanism, to the introduction of EIA/IEE and its processes, resource generation through the establishment of Provincial Sustainable Development Fund and the provision of courts for environmental cases (GoP, 1997).

After the 18th Amendment, which delegated more powers to provinces, The Punjab government adopted the Punjab Environmental Protection (Amendment) Act, 2012 (Punjab Act) with minor changes (GoP, 2012). The structure of the agency suggests that there is only one central environmental protection agency for the entire province of Punjab with no provision to set up district agencies (GoP, 2012).

PEPA provides a full-fledged framework for the protection and conservation of the environment, but the devil is in their legislative schemes making the implementation subject to the rules prescribed which are hardly clear and forthcoming (Nadeem and Hameed, 2008). The Pakistan Environmental Protection Act 1997 is using IEE and EIA as its main instruments to protect the environment from any further harm. However, this law is hardly making any difference (Nadeem and Hameed, 2008; Saeed *et al.*, 2012). Under this Act, fines are to be imposed in case of non-compliance but, in practice, these fines are rarely imposed (Nadeem and Hameed, 2008). According to an analysis by the Netherlands Commission for Environmental Assessment, in 2009 Punjab government had passed more than 50 EIAs but only 20 % EIAs followed the right procedure and underwent an EIA (Martin *et al.*, 2006). Although the legislation and procedures for EIA are very clear, lack of implementation on the part of EPA makes it a toothless body with its adverse effects on the socio-ecological system (Beg, 2004). For implementing and enforcing PEPA (1997), there is a need to enhance the institutional capacity of EPD which is only possible when there is political and bureaucratic will to do so (Beg, 2004). As mostly the project developers understand that authorities lack the enforcement capacity; therefore, EIA has become just a formality (Beg, 2004). It is evident from the very fact that many government departments which do all the preparation work for governmental projects have the habit of exerting political pressure for EIA clearances (Martin *et al.*, 2006).

Public participation is mandatory under the Pakistan Environmental Protection Act (PEPA) 1997 (GoP, 1997) and IEE/EIA Regulations, 2000 (GoP, 2000) during the EIA review process in Pakistan. Pakistani Environmental Protection Agency (Pak-EPA) in the light of the World Bank 's Participation Sourcebook,

1995 prepared guidelines for regulating public participation (WorldBank, 1996). The guidelines provide safeguards, making it binding for developers to discuss the project and its impact with the local community and subsequently include mitigation measures to offset the adverse effects of the given project by sounding out their genuine and legitimate concerns (WorldBank, 1996). The law gives provision for public involvement in the process of EIA but there are two problems associated with this. First, the rules do not require public participation at the stage when IEE is being prepared and reviewed (Screening); and second, the public gets hardly a chance to articulate their views on the proposed activity till the time the EIA is prepared and therefore became a little irrelevant (Martin *et al.*, 2006; Nadeem and Hameed, 2008). Hence, the prevailing system is heavily tilted towards the project proponents and government authorities much to the exclusion of public of important decisions. Under EIA Regulations, the provincial authority communicates the final decision about a proposed project or activity to its main proponent without any compulsion to inform the public simultaneously. Interestingly federal or provincial law is silent on the need for public consultation during the EIA process (Nadeem and Hameed, 2008). In practice, this process of EIA has been reduced to mere formality regarding public participation (Nadeem and Hameed, 2008; Khawaja and Nabeela, 2014; Nadeem and Fischer, 2011). However, when it comes to the schemes funded by international organisations public participation is taken more seriously. Tools like community meetings, focus groups, questionnaire survey are sought during EIA studies to satisfy the foreign client (Fischer *et al.*, 2014).

One glaring practice in Pakistan is the belated submission of EIA report and public participation. After submission and preliminary review is done by EPA officials, a call for public participation given through 'Public Hearing Notice' in any national newspaper (Nadeem and Fischer, 2011). These notices are mostly carried along with tender notices in the newspaper and so hardly get attention of the public, which mostly remain ignorant of such invitations and consultations (Nadeem and Fischer, 2011). For public consumption, the relevant agency provides a copy of the EIA report in its local offices or any

library near to the development location. An EIA report can also be available at the project developer's office for the public. However, printing or photocopying of report is not permitted nor the public or stakeholders have the time to visit libraries and EPA/proponent in their spare time and read full reports for giving feedback (Nadeem and Fischer, 2011). However, some experts and governmental organisations have started uploading some documents on their websites (Nadeem and Fischer, 2011).

Another problem is the accessibility of public hearings venue as they are rarely held at the project site and instead, local hotels, halls located in the city and Tehsil Municipal Administration (TMA) office are the more popular venues for such events. It is always difficult for people to access the out-of-reach venues which are an important barrier to public participation (Nadeem and Fischer, 2011). Selective venues are another obstacle in the way of the people living in far-flung areas are not being transported to hearing venues. Even timings of public hearings are hardly convenient for the general public and mostly depend upon the availability of another side of divide including project and EPA officials. More suitable time for common people is either weekends or afternoons of working days, but to the contrary, these meetings are held during office hours (Nadeem and Fischer, 2011). At these briefings, the officials mainly briefed the participants on various aspects of the project. Towards the end, the public can give their input, but selectively, probably due to a shortage of time. Mostly EIA consultants give an official response to the questions raised on this forum with an assurance to include them in the final EIA report. The participants not given the chance to express their views are asked to submit it in written form to the EPA officials after the hearing. However, it is quite paradoxical that concerns raised by the stakeholders at different forums in the process hardly get adequate consideration and reflected in the final outcome (Nadeem and Fischer, 2011). The public participation in this process is analogue to the lowest rung of ladder of public participation, informed by Arnstein (1969) which indicates that authorities only use the notion of public participation in a very superficial form.

However, there are some events of social change in which stakeholders led from the front, forcing the competent authority to suspend the work till the resolution of the conflict between affected party and the project proponent by satisfying the concern of the former by opting for project alternatives. They have succeeded in weakening the authority of government. The Lahore Canal Road widening is a classic example when all stakeholder including (NGOs), experts and other local groups came together to bring desired results (Dawn, 2006a). In this project, the Canal Bank road was to be widened at a hefty cost that not only covers the cost of Rs.700m but more importantly involves the cutting of some 2,000 trees. This project was resisted by several local environmental groups, international NGOs, professionals and educational institutions as well as by many concerned citizens of Lahore. They all close their ranks and forged the Lahore Bachao Tehreek (LBT) (Save Lahore movement), to articulate their sentiments of oneness; raise their voices against this anti-environmental and highly damaging project. The central plank of this organisation was this that as per the Master Plan 2020 Lahore has only 2,250 hectares of developed open spaces, 0.42 hectares per 1,000 people. As open spaces are already shrinking, it is imperative to raise voice to safeguard the existing greens.

Fortunately, this movement coincided with the judicial activism of Chief Justice, who took notice of this project (Dawn, 2006b). The Chief Justice not only issued orders to suspend the project but secured assurance from the Punjab chief secretary that an environmental impact assessment (EIA) will be carried out before proceeding any further. In 2007, the Punjab Environment Protection Agency gave clearance for the project. However, The LBT challenged the approval in the form of EIA in Lahore High Court (News, 2009) According to media reports, the project (Canal Widening) was again launched in 2009 by the new Chief Minister regardless of the case pending in LHC, this time around at an exorbitant cost including the cutting of fully-grown trees (Dawn, 2009). LBT once again sought help from Chief Justice asking him that the Lahore Bachao Tehreek looks to the honourable chief justice and prays that notice to be taken of the Government of Punjab's attempt to run a fresh

project through a previously granted EIA. The Lahore Bachao Tehreek wrote to the Chief Minister of Punjab requesting him to make public the plan of the Government of Punjab Project so that its characteristics can be ascertained" (Dawn, 2009). After a battle of seven years finally, the Supreme Court gave its ruling in 2011. The judges decided that "only 1,800 trees would be cut", against the original idea which "cutting of 33,000 trees"; and that "60% of the trees which are likely to be affected are eucalyptus, which is even otherwise not beneficial to the soil and environment" (Nation, 2011). The judges also directed the provincial government to ensure that "minimum damage is caused to the green belts and that tree cut down is replaced by four trees 6-7 feet tall" (Nation, 2011). They further proclaiming it a 'heritage park'. A Lahore Canal Heritage Act further protected it, passed by parliament in 2013 (Nation, 2011).

This example of active stakeholders' involvement, though far and few between is quite encouraging giving a ray of hope that things can be heading towards the right direction. From these episodes, it is also evident that the interest groups with the potential to challenge existing power relations need to be accommodated and powerful political elites and state officials should be ready to make little adjustments or face political conflict. The outcome of this accommodation will be more egalitarian, pluralistic and more democratic setting.

The National Conservation Strategy approved in 1992 turned out to be a real catalyst giving rise to an environmental movement in Pakistan with national and international NGOs joining hands (Aftab, 1994). These NGOs established offices in Pakistan placing locals to manage the newly initiated country programme. This cooperation went a long way in building favourable public opinion in a way that was never witnessed before. The placement of local leadership in the international organisation has been quite helpful both ways such as creating closer links with key government, establishing credibility with civil society and could be instrumental in fetching donor funding (Aftab, 1994). These NGOs' profile is mostly confined to the rural and far-flung areas working with the local community to improve the natural ecosystem. However, their

role in urban centres or big cities is minimal, and for urban green spaces even lesser (Aftab, 1994). According to research shows in Pakistan, the number of local NGOs related to the environment is very small (Khan and Khan, 2004). They are also the youngest generation of NGOs to emerge on the surface, rendering services ranging from the sustainable development to community empowerment and by advocacy campaigns and lobbying for environmental and socio-economic change. A strong and enlightened leadership exhibiting a professional approach is what needed at this time to play a constructive role. It is also essential that these local NGOs which have limited scope and resources must be backed up by national and international NGOs to become effective as it is evident in the case of cutting of trees where the civil society enable itself to challenge the power network of political-bureaucratic nexus.

5.8 Lahore: An Analysis of the Operational Level

Lahore has quite an inauspicious start after independence. The communal riots that followed the separation of the Sub-continent had its toll on all spheres of life, and the city's greenery was no exception. The fire these communal tensions stoked and destruction it wreaked destroyed the gardens and other green areas of Lahore was known for. The most of green belt around the old built by the English colonial regime separating the local population from the outsiders got wiped out (Rehman, 2009; Rehman, 2014b). Most ironically and saddening what little was got spared in the communal rioting was encroached by the migrants moving from Hindu dominated India, starting a new lease of life with the encroached land becoming the future hub of economic activities(Rehman, 2009; Rehman, 2014b). Hence, all the green heritage of Lahore, its impressive landscape was gone with the uncongenial wind generated by Hind Muslim riots.

5.8.1   Urban Green spaces' planning in Lahore

After independence, as the new regime got its acts together, it passed the Municipal Administration Ordinance (MAO) 1960. According to this ordinance urban councils were responsible for making master plans. Another important step in this direction was the second five-year plan (1960-65), highlighting to

prepare master plans for major urban centres in Pakistan to undertake development in a planned manner. In this list, Lahore made its way to the top, mainly for the provincial metropolis of the biggest province. This decision was a milestone for master planning in Pakistan in 1961.

For master planning, the existing statutory powers came from the Punjab Town Improvement Act 1922, Municipal Administration Ordinance of 1960 and Cantonments Ordinance 1924. The Town Improvement Act 1922 provided the provision of the master plan for the development of controlled zones under Lahore Improvement Trust (LIT). Municipal Administration Ordinance 1960 allowed developing a master plan for municipal localities only, while Cantonments had their own planning boards. Therefore master plan remained a serious challenge from the very beginning from its preparation to implementation (Hameed and Nadeem, 2006). LMC had the statutory cover for the preparation of master plan but lacked in human resources for preparing master plan, administer it and keep it updating, whereas the legal powers to undertake improvement, urban renewal and land sub-division schemes vested Lahore improvement trust which was equipped with the planning staff had no statutory power for preparation of the master plan (Hameed and Nadeem, 2006). Both were independent headed by their chairman- one was supposed to be elected by the citizens of Lahore, whereas the other has all along been a senior bureaucrat and has always been appointed by the government. Both the agencies were working autonomously with their own framework.

As Lahore Municipal Corporation (LMC) and Lahore Improvement Trust (LIT) lacked the human resources expertise for master planning, a new committee, full of bureaucrats, was formed by the Punjab Government (Hameed and Nadeem, 2006). In 1966, this committee submitted the master plan to the Punjab Government for approval (Hameed and Nadeem, 2006). As per the salient feature of Lahore Municipality Master Plan, the city was divided into different zones. Among its main proposals, Master Plan recommended a Green Belt to be developed all around Lahore as a check to city's increasing growth as well as overspill population, planned to be accommodated in

satellite towns to be developed 25 km away from the main city along inter-city roads leading to various cities (Nespak, 2004). Residential areas for the first planned as self-sufficient Neighbourhood Units to accommodate future growth of population (Nespak, 2004). The Master Plan also proposed parks and open spaces at the city level and in the centre of neighbourhoods (Nespak, 2004). Despite some sound proposals reflecting a good beginning, the plan never saw the light of the day (Nespak, 2004; Hameed and Nadeem, 2006). In 1961, the efforts to make a Master Plan for Lahore began and by the time it came up for enforcement, after overcoming all the bottlenecks, dithering over on the part of Punjab government and bureaucratic red tape, it was already too late in the day, 1972, which was a time a new political set-up was taking over in Pakistan committed to entirely new political ideology (Hameed and Nadeem, 2006). By this time, all the institutional support required for smooth implementation was also no longer there. The city was not fully prepared to implement such a massive program coming from the top lacking laws and wherewithal (Hameed and Nadeem, 2006). Municipal Administration Ordinance 1960 did not consign legal powers for the implementation of master plan thereby making less room for its applicability (Hameed and Nadeem, 2006). The absence of legal structure made Master plan a redundant document, where people used it according to their own whim, without regarding any development plan and urban environment. Although the master plan emphasised the need for parks and a green belt in the city in its guidelines, due to its non-statutory status, there was no such activity to be noted.

After the independence of Pakistan, Shalimar Garden, Lawrence Garden and Gol Bagh remained the three main gardens of Lahore (Rehman, 2009). Shalimar and Lawrence gardens were the most sought-after destinations of people looking for recreation while Gol Bagh emerged as a leading venue for political activities. As the city expanded and the population grew, the city witnessed a severe shortage of public parks. The very first park's foundation stone was laid on the Pakistan Day Memorial at Minto Park north of the walled city (now Iqbal Park) on the site where the Pakistan Resolution was passed in

1940, using its open space for beautiful landscaping (Rehman, 2009). The park, completed in 1968, was more a symbol of the long-drawn-out political struggle of independence and so was never meant in the first place to be something accruing environmental benefits evident from the fact that management was reluctant to grow trees in this park as it can obstruct the view of a monument situated in the park. Apart from this, there was hardly any significant development in Lahore to add to its urban green spaces.

Another great opportunity came Lahore's way when the city adopted its second master plan, known as Lahore Urban Development and Traffic Study (LUDTS) –1980 finalised with the assistance of the World Bank (Nespak, 2004). This master plan provided a guiding framework for urban planning in Lahore, thereby, drawing the attention of the decision-makers towards difficulties inherent on the path towards urbanisation in future though it was devoid of any legal backing. The LDA started implementing this plan once being approved while LMC continued to stick in the groove, focussing mainly on master plan 1966, only to the extent of a few projects with donor funding (Hameed and Nadeem, 2006). For urban green spaces, this plan seemed to be quite emphatic and enthusiastic guiding the authorities to utilise the most of vacant places in Lahore for creating green infrastructure, linking the series of open spaces to be used as social facilities for the citizens (Nespak, 2004). The new master plan proposed one stadium for every population of 250,000. Its other features include one sports ground and family park for every 25000 population, two play lots for every 3000 population (Nespak, 2004). Another important idea conceived in this master plan was the provision of landscaping in and around the graveyard (Nespak, 2004). But all this green space planning never saw the light of the day as this master plan like the one before it was never implemented (Nespak, 2004). In May 1980 however, Lahore started changing with the advent of an army General as Governor of Punjab during second martial law regime. The ex-General was passionate about landscaping and restoration of Lahore to its old glory. Under his rule, the city witnessed fountains on all important road junctions along with new parks as recreational requirements of the growing population. Three parks, namely

Gulshan Iqbal, Race Course Park (now Jillani Park), and a re-designed Model Town Park, were added in the south of the city and had a great impact on the city's landscape, felt all over Pakistan (Rehman, 2009; Rehman, 2014b). These parks were laid out with some common features such as large lawns, walkways, lakes and waterfalls, attracting many people daily. Another park named after the former chief minister was built in the 1980s on the periphery of the linear belt of Model Town. This area was a designated place for the cultivation of vegetables and fruits for the consumption of residents, following the idea of the garden city, but its implementation or conversion was not possible given the personal interest of the then Chief and politics of patronage (Rehman, 2009).

The current masterplan 'integrated master plan for Lahore-2021' and third in series was approved in 2004 (Nespak, 2004). In this master plan, the concept of urban environmental governance was conceived as a separate subject, declaring mandatory open spaces in the city. According to this plan, the ratio of open spaces in Lahore was 0.42 hectare per 1000 population while keeping in view the physical and financial constraints a ratio of 0.50 hectares was recommended as a future target for 2021 (Nespak, 2004). The plan recommends one regional, two town parks, two hundred neighbourhood parks and five hundred Mohalla parks along with three riverside parks in southern and northern Lahore (Nespak, 2004). It also emphasised the need to maintain the existing greenspaces/parks in inner Lahore (Nespak, 2004). To extend the green cover of the city, it was also recommended to make graveyards densely planted with grown trees which can also serve as a buffer between these burial places and residential housing areas (Nespak, 2004). There is no study available to validate whether these targets have been attained or not, however, the target of 0.50 hectares of open spaces per 1000 population is considered far below than the international standard. The PHA (the current organisation for managing green spaces) claims that it has developed 828 parks, 276 green belts (1575Km), roundabouts and triangles in Lahore (PHA, 2018a). The direct observation was taken by the author and participants in this research somehow validate this point to the extent of building Mohallah

and neighbourhood parks, finding their number multiplied, but there are other conflicts of interest about their quality and standards which will be discussed later in this study (chapter seven).

5.8.2 Urban Planning and Peri-urban Agricultural Land

With the landmark Local Bodies Act 1979 governing local governments their functions and powers this era witnessed some important legislative and institutional measures namely Punjab Development of Cities Act 1976 and a land acquisition act 1973 in Punjab which changed the status of Lahore improvement trust into autonomous Lahore Development Authority, setting new trends often characterised as both boon and bane of development (Qadeer, 1983; Qadeer, 1996). Punjab Local Government Ordinance 1979 did not make any improvement. Instead, it mostly replicated the defects of Municipal Administration Ordinance 1960 including the clause that did not make master planning binding for an urban council nor even the violation of Master Plan was any serious offence and as such violations of plans were quite common (Hameed and Nadeem, 2006).

Lahore Development Authority has the mandate to carry out major development projects such as water sewerage and transport and to undertake planning and development for urban expansion for Lahore. Massive suburban land development works scheme started in Lahore under the banner of Lahore Development Authority (1975). More than putting the cities on the right track of development, the land has come to be known as the biggest currency of patronage and corruption in the history of Pakistan (Qadeer, 1983). LDA used their power under Land Acquisition Act 1973 Residential and more coveted commercial plots had been dished out at a very nominal price to politicians, public officials and professionals, who then never looked back acquiring assets at the rates 5–10 times the official price (Qadeer, 1983). Lucrative parallel land development and housing industry, as well as private dealers and developers, appeared in the market often in league with public officials (Dowall and Ellis, 2009). From 1985 onwards the LDA went through a period of financial problems due to restoration of Land Acquisition Act 1894, binding development authority to pay market value on compulsory acquisition of land

to the private landowners. LDA under a new policy of Commercialisation and different land use changing policies started allowing conversion of agricultural land into private housing societies and residential properties into commercial against charging a considerable fee and generating revenues leading to haphazard growth and unplanned commercial areas (Qadeer, 1983; Qadeer, 1996; Leonard, 1986; Zaman, 2012). These trends not only constraining the ability of food production but also harm its environment. A study investigates the effect of conversion of agricultural for commercial purposes revealed that the largest negative impact of this conversion is on the environment as compared to social and economic aspects (Shah and Abbas, 2017; Hassan, 2018). The urban land becoming the most sought-after thing in the society, the market prices became high in this background the 'allotment prices' provided much-needed relief to only politicians, bureaucrats and well-connected people as a way of patronage in the form of plot quotas in government-owned land and residential schemes. A study in Punjab (1991) estimates that:

> the provincial departments and local development authorities have developed 318,952 plots spanning over a period of forty-year, making a revenue of Rs 6.9 billion through official prices, when the market of the same was Rs 63.9 billion— thereby showing subsidy in allotments of plots worth more than 9/10th of the price (GoP, 1991 cited in Qadeer, 1996: 07).

This increasing growth of housing societies makes the situation more complicated when an informal sector started to develop to fill the gap between this the fragmented housing schemes (Qadeer, 1996). This informal market served the low-income group therefore sometimes lacking to provide basic amenities whereas bypassing the government's regulation for housing schemes. A newspaper report highlights this issue as follows:

> Hundreds of societies have surfaced in Lahore that didn't get any approval from LDA or TMA and the main question which comes to one's mind is why LDA had not taken any action against the illegal society during its execution. Similarly, one can witness a violation of rules and regulations in several approved housing schemes such as smaller roads, no parks, graveyard land converted into residential plots (Raza, 2017).

As such the emerging picture of Lahore is that of a land market highly fragmented, speculative with a network of power and privilege out for a money-minting spree with scant attention towards the socio-ecological concerns finding itself on the driving seat, fully embedded though.

5.8.3 Parks and Horticulture Authority: A New Organisational Setup

Due to the lack of priority and budgetary constraints, the conditions of the existing green spaces started worsening (Rehman, 2009). Some new parks at city level were built under showmanship and personal whims of rulers given to grandstanding than any ecological concern. The worsening conditions of green spaces and brought authorities to resort to the commercialisation of parks, making them more of a centre of commercial activities. The commercialisation started to increase the grey areas, losing out the much-need green and nature. In these circumstances, another provincial government created to set up namely PHA (1998) though the powerful and autonomous run by the federal bureaucrats to manage parks.

The PHA is an independent and autonomous body under the jurisdiction of Government of Punjab which looks after the parks and green spaces of Lahore exclusively. As to Its organisation, it has been divided (Lahore city) into seven horticultural zones: each headed and managed by an officer to the rank of director. PHA's main decision-making body is its Board of Directors. The Chief Minister of the Punjab Province is the Chairperson of this organisation. The Board of Directors consists of 17 members, drawn mostly from governmental departments including secretaries and ministers. PHA Act 2012 provides for the participation of non-state stakeholder as well. The Board includes two environmentalist, one horticulture expert and a member of the chamber of commerce with mostly nominated by the government. The Board was non-functional in 2017 when the fieldwork for this research was carried out. As per information from the official website of the PHA the board has not been completed yet as per rules. The PHA started with a mandate to maintain existing gardens, parks, and roadside vegetation as well as carrying out landscape work in the whole Lahore. The main duties included, develop and

maintain green areas, outdoor advertisement's regulation and control and holding public festivals and exhibitions to promote Pakistani and Punjabi cultures. PHA's objectives explain its commitment to improving green spaces as green belts and parks for the beautifying city as well as to improve its environmental condition and to achieve social benefits (PHA, 2018b).
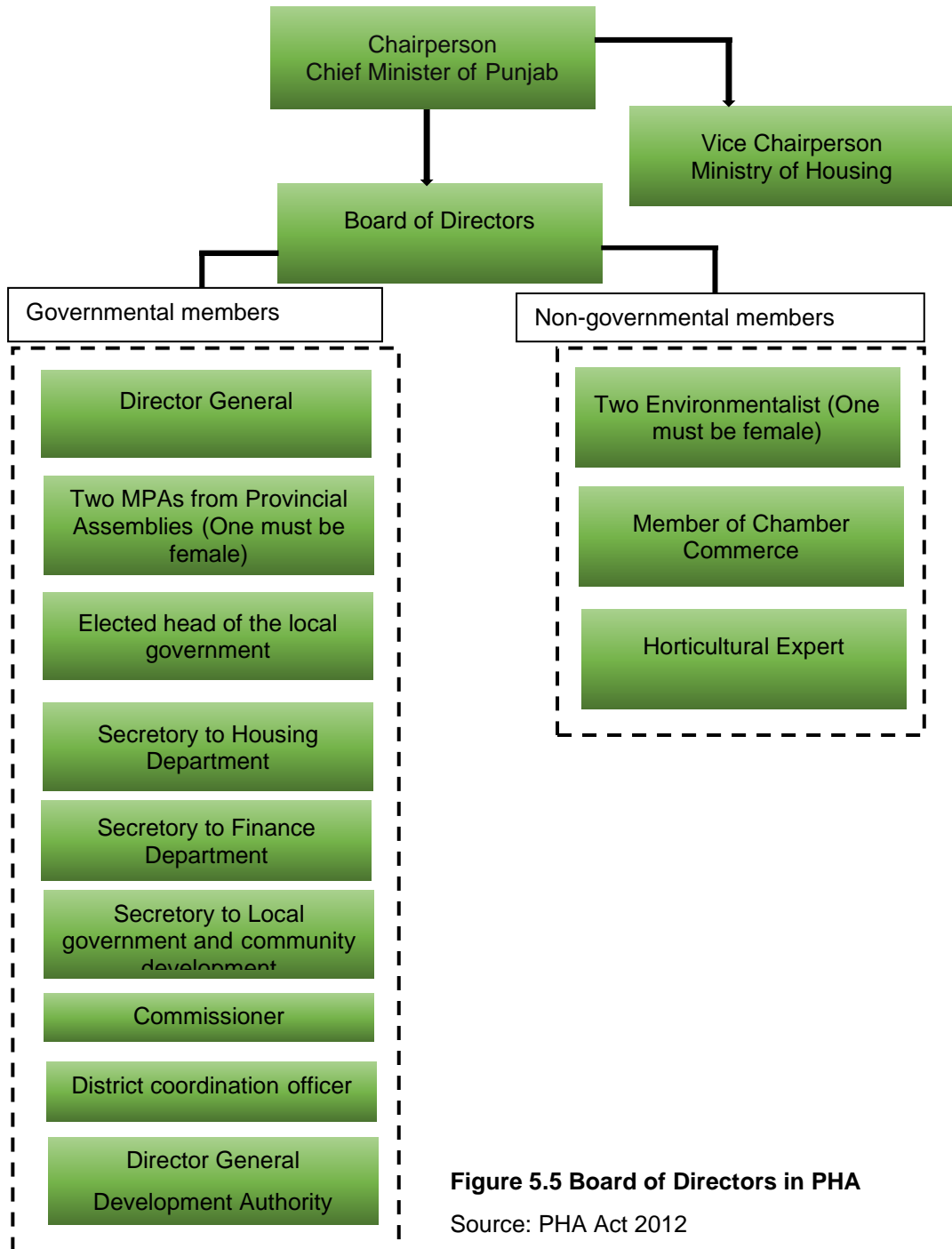
Figure 5.5 Board of Directors in PHA

Source: PHA Act 2012

Though PHA meant to improve the environment of Lahore but it seems a path dependence trajectory. It turned out another successful attempt to bring more powerful actors in the management of parks and thereby keeping the British legacy by preferring a bureaucratic setup over municipal councils. The analysis of institutions in this study clearly shows that how the two Path dependent forces, politician and bureaucracy unfolds itself at a micro level which shows governance of green spaces as highly unsustainable, exclusive, undemocratic, and with lack of accountability without any desire on the part of governmental structure for a transition to an institutional design based upon democratic, participatory and collaborative approach.

5.9 Summary and Conclusion

This chapter has traced the genesis of rigid institutions by using the concept production and reproduction of institutions due to path dependency. As study followed the historical events, it became amply clear that most of the development of institutions occurred at the macro level with its implication at the micro-level, therefore making it obligatory to include these levels in the study as well. The development of institutions in subcontinent manifest itself through a Path dependent trajectory with consideration of power politics and the game of vested interests keep the ruling class harbouring landed aristocracy (which later morphs into all-powerful political elite) and civil and military bureaucracy remain on the one side against the marginalised classes or groups in this equation. The study used the concept of critical juncture which marks the initiation of this process where choices made at one point have a direct bearing on the subsequent events, creating a series of self-reinforcement processes which result in a 'locked-in', defying all the path-changing initiatives. The lock-in is difficult to undo given the fact that cost attached to switching over to another path becomes too high and second, a positive feedback loop from the actions of elite actors continuously strengthening the existing institutional framework, therefore, making it difficult to deviate from the prevailing path.

The critical juncture, according to this study, arrived at a point when the colonial regime attempted at creating a new system of revenue collection through bestowing land ownership rights to peasant-propriety. It was an attempt to exclude the landed aristocrats from this equation which they considered an unnecessary part of the system. However, this mindset changed sooner than later following the revolt of 1857 when this approach proved to be wrong and a new act Punjab Tenancy Act 1868 was passed which created a hybrid framework allowing the landed class to be part of the system along with peasant proprietors into an alliance with the colonial state indicating the beginning of path dependence process. The new development was, in fact, an admission from the colonial state that landed aristocracy was a linchpin in maintaining order while also realising that a prosperous peasantry could also be a source of passive support in ensuring stability in the region which was reinforced by a network of baradaris (families/ clans/ kinship).

The Colonial regime towards second half 19th century took a series of institutional measures that reinforced an evolving relationship between the colonial rulers and landed elite started about two decades earlier. The laws that English rulers framed led to induction of landed elite into echelons of power whether military or bureaucratic or representative government. The evolving institutional outcome led to considerable improvement in the economic and political status of the landed class. The aristocracy on their end kept well their part of the bargain, as Punjab emerged as one of the most peaceful and prosperous areas of the subcontinent with the Canal Colonies becoming the hub of economic prosperity. The institutional framework of politics allowed the landed elite to be part of all the state organs, creating a positive feedback loop guaranteeing an increasing return for both actors out of this arrangement while at the same time creating a lock-in situation difficult to breakout by other forces.

The independence from colonial rule provided a great opportunity to depart from the beaten track but even did not put any dent in the bargaining power of the landed elite. The nascent state was in the grip of an upheaval after the independence as it tried to manage myriad problems. The state institutions

were weak, but the position of landed aristocracy seemed unchanged. As such the leadership looked for their support in dealing with the fluid situation and in return, they once again managed to get a privileged status. In the new state, military-bureaucratic establishment emerged as the most dominant actors, by replacing colonial masters in the new power equation. The military regimes exploited the squabbling among the feudal classes who were now taking on political roles to pursue their institutional interests along with the allied sections, created a class of rent-seeking politician ever-ready to cooperate with them. The military regime never made a serious effort to see the back of the institutional status quo and hence allowed its reproduction and reinforcement. Each time an opportunity misses, or the cycle of reproduction completes, it gets, even more, harder to deviate from the path-dependency or finds a solution to the people's problems. In 1970, the administrative reforms introduced by the elected government only further enhanced the power of bureaucracy, strengthening its already existed link with the landed/ political elite but at the same increasing the gap between the government and people also. The study has found that colonial rule in Punjab in over a century and a half empowered a particular class to pursue its interests, but it unleashed a culture of patronage and bargain. Hence any attempt to slice away its powers or any attempt at devolving powers has been foiled by this privileged class through its time-tested links with echelons of power.

The emerging power equation fully tilting towards political elite and executives, was more interested in perpetuating its power instead of devolving it or sharing it at the local level and so defying attempts at an efficient delivery of public services and governance reforms at the local level to give a quality life to the general public. It is quite paradoxical that it was the only authoritarian regime that always tried to devolve powers through the local government reforms while the democratic government always resisted any such efforts. Hence, the study found that neither federal nor provincial governments nor the civil services are interested in sharing their powers with local leadership, considered as rivals, ever ready to encroach their financial, administrative and political powers and resources.

Hence, the prevailing system retains the supremacy of the top tiers, allowing the federal and provincial governments to do all the planning and decision-making while the officers below these tiers are only used for implementation. This concentration of powers in a few hands and unending culture of patronage has a direct bearing on the quality of governance at the local level. Its reflection can be seen on the governance of urban green spaces in Lahore quite visibly as civic services wither in the absence of an accountable and dynamic local leadership. As all the decision-making and planning is done at a higher level. The decisions hence taken are hardly the embodiment of the public preferences and aspirations, as if formulated by the bureaucracy in its ivory towers, resulting in an inefficient, unsustainable and inequitable system (interviews analysis).

This study has also discussed two events which could have challenged the existing power-centred institutional design. First, when the military regime in quest of legitimacy introduced the local government system in 2001 seeking to devolve power to the local level, completely ignoring the provincial tier of the government. It appeared as if social change is making its way in the country with a new system and new breed of a politician taking centre stage in politics after elections held under the new system, leaving way behind prodigies of the old Path dependent system. The LG System 2001 was, in fact, an ambitious attempt to empower citizens and knit together a highly decentralised, responsive and accountable system, away from the highly centralised system. The LG System introduced revolutionary ideas. The introduction of Citizen Community Board (CCB) was one such idea, which was considered a tipping point, leading to community participation in the development process, seeking greater interaction between local governments and ordinary citizens.

Although this system was criticised for its various flaws, yet this system provided an opportunity to break away from the historic power network lock-in resulting from following a Path dependent trajectory. However, this window of opportunity got closed towards the end of the military regime as the democratic forces took over the political stage exhibited a little interest in

preserving the brainchild of their predecessors, let alone a military dictator. After the exit of the military regime, an amendment was piloted through parliament delegating powers to provinces once the preserve of centre government making it arena for more powerful actors to play their part, not at all interested in devolving their power at a lower level.

The cutting of trees near a canal in 2006 was challenged by the Civil Society committed to protecting the environment was the second opportunity against the forces of the status quo in Punjab. That was the time when all civil society closed ranks against the highly influential executive and sought judicial activism against the former bent upon pursuing unsustainable development scheme despite its cost on the environment. The civil society activism forced the government to re-evaluate its policy and put a halt on its ambitions. However, due to lack of any reinforcing mechanism, this intervention turned out to be much more a fleeting moment unable to hold itself and giving in to the forces of Path dependent trajectory. A scrutiny into the incident shows that local interest groups and NGOs in this group that spearheaded the movement were loosely organised lacking wherewithal in terms of financial and human resources to sustain its activities for a more extended period (Interview with local environmentalist). Collaborative activities at multiple levels and tendency towards partnership-making could cover up for the lack of financial constraints and local knowledge and expertise. Horizontal networking builds social capital and the evolving solidarity among NGOs increases the political leverage of small interest groups battling for a cause. The linkage to an international organisation in a developing country's context enhances the credibility of local setups and grant legitimacy to their actions apart from introducing new ideas and a high standard of governance. The point of view justifies by the actions of two national and international NGOs, in this case of cutting of trees, started supporting the small groups in their heady pursuits against government's canal widening involving felling of trees in huge numbers proved to be a success story.

The study argues that seeking a transition to an institutional framework conducive for collaborative planning and the polycentric system is not possible

until power is shared to the local level stakeholders under a democratic set up allowing horizontal and vertical networks. However, the historical analysis builds around the idea that it is not easy to break away from the Path dependent forces that have locked-in the institutions through a self-reinforcing mechanism and concentrates power at the top tiers of the government. However, on the other hand, this study has also discussed two events as a missed window of opportunity that could have been a harbinger of change. Kingdon (1984) contends that this window opens for a brief period to execute the institutional change. Hence, it is the pre-requisite of any institutional change that the concerned actors should be fully prepared to benefit from this opportunity. Olsson et al. (2006) identify three distinct phases of institutional transformation: the first and foremost being ensuring the relevant system is ready for the change. It seeks transformations in social features such as perception and more importantly, the actors' readiness to change. Actors at various levels have the capacity, will and congenial atmosphere, comes the first foundational idea of institutional change woven around polycentric governance (Olsson *et al.*, 2006). Hence, this chapter concludes that institutions in Lahore are locked-in into Path dependent forces requiring not only a suitable opportunity but the agency of actors countering the forces of the past. The next chapter will discuss the prospects of change while exploring discourses, which show the perspective of different actors on the governance of urban green spaces in Lahore.

Chapter 6. Institutionalising Participation: A Paradox of Dominant Discourse

6.1 Introduction

The purpose of this chapter is to examine the prospect of an institutional transition for the governance of urban green spaces in Lahore through understanding stakeholder's perceptions, preferences and interests as a harbinger of change. The analysis of the previous chapter has underlined that the governance of urban green spaces has been locked-in the old and anachronic command-and-control system, following a Path dependent trajectory. It has highlighted a need for a change in the institutional structure that results in functional polycentric governance featuring collaborative and adaptive approaches. However, this transition can only take place when the actors are willing to accept this change (Olsson *et al.*, 2006). Therefore, this chapter will use discourse analysis to assess the prospects of institutional change by understanding actors' perception and preferences for the governance of urban green spaces. The actors assert their interest and preferences through discourses by imparting their own meaning and interpretation to them (Foucault, 1980). Therefore, the direction of change in the system mainly depends upon which discourse becomes dominant and legitimate (Foucault, 1980; Hajer, 1995; Gaventa and Cornwall, 2008; Clement, 2010). This approach underlines the importance of discourse as a source of power as it generates new ideas that gain popularity and permeates political systems subsequently, thereby, shaping up new policy agendas and creating pressure for an institutional change over time (Foucault, 1980). Institutional change, therefore, is the outcome of the constant power struggle between actors to gain dominance through asserting their claim and interests (Mahoney and Thelen, 2010). Hence, to fully understand the power dynamics in the system, it is highly critical to take into account the hidden sources of powers, in the form of prevailing discourses (Clement, 2010; Foucault, 1980; Bourdieu, 1977).

Based on this rationale, the study will use discourse analysis to evaluate the prevailing discourses in Lahore for the governance of urban green spaces. This analysis will be helpful to understand the prospects of institutional change in the system, conducive to polycentric and collaborative governance.

This chapter will proceed in the following manner. After the introduction, the second section will provide a detailed account on Q-methodology- a mixed method approach, that will be used as a tool to explore the discourses. Section three will be comprised the results of the study while explaining all the discourses at great length. The fourth section will provide a detailed discussion on these discourses, given their similarities and differences with the existing literature. The last section will conclude the chapter by identifying the dominant discourse among different discourses, their interaction and their significance for institutional change for governance of urban green spaces in Lahore.

6.2 Methodology:

This chapter uses Q-methodology to reveal the perspectives of various stakeholders on the governance and management of urban green spaces in Lahore. The Q-methodology combines both qualitative and quantitative aspects. Its utility derives from its ability to process subjective information into quantifiable data, which is rare in the conventional techniques of discourse analysis (Brown, 1993; Brown, 1996; McKeown and Thomas, 2013; Stephenson, 1953). Q-methodology was developed by Stephenson in 1953 to apply in the field of psychology, but has been used in many other disciplines (Frantzi *et al.*, 2009; Baker *et al.*, 2006; Goldman, 1999; Howard *et al.*, 2016; Eden *et al.*, 2005), and is widely acknowledged for its ability to measure the subjectivity of stakeholders in environmental studies (Forrester *et al.*, 2015; Dasgupta and Vira, 2005; Gruber, 2011; Webler *et al.*, 2009; Barry and Proops, 1999).

Q-methodology has gained in popularity in recent years as it examines the emerging patterns within and across individuals' discursive understandings of a particular issue, revealing patterns in a structured and interpretable way. Q-

methodology gives a systematic way of reducing the divergent viewpoints to a few manageable themes, presented as discourses (Barry and Proops, 1999; McKeown and Thomas, 2013; Watts and Stenner, 2012). It is also an effective way of identifying the shared goals within and across different groups, their agreements and disputes and, thereby, provide a basis for further areas of research (McKeown and Thomas, 2013; Watts and Stenner, 2012).

Q-methodology comprises the following six steps: (1) Defining the concourse; (2) developing the Q-sample; (3) selecting the P-set; (4) Q-sorting; (5) statistical analysis; and (6) interpretation.

6.2.1 Defining the Concourse

The concourse has been defined as "the flow of communicability surrounding any topic" (Brown, 1993: 95). In this research, the concourse was created from semi-structured interviews with key informants. An interview protocol was developed based upon the governance arrangement approach (Arts and Goverde, 2006; Arts and Buizer, 2009) (Appendix C-1). Five pilot interviews were conducted through Skype, and minor amendments were made to the interview schedule (Appendix C-2). The interview questions were kept flexible to allow interviewees to discuss their views at full length, and to allow for the collection of information from interviewees possessing different levels of authority, skill and knowledge.

Stakeholder groups (Table 6.1) were identified using an interest-influence matrix (Reed *et al.*, 2009; Hare and Pahl-Wostl, 2002) and an analytical categorization of stakeholders' groups, based upon their experience, observations and the theoretical perspective of the phenomenon in question (Hare and Pahl-Wostl, 2002). Thus, stakeholder identification was based on individuals, groups, and organizations with "interest" in and "influence" over the urban green spaces in Lahore. When selecting participants from each stakeholder's group, a purposive sampling strategy was used for the study. The participants were deliberately chosen based on their relevance to the topic in question (Brown, 1980). This kind of sampling is done by selecting those participants who are well informed about the issue at hand, and who can contribute valuable information by having a better understanding of the

system (Watts and Stenner, 2012; Webler *et al.*, 2009). Diversity of opinion is the most important principle observed in participant selection. In this way, if a discourse exists, the chances of its being revealed are far

Table 6.1 Stakeholder groups for semi-structured interviews and the Q-sorting process.

Stakeholders' Group		Organizations/Institutions/ Public	No. of Interviews N=30	No. of Q-sorts N=27
Government Stakeholders		Parks and Horticulture Authority	2	2
		Punjab Forestry Department	2	2
		Lahore Walled City Authority	2	1
		Metropolitan Corporation Lahore	1	1
		Environmental Protection Department	2	1
		Politician	2	3
		Department of Planning and Development	1	1
		Cantonment Board, Cantt	1	0
Non-governmental Stakeholders	Private	Expert (landscape and horticulture)	2	2
		Lahore Chamber of Commerce	1	0
		Private Developer	1	1
	Civil Society	International NGOs with local partners	2	2
		Local Environmental group	2	2
		Academia	2	2
		Media	2	2
		Users	5	5

greater, even when it is very marginal (Watts and Stenner, 2012; Webler *et al.*, 2009). As Lahore was the native town of the researcher, it was easy to approach the participants through formal and personal networks. These participants were approached by emails and phone, as well as by personal visits to their offices, and some parks. In total, 30 interviews were held. These interviews were mostly conducted in offices during office timings, but some of the interviews were also held in parks, and at participants' homes. The interviews were conducted following the protocol approved by the School of Geography and University of Leeds Research Ethics Committee**.** All participants gave their informed consent for their participation before conducting the study. These interviews were mostly conducted in the native language (Urdu). The average length of the interview was 35 min. These interviews were audio-recorded and subsequently translated and transcribed

into English. This study relies upon a naturalised approach while transcribing interviews, giving precedence to the meaning contained in a transcript.

A concourse was developed using NVivo software through coding the main themes from the interview transcripts. A deductive approach was adopted to generate themes and codes. A structured framework on governance arrangements was used for analysing the interviews. The governance arrangement comprises four aspects: Actors, including individuals, groups and organisations that are either part of a governance arrangement or have the potential to have influence—in this case on urban green spaces in Lahore; discourses, which are about how these entities value urban green spaces; rules of the game, which explain the challenges and opportunities in the planning and management of urban green spaces; and resources, which are discussed in terms of the capacity of actors to achieve some outcome. The concourse in this study consisted of 310 statements. A saturation point of repetition was reached with a greater number of statements in the concourse (Eden *et al.*, 2005; Glaser *et al.*, 1968). The statements were kept in their original form, as they came from the source, except for occasionally supplying nouns for clarity.

6.2.2   Developing the Q-sample

After assembling the concourse, the next task was to reduce the statements to those that would be used in the Q-sort (Barry and Proops, 1999; Watts and Stenner, 2012). A four-by-four matrix (Table 6.2) was developed following Dryzek & Berejikian (Dryzek and Berejikian, 1993), to provide a structured approach for selecting the statements (Barry and Proops, 1999; Dryzek and Berejikian, 1993; McKeown and Thomas, 2013). This matrix had two dimensions. The first dimension is the 'discourse element', which explains the political aspect of discourse. It includes; Ontology, or set of entities, which in this case constitute a set of entities such as individuals, groups, organisations, and governmental departments; agency is the capacity or degree of these entities to act, or to be acted upon; agents and their motivations describes the motivation of actors, for instance, self-interest, civic virtue and survival; relations are natural and unnatural political relationships. The second

dimension of the matrix consisted of types of claim. These types are the definitive claims that give meaning to the terms, designative claims that are statements of fact, evaluative claims which explain the worth of something that does or could exist, and advocative claims that are concerned that something should or should not exist. Vague, confusing and overlapping statements were omitted from the matrix in order to reduce the number of statements. About equal numbers of statements for each cell in the matrix were chosen.

Table 6.2 A matrix for filtering statements using categories, discourse element, and types of claim

Types of claim	Elements of Discourse			
	Ontology (Set of entities)	Agency (Degree of agency assigned to entities)	Actors and motivations	Relations
Definitive (Meaning of term)	1	2	3	4
Designative (Statements of fact)	5	6	7	8
Evaluative (Worth of something)	9	10	11	12
Advocative (Should or should not exist)	13	14	15	16

Source: Adapted by Dryzek & Berejikian (1993)

Finally, the statements were selected in a way that they represent almost equal numbers of positive, negative (opposing) and neutral arguments, thereby allowing the interviewees to give viewpoints covering all angles. The sample consisted of 64 statements. A pilot was carried out with three colleagues in order to test the clarity of the statements, as well as to test the ease with which it was possible to sort them. Following the pilot, a few statements were dispensed with, because they were confusing and repetitive. Additionally, it was found that the large size of the Q-sample made the sort too time-consuming. Therefore, a final set of 48 statements was selected.

6.2.3   Selecting the P-set

The next step was the formation of the P-set, which is a structured sample of respondents. The number of participants in a Q-study, as opposed to other traditional techniques such as surveys, does not need to be large. However, the size of this P-set should be large enough to provide robust data for statistical analysis. In Q-methodology, instead of focusing on the number or quantity, participants are chosen based on their comprehensive knowledge and the diversity of their views (Watts and Stenner, 2012; Webler *et al.*, 2009). It is possible to complete a Q-study with a small number of participants; for example, Barry and Proops (1999) found that only 12 participants could provide statistically valid results. Watts and Stenner (2012: 73) explain that the number of participants involved in Q-studies can be small or large "unless [this number] is less than the number of items in your Q-set". In our study, we aimed to obtain data at the Q-sort stage from the same participants who participated in the semi-structured interviews. A total of 22 out of 30 interviewees agreed to take part in ranking exercises when contacted at the Q-sorting stage. Additional participants were added in order to cover any gaps among those in the stakeholder group who did not respond at the Q-sorting stage. Given the time constraints, 27 Q-sorts in total were obtained, covering all the categories of the stakeholder groups, and providing comprehensive and diverse information in response to the questions.

6.2.4   Q-sorting

In the fourth stage of Q-methodology, participants ranked the selected statements based on how strongly they agreed or disagreed with them. Printed cards and a distribution grid were used to obtain Q-sorts from the participants. All 48 statements were written on square cards. These statements were written in English and Urdu on both sides of the cards. The cards were randomly numbered. For this study, the distributional grid comprised a 9-point scale from −4 to +4, indicating the least agreed statements, neutral, and most agreed ones. A forced quasi-normal distribution was adopted where participants were asked to place one card in each cell of the grid (Fig 6.1). The Q-sort was recorded on a printed version of the

distribution grid, by noting down the number given to each card by the researcher (Appendix C-3). After the Q-sorting process, the participants were interviewed to clarify their position for selecting those statements. The participants were further asked if they found anything missing in the Q-sort for which they would like to give some additional information. This interview after the Q-sorting was helpful for the interpretation of the results.

-4	-3	-2	-1	0	+1	+2	+3	+4
5	12	35	45	48	34	11	46	40
37	19	47	27	7	43	1	21	44
6	14	39	8	22	4	3	16	9
	25	18	42	29	41	38	31	
		15	28	24	20	32		
		23	33	13	10	36		
			30	26	2			
				17				

Figure 6.1 Q-sort

Forced quasi-normal distribution of the Q-sort from –4 (least agreed) to +4 (most agreed), showing a printed version of the distributional grid ranked by a participant and recorded by the researcher through noting down the number assigned to the cards.

6.2.5 Factor Analysis

The data was analysed using centroid factor analysis. Through analysis, four factors were extracted (Table 6.3). The factors were rotated through varimax rotation which fulfils the Kaiser-Guttman criterion (eigenvalue ≥ 1) (Watts and Stenner, 2012). All these factors have at least two participants loading significantly on them (Table 6.4). To calculate the significant loading value on factor for the study, the equation presented by Watts and Stenner (2012) has been used which gives the significant value for the study as ±0.38 at P<0.01 level [Significant factor loading = 2.58 x (1 ÷ √no. of items in Q set)].

6.2.6 Interpretation of Factors

The factors generated through this process do not represent any specific Q-sorts from individuals but represent an ideal type of Q-sort (Barry and Proops, 1999; Watts and Stenner, 2012). Hence, each Q-sort contains traces of more than one respondent's sort.

Table 6.3 Extracted factors with eigenvalues and study variance

Q-sort. No.	Factor 1	Factor 2	Factor 3	Factor 4
1	0.2454	-0.1446	0.1368	0.524
2	0.5054	-0.1363	-0.1765	0.3383
3	0.2745	-0.3719	-0.0829	0.1099
4	0.0416	0.4762	-0.2296	-0.1201
5	0.574	0.1606	-0.2095	0.1252
6	0.2669	-0.3091	-0.1563	0.0395
7	-0.1165	0.0975	0.3797	-0.2352
8	0.3286	0.0498	0.1579	0.1248
9	0.595	0.2068	0.0924	0.0774
10	0.6446	0.0753	0.1742	0.0515
11	0.1509	0.2066	0.0678	-0.4369
12	0.2587	0.2465	0.0547	0.1772
13	0.451	0.0007	0.2453	0.1068
14	-0.0344	0.1534	0.2126	0.1961
15	0.1441	0.2244	-0.2044	-0.2174
16	0.2593	0.1549	-0.0566	-0.2877
17	0.4023	0.1071	0.3679	-0.2675
18	-0.1815	0.2363	-0.1531	0.1663
19	-0.2286	0.3502	0.0747	0.1869
20	0.4308	-0.1621	-0.0631	-0.2252
21	0.3866	-0.1021	0.3451	-0.2757
22	0.1193	0.277	-0.01	0.1848
23	0.0553	-0.5728	0.11	-0.0661
24	0.4565	0.0712	-0.4724	0.0538
25	0.548	0.1374	-0.1736	0.1254
26	0.0164	-0.2158	0.4136	-0.1404
27	0.2733	0.4381	0.1723	0.2788
Eigenvalue	3.2499	1.6816	1.2975	1.3298
%Explanatory Variance	12	6	5	5

In contrast to this scenario, a statement attracting a 0 ranking can be more revealing, and hence more valuable if the other discourses place it extremely high or low. Interpretation through this method not only depends upon

explaining the relative positioning of the statements in discourses, but it also stresses the need to give a discourse a coherent point of view (Dryzek and Berejikian, 1993; Watts and Stenner, 2012). Thus, an anomaly can be addressed through its explanation. The interpretation also rests on interviews held with the participants of the Q-study beforehand to generate the concourse, as well as the interviews during the Q-sorting process (Dryzek and Berejikian, 1993; Watts and Stenner, 2012).

Table 6.4 Factor Matrix with an X Indicating a defining Q-Sort

Q-Sort.no.	Factor 1	Factor 2	Factor 3	Factor 4
1	0.3991 X	0.0595	-0.0871	-0.4516 X
2	0.4912 X	0.2707	-0.2968	-0.1303
5	0.5415 X	0.1109	-0.2621	0.2015
8	0.3768 X	0.0318	0.0824	-0.0338
9	0.6169 X	0.0353	0.0270	0.1699
10	0.6327 X	0.1587	0.1216	0.1180
13	0.4812 X	0.1125	0.1713	-0.0358
25	0.5205 X	0.1128	-0.2276	0.1721
27	0.5205 X	0.1128	-0.2276	0.1721
3	0.1637	0.4165 X	-0.0948	-0.1527
6	0.1319	0.3929 X	-0.1367	-0.0477
19	-0.0203	-0.4563 X	-0.0356	-0.0743
20	0.2325	0.3895 X	0.0446	0.2426
23	-0.1040	0.5048 X	0.1722	-0.2287
7	-0.840	-0.1416	0.4356 X	0.0754
17	0.3524	0.0780	0.4310 X	0.2533
21	0.2763	0.2552	0.4307 X	0.1673
24	0.3349	0.2070	-0.4615 X	0.2677
26	-0.0086	0.1476	0.4499 X	-0.1154
4	0.0677	-0.3099	-0.1961	0.3956 X
11	0.0350	-0.0088	0.2257	0.4568 X
15	0.0592	-0.0327	-0.1138	0.3776 X
16	0.1451	0.0646	0.0534	0.3862 X
12	0.3660	-0.1582	-0.0477	0.0281
14	0.1283	-0.2373	0.0984	-0.1610
18	-0.0647	-0.2910	-0.2246	-0.0245
22	0.2429	-0.2320	-0.1101	0.0178

6.3 Results

The study revealed four discourses: Public participation as an efficient model, pro/anti administrative, leadership/capacity building and decentralization or elite capture

6.3.1 Loading of Stakeholder Groups on Each Factor

An important aspect of the results of this study is the three discourses emerging as bipolar factors. This bipolar feature of a factor shows that like-minded individuals were rolled into the same factor, as they adopted a similar pattern of sorting with a similar discursive position. Others, however, held diametrically opposite points of view on the issue as they loaded negatively on the same factor (Addams and Proops, 2000). The bipolarity of the discourse reveals an inherent conflict within a factor. Factor B of the discourse of administrative rationality has one negative loader that belongs to the user category. This result shows stakeholders' dissatisfaction with the government's performance. However, it is also different from the discourse of efficient management, as this participant thinks that people are not fully capable of participating in activities related to the management of urban green spaces (Interview No. 30). Factor C and D, representing the discourse of capacity building and decentralisation, respectively, have one negative loader for each factor, and that is bureaucracy. It shows that the bureaucratic viewpoint runs contrary to both discourses.

Table 6.5 Stakeholders' loading on each factor

Stakeholder group	Factor A	Factor B	Factor C	Factor D
Government	2	3	3 (-1)	2(-1)
Environmental groups/NGOs	1	0	0	2
Journalist	2	0	0	0
Users	2	-1	1	0
Private Developers	1	0	0	0
Academia	1	0	0	1
Experts	0	1	1	0

The results of this analysis can be placed in the context of developing countries, where a considerable gap exists between the government and civil society (Najam, 2000; Bratton, 1989; Fiszbein and Lowden, 1999), except for factor C (leadership and capacity building), where the government is seen to be supportive of NGOs' roles in leadership. The position being taken here seems to be opposite to the stance taken by factor B, where the government is strongly against the NGOs' roles in the management of green spaces. However, if we split the category of the government group, which comprises elected representatives and bureaucracy, then two Q-sorts positively loading on this factor belong to elected representatives, while the negative loader is a bureaucrat, therefore showing a conflict between these two stakeholder categories. The on-ground reality in Lahore, where bureaucracy is more powerful, stronger and rigid than the political figures, is that these situations are not uncommon. This also shows that elected members are somehow flexible, as compared to bureaucracy, which puts its institution above everything, and shows more resistance to change.

6.3.2 Discourse A: Public Participation as an efficient model

Eigenvalue: 3.2

Study Variance: 11

Number of Q-sorts significantly loading on Factor A: 9

Stakeholders 'group: Government Officials, Environmentalist, Private developers, Academia, Journalist, Users.

This discourse has emerged as a result of the perceptions of green space management in which the government lacks the wherewithal to run the system more efficiently (Table 6.6). The dissatisfaction of participants from the existing system, which is quite palpable, places mistrust upon the government, underlining the need to adopt an approach based upon public participation for the governance and management of green spaces. Statement 17 (+3) shows that the actors involved in this discourse are fully aware of the importance of green spaces for improving the environment. However, they seem palpably dissatisfied with the process of policymaking, as well as its implementation at

different levels. The participants view the policymakers as having very little interest in improving the environment. Instead, they are out to protect their personal interests (30, +3 & 22, −4). As in past Q-sorting interviews, the participants pointed out that the government was more interested in developmental projects, rather than the environment, such as widening roads at the expense of green spaces. As such, in this discourse, the participants want citizens to take over management, as their right, as well as their civic duty (7, +4). There is a rejection of the claim that people's socio-economic conditions are an obstacle to engaging them in governance (23, −4). Hence, people need to start to work together in social networks, such as community groups, private clubs and voluntary organisations (5, +2).

Table 6.6 Selected statements from Crib sheet for Factor A

St.no.	Most Agreed and Disagreed statements	Position in Q-sort
7	Every citizen has to contribute for green spaces because they are using these resources or nature. they are consuming so they must play their part.	+4
35	I think technocrats should have a bigger role, the right man for the right job is what needed. But it is not being done.	+4
17	In our country not, much importance is given to the environment. Once climate change was a ministry and then it becomes a department which again became a ministry but toothless kind of ministry.	+3
30	Environment is not our priority. our policymakers want to show that stuff to the masses on the basis of that they will get more votes in the coming elections.	+3
33	I must say that role of Ulemas (religious leader) can be very positive. They are being used for wrong things. If we engage them, I mean to say we can use that institution as well.	+3
5	I think there is no community culture here. They need to develop a community culture. where there are parks people in the neighbourhood should have meetings, or they should have clubs, so they can specify that in this area what do they need.	+2
20	Green spaces are not adequate in the inner city. we do have funds, but people don't want to leave their places. they are ready to die for every single inch of land.	-4
22	Since long time new parks have not been formed as the government do not have sufficient land.	-4
23	This is cuckoos land. These people in the inner city do not have money to maintain their houses how you ask these people to make a garden on their roofs.	-4

This discourse also calls for the management of green spaces on a more scientific basis. Here, the involvement of academia to lead the way has been stressed, with the belief that bureaucracy lacks the scientific outlook and knowledge so vital to managing parks and green spaces, and handling the environment in general (35, +4). In addition to scientific input, the importance of local cultural institutions is also recognised, especially in creating awareness—preferably among the religious, given their far-reaching impact upon society (33, +3).

This discourse emphasises that public participation is the only way forward for improving the ecological health of the city, as well as lending legitimacy to the system. Therefore, this discourse recommends organic changes in the governance of urban green spaces, based upon a new institutional design studded with non-state actors at multiple scales and levels.

6.3.3   Discourse B: Anti/ Pro-Administrative

Eigenvalue: 1.67
Study Variance: 6
Number of Q-sorts significantly loading on Factor B: 5
Bipolar Factor: Four Positive loaders, One negative loader
Stakeholders 'groups: Government, Expert and Users

This is a bipolar factor (Table 6.7). Out of five, one Q-sort has a negative loading on this factor, in the opposite direction to the overall discourse. This discourse shows full support for the existing administrative system for green spaces while rejecting suspicion about the role of government in this system (9, −4). It also disowns the viewpoint that there are systematic flaws in the planning of green spaces (31, −3). However, this discourse concedes that the situation is not very good due to a lack of coordination among various departments (11, +3), and due to resource constraints, including land, as explained in statement 22 (+4) and 14 (+3). Therefore, it attaches a priority to the generation of funds locally Although this discourse favours citizen participation in the governance of green spaces (7, +4) paradoxically, it declares other actors, such as experts and scientists (35, −2), environmental

groups and NGOs (3, −2), and religious groups (33, −1) as irrelevant, and considers that their involvement is not enough to turn things around.

Table 6.7 Selected statements from Crib sheet for Factor B

St.no	Most Agreed and Disagreed Statements	Position in Q-sort
22	Since long time new parks have not been formed as government do not have sufficient land.	+4
29	I think the things are getting commercialised. people go to green spaces for a walk but they have increased the grey structure. you are bringing that kind of facilities which are damaging the true spirit of UGS.	+4
7	Every citizen has to contribute for green spaces because they are using these resources or nature. they are consuming so they must play their part.	+4
14	The local government need to generate funds. so, if we go to any park or historical place in the western country. we have to pay for that. why cannot we pay the fee? They can generate their own resources.	+3
11	In our country, our bureaucratic system, there are turf wars. There is less coordination, unity and not a single united policy on which everyone is agreed.	+3
33	I must say that rule of Ulemas can be very positive. They are being used for wrong things. If we engage them, I mean to say we can use that institution as well.	-1
35	I think technocrats should have a bigger role, the right man for the right job is what needed. But it is not being done.	-2
3	I feel that these local group environment groups should come forward. they should take the lead and NGO should back them up by giving excellent solid scientific support.	-2
31	Planning varies area to area in Lahore. Posh areas where policymakers live and have their influence are better looked after and managed.	-3
9	The government does not allocate enough budget for EPD. that shows the priority of our leaders and, politicians and our government, they think the environment is OK this is western agenda, and these are rich people tantrum.	-4

The opposite of this discourse (Table 6.8) highlights different issues, which are considered to be down to the poor performance of government in managing green spaces (9, +4 & 31, +3), rejecting the stance of a shortage of resources as the leading cause of ineffective governance (22, −4 & 14, −3). The viewpoints in this discourse disprove the idea of public participation as the solution (7, −4). This discourse identifies a new actor, the private sector, contending that it can play a positive role in improving greenery for the city

(37, 0). This discourse shows a tilt towards commercialisation or privatisation, which is also evident in statement 29 (−4), where it completely rejects the idea that commercialisation in parks results in increasing grey structures, ruining the true spirit of green areas. In summary, while placing both government and citizens in dim light, it puts weight behind a new actor—the private sector—which, according to this viewpoint, needs to come to the forefront.

Table 6.8 Selected statements from the Crib sheet for Factor B (Negative Loader)

St.no.	Most Agreed and Disagreed statements	Position in Q-sort
9	The government does not allocate enough budget for EPD. that shows the priority of our leaders and, politicians and our government, they think the environment is OK this is western agenda, and these are rich people tantrum.	+4
26	How many people have the budgeting concept? And even if I have I will not that headache. In this situation, it is unnecessary interference to involve a layman.	+4
6	Parks and Horticulture is an authority, why we have authorities? WAPDA is another authority so is LDA, why authorities? why are not these services? if these are services you can involve people.	+3
31	Planning varies area to area in Lahore. Posh areas where policymakers live and have their influence are better looked after and managed.	+3
38	I think in our system NGOs need to interfere because when they protest on something it catches the attention of media, resulting, some progress, negotiation, and so there is some betterment.	+3
41	Media covers the issues but not that much because it is not advertiser's interest, nor does of the corporate interest, so they don't focus on them.	+3
28	The latest trend is that private housing societies import plants from China or Thailand that are fully grown plants. so that's how they are getting good business but that is neither our economy, not the indigenous plant.	+2
14	The local government need to generate funds. so, if we go to any park or historical place in the western country, we have to pay for that. why cannot we pay the fee? They can generate their own resources.	-3
7	Every citizen has to contribute for green spaces because they are using these resources or nature. they are consuming so they must play their part.	-4

6.3.4 Discourse C: Leadership and Capacity Building

Eigenvalue: 1.29

Study Variance: 5

Number of Q-sorts significantly loading on Factor C: 5

Stakeholders 'groups: Government Officials, Expert and user group

This is also a bipolar factor (Table 6.9), where out of five, one Q-sort has negatively loaded on the factor. This describes the mirror image of the discourse. The discourse emphasises the role of leadership and capacity building for the citizen, underlining that people are not fully aware of the problems, and they do not have enough knowledge (26, +3 & 36, −3). It further explains that the main reason for this lack of awareness is their socio-economic conditions (23, +3). Hence, there is a need for environmental groups and NGOs to come forward and take some leadership in capacity building among people, increasing awareness, so that they can understand the issue at hand (13, +4 & 3, +3). This discourse also recognises that civil society has a role to play in taking political action, as governments are still ineffective at coming up with right solutions for managing green spaces (38, +4).

Table 6.9 Selected statements from the Crib sheet for Factor C

St.no.	Most Agreed and Disagreed statements	Position in Q-sort
1	People don't realise what is the quality of life. The Quality of life is not about taking the big house, quality of life is what is inhaling, how you feel, or is your brain at peace. that's the quality of life.	+4
13	The civil society should take responsibility. sometimes there is limited capacity and knowledge so civil society can bridge that gap and ensure that good laws are enacted and comply with.	+4
38	I think in our system NGOs need to interfere because when they protest on something it catches the attention of media, resulting, some progress, negotiation, and so there is some betterment.	+4
23	This is cuckoos land. these people in the inner city do not have money to maintain their houses how you ask these people to make a garden on their roofs.	+3
26	How many people have the budgeting concept? And even if I have I will not that headache. In this situation, it is unnecessary interference to involve a layman	+3

This reverse discourse (Table 6.10) recognises that it is the civic right of people to participate in the decision-making process for green spaces (36, +3). Therefore, this discourse stresses the idea of community empowerment as being demonstrated in statement 5 (+4). It disagrees with the stance that

the user groups are naïve (26, −3), but emphasises that people know what they want, as it disagrees with statement 1 (−4). However, this discourse is not satisfied with the performance of local environmental groups, as it disagrees with statement 46 (−2). It rejects civil society's role in any form, either as a watchdog or as a capacity builder, as it strongly denies these two statements (38, −4 & 13, −4). This discourse is neither satisfied with the government's role, nor that of the NGOs, but instead considers the private sector better than both of them (37, +4).

Table 6.10 Selected statements from the Crib sheet for Factor C (Negative Loader)

St.no.	Most Agreed and Disagreed statement	Position in Q-sort
5	I think there is no community culture here. They need to develop a community culture. where there are parks people in the neighbourhood should have meetings, or they should have clubs, so they can specify that in this area what do they need.	**+4**
37	I have seen that our private sector is more aware than the government sector on the virtue of environment protection as most of the private housing schemes have green spaces as dominant features.	**+4**
36	Green spaces meant to be used by users but if you ask me if they any role in policymaking and decision making, it is not like that they should be involved in this process	**+3**
46	When talking about the Lahore city the local environmental group is a powerful pressure group, so its activists do not let anything go wrong here easily. they are quite vigilant; parks cannot be transformed for any other purposes.	**-2**
1	People don't realise what is the quality of life. Quality of life is not about taking a big house, quality of life is what is inhaling, how you feel, or is your brain at peace. that's the quality of life.	**-4**
13	The civil society should take responsibility. sometimes there is limited capacity and knowledge so civil society can bridge that gap and ensure that good laws are enacted and comply with.	**-4**
38	I think in our system NGOs need to interfere because when they protest on something it catches the attention of media, resulting, some progress, negotiation, and so there is some betterment.	**-4**

In short, the positive side of this discourse is about bringing NGOs to the forefront, if anything meaningful is to be done for empowering people and building their capacity, leading to public participation. On the negative side, however, a discourse emerges which favours citizen participation, but shows

dissatisfaction with the big actors, government and the NGOs, and therefore emphasises bringing a new actor into the equation, which is the private sector.

6.3.5 Discourse D: Decentralisation or elite capture

Eigenvalue: 1.32

Study Variance: 5

Number of Q-sorts significantly loading on Factor C: 5

Stakeholders 'groups: Government Officials, Environmentalist, Academia

Table 6.11 Crib sheet for Factor D

St.no	Most Agreed and Disagreed Statements	Position in Q-sort
31	Planning varies area to area in Lahore. Posh areas where policymakers live and have their influence are better looked after and managed.	+4
43	The green spaces and its problem cannot be solved until it is not taken at the government level. other problems can be solved at the individual level but for green spaces and tree plantation government have to give some policy. yet at city level government has to give some policy.	+4
2	At least all the parks in Lahore should be digitised and mapped them in GIS and online information where people can know when its maintenance is due when it is done. how much is the budget, how much has been spent? There should be information sharing so people will come to know the government preferences towards the parks and the green spaces.	+3
4	NGOs have a very limited scope. they can do some pilot project which can address four or five schools, but if you want a big scale, then you need to involve the government.	+3
16	we have brought local government system again after nine years gap, but they do not have any power. All the authority is held by the chairman of LDA or chairman of PHA.	+3
21	If local government need a budget, they can't increase a few fine or fee or tax as they need to take permission from the provincial government and provincial government don't allow it. they cannot generate their own funds. so, the cities cannot be run	+2
30	The environment is not our priority. our policymakers want to show that stuff to the masses on the basis of that they will get more votes in the coming elections.	-2

This discourse (Table 6.11) shows an inherent conflict between bureaucracy and local government (16, +3) while representing the pro-decentralization viewpoint which demands the devolution of power to the local level. It admits that planning about green spaces is not effective, as it mentions social inequality as the main issue (31, +4), but the primary reason for mismanagement is the lack of devolution of power at the local level (21, +2).

It denies the role of the public in the governance and management of green spaces (5, −4 & 7, −3), and emphasises that the problems related to these green spaces can be solved only with the involvement of the government, which can provide a conducive environment for change (43, +4). However, it also admits that the government should be accountable to people by providing them with all the information about the system (2, +3).

Table 6.12 Crib sheet for Factor D (Negative Loader)

St.no.	Most Agreed and Disagreed statements	Position in Q-sort
5	I think there is no community culture here. They need to develop a community culture. where there are parks people in the neighbourhood should have meetings, or they should have clubs, so they can specify that in this area what do they need.	+4
14	The local government need to generate funds. so, if we go to any park or historical place in the western country, we have to pay for that. why cannot we pay the fee? They can generate their own resources.	+4
37	I have seen that our private sector is more aware than the government sector on the virtue of environment protection as most of the private housing schemes have green spaces as dominant features.	+4
7	Every citizen has to contribute for green spaces because they are using these resources or nature. they are consuming so they must play their part.	+3
13	The civil society should take responsibility. sometimes there is limited capacity and knowledge so civil society can bridge that gap and ensure that good laws are enacted and comply with.	+3
19	Civil society sometimes cannot get that support which is needed from media, judiciary, and local people.	+3
27	NGOs haven't done any significant project on urban green spaces. What they did is in bits and pieces like lobbying, advocacy, with journalist, students and the private sector.	+3
48	Private participation is too little. and if we talk about what private sector is doing, it is mostly undertaking tree planting initiatives. they have no participation in policymaking.	+2
30	The environment is not our priority. our policymakers want to show that stuff to the masses on the basis of that they will get more votes in the coming elections.	+2

The negative loader on this discourse (Table 6.12) emphasises that public participation as an important part of the management of green spaces (7, +3). However, it also understands that people must organise themselves if they

want to take part in the management of green spaces (5, +4). It is not satisfied with the NGOs' roles in the present scenario (27, +3).

This discourse underlines mistrust of political actors, which is, according to participants, because they are more interested in self-serving pursuits (30, +2). However, this discourse also explains that, currently, the private sector is better at the management of green spaces (37, +4), and at the same time it explains that in the present circumstances the private sector should play a more significant role (48, +2).

6.4 Discussion

This study aimed to examine the prevailing discourses in the city, in order to understand stakeholders' perceptions of the institutional design required for effective, efficient and sustainable governance and management of urban green spaces in Lahore. One limitation being faced by the study was its low explanatory variance. It is mainly because governance is a vast subject, and because of that, most of the data was not focused on one idea. This made the ranking exercise a more complicated process. Study variance can be increased if more participants are added to the Q-sorting process. But given the fact that this study is a part of a PhD project and due to time constraints, it was difficult to approach more participants at that time.

The Q-method revealed four discourses, out of which three are further divided into sub-discourses. The governance and management of green spaces are both highly contested in Lahore, illustrating the need for polycentric governance of this common-pool resource. However, efficient management, the most dominating and legitimate discourse of the study, underlines the need for social innovation through developing local institutions in pursuit of the management and governance of urban green spaces in Lahore.

The discourse on efficient management is parallel to the dominant global discourse on natural resource management, which emphasises the public participation approaches at the core of managing sustainable systems (Agrawal, 2003; Armitage *et al.*, 2009; Berkes, 2003; Colding, 2011; Colding

et al., 2006; Dietz *et al.*, 2003; Folke *et al.*, 2005; Foster, 2011; Olsson *et al.*, 2006; Ostrom, 2008; Ostrom, 2010; Pahl-Wostl, 2007). This discourse has emerged because of stakeholders' dissatisfaction with existing, inefficient bureaucratic forms of management and control. Dissatisfaction indicates their lack of trust in the state, which is essential to the functioning of a system (Davenport *et al.*, 2007; Lachapelle *et al.*, 2003). The analysis of interviews and post-Q-sorting interviews for this study express stakeholders' dissatisfaction on many levels; against government's ineffective policymaking and its implementation, lack of vision for shared goals in decision making and the management of green spaces. This dissatisfaction also shows itself where the participants feel a lack of influence over decision-making and the management of green spaces.

Empowerment seems to be a new slogan, as is evident from this discourse. These local stakeholders want power in the form of civic rights to manage urban green spaces. The literature on common-pool resources implies these civic rights need to be property rights, which gives more power to the local actors for rule-making regarding urban natural resources, and also provides incentives to the stakeholders in the form of the custodianship of the resource in question (Agrawal, 2001; Colding *et al.*, 2013; Besley and Ghatak, 2010; Colding, 2011). Hence, in the sustainable management of urban green spaces, secure and well-defined property rights become a distinctive characteristic (Schlager and Ostrom, 1992; Colding, 2011; Colding *et al.*, 2013; Ostrom and Hess, 2010). In western countries, there are examples where these rights have been successfully assigned to communities through different local initiatives, such as urban gardening, allotments and community gardens. However, studies show that when upscaling these local initiatives, their success is determined by the presence of strong social networks that provide technical, political and financial resources (van der Jagt *et al.*, 2017b; Buijs *et al.*, 2018; Azadi *et al.*, 2011). In Berlin, a project called 20 Green walks has been developed for a green corridor network. The project was initiated by two NGOs and evolved into co-governance with the local government and its citizens. Different capacities and resources, such as funding, provision of GIS

data for mapping, maintenance of pathways, disseminating information through the website, and political approval of the path network by local government, have resulted in its inclusion in formal UGI Planning (Buijs *et al.*, 2018). There are several examples mentioned in the literature where civil society and local government have collaborated for innovative practices, ranging from local community actions to formal policy-making for sustainable and equitable urban green spaces (Azadi *et al.*, 2011; Buijs *et al.*, 2018; van der Jagt *et al.*, 2017b; Teal *et al.*, 1998).

Efficient management discourse underlines a desire for change. This discourse aims at bringing institutional change, where it highlights the importance of sharing resources and expertise from every field. This discussion mentioned above henceforth indicates that participants in this discourse have the normative stance, which coincides with the ideas and thoughts expressed in the literature on public participation, expressing a desire for institutional change and a departure from the path dependency, in favour of shared values, and power, as a way of implementing governance, and hence a way forward.

Discourse B favours the existing institutional design based on the bureaucratic system in Pakistan in general and Lahore in particular. The participants seemed to be satisfied with the performance of the government as far as the quality and quantity of urban green spaces in Lahore are concerned. Lack of the availability of land and other resource crises remain prominent areas of discussion, as is the case in most developing countries (Mensah, 2014; Okpala, 2009). Though at the same time, this discourse is not against citizen participation, the participants express scepticism regarding the role of NGOs. The administrative rationality uncovers a latent struggle between the government and these NGOs, with the former less interested in NGOs or issues like capacity building. Najam (2000) described this 'inescapable' tension as a defining feature of governmental-NGOs relations, whose goals, interests, priorities and resources collide in the policy stream; sometimes by intent, sometimes by default.

The unacceptability of NGOs may be due to the different motivations and goals of the state and NGO sectors (Baruah, 2007; Atack, 1999; Lister, 2003), but at the same time participants in this discourse are not ready to share their power with other actors, such as academia or local groups. This discourse favours public participation, but remains silent on the means to this end, and instead wants the public to render services on their own without any facilitation from the government. This shows that bureaucrats are less willing to share their power, thereby resisting any institutional change that will weaken their stranglehold over the government—findings which are in line with most of the literature in developing countries (Pasha *et al.*, 2002; Krueger, 1990).

Overall, this discourse brings to the fore two conflicting perspectives. The reverse of this discourse, however, shows an entirely different picture, as the participants look at the administrative rationality as a problem and not an asset for urban green spaces in Lahore. The second perspective, however, totally negates public participation, though concedes a marginal role of NGOs as a watchdog for accountability.

Although discourse C is in favour of an institutional change for managing urban green spaces, it emphasises creating awareness among citizens as the first and foremost step in developing a pro-environmental mindset that is entirely helpful in the management of urban green spaces. The learning process is vital as an individual can better participate in environmental improvement programs after developing understating, motivation and the required skills (Tidball and Krasny, 2011; Mamun *et al.*, 2012). Therefore, this discourse emphasises the role of leadership and capacity building in the management of urban green spaces in Lahore.

According to this discourse, the public should participate in nation-building activities aimed at improving the way of life of ordinary people. Public participation is the citizens' fundamental and democratic right (Ribot, 2002). The development of this kind of behaviour is key to a real change in the power equation in any local setting. The way resource users organise themselves and their awareness about their rights are the main factors for changing the power dynamics in the system (Agrawal and Gibson, 1999; Berkes, 2004).

Therefore, there is a strong need to bring awareness to the people, which can be achieved through providing them with environmental education through formal and non-formal methods, and which can have a direct bearing on their quality of life (Sola, 2014). This discourse understands that NGOs or local interest groups should take this leadership role. NGOs are much better placed to assume the leadership role, given their outlook being wedded to empowering communities, and thereby playing a capacity-building role in many of the cases—bridging gaps when there are contending views between local people and government agencies, and above all addressing issues causing friction between, within or among communities (Ulleberg, 2009). This role goes a long way in integrating the interests of local people with environmental concerns.

However, the inherent conflict shown by the reverse side of this discourse is the lack of trust, both the government and the NGOs. Here, NGOs and civil society are considered not yet ready to play the role required, while the government is not performing according to the expectations of the public. Hence, it emphasises bringing in another actor, the private sector, to play its role and bridge the prevailing gap.

Discourse D adopts a pro-decentralized stance, by emphasising that nothing but the devolution of power to the local level is the key to the success of natural resource management. The World Development Report states that decentralisation is a means of 'bringing the state closer to the people' (mondiale, 1997) (p. 110). This seems true, as only local government facilitates the involvement of civil society actors in the governance, planning and implementation of development projects, thereby brightening the prospects of greater public participation and transparency, and the redressal of resource crunch (Ribot, 2002). The environmentalists eulogise the concept of decentralisation, as it has the wherewithal to reshape the institutions upon which future local natural resource management will depend, thereby making way for establishing institutions for sustainability and social inclusion (Armitage, 2005a; Ribot, 2002).

However, whether decentralisation can achieve its objective, leading to a representative, accountable and equitable process, depends strongly on which actors have been given the discretionary power to run the resources. Hence, the fate of decentralisation very much depends upon whether the local governments are receptive to public participation, or if it is another case of a concentration of authority (Rondinelli *et al.*, 1989; Ribot, 2002; Oyono, 2004). A study has established a positive correlation between decentralisation and green spaces' impacts on peoples' lives in the core cities of the EU (de Vries, 2012). Another study in Africa has indicated that decentralisation leads to enhanced public participation through the improvement and reshaping of the local institutions for natural resource management (Ribot, 2003). One study in Asia and the Pacific explains that outcome decentralisation has gone against expectations, especially when and where local governments are made to work under the supervision of higher levels of government with financial powers (Ferguson and Chandrasekharan, 2005). A government with a nationalist outlook mostly exercises control over decentralised governance structures, and allows only limited autonomy through political control, through a partial devolution with constraints on financial arrangements (UNDP, 2014). This is the case in the current study, where the local government is undermined by the power of bureaucracy and the provincial government.

However, the essence of decentralisation is a greater and more wide-ranging public participation, along with powerful local authorities wielding meaningful discretionary powers, resulting in a representative, accountable, efficient, equitable and sustainable system on a local level (Benjamin, 2008; Ribot and Larson, 2013). This political system is most viable for natural resource management, as only an accountable and representative local government can ensure environmental well-being on a long-term basis. This point is also stressed in the present study's discourse, advocating decentralisation, but not empowerment. The participants here do not approve of the concept of a greater grassroots public participation or the leadership role of a local interest group. They want token participation of the public, whereby the local government is accountable for keeping the public informed, considering the

right to information as the first stage in the process of participation (Arnstein, 1969). The prevailing mindset gives hints of a system based more upon elite capture than power-sharing and public welfare, through an accountable setup.

The standpoint taken by the flipside of this discourse is somewhat in line with the public participation discourse, in which the government is less trustworthy, and the need for public participation through involving civil society is emphasised. However, this discourse also brings the private sector into the present scenario, where private sector inclusion is not only supported, but their contribution is demanded in the policy-making process.

6.5 Conclusions

This study presents the diverse views of key stakeholders in Lahore on green spaces, giving their perspectives on planning and management. The discourses describe a governance system that is contested, representing loose and fragmented power centres, demanding to be accepted and included in the pursuit of management and governance. The study shows that all the stakeholders are ready to participate in the management and governance of urban green spaces. Hence, it indicates the need for bringing together various local power centres through collaborative and co-management schemes, as envisaged in the polycentric governance framework, to build an efficient, sustainable and socially equitable system of urban green spaces.

This research is based upon the concept of public participation from the polycentric governance literature, to single out discourses that have the potential to bring about institutional change for the urban green spaces in Lahore. The most significant discourse that emerged with the potential to bring about a fundamental change is that involving citizens at the grassroots level. This discourse highlights mistrust between citizens and the government, hence the need to replace the anachronistic system through political re-organization, developing social capital based on the principles of power-sharing and shared values in a local scenario. The discourse of capacity building and leadership is also parallel to this discourse, as it gives importance

to social learning and capacity building to empower citizens, but at the same time, it indicates less trust in the government to achieve their goals.

Although the discourse regarding decentralisation is also focused on changing the power equation in the management of urban green spaces in Lahore, it mostly confines itself to the devolution of power to a local government, falling short of developing the concept of citizen participation, and so conflicting with the other two discourses which seek public empowerment. The decentralisation discourse is not prepared to give any power to NGOs or civil society in green space governance. It explains public participation from a very limited and parochial perspective. The discourse with pro-administrative rationality is at odds with all other discourses, interestingly challenging them by justifying the role of government and bureaucracy as the only good and effective institutions to bring about the change that the people are looking for, regarding urban green spaces or otherwise. It places no, or a low, level of trust on the individual as an agent of change, and contrary to the concept of power-sharing, believes in a power dynamic based on individuality and antagonism. These results clearly show that, overwhelmingly, the discourses are in favour of changing the power dynamics in the system at certain levels with different strategies. However, the less dominating, status quo-oriented administrative discourse serves as a barrier, resisting efforts to change to this idea at all levels. The presence of a dominating discourse on public participation as efficient management, but its non-existence in practicality, reveals that the system is highly influenced and fettered by rigid power structures, and therefore there is a need for a reshuffling of the power equation for the institutionalisation of the discourse of public participation as an efficient model.

Chapter 7. Unfolding Power Dynamics through Discourses

7.1 Introduction

The previous chapter has identified four discourses for the governance and management of urban green space in Lahore based on statistical analysis using Q-methodology. The discourses were: public participation as an efficient model, administrative, capacity building and leadership, and decentralisation or elite capture. This chapter will provide a comprehensive analysis of these discourses using a qualitative approach. The analysis of discourses will be helpful to reveal actors' underlying preferences, practices, relationships, and shared meaning for the governance of urban green spaces in Lahore. Given this, the chapter will unfold various power dynamics among stakeholders' group in relation to setting priorities, goals and policy formulation. Through revealing these power dynamics displaying discursive struggles, the study will be able to identify the factors which can facilitate or constrain institutional change for the governance of urban green spaces in Lahore.

This chapter will provide a detailed account of each discourse. These discourses are public participation as an efficient management model (A), anti/ pro-administrative (B), leadership and capacity building (C), and decentralisation and elite capture (D). The discourses were produced through interviews with 30 stakeholders. NVivo has been used to codify the interviews and unpack the discourses. Interviews have been coded through a deductive process whereby a pre-determined framework of themes emerged in the previous chapter (chapter six) has been used. Discourses have been analysed based on both text and discursive practices displaying social constructivism underlying this process (Dryzek, 1994; Hajer, 1995; Keeley and Scoones, 2000). As the discourses being examined, the emerging patterns will indicate as to which actor is more powerful and what actions the actors undertake to legitimise their interests through discourses. However, changing discourse into the structure, the actors need to assert over the other actors.

After a discussion on discourses, this chapter will conclude by highlighting the power struggle between these four discourses. It will also indicate the dominant discourse of the study and its potential to bring about institutional change in Lahore.

7.2 Discourse A: Public Participation as an Efficient Model

The previous chapter identified public participation as the dominant discourse of this study. Various stakeholders, including park users, local environmental groups, NGOs, experts, and academia all demand to be involved in the decision-making process. This discourse is largely opposed to the status quo, top-down system. The stakeholders have asserted the idea of public participation in the management and decision making of urban green spaces at various levels. For example, the user group were mostly interested in day to day operational level decision-making process regarding their neighbourhood parks. However, academia, expert and NGOs and local environmental groups' main priority were to secure a right to participate in higher-level decision-making processes. This discourse is very close to Ostrom's idea for effective management of natural resources which explains the primacy of involving the individuals affected by changes at the local level by allowing them to take part in rule-making at the collective and constitutional level (Ostrom, 1990). This discourse challenges the administrative discourse (B) by way of highlighting its demerits and promotes values and practices that call for collaborative action. Being pragmatic, dynamic and reactive, this discourse embodies a shift from the status quo to a new way of thinking about the governance of green space. It seeks a higher priority for public participation in decisions about how urban green spaces are to be managed and governed. This discourse shows two distinct themes. First, there is an overwhelming mistrust in government for their environmentally unsustainable and socially inequitable planning and policies. Second, it embodies a rights-based perspective, taking a normative stance that urban green spaces' governance in Lahore should be based on the ideas of collaborative planning and participatory approaches. The results of this study show participants'

desire to take collective action as an alternative and innovative approach for governing and managing urban green spaces.

7.2.1   Lack of Trust in Government

The participants in this discourse express dissatisfaction in government performance. This dissatisfaction is an indicator of people's lack of trust, a big impediment for collaborative processes (Lachapelle *et al.*, 2003; Davenport *et al.*, 2007). The stakeholders express this mistrust on many levels which highlights certain issues related to environmental sustainability and social equity in the urban green spaces' system. Furthermore, these concerns show government's inability to develop the right policies with shared interests and citizens' participation in the development and management of urban green spaces.

7.2.1.1 Environmental and Social Sustainability

The biggest concern raised by participants of this study was about environmental sustainability- the nature of plantation going on in the city. They shared that PHA had more emphasis on shrubs and seasonal flowering plants with decorative and aesthetic value rather than planting trees providing shelter and comfort to heat-stricken people. One of the experts highlighted this issue:

> A flaw in their planning is this that first of all they are using exotic species, and secondly where there are spaces for trees, they are not using them, they are planting shrubs. Their emphasis is on the beautification and the landscaping whereas I told you that objectives of urban forestry are very localised if you look at the Lahore temperature and your need assessment tells that you need trees over here [Interview. No.12].

Other than regulating temperature, there are other environmental benefits associated with these green spaces. Different participants mentioned that the city is facing a loss of biodiversity and poor air quality due to lack of environmental concerns of Authority. Abubakar (2017) found that Lahore lost 8839 hectares of its tree cover between 2007 to 2015. This loss of vegetation cover highlights the lack of interest of the government for environmental benefits which can be gained from green spaces. It also shows participants

concern for the government which is more interested in economic gains as mentioned by a participant in academia group:

I think things are getting commercialised. People go to green spaces for a walk, but they have increased the grey structure. You [PHA] are bringing that kind of facilities which are damaging the true spirit of UGS [Interview No. 1].

Figure 7.1 Use of ornamental plant along the main road in Lahore

Source: PHA, 2017

It is not only commercialisation but other programmes such as developing more roads or developing private housing schemes by cutting trees at the expense of local demands underlining a lack of robust approach towards benefits of urban green space amply.

The interviews and field visits have revealed that Lahore city authorities tend to prioritize green spaces for city image while little attention is being accorded to social-cultural functions. One of the essential goals of green spaces, as mentioned in the Master Plan of Lahore City, has been the provision of active and passive recreational opportunities. Contrary to this objective, the

emphasis of the city officials has always been on aesthetics, beautification and city image (interview analysis). Despite the recognition of social benefits in these plans, little efforts are being made to develop any mechanisms to achieve these goals. For examples, during the fieldwork observation, the researcher has found that in some city-level parks, the places designated for women exclusively are being used by men. Hence a cultural norm that can be promoted through these open spaces has been compromised for lack of monitoring and enforcement, making these green spaces and their benefits inaccessible to this particular section of society (Fig 7.2 & 7.3). These failures indicate some inherent flaws in the process of policy-making and its implementation. The exclusion of some groups from the process raises some serious questions about the issue of social equity underlining redressal through adopting a participatory approach toward urban green space governance (Barbosa et al., 2007; Azadi, 2011; Colding, and Barthel, 2013).

Figure 7.2 A notice board displaying instruction for reserved area of park for women and children

Figure 7.3 A man sitting in the area reserved only for women and children

Source: Fieldwork, 2017

Participants of this study also have expressed dissatisfaction with government officials lack of interest in the benefits of conserving heritage, especially historical/cultural artefacts, and a variety of green areas surrounded it. Lahore,

being a historical city, has more than its share of remnants of historical monuments and gardens, but due to government's development priorities, these historical places are continually vanishing and losing their attraction for the people. A participant belongs to the user group has expressed her concern in this regard:

> Chouburji Garden [historical pavilion and its surrounding garden] and its near football ground have become deserted due to [road] construction. Secondly, it has become a kind of dumping ground for the material used for the development of the road.

In Lahore historical artefacts, such as, pavilions, gardens and tombs have great potential in preserving overall cultural heritage which is not being exploited to its fullest extent (interview analysis). This trend is contrary to the findings of the 2018 World Cities Culture Report, which recognises urban green spaces as a potential source of increasing tourism by preserving cultural heritage (WCCR, 2018)

Figure 7.4 Chouburji Garden, A historical monument losing its attraction due to construction in its surrounding.

Source: Fieldwork 2017

Social equity has also been highlighted by interviewees mostly criticising the authorities for meting out injustice to the people in the provision of green spaces both in quantity and good quality with privileged areas and classes

getting a real preferential treatment from the authorities. The decision making for urban green spaces mostly depends on the personal choice and whims of the policymakers and planners as also evident from the historical analysis mentioned before (chapter five). The concept of equity relates to the core issue of environmental justice which oversees whether environmental amenities are spread in the city in a just manner without any discrimination. However, this is not the case in Lahore:

> Planning varies area to area in Lahore. Posh areas where policymakers live and have their influence are better looked after and managed [Interview No. 7].

Figure 7.5 Cutting of trees for road widening project

Source: Fieldwork, 2017

Although the direct observation and most of the interviewees in this research agree that there has been an increase in the number of parks in the city ever since PHA took over. However, it is the quality of these parks, which is an issue, making these facilities inaccessible for the general public. The quality of the park is a major criterion to measure the accessibility of general public in urban green spaces. Different countries have recognised some international quality standards such as the UK has set some benchmark standards for freely accessible (ANGSt, 2010) and well-managed parks and green spaces

in the UK (Green Flag Award Scheme, 2008). Poorly maintained park instead of benefiting the public become a liability and so a dis-service for the community. As in this study, one park user living in adjoining a park explains this phenomenon in these words:

> There is no maintenance. The parks which have been developed in the earlier development phases, their surface level is lower than the other fixtures such as streets and houses surrounding them. So, whenever there is rain, they literally become ponds… So, all the hard work of gardener just washed away with one rain. And there is another thing that when water becomes stagnant it becomes the breeding ground for mosquitoes and other insects…It is very rare that if they [PHA] send their machinery to drain water even if we call them again and again (Interview No. 30].

One participant from user group also highlights security-related incidents involving vandalism and drugs in these parks. These incidents reveal the lack of enforcement of regulation along with monitoring issues. This is a quite widespread problem in natural resource management in urban setting and Foster (2011) refers it as "regulatory slippage", invokes the governance question anew in case of authorities' failure to control and check noncompliance from the users of the resource. Under conditions of regulatory slippage, Foster (2011) explains that solution lies in changing the institutional design for the management of natural resources. Another study conducted in the UK highlights the similar issue where the government is more concerned for placemaking (developing new projects) rather than place keeping (long term maintenance), which is detrimental for the quality of parks and green spaces. Therefore, the study suggested that involving the community in the process of governance can be a viable solution to protect these green spaces (Dempsey and Burton, 2012). The literature is quite in line with the discourse of public participation in this study, which demands a new role in the governance of urban green spaces in Lahore due to inefficient planning and management of green spaces in Lahore.

Another source of discontentment, as evident from this discourse, originates from the belief that the government does not facilitate the participation of non-state actors in decision making. The development and management of urban

green space is mainly the responsibility of the PHA in Lahore. However, different studies highlight that the state is no longer a sole actor in the governance of cities (UNDP, 2014). Various studies have suggested that collaborative arrangements between government, private sector and the voluntary sector could be a way forward to improve quality and quantity of urban green spaces (Baycan-Levent and Nijkamp, 2009; Dempsey and Burton, 2012). In this study, the discourse of public participation is highlighting the same issue where there is a lack of incentives from the government to engage diverse stakeholders in the decision-making process for urban green spaces.

It is critical to include local and scientific knowledge in the decision-making process to achieve all the benefits from the urban green spaces, (Yli-Pelkonen and Kohl, 2005; Sandström et al., 2006). An efficient and dynamic research and development structure well-versed with local needs and demands are most important for inducing knowledge-based planning and management. Involvement of academia and other stakeholders active in the area of urban green spaces can ensure to create feedback loops or other forms of active linkages. However, in Lahore, no such linkage or collaboration between academia and other stakeholders is in place, especially for research purposes. The absence of scientific approach also indicates the PHA non-participatory mindset which is a question raised by an academic in this research:

> PHA has never taken on board academics for any of their project or event…. [never they] have invited academics from any department like botany, agriculture, or the environment or ever they have collaborated with [them] and if not, what is the reason? [Interview No. 8].

Therefore, the stakeholders in this discourse are not satisfied with the government's performance towards green spaces in terms of its ability to deliver services. Nor are they content over its planning and policies when it comes to managing the urban green spaces:

> I do not believe that our authorities [PHA] take green spaces in a way we see in Europe which is meant to serve the people and they can use it to get a variety

of ecosystem services from it. I think in our society the authorities are more focused on monetary gains rather than green spaces services [Interview No.1, Academia].

The participants in this discourse are more interested in environmental gains from urban green spaces, therefore, emphasising scientific and local knowledge to be used to govern urban green spaces which are vital to sustaining human and natural eco-systems in the city.

The non-participatory mindset is not being reflected at the academic or institutional level but also at a local level where there is hardly any desire to involve the park users as the main stakeholder in the planning of green spaces. According to one participant (Academia) the lack of understanding and the bureaucratic culture of PHA are the main reasons which hamper public participation in this process:

> I think a lack of will and comprehension about how they can get better results by involving people or users in this system or maybe it is a bureaucratic culture that doesn't allow to take someone else's opinion. And because a user is an ordinary man it could be me, and it could be my driver, so they [PHA] think that how should they ask these people? [Interview No.1]

In this situation, the government's will be the most important condition for organising any change concerning citizen involvement in the management and decision-making process for urban green space in Lahore. For change to happen and take root, it should be part of the broader vision for development, society and environment, followed laws and policy instruments compatible with this. In the context of Lahore, these conditions are conspicuous by their absence. This is evident from the fact that there is a paucity of legislation and policies consistent with sharing the rights and responsibilities of citizen for management and governance of urban green spaces (PHA Act, 2012). The participants argue that the main reason for the government to not involve people as it could make them able to hold government and their practices accountable. There is a wide belief of participants about the lack of transparency and accountability in the governance process in Lahore. For instance, commenting on master planning in the city, one participant from NGO depicts this situation in these words:

First of all, we have a problem in this process [Master planning], and then they [Government] changed it according to their own will. All the rulers and bureaucracy and the even private sector they influence it, manipulate it, and they just play with this document. So, my point is that nobody follows the master plan in its true sense. It just becomes kind of living document in the sense that whenever you want to make a change in it and whenever they want, they change the scale and make the green spaces small or declare it a commercial area. So that's very unfortunate [Interview No. 9].

According to interviewees, corruption is the most common strategic behaviour among the political and bureaucratic circles and regarded as a major barrier to involve the public in any processes for urban green spaces in Lahore. Adams (2000: 03) argues, "If a particular reform engenders enough opposition among social stake groups with large political weights, that reform will be delayed and/or not implemented". As for the green spaces in Lahore are concerned rent-seekers includes bureaucrats and political actors do their best to bend modify the rules to achieve their ends. This results in short-term monetary gains, but the practice engenders sustainability issues which are highlighted by one of horticulture expert:

[There are] many things in it (Greater Iqbal Park) like huts, gazebo, lakes and many more things. The basic horticultural work is not being done properly… The consultancy they [PHA] hired, is taking massive amount like four Lakhs (four hundred thousand) rupees per month (for its services). The problem is that the consultancy is owned by a person whose brother is very close to the prime minister. So, they [PHA] cannot say anything [Interview No. 6].

Therefore, the participants in this study consider that citizen participation can enhance accountability, transparency, and so reduce corruption but that it is not in government interest. Accountability here refers as Fox (2007) defines it as "the process of holding actors responsible for their actions" (Fox, 2003: xii). The participants in this discourse want detailed information about the system, the government's action justifying the treatment it meted out in the semblance of reward and punishment to good and the bad. However, the status quo means the government less accountable and more powerful as compared to

other actors in the system, therefore, showing participants' desire to change this institutional structure.

7.2.2 Public Participation as a Viable Solution

This discourse articulates a desire for change; to break away from status quo institutional arrangements towards more collaborative green space governance. It also indicates a growing chasm between the diverse range of civil society stakeholders and the existing governmental institutions. The idea of collaboration implies the changing power equation among stakeholders in terms of access and decision-making over the use and management of the resources. This new institutional arrangement can support environmental and social sustainability, allow positive incentives for locals, and thereby, overcoming problems of legitimacy while departing from the traditional style of management (Agrawal and Gibson, 1999; Berkes, 2004).

This discourse, however, shows that despite the discontentment among the stakeholders they do not consider themselves as feeble actors but instead ready to come together as an alternative to the existing structure and practices of the state management:

> I have many [80] class fellows, and we have a social media group for this purpose [plantation]… Last year one of my friends planted 50 Jaman tress [a native fruit tree] in Lahore. Now they wanted to plant some trees along the canal] [Interview No. 6].

This discourse highlights the importance of collaboration as it ultimately seeks to bring institutional change for urban green spaces in Lahore. The coming together of the stakeholders as mentioned by participants in this discourse is very similar to the concept of social capital developed by many scholars interpreting it in their own way (Bourdieu, 1986; Coleman, 1988; Putnam, 2000) but their emphasis remains explaining the social structures, relations and networking for collective benefits in the system. Harper and Kelly (2003) have called social capital the 'glue' that binds the people together, enabling cooperation. The presence of social networks where different actors come together can be more important than the formal institutions to effectively deal with resource dilemmas (Olsson *et al.*, 2006; Hahn *et al.*, 2008). In the context

of Lahore, social capital finds expression at the local community level through social norms of trust and reciprocity. Many park users discussed how informal groups of residents and individuals living near the parks engaged in the upkeep of neighbourhood parks. Most of these groups are informal and loosely arranged without any PHA's support. They are volunteering for upkeep and monitoring the parks to check criminal and other undesirable activities. One councillor mentioned that the neighbours of a park without having any formal role got keys to control the entry of people to keep drug users and criminals away from the park [Interview No. 17]. Furthermore, their activism forced the government to stop granting permission to festival activities, considering it highly detrimental to the park (the rules and policies of PHA allow to hold some functions and festivals in parks by paying a commercial fee). This tension is not limited to Lahore, but it is a core debate in various developed countries as well, where mostly citywide interest for generating more revenues ignores local demands and interest (Smith, 2019; Smith, 2014). A study conducted in the UK shows that there is a clear tendency of commercialisation of parks due to lack of funds of local government. This result in increasing activism and resistance from local groups to this trend as it is felt to have detrimental consequences for green spaces (Smith, 2019).

A type of trust other than a general/dispositional trust, as being exhibited by the participants, is that of rational trust (Stern and Coleman, 2015). This kind of trust occurs when the participants have the motivation and shared interests and above all believe that the collective action undertaken by them would result in positive outcomes (Stern and Coleman, 2015) Stakeholders who are imbued with rational trust or have identical objectives tend to have a higher degree of mutual understanding thereby, showing greater communication and information sharing between such actors who can also be identified as bonding social capital. Such as, in Lahore, at some open spaces, vacant lots and grounds, have been converted into a sports club by youth initiatives in the local area. Here the stakeholders are seen pooling their efforts to maintain, oversee, and manage open spaces for their own interest [Interview No. 27, User group]. Some traces of bridging social capital can also be found at city

level practices when actors in a collaborative effort joined hands against a development project, considered detrimental to the existing green spaces and so could be a cause of further environmental degradation (Interview.No.13, Local environmental group). These kinds of social networks can improve governance processes by generating and sharing knowledge, mobilising and allocating resources, agreeing to common rules among actors for monitoring and sanctioning and conflict resolution (Bodin *et al.*, 2006).

In short, the participants involved in the formation of this discourse has taken a normative standpoint. The participants in this study have expressed a desire for institutional change, from a bureaucratic and centralised arrangement to a system based on shared values and power as a way of governance and hence constitute a way forward.

7.3 Discourse B: Administrative

This discourse comprises mainly pro-government voices, including a government official and some experts, defending the government. As for urban green spaces are concerned the central assumption of this discourse is this that they are best handled by bureaucracy when pursuing planning, administrative organisation and service delivery as if people and other stakeholders are content with these practices and do not require any power-sharing. As one government official explains:

> PHA's main focus is on public service, it is our deepest desire to facilitate public as much we can, and we are doing this all for the public… people came here from outside of Lahore, Lahore is an international city, and people enjoy here a lot and appreciate us [Interview No.20].

However, this discourse concedes that there are some flaws in the current governance arrangements. These organisational fault lines are now outlined in turn.

7.3.1 Organisational Fault Lines

This discourse highlights that there some deficiencies in the urban green system's planning and management in terms of resources and organisational structure.

7.3.1.1 Lack of Resources

The administrative discourse declares a lack of finances for public services and land availability as the biggest difficulties facing the management of green spaces. Many studies have attributed the lack of funding for parks and green spaces as a secondary priority compared to the provision of other basic services such as health, infrastructure and development (Okpala, 2009; Mensah, 2014; Sandström et al., 2006) which is in line with the results of this study:

> Our [Government] budgets……is not as big as our [Government] problems are. We have fewer resources…… our basic problem today is that our people do not have clean drinking water… many areas are like this… then our children… schools are in such a condition where they do not even get basic needs and then health issues. These issues get high priority than urban green spaces... Our problems are far greater as compared to our resources [Interview. No. 19, Department of Planning and Development].

According to this discourse, a paucity of funds is the real issue behind poor quality and quantity of green spaces in Lahore. This issue is also highlighted in the literature for both developed and developing countries (Okpala, 2009; Mensah, 2014; Sandström et al., 2006). However, many developed countries negotiated this austerity through a reconceptualisation of urban green space governance (Barker *et al.*, 2019). Reconceptualisation includes efforts by the government to seek partnerships with private developers, user groups and non-profit organisation (Dempsey et al., 2016). As a result of the new arrangement, the local authority shares its power with the other stakeholder groups to enhance the quality and quantity of urban green spaces (Mathers et al., 2015). In the case of Lahore, PHA reaches out to the private sector for outsourcing various services such as plant nurseries, horticulturist and landscaping services in city-level parks and commercialisation of parts of

parks to generate extra funds. As such increasing reliance on the private sector can be witnessed. However, this approach received some criticism from the scholars such as Lindholst (2009) think that this procedure of contracting-out is itself to be blamed for poor quality for provision of services. Their reference is towards the clause for the lowest bidders, making this process irrelevant for performance outcomes rather more focusing on cost-cutting (Lindholst, 2009). These negative outcomes are quite common in Lahore's case where participants in this study show dissatisfaction from not only this practice but also from the procedures' transparency and fairness involved in contracting out these public services.

7.3.1.2 Lack of Coordination among Departments

Another issue indicated by the participants in this discourse is lack of coordination among departments which shows a tendency for sector silo which again is a major hurdle in the way of developing a comprehensive and unifying policy on urban green spaces. This finding is quite in line with many studies conducted at the international level (Yaffee, 1997; Pinkerton, 2007). The Green key project in European Union recognises the importance of coordination for the governance of green spaces as often it is divided amongst different departments and geographical areas, therefore, needs effective communication amongst departments (Flores *et al.*, 1998; Jim, 2013; Gordon *et al.*, 2009; Hill *et al.*, 2010). The lack of communication is quite visible among the various governmental departments. As on participant mention it:

> In our country, in our bureaucratic system, there are turf wars very common. For example, if I have a charge (authority), I do not want to share it or let it go to anybody else and so this is the dilemma which is difficult to resolve. So, there is less coordination, unity and not a single united policy on which everyone is agreed [Interview No. 11, Lahore Walled City Authority].

Stakeholders suggested that a civil servant or bureaucrat is known to live in his own ivory tower, not interested in any networking or cooperation whether among the governmental departments or private groups. In most cases, a bureaucrat makes it an ego matter contacting other departments, mainly when they are operated for any other service (Interview No.7, Punjab Forest

Department). The glimpse of the authoritarian culture here affects the prospects of any intra-departmental cooperation where needed. This style of management again fails when it comes to green spaces which requires multi-dimensional and integrated approaches to make any tangible headway. The concerned departments must come together and develop a working alliance based upon the principles of an integrated approach which is considered as a good tool to provide better and sustainable management of green spaces (Haq, 2011)

7.3.1.3 Instability and Inconsistencies in Departmental Structure and Procedures

Another fault line recognised with the administrative discourse is that the instability and inconsistency in administrative governance. As one participant mentioned it:

> Over here, what we can see that all the structure that is controlling green spaces is based on bureaucracy. So, if one secretary comes for six months and is replaced by another secretary after six months, he cannot understand the problem comprehensively [Interview.No.1, Academia].

As per government rules and norms, most administrative appointments are not tenure-based. As such bureaucrats come and go, raising the issue of stability in departments such as where this problem is quite common. Inconsistency and instability are a significant barrier to finding sustainable solutions. These results are similar to the findings of various studies that suggest the inconsistencies and instability in organisational structures can cause major impediments such as lack of alignment among top officials, funding bodies or experts and hence undermines collaborative solution building (Ordóñez et al., 2020; Young, 2013; Sandström et al., 2006). Here the officers join PHA just on their way to some higher position in terms of scale and influence. This PHA practice turns out to be against any change or innovations. Every newcomer at the helm of affairs is more interested in routine handling of department knowing fully well that his stay is short-lived and so no point in undertaking any long-term tasks (Interview No.6, Expert group). Again, being from the general cadre they have neither the skills nor

wherewithal to handle specialised tasks and assignments, let alone to spearhead any durable change or bringing improvement in the existing state of affairs, a participant remarked:

> When you [the government] are appointing a head [In-charge person] which does not know anything so what will be you expecting from him? So now the recent DG [PHA] is from the transport department. The former DG was from the finance department, the DG before him was a little bit inclined to forestry thus had some knowledge of trees. Moreover, before him all the DGs they even did not know the basic understanding of grass, leaves or flowers [Interview No.6, Expert group].

Participant in this study also shows their resentment to the discursive practice of the administrative discourse where most of the appointment of PHA Directors and Board of Directors are being made directly from the provincial level. The process of appointment is through a set procedure in which officers from the superior services get precedence over other cadres. Here the selection is not made through electoral practices by the people, as is the case in some advanced countries. Various stakeholders interviewed for this study noted both the direct and indirect influence of government and minister appointed on the Board and governing bodies. The missing voices in the entire organisational structure are user group or citizens with little or no means of engaging with the bureaucracy. Hence, they cannot make any positive contribution because the government is reluctant to nurture a cooperative relationship with these missing voices. Citizens involved in this study rejected the notion that the government inform or consult the public on its initiatives. It is also noted in the study that if some citizen groups provide information to the government functionaries, they are least bothered to make use of it in the best possible manner. As one participant from administrative discourse verified this claim of participants:

> No, it is not necessary, people are of different nature so there come so many conflicts, some people demand gates on four sides of the park, some wants gate in front of their houses, some demands walls of park high in order to keep privacy, there are different school of thoughts so if we start consulting them then park can never be developed, our people [officers] are expert and

sometimes we hire consultants for bigger parks so it is our decision [Interview No. 26, PHA].

In Lahore where the bureaucrat culture based on the concept that 'the master knows all and is always right' the prospect of change becomes minimum. This kind of management style at every level of bureaucracy is authoritarian and hardly allow any communication between a bureaucrat and his subordinates. As such the system has a high level of conformity and very little room for disagreement nor considered an acceptable bureaucratic norm and therefore it follows a top-down approach all the way.

7.3.2 Mixed Views towards Public Participation

However, this discourse has a contradictory element, favouring the authoritarian top-down approach in governance while at the same time it supports the idea of public participation from a very narrow perspective. In relation to Arnstein's ladder of public participation, it seems that its lowest rung only matters here. The data gleaned from interviews with government officials explain their views on public participation. Government officials ask the public to cooperate on an individual level by going ahead with plantation at their homes. As one statement explains this idea as:

PHA is working a lot, their work is visible to all. People are not conscious, they don't have sense, civic sense. They do not know how to protect trees… the public can also contribute … can't they grow plants outside their houses [Interview No. 25, Metropolitan Corporation Lahore]?

In other words, this discourse promotes the civic duty of the people to make their gardens green by undertaking plantation but refrains from suggesting that people should have a say in the priorities and how urban spaces are managed. These officers, moreover, give a verbal undertaking that some resources such as plants sapling, seeds could be provided to the people if they come to them and ask, showing that government wants to keep its commitment to participation is limited to some superficial form of participation as nobody discussed the technical, scientific and financial sides of this vague offer. Here it seems the idea of public participation is only meant to give legitimacy to the government's action and decision making.

Despite the refrain of public participation, the participants in this discourse express scepticism on the role of NGOs. Lack of trust in NGOs remains palpable. Also evident from the discussion of participants:

> I may be wrong, but as far I feel NGO's only work there, where they get earnings………So my view is that NGO's creates problems. I have attended some seminars run by a few ladies who themselves live abroad and discussing problems prevailing in Pakistan. It is difficult to understand their viewpoint [Interview. No. 26, PHA].

This anti-NGO feeling from the state is quite conspicuous in the literature (Najam, 2000) on developing countries which shows that the government is least prepared to try new approaches or open up to improve its governance. This exclusion on the part of NGO may be due to the difference in interests among state and NGO sectors (Baruah, 2007) or it could be that government is not willing to divert its funds to the non-state sector (Bebbington and Thiele, 2005). Rules of business in Pakistan governing various administrative departments are quite old, tilting in favour of bureaucracy. The bureaucrats do not allow any change which is threatening to their supremacy. Government discourse carries the intent and language of command and control but also espouses ideas of public participation very vaguely.

Overall, this discourse conflicts with other discourses, reflecting a huge gap between the administrative rationality and civil society with the former not ready to concede power to any other institution, especially civil society, making the power-sharing almost impossible. Hence, one can observe a continuous struggle to keep everybody out while maintaining its stronghold on decision-making on the part of the government. This power struggle is quite visible when it comes to the management of urban green spaces in Lahore. As such this discourse shows results quite contrary to collaborative governance and co-management indicating some major issues that are a barrier to achieving this goal.

7.4 Discourse C: Capacity Building and Leadership

This discourse mostly comprised of elected representatives, experts, and user group. The defining features of this discourse are its goals of achieving pragmatic solutions for the effective management of urban green spaces in Lahore. These solutions are linked to themes of leadership and capacity building of community members. The discourse of capacity building and leadership implies that sharing power and shouldering responsibility and rights for management of urban green spaces is only achievable if there is a capacity to do so and this requires skills, knowledge and networks. This discourse aims to empower citizens that meant to give people the incentive and the resources and the decision making and operational capacity to participate effectively in governance. Hence, this discourse explains the importance of leadership and capacity building for a sustainable system of urban green spaces in Lahore. It explains two main reasons for that; citizen's lack of knowledge and interest in green spaces and their lack of knowledge about their rights which are a barrier to their participation.

7.4.1   Lack of Knowledge and Awareness

Citizen's level of knowledge about the environment and green spaces and ultimately, their interest is a critical factor in the future management of natural resources. It has been highlighted in the literature as the main problem in management and governance issues in most developing countries (Mamun *et al.*, 2012). The value of urban green spaces as ecosystem services or their benefits being a scientific concept is not an easy topic to be comprehended by a layman. There is a need to impart that knowledge to the ordinary people that is easy and understandable as one participant explains it:

> We talk about the environment, we talk about ecology, we talk about …. about global warming, we do talk but the terms we use in that our average person cannot understand it…. there is a communication gap [Interview. No. 14, Local Environment Group].

The complexity of language associated with using scientific language for explaining the benefits of green spaces is considered as one of the main

hurdles where people are unable to understand the foreign language and terms. It has been mentioned in interviews that language needed to be tailored in the local context to convey the message to a layperson. To create environmental awareness among citizens, it must start at basic levels as many participants in this study explain the lack of environmental education at the school level curriculum as the main reason of unawareness in society as one participant puts it as:

> You [Government] should change the curriculum and from fourth, fifth grade teach the children about the environment….I firmly believe that in geography or Pakistan studies or even in Urdu and English textbooks ………where we teach them different things we should also add some small changes ……..So they [children] learn gradually as they move upward. You need to add just one chapter in geography or other subjects. Just tell them that this country is blessed with some good natural assets. Why is it important to protect them? What can you do as an individual as a student and as a kid or as a father or as a mother? So, I think that is education and there is also an important role of teachers in it [Interview No. 9, NGO].

The learning process is an important step to develop an understanding and desired skills or in other word awareness which encourages individuals to participate in environmental improvement programs (Tidball and Krasny, 2011). Therefore, this discourse emphasises to bring awareness among people through formal and non-formal education which ultimately meant to improve their quality life (Mamun *et al.*, 2012; Sola, 2014).

7.4.2 Knowledge about Civic Rights

According to this discourse, other than environmental awareness, the public also needs awareness about public participation which is their fundamental and democratic right. They must be educated that their political organisation and thereafter collective action in a specific direction like environmental issues is in favour of public interest and hence they are rightful to pursue such activities.

The lack of knowledge about their rights, coincided with a daily preoccupation in matters pertaining to the individual's livelihood pre-empts the community to contribute to green space management or other collective actions. In this

study, the economic limitations make it most difficult to participate by people in some day-to-day tasks. Low socioeconomic status or poor living conditions have been also perceived as a constraint in relation to the capacity of the local community to take part in collective activities. The main challenge for people in Lahore is mere survival, which occupies all their time and energy. These findings are very common in natural resource literature where it states that external livelihood opportunities may result in lack of public participation in natural resource management (Kim *et al.*, 2014, Armitage, 2005, Agrawal and Gupta, 2005). Participants explain this issue in their own words:

> They [people] are so engrossed in the livelihood activities as if they are just surviving for bread and butter. If a person knows that if he does not work, his children will suffer, he cannot pay his kids fee. So, they keep engaged in these livelihood activities…………that's why you will see that in posh areas people have a more aesthetic sense. The reason is that they are economically strong so they can think over this matter [Interview. No.7].

In case the people are in the knowledge of their rights as well as the rules that govern a particular area of activity they are more likely not only to perform their role but also able to check the wrong being done either by the self-serving elite (Ribot, 2002). This attitude and behaviour change is an important indicator to bring in any change with a focus on redistribution of power in any local setting (Adger *et al.*, 2001; Agarwal, 2001; Berkes, 2004). As such this state of the affair; lack of education and awareness on rights and prevailing system combined with citizens' lack of capacity represents a vicious cycle of disempowerment (Gandiwa *et al.*, 2013). The citizens who want to do something despite these issues and difficulties too are helpless for lack of capacity. They not only lack skills, fiscal capacity but also access to relevant actors with the capacity to effect change. Hence, the focus of this discourse is to develop the capacity of individuals to work together to achieve collective goals about urban green spaces in Lahore. Increased capacity can contribute to participation and empowerment which enables them to pursue collaborative decision making on the local or community level (Rappaport, 1987; Chaskin, 2001; Ribot, 2002).

7.4.3 Role of Leader

The literature on collaboration emphasises the role of leadership as the first and foremost aspect of capacity building (Baland, 2007). The leader is a linchpin in knowledge creation and its spreading to the ordinary people (Bodin and Crona, 2008). This discourse claims in the current situation NGOs are a good candidate to assume a leadership role. In Lahore, these NGOs are already have acquired this part by working on capacity building initiatives for stakeholders, empowering communities, developing links between various stakeholders especially between governmental groups and civil society. This kind of role goes a long way in integrating the development needs of local people with environmental concerns (Ulleberg, 2009). These findings are consistent with the other studies whereby the NGOs use their links to promote awareness by dissemination of information and mobilising the group to action (Holmén, 2002; Ritchie, 1995; Whitelaw *et al.*, 2003). The analysis of interviews in this study show that NGOs in Lahore are exhibiting various ties with different stakeholders mainly academia, Punjab Forest Department, and local environmental groups, showing that these actors are also playing an essential role in spreading knowledge and information along with sharing resources and positively engaging towards collaborative activities as mentioned by one NGO member:

> We have signed MOU with three universities in Punjab …we are supporting them in research, developing awareness at different levels…we are also in contact with the government departments…We also take the Punjab Forest Department on board and ask them to provide us with plants. We also connect them [Punjab Forest Department] with university [Interview No. 18].

These kinds of networks are advantageous in the initial phase of institutional change involving collaborative action, forming groups and building support (Bodin *et al.*, 2006; Janssen *et al.*, 2006). The NGOs in Lahore act like brokers have a positional advantage in networks as they provide access to a greater diversity of resources and link different stakeholders. The position of individuals in a given network significantly contribute in the circulation of information and resources and hence goes a long way in pinpointing the most

influential person in the very network capable of playing leadership role (Bodin *et al.*, 2006; Wasserman and Faust, 1994). In the context of this study, most of these characteristics are exhibited by the NGOs, making them the most influential actor in the social network of urban green spaces. The participants in this study believe that the role of civil society especially NGO is crucial for the management of urban green spaces in as far as long-term resource governance is concerned as it is effective to attribute to win over disconnected segments of the network quite like a broker, thereby, creating diversity and new ideas (Bodin *et al.*, 2006; Wasserman and Faust, 1994). The role of NGOs as a broker which brings in its wake leadership is the crucial component of a successful quest towards an institutional change in the case of urban green spaces in Lahore. Scholars in the same context have given added importance to leadership which according to them bring trust and cooperation, steering collective processes in the right direction, and more importantly reducing costs of transitions for positive socio-ecological outcomes (Ramanathan, 1992; Rahmato *et al.*, 2008). Therefore, in Lahore with this positive contribution of NGOs for urban green spaces' governance, the participants in this study contend that there should be more local environmental groups and NGOs who could take this leadership role given the strategic position they hold in the network:

> In Lahore, there is an organisation "Lahore Bachao Tehreek" which works for green areas and resists government actions such as projects which involve cutting of trees, but its scope is limited. It is a small organisation. If there would be more organisations at the local level, they can make the government realise the importance of green spaces for citizens [Interview No. 23, Media Group].

However, NGOs also face some challenges which needed to be overcome, as one member of NGO explains it as:

> We are an organisation. Sometimes we are successful, and many times…. many times, we do not succeed. It is a collective responsibility. Media should highlight this issue along with other political issues. The civil society should take this as their responsibility because sometimes there is limited capacity there is limited knowledge and this is civil society who can bridge that gap and provide

that knowledge and a platform to ensure those good laws are enacted and secondly being complied with that [Interview No. 9].

This discourse highlights the contribution of other actors and not just the NGOs in pursuit of successful collective action for urban green spaces, making it a case of collective responsibility where media, academia and religious groups all should join hands as civil society members to create awareness and capacity building among the communities and groups.

7.4.4   A New Actor

Apart from the engagement with civil society, this discourse also highlights the importance of the corporate sector which has great potential for the provision of green spaces in the cities.

In the developed countries, the involvement of the private sector to oversee green space development is meant to not only bring much-needed finances but also engaging them in decision-making process (Mathers et al., 2015; Buizer et al., 2015) The involvement of private actors in the urban green spaces can follow different models of collaboration with most prominent being public-private partnerships, philanthropy, charity, adoption or sponsoring green spaces are some ways of looking at this cooperative mode (Barker and Pina-Sánchez, 2019; Buizer et al., 2015; Dempsey et al., 2016). As for the green spaces in Lahore, such collaboration has been witnessed on a limited scale in the past when the corporate sector sponsored development of new parks. However, this arrangement could not survive for an extended period. As one government official sharing the information disclosed that though such collaboration took place in the past but right now, the government has hardly need for any such collaborative arrangement [Interview. No. 26].

Studies have shown that involvement with the private corporate sector follows two distinct patterns; either through taxes, fees or incentives in which the economic value of green spacers increase the profitability of the businesses (Tyrväinen and Väänänen, 1998; Jim and Chen, 2006; Kong et al., 2007). The economic value of green spaces, as assessed by private actors, is an important consideration behind preserving the interest in developing or

maintaining green space by private companies. This evaluation gives the business interest an overview of the costs and benefits of green space development. The economic benefits for a corporate actor include the supply of fruits, urban agriculture and the economic value of the area, job creation, tourist attractions (Tyrväinen and Väänänen, 1998; Jim and Chen, 2006; Kong et al., 2007). However, in the current study, some participants have expressed resentment to this trend of privatisation or commercialisation in Lahore, underling a contradiction with this discourse. These participants viewed that the private developers either do not following the rules and standards given by the government or manipulating these standards for their benefits. In other cases, some private housing schemes led by business concerns exploit landscape and greenery to increase the sale prices of residential properties without any ecological functions of the green spaces using the non-native and exotic species of plants:

> The latest trend is that private housing societies import plants from China or Thailand that are fully grown plants. So that is how they are getting good business but that is neither our economy, not the indigenous plant [Interview No.6, Expert Group].

The commercialisation of parks is also a big concern for the respondents of this study as they find the involvement of businesses in parks resulting in degradation of these areas besides harming the true spirit of parks [Interview. No.1]. Looking at these concerns, it is important to put in place a mechanism for accountability and quality monitoring before realising the full potential of the private sector for the development of urban green spaces.

7.5 Discourse D: Decentralisation

This discourse presents the point of view government officials, environmentalist, academia who consider decentralisation as an important step towards bringing the people closer and together with the state. This is because the local government ensures active involvement of civil society in all important phases of governance, including planning and implementation of development projects. The decentralisation or local institutions also

addresses the issue of resource crunch besides ensuring greater transparency and accountability (Ribot, 2002; Ribot, 2003; Armitage, 2005a). However, decentralisation can only bring any change when it leads to political, administrative and financial devolution at local levels (de Vries, 2012; Ribot, 2003).

7.5.1 Conflict between Political Actors and Bureaucracy

This discourse articulates the power struggle between two main actors in Lahore for urban green spaces; bureaucracy and local government. The participants in discourse adopt a pro-decentralised stance. In decentralisation usually, powers are being shifted from the central government to lower levels in a political-administrative hierarchy (Crook *et al.*, 1998; Ribot *et al.*, 2006). In Lahore, this power struggle is very evident where PHA have all the authority over urban green spaces and local government does not have any say in this whole process (chapter five). An academic involved in the formation of this discourse also emphasises the need for political decentralisation to the local level in the given context against the administrative structure which is more powerful than any other institutions.

> We have brought local government system again after nine years gap, but they do not have any power. All the authority is held by the chairman of LDA or chairman of PHA [Interview No.8].

The results of this study show that local governments lack financial and decision-making powers mostly undermined by higher authorities, including powerful civil bureaucracy and provincial government. Therefore, the voices in this discourse stress upon a higher level of autonomy at the city level.

7.5.2 Concept of Public Participation

Another important discussion in this discourse is about public involvement. This discourse is quite content with granting meaningful discretionary powers to the local governments, but its results are quite contrary to the essence of decentralisation which allows full public participation and so giving way to a representative set up and so fully accountable, efficient and sustainable

(Meynen and Doornbos, 2004; Larson and Ribot, 2004). As this discourse constitutes two important main groups of stakeholders (state and non-state), the further scrutiny to understand public participation gives some more insight. This discourse has taken the same stance as such in discourse C leadership and capacity building. It emphasises that before involving the citizen in the decision-making process, it is vital that they develop institutional capacity which is lacking in the present situation:

> How many people have the budgeting concept? And even if I have, I will not that headache. In this situation, it is unnecessary interference to involve a layman [Interview No.1].

This discourse also emphasises that the biggest hurdle for people to be involved in their socio-economic conditions which do not allow them to participate other than any livelihood activities such as a government official expresses his feelings about it:

> This is cuckoos land. These people in the inner city do not have money to maintain their houses how you ask these people to make a garden on their roofs [Interview No. 10].

This discourse, therefore, shows an inherent power struggle between the city-level government and provincial government which demands political decentralisation and devolution of power to lower levels. This discourse, however, concurs with the position taken by leadership and capacity building discourse depicting which focuses on capacity building to bring some institutional change in the system.

7.6 Conclusion

In this chapter, a qualitative approach has been employed to explore various discourses for governance and management of the urban green system in Lahore. By applying a theoretical framework for collaborative and polycentric governance, this research identifies several opportunities and barriers as mentioned in these discourses, which unfolds as a power struggle between these discourses.

The collaborative process provides a way forward, especially when it becomes a source of new knowledge, skills, expertise, finances and political connections in the system enough for solving complex problems (Armitage et al., 2009; Berkes, 2009; Carlsson and Berkes, 2005; Chaskin, 2001; Healey, 2003; Innes and Booher, 2003; Kim, 2010). However, in the context of Lahore, this kind of collaborative relationships is rare commodity hardly exists between government and nongovernment actors as exhibited in these discourses. The competing interests among these discourses are visibly apparent as evident from struggles to gain economic interest on the part of the government with civil society vying for environmental and social equity as part of the system. The collaborative relationship among various sub-groups as developed in the management of common-pool resources goes a long way in dealing with the competing interests of the stakeholders.

The study shows a dominant discourse towards public participation which reflects citizens' normative stance on the management and governance of urban green spaces in Lahore. This discourse lends support to the voices in public participation discourse rejecting the government's stance on lack of resources as the main impediment in the planning and governance of green spaces. It is more the lack of innovative and adaptive approaches to governance resulting in poor quality and quantity of urban green spaces in Lahore. It also shows the absence of interest on the part of the government, especially in the non-physical aspects of the urban green spaces' system that features overall governance.

The participants in this discourse lay much premium on social networks and establishing trust and reciprocal relationships as part of the effort to gather social capital. The emergence of civil society is also a step in the same direction where actors show a tendency to go along with the new institutional arrangement for governance and management, declaring existing management led by centralised bureaucracy for urban green spaces a failure. The study indicates that though the civil society is still in its infancy, yet it is playing a leadership role in the current situation. Ideally, the leaders are brokers and facilitators and in Lahore, this role is performed by NGOs or civil

society is based upon collaborative leadership. The literature on collaborative governance notes the need for more adaptive, transformative styles of leadership, where leaders can balance competing interests (Ayers, 2016; Innes and Booher, 2003; Kim, 2010). This role of leadership allows actors to accommodate differences and find ways to empower diverse voices. In this study, the discourse of leadership and capacity building unfolds a facilitator's role and suggests conditions for potential negotiated spaces where interaction between stakeholders from different discourses can occur. This study suggests that in order to strengthen the role of civil society, external and internal actors should support NGOs so that it can play a more significant role, mobilise communities through creating awareness in the society, lobbying and advocacy for their cause and more importantly address power asymmetry in the system. The discourse of public participation and leadership and capacity building and decentralisation show some commonality but show divergence where the latter two discourse put more emphasis on developing skills and knowledge on the part of citizen before playing any role in the system. This difference also shows the gap between citizens at the grass-root level and outreach of NGOs or other members of civil society to them. It is essential to bridge this gap as the merger of these two discourses will have more potential for bringing an institutional change in Lahore.

However, the role of the state is critical despite the emergence of civil society, given the formal ownership and regulatory control over its green spaces. With this monopoly of the state over resources power asymmetry and inequities follow, making it difficult for the stakeholders to become a part of any cooperative management of a shared urban resource. The state needs to provide enabling conditions for collaboration. The discourse of administrative rationality is against the idea of public participation except for some cases where this concept is being used in a very vague sense or to make their actions legitimate. The discourse of decentralisation underlines an inherent conflict and power struggle with administrative discourse.

As evident from the study of these discourses, for a collaborative process to thrive, it is not only crucial that the state provides a conducive environment,

but it also needs to play a leadership role in this process. Nevertheless, in the case of Lahore, the state's role is marginal. Neither it exhibits any leadership qualities to nudge the stakeholders towards the right direction where this collaboration is possible nor as a facilitator of enabling environment. Therefore, the government needs to undertake capacity and leadership building skills and practices not only related to urban green spaces management but also for the collaborative processes and practices in the system. This can be done by creating more awareness of among power echelons on public participation. Besides, the civil servants and officials need capacity building as they appear unfamiliar as to how to effectively devolve authority and making collaborations for management of resources.

Findings from this embedded case study underscore that a relationship based on mutual trust can be the catalyst for moving from restrictive, bureaucratic cultures to a more flexible, collaborative arrangements, ensuring a real turnaround in the governance of the urban green spaces in Lahore. In this analysis, public participation and leadership and capacity building discourses offer an opportunity for change. The public participation discourse is in for taking collective action while leadership and capacity building provides the wherewithal to achieve this end.

The depletion of the green spaces along with environmental degradation is viewed as the main factor for bringing about the institutional change, and thereby, creating a window of opportunity for a new governance arrangement in Lahore. Various studies have mentioned that resource depletion and conflict between actors act as a primary driver that has nudged the system towards an institutional change for the management of natural resources (Ayers and Kittinger, 2014; Ajayi *et al.*, 2012). Therefore, these discourses emphasise on integrating scientific and local knowledge through inclusive, participatory governance for efficient, equitable and sustainable system urban green spaces, which in turn links to policy recommendations of this research.

Chapter 8. Conclusion

8.1 Introduction

The present study examines the prospects for an institutional change that allows the sustainable governance of common-pool resources in a given socio-ecological system. To achieve this objective, the study has used an in-depth single-case study: Urban green spaces in Lahore. Within its broader scope, this thesis has explicitly traced institutional conditions required for a transition from an old and anachronic command-and-control system to functional polycentric governance through adopting collaborative and adaptive approaches. Detailed knowledge of the current institutional framework was essential to understand the prospects of transition towards collaborative and polycentric governance.

Three objectives, along with their associated questions, were framed to help navigate the study. The first research objective was to examine the root-causes of the institutional rigidity that underlies social-ecological systems showing the signs of being maladaptive. The second objective of the research was to find out different discourses for governance and management of urban green spaces in Lahore indicating prospects of change in the system which has been done by using Q-methodology- a semi-qualitative method. The pursuit of the third objective brought this study further closer to achieve its objective as it explored discourses in greater depth and observes how far they provide insights into stakeholders' interests and preferences for public participation in the governance of urban green spaces in Lahore.

8.2 The First Research Sub-question- Investigating roots of Institutional Rigidity and its Impact on Urban Green Spaces

The first research question has used the concept of path dependency to trace the development of institutions in Lahore. This historical analysis showed very clearly how the perpetuation of institutions, production and reproduction of

institutions due to the self-reinforcing mechanisms, have led to the concentration of power in certain institutions. The process of path dependency has resulted in a system locked-in in power asymmetries where state actors become more powerful and distant from societal needs and demands in the emerging equation.

The critical juncture in this process was the point when the colonial regime undertook the task of replacing age-old communal property rights with private property rights. The new property regime led to a series of changes that turned the whole power equation in the society in favour of a few actors with landed aristocrats in rural areas and administrative bureaucracy in urban areas got all the powers. The impact of this institutional arrangement and emerging power asymmetries can be seen on the governance of parks and green spaces. This era witnessed the development of large private parks and green belts in the city with the sole objective to improve health and sanitary condition for the English population or at the most for economic efficiency and discovering new species and agricultural innovations by way of research. Instead of the fulfilment of local demands or catering to the local people, these parks and green spaces again became a tool to perpetuate the administrative and technocratic hold of the elite. The path dependency and resultant power asymmetries got incremented when the colonial regime adopted a series of institutional measures towards second half 19th century. The study finds that colonial rule in Punjab in over a century and a half empowered a particular class to pursue its interests, thereby unleashing a culture of patronage and bargain. The independence from colonial rule provided an excellent opportunity to leave behind all the colonial legacy. The incremental increase in path dependency continued after independence with military-bureaucratic establishment replacing colonial masters in the new power equation while the rural elite emerged as a new class of politician. This trend even continued under the new democratic leadership when administrative reforms unveiled by the elected government in 1970 further empowered the bureaucracy and strengthened its existed link with the elite. The emerging power equation's asymmetry was once again highlighted by the increasing consort between the

political and bureaucratic elites least interested in devolving or sharing authority at the local level and at times defying attempts at bringing about reforms in governance to give a quality life to the general public through devising an efficient delivery of public services at local level. This culture of patronage and bargain has a direct bearing on the governance of urban green spaces in Lahore where all the decision-making and planning is done at the higher levels, hardly the embodiment of the local stakeholders in this system. The chapter concluded that a new institutional design is needed to bridge the gap between the state and its people to devolve the power to local stakeholders in Lahore.

8.3 The Second Research Sub-question- Exploring New Discourses

The analysis of the first research question underlines a need for a change in the institutional structure in case of urban green spaces in Lahore. Accomplishing an institutional change is a big challenge that involves a constant struggle for power through which actors vie to establish their supremacy over others by way of higher acceptability for their ideas and practices (Foucault, 1980; Mahoney and Thelen, 2010). As such, in this power struggle change can become a reality if the balance of power tilts towards a discourse that establishes its dominance through its language, and discursive practices (Foucault, 1980; Mahoney and Thelen, 2010; Lindegaard, 2013). Against this background, the second objective of the study was to explore various discourses, representing contending views of stakeholders in Lahore on urban green spaces governance and management. This study used Q-methodology as a tool to discover different discourses which are useful to understand stakeholders' understanding and preferences for governance and management of urban green spaces in Lahore.

The result of the study showed four distinct discourses revealing the governance of urban green spaces is a fragmented and contested concept indicating the complexity of the issue. These discourses include public participation as an efficient model, pro/anti administrative, capacity building

and leadership and decentralisation or elite capture. The study's results place the public participation discourse at the top as the most significant discourse vying for a change through the involvement of people at multiple levels. The discourse of capacity building seeks to empower the public through social learning and capacity building and hence it acquires a pitch quite like public participation discourse. The discourse on decentralisation stress upon the devolution of power to a local government but falls short of putting its weight behind the concept of citizen participation. The discourse with pro-administrative rationality appears to be competing with all the discourses by placing the government and bureaucracy above every other institution and showing minimal trust in the abilities of the citizen as an agent of change. These results clearly show that most discourses (three) are in favour of changing power dynamics in the system at certain levels with different strategies. However, status quo oriented administrative discourse is far less dominant in the contest, resisting efforts at the change at all levels.

8.4 The Third Research Sub-question- Unfolding Power Relations through Discourses

The emergence of four discourses, as part of the answer to the second research question, reveals the existence of competing interests within a system which makes institutional change a very challenging prospect. This conflict of interest often gives rise to multiple representations for a particular perspective. Hence, analysing these discourses is key to any institutional change as they reveal various dynamics within institutions, including the role of actors, their strategic games, structure, formal and informal practices, and social norms and ideas. While unfolding power equation all these actions affect the manoeuvrability of actors and subsequently establish power and supremacy.

The study shows a dominant discourse towards the public participation declares existing management led by centralised bureaucracy for urban green spaces a failure. This discourse shows a lack of trust in government institutional arrangement; hence, it reflects citizens' overwhelming demand for

their rights in the management and governance of urban green spaces in Lahore. The participants in this discourse showed their inclination towards developing social networks and trust-building and reciprocity in the relationship as part of the effort towards an efficient system.

The discourse on civil society (leadership and capacity building) is supportive of public participation and as such constitutes a step in the same direction where actors show a preference for the new institutional arrangement for governance and management. Both discourses have shown their mistrust in the state and its ability to govern and manage. The study indicates that civil society is playing a leadership role in the current situation. This role of leadership allows greater reconciliation, whereby empowering diverse voices. The discourse of leadership and capacity building emerges as a facilitator, and thereby, linking various actors and sub-groups in pursuit of urban green spaces management and governance. However, according to this discourse external and internal actor should support civil society to enable it to play the role of a facilitator; mobilise communities through creating awareness in the society, lobbying and advocacy for their cause and more importantly address power asymmetry in the system. The discourse of public participation and leadership and capacity building both agreed on collaborative action except where the latter discourse put a more premium on developing skills and knowledge by citizens before playing any civic role in the system. Bridging gap between these two sub-groups (discourses), and their subsequent merger will have more potential for bringing an institutional change in Lahore.

The discourse of administrative rationality is not ready to share authority with the civil society or devolve their powers to the grass-root level to achieve any turnaround, and so exhibited a huge gap in these three discourses, and the actors represented them. An in-depth analysis of the discourse of decentralisation shows an inherent conflict and power struggle with administrative discourse. However, this discourse is also in opposition to direct public participation as they still need capacity building to have the role of active citizenry. Again, scrutiny into these discourses brings out that the state needs to provide a conducive atmosphere and leadership qualities for a

collaborative process to thrive which is marginal and non-committal in the present situation.

This thesis investigated the **overarching research question**: how a change towards polycentric system be achieved? Polycentric governance, being characterised by the presence of various functional units of decision making, is capable of solving the problems for a socio-ecological system (Ostrom, 2008). As per analysis of this study on urban green spaces in Lahore, three main themes have been found quite relevant to the shift in governance toward polycentric systems. These themes are; "locked-in" institutional arrangement, emerging collaborative activities and cross-scale information sharing. In the present context, there is ample evidence on urban green spaces being locked-in with bureaucratic structures. These institutional structures and concerned actors are more interested in economic gains which lead to rent-seeking behaviour and hence a challenge to overcome for a transition. Another limitation which has been highlighted in this study is the socio-economic conditions of the people, which hinder their involvement in this process. However, findings show evidence of emerging polycentricity from the existence of dominant discourse favouring collaborations, between actors at different levels to address emerging social-ecological challenges. Ostrom has also pointed towards the same direction describing social learning and self-organisation by actors as crucial factors behind any institutional change (Ostrom and Basurto, 2011). In this case, the structural aspects and perceived benefits of institutional change have led the actors to take action to overcome social and ecological dilemmas. As opposed to this apathy on the part of the government, the participants of the study prefer diverse institutions provide a basis for effective, equitable, and sustainable outcomes at multiple scales. Hence in this case study, actors by using their bonding and bridging social capital mark the start of process of social learning. These actors at different levels and scales are engaged in collaborative processes by sharing information, knowledge and resources, thereby enhancing institutional capacity on the part of non-governmental stakeholders.

The analysis shows that actors are involved in self-organising activities on various levels which also underline the presence of institutional capacity of actors at different level which is a pre-requisite for the advent of a polycentric system of governance. These characteristics provide increasing evidence of incremental changes with more space for new actors despite being centralised governance. The emerging trend indicates that instead of sudden change there are more chances of a gradual transition, underlining, the slow pace at which these changes are taking places and issues being addressed especially about authority and rights. Olsson *et al.* (2006) term this stage as the first phase of institutional change towards polycentric governance, preparing SES for change. It is pertinent to mention that a shift from the first to the second stage is possible when a 'window of opportunity' opens (Kingdon, 1984). The results of the present research suggest that the system is amid its first phase of institutional change where most actors are ready and willing to accept this change.

8.5 Contribution of the Study

8.5.1 Theoretical Implications

This dissertation attempts to answer key questions that are pertinent with transitions to polycentric governance in Lahore. Different theoretical debates and frameworks have been combined to enhance its explanatory power to identify the opportunities and challenges relevant to the case study – the governance of urban green spaces in Lahore. In more fragmented and complex societies, the idea of polycentricity seems to be a way forward in theoretical and applied governance discussions. This study contributes by examining the feasibility and practicality of importing and replicating a conceptual framework in the urban context of a developing country. This study, while enhancing the understanding of the structural and functional characteristics of polycentric governance, also reveals its power dynamics and its implication for the governance of urban green spaces. The distilling of power dynamics goes a long way in increasing comprehension over the functions, structures, advantages and limitations of polycentric governance.

Understanding power dynamics needs focussing on both top-down and bottom-up dimensions as being the case in this study, thereby, broadening the concept of power in the polycentric framework. Also, the study provides more significant insights as to how polycentricity performs in a different system especially in the context of a highly centralised state.

This study reveals that the governance of urban green spaces in Lahore is in its emerging phase as it exhibits some features of polycentricity proposed by McGinnis and Ostrom (2012) and Ostrom (2008). However, the emergent polycentric system exhibits some structural fissures due to its power dynamics. There are different centres of decision making, in which some are more powerful than others. Inter-organisational networking is somewhat there but due to lack of rules or legislation from the government, it is not enough to create new institutional arrangements. The polycentric system is an evolutionary process with incremental changes (McGinnis and Ostrom, 2012; Ostrom, 2008). This incrementalism is due to a large number of actors enjoying veto power, and so constitutes an obstacle in the way of bringing substantial changes or allow others to join their ranks (McGinnis, 2005). It can be argued that the current system is changing slowly and gradually given historically generated institutional inertia. The results of the study show deep-rooted mistrust among stakeholders due to historically embedded top-down bureaucratic structures, presenting many challenges towards sustainable transition towards the polycentric system.

Finding an emergent polycentric order, this study lends credence to polycentric systems theory, but at the same time, it identifies some limitations in its application in practice. A full transition towards polycentric governance cannot be achieved until and unless the government provide support at each level of governance. Devising rules and procedures and a vision about public participation and collaborative processes are crucial to the successful functioning of the system. As such, government institutions need to create political space for communities, by reducing historical control over the governance and development process. In a highly centralised, control and command system a complete transition towards polycentric order will be

difficult or span over a much more extended period if the entire process is not accompanied with a strong political will and relevant policy reforms.

Another critical factor in this regard is the transaction cost of the transition with prospects of the further stalling transition process. In the case study, most of the transaction cost for developing institutional capacity has been borne by the non-governmental stakeholders without much government support. Evolution is a lengthier process requiring both continuity and stability. However, this continuity depends upon as to how far the non-state actors are willing to bear the transaction cost, especially in the absence of support of governance.

In general, the case study findings provide evidence of unfolding of an emergent polycentric system featuring non-state actors seeking to assert them in a bottom-up power-dynamics on the one hand. Parallel to these efforts, there are power dynamics characterised by top-down bureaucratic structures. Between these two types of power, one finds a vast chasm of mistrust vis-à-vis each other. This gap can be filled by developing new rules of the game in the form agreements, protocols, conducive for building trust and confidence against each other. Accomplishing this will bring in its wake power-sharing arrangements that will go a long way in establishing polycentric governance.

8.5.2   Methodological Implications

The present research has contributed to unfolding power dynamics in polycentric governance by applying the politicised IAD framework (Clement, 2010). The present research uses both discourse and institutional analysis in one study to have greater insights into the governance of green spaces. This analytical dualism allows focussing on both structure and agency, which brings out both top-down and bottom-up dimensions of power. Studying power dynamics with the application of dual analysis on the level both institutions and discourses is a significant contribution of this study which provides a comprehensive but nuanced analysis of the complexity attached to polycentric governance.

Apart from various qualitative methods including content analysis and document analysis, this study uses Q-methodology as an innovative methodological tool for this research. Q-methodology is a modern methodological tool which is gaining currency with time for its relevance to natural resource and environmental governance. This research has also contributed to this ongoing trend by examining the usefulness of this methodology in the context of a different culture, a developing country's context. The experience was quite revealing as participants went through the q-sorting process, sharing their perceptions and opinions quite enthusiastically. The present study has added to advance Q-methodology as a useful participatory tool in natural resource management and environmental governance.

8.6 Policy Guidance and Recommendations

The results of this study confirm stakeholders' willingness to be engaged in the governance of green spaces. In the emerging scenario, it is important to redistribute the decision-making power and thereby influence the balance of power in favour of an engaged public. This thesis provides the following recommendation, which can facilitate a complete transition towards collaborative and polycentric governance of urban green spaces in Lahore.

8.6.1 Overarching Goals

There is a need to have a clear vision that can integrate the environmental, ecological and socio-economic importance of the ecosystems of Lahore. In pursuit of this goal, it is essential to integrate different values, interests and knowledge including scientific, local and traditional, allowing the engagement of local communities and other stakeholders.

8.6.1.1 Goals for inclusiveness and Representation

To make the governance process transparent and fair, there should be some goals for inclusiveness and representativeness for stakeholders' involvement in this process. In a mistrusted society where there is a big chasm between people and government, a starting point to bridge this gap is to provide a legal

framework to ensure inclusiveness and representativeness of different stakeholders. Laws enacted should ensure people are included without any discrimination based on their ideological leanings and relationship in the past with the government. The main aim of such legislation or legal framework is to lay the foundation of a real representative engagement without any bias of gender, ethnicity, age or socio-economic background.

8.6.1.2 Goals for Green Spaces Planning and Management

Most of the participants in this research has been critical of the government's beautification drive as a primary concern for developing and managing urban green spaces in Lahore while ignoring the other function of these green spaces. Given this situation, incorporating concepts such as ecosystem services and green infrastructure at city level green spaces strategy would offer some adaptive solution to this problem. These concepts not only provide with opportunities to explore the multifunctional and multi-benefits potential of these green spaces but also provide an opportunity to involve different stakeholders in this process by interlinking various public, private and semi-private types of green spaces. This research reveals that in Lahore, the planning and management of green spaces are mostly focused on parks and roadside vegetation. As such, the concept of green infrastructure would be a good starting point which allows involvement of all the formal and informal types of green spaces. For example, in Lahore, while starting some new development project, the environmental law states that private developers need to plant some trees depending on the size of the project as a mitigating strategy. The most significant barrier, also recognised by government officials and the private sector, is the lack of land, which makes it impossible to enforce this law. In this situation, incorporating different types of green spaces can provide a solution to this problem. For example, limited attention has been given to integrating cemeteries or river's banks to meet the land deficiency in Lahore. On the pattern of emerging international trend schoolyard greening, Institutional lands such as school, universities and hospitals' land can be used for this purpose. These efforts can also provide greater opportunities to involve different levels of collaboration among stakeholders.

8.6.2   Information Sharing and Trust-building

Sharing of information and trust-building on an extensive level is necessary to put behind the Lahore's history dotted with mistrust and lack of collaboration. By developing a transparent information-sharing mechanism will improve the stakeholders' understanding and knowledge of the entire system as well as a clear view of risks or uncertainties involved in the process. These efforts for a pro-active engagement of and collaboration among local communities, government and other stakeholders will impart much-needed legitimacy to the entire process and hence help improving policies and actions. The emerging situation will also help achieve transparency by pointing out institutional loopholes facilitating mismanagement of green spaces and public resources otherwise.

8.6.3   Science-Policy-Society Interface

Establishing an active research and development (R&D) structure can be an important step, towards change, through greater use of existing organisational and institutional arrangements, in a way that avoids additional bureaucracy. Greater collaboration between academia and organisations working in the domain of urban green spaces can be one way forward in the formulation of policies combining scientific rigour, local need and demand by reflecting socioeconomic and biophysical interactions and feedbacks in the system. Academia plays a vital role in providing scientific and local knowledge which is vital for urban green space planning and governance. Research based on scientific knowledge and information are essential to comprehend concepts such as ecosystem services and green infrastructure, furthermore, creating strategies, developing evaluative criteria and setting standards for quality and quantity for these green spaces for their sustainable use. Besides, to generate scientific knowledge, academic research is also essential to understand the community interaction with the environment in terms of societal demands and preferences towards these urban green spaces. This scientific and local knowledge interface provides the information that is required to integrate into the decision-making process regarding urban green spaces. Building

feedback loops between researchers and green spaces' stakeholders would be crucial to ensure that research meets ongoing needs. This arrangement will also promote the transfer of knowledge from various case studies conducted in the world, thereby introduce learning, novelty and innovation in the system.

8.6.4   Developing Capacity Building to Facilitate Transitions

Capacity building is an important factor for the management of urban green spaces. This process involves broad-scale knowledge enhancement and skill development of stakeholders. In the current situation, mostly the civil society spearheads such an initiative as far as urban green spaces. However, the study suggests that the government needs to undertake capacity and leadership building skills and practices that not only related to urban green spaces management but also the collaborative processes and practices in the system.

8.6.5   Education and Awareness

Public awareness, education and outreach are essential parts of any policy on urban green spaces in Lahore to encourage action from the stakeholders within the framework of environmental education. Education and outreach will not only expand public awareness of the importance of urban green spaces and environmental conservation, but it also induces citizenship to take action and so increases the prospects of community stewardship in urban green spaces, plantation and its conservation, proper management techniques bringing in its wake the benefits offered by these resources. Media (electronic, print, social etc.) needs to be the part of any sensitisation campaign to create awareness about the efficacy of natural resources including urban green spaces. Environmental education needs to be part of the school's curriculum, textbooks and teacher training programmes. The educational institutes, especially schools, can lead the way from the front by promoting plantation, environment and nature conservation through developing voluntary societies and clubs to encouraged children for collective citizen action.

8.6.6 Secure Property Rights

The findings of this research recognise that governance of urban green spaces in Lahore needs the structural changes catering to interrelations between the government, businesses, and civil society actors, leading to different political practices. The government intervention is required to provide opportunities to the stakeholders to engage in land management schemes. The concept of urban commons constitutes a viable alternative for the government for cost-effective greenspace management. The government need to reassign the property rights to local stakeholders to foster collaboration and co-management. For example, governments could earmark a piece of land to be collectively managed by PHA, conservationists or environmentalist and community groups. Such participatory designs may follow a different institutional arrangement in different parts of the urban landscape, featuring different stakeholders, such as government entities, community, non-profits organisations, the private sector. Allocating resources and educational materials related to green spaces issues such as proper species selection and planting practices, the difference between of invasive and indigenous species, insects and diseases, management issues will be helpful to develop more active citizenship.

In Lahore, NGOs are quite active and conspicuous in the city, especially in providing a solution to the issues regarding urban green spaces. Nevertheless, their full potential has not been realised as yet. In Lahore right now the NGOs are on the fore-front, supporting some bottom-up initiatives and have the countervailing power to the government exercising pressure through different tactics such as lobbying, negotiation, demonstration, and building public opinion through mass media. In order to realise full potential, there is a need to encourage and incentivise the NGOs to change their role from adversarial style to a more supportive partner of government. This partnership can go a long way in achieving targets from policy-making to its implementation as the NGOs can bring additional resources in the governance process.

According to the results of this case study, an important actor that seems to be conspicuous by its absence is the private sector. The cooperation of public and private actors in planning, implementing and financing green space projects is highly critical. This cooperation can result in adopting practices such as regeneration projects, or private sponsorships meant for the support of green space development and management. Corporate Social Responsibility (CSR) of the business can be considered as an alternative source of funding to finance urban green spaces' projects. Corporate Social Responsibility programme should be regulated to be adopted as a policy, encouraging not only the involvement of the private sector but also enhanced community participation in achieving sustainable urban development. However, to achieve the results mentioned above the engagement with the private sector should be above-board and transparent. This transparency will increase community confidence in green spaces development and management and would result in greater community participation.

8.7 Research Impact

This case study of Lahore explores the diversity of perspectives, knowledge and values on institutional design for the governance of urban green spaces, relying mainly on participatory approaches. The aim of this exploration, involving deep and multi-perspective description and analysis, is to establish that speculation over the likelihood of normative and theoretical concepts can be useful if based upon the relevant knowledge of what is feasible in a given context. So based on peoples' perspectives, this research has raised peoples' voices which are often unheard in the current public administration. Therefore, this study links the policy with real dynamics of the governance of urban green spaces in Lahore.

The study has broader policy implications for urban green spaces in Lahore. Through suggesting a collaborative model, it recommends a new institutional arrangement for effective governance and management of urban green spaces. Again, the different recommendation made in this study to enhance the sustainability of urban green spaces offers a wider range of measures that

can be utilised by policymakers and practitioners to manage urban green spaces successfully. Such suggestions provide the Lahore city authorities with a wide range of ideas that can be made part of development agendas, including the preparation of green space plan and strategies.

Finally, this study also contributes to expanding the knowledge of urban green spaces in Pakistan, where there is minimal literature on this topic. The study has also contributed to expanding the knowledge base for themes such as urban green spaces, governance, and social inequity and environmental sustainability at a larger level.

8.8 Limitations and Future Research

Like many PhD projects, this study is not without its limitations. However, these limitations present opportunities for further research in future. This study has provided insights into polycentric governance and its prospects for urban green spaces in Lahore. It is recognised on the onset of research that for a broader understanding of polycentric governance, there is a need to know the perspective of multiple stakeholders. Therefore, while conducting this study, it was assured that all stakeholders get equal representation. While doing research, it was realised that a greater representation at the community level could be more useful to grasp the concept more comprehensively. This gap hence provides an opportunity for future study and research. It is recommended that a future study can use a larger sample size, especially for community user group/citizens/residents. Likewise, a new avenue to the inquiry can be explored by conducting a study exclusively with these key actors (micro-level). That study will be helpful to understand citizen's concerns and problems, which will give more significant insights to understand polycentric governance practical implementation in the Lahore.

Conducting discourse analysis presents some limitation as it represents a snapshot in time. Discourses change with time in response to local conditions and changing policies. Changes allow new ideas and knowledge to get into the discourse. This case study has examined the emergence of polycentric governance up to the year 2017. However, this represents only the beginning

of a polycentric governance system in Lahore. Thus, there is much scope for further examination of both the evolution of polycentric governance and its contribution to urban green spaces governance in Lahore.

8.9 Concluding Thoughts

The governance transition, with all its outcomes, is a complex process replete with opportunities and challenges. A polycentric configuration has multiple centres of decision-making capable of mitigating conflicts and balance out needs and interests. Nevertheless, the government retains a central role in this transition given its authority and capacity. Do these complex power dynamics imply that whether the polycentricity is an appropriate approach for governance in a highly centralised command and control setting? Furthermore, is there a scope for improvement in the polycentric arrangements or is it a pipedream in this setting? These questions may not have any simple and straightforward answer but have far-reaching implications for decision-makers, which should be aware of the explicit and implicit form of power in governance arrangements. A polycentric system as a multi-actor and multi-level governance structure has great potential to bring about a durable change. However, it does not mean the application of this concept has an inbuilt panacea for governance problems (Ostrom et al., 1961; Ostrom et al., 2007) and so needs reappraisal in the light of trade-off and synergies in a given context.

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List of Abbreviations

AHSP: Agri-Horticultural society of Punjab

BD system: Basic Democracy System

CCB: Citizen Community Board

CPR: Common Pool Resources

DOPP: Devolution Of Power Plan

EIA: Environment Impact Assessment

EPA: Environmental Protection Agency

EPD: Environmental Protection Department

GoP: Government of Pakistan

IEE: Initial Environmental Examination

IUCN: The International Union for Conservation of Nature

LBT: Lahore Bachao Tahreek (Save Lahore Movement)

LDA: Lahore Development Authority

LG System: Local Government System

LGO: Local Government Ordinance

LHC: Lahore High Court

LIT: Lahore Improvement Trust

LMC: Lahore Municipal Corporation

LUDTS: Lahore Urban Development and Traffic Study

MAO: Municipal Administration Ordinance

MNA: Member of National Assembly

MPA: Member of Provincial Assembly

NGO: Non Governmental Organisation

PEPA: Pakistan Environmental Protection Act

PEPC: Pakistan Environmental Protection Council

PEPO: Pakistan Environmental Protection Ordinance

PHA: Parks and Horticulture Authority

SES: Socio-Ecological System

TMA: Tehsil Municipal Administration

UGS: Urban Green Space

UN: United Nations

WHO: World Health Organisation

Appendix A

A-1 Information Sheet

Project Title

The Governance of Urban Green Spaces in Lahore: Discourses and Institutional change

Researcher Contact Details

Rizwana Alam
Email: ee14ra@leeds.ac.uk
Mobile: 03018173814
        +4407413150426

Project Description

You are being invited to participate in a research study "Governance of Urban Green Spaces in Lahore: Discourses and Institutional change". This information sheet will provide you with the valuable information about research, so before you decide, it is important for you to understand why this research is being done and why your participation is important and what it will involve. Please take the time to read the following information carefully, and if you wish, you can discuss it with others, and if there is anything you do not understand, or you need some more information, please contact me. Take your time to decide whether or not you wish to participate in this research.

This research is about Urban green spaces in Lahore. Urban green spaces are vital to any country providing many environmental, social and economic benefits to its residents. There are many kinds of green spaces associated with a broad range of services derived from them. Different people have different preferences, demands and needs for using these green spaces. It becomes a challenge for the urban planner and policymaker to fulfil all these demands while managing and planning these green spaces. Unfortunately, these green spaces are continuously diminishing due to these challenges in their planning and management. This research aims to look at views of

different stakeholders for planning and management of these green spaces and find out what are challenges and opportunities to integrating their opinion in policy making process.

Participation

If you agree, an interview will be conducted. It will be recommended that these interviews will be held in the offices or any public place during working hours. The interview will take 30-40 minutes. It will be a semi-structured interview which includes mostly open-ended questions, but if you agreed at a second stage, you might be asked to rank your preferences (optional). Interviews will be recorded by using a digital audio recorder.

This is entirely a voluntary participation. If you want to participate, you will be asked to sign a consent form. You can withdraw from research anytime, and there are no negative consequences associated with it and you do not have to give any explanation for that. However, you cannot use your right to withdrawal if the collected data would have been subjected to analysis (The maximum time for withdrawal will be two weeks after the completion of data collection process).

Benefits and Risks

There are no expected risks in taking part in the research. While there are no direct benefits to participants from participating in the project, it is hoped that your responses will contribute to our understandings of issues of urban green spaces in Lahore and will be helpful for further planning and will assist in creating a broader societal impact of this research.

Confidentiality and Anonymity

All information obtained during the study will be confidential. Your identity will be completely anonymised. You will not be able to be identified in any reports or publications associated with the research. Information that will be collected about you will include general information, your experience for visiting these green spaces, your preferences and demands and perception about these green spaces.

The results of the research will form the basis for my PhD thesis and will be included in academic journal publications and reported at academic research conferences. The research data will be archived in the University of Leeds Repository and can be re-use and share with others in line with University of Leeds's Data Management Policy.

Consent to Participate

If you are interested in participating in this project, you are asked to sign the consent form. Once I have received your consent, I will contact you so we can arrange to meet at a time that is convenient for you. If you decide you would rather not participate in this study, you do not need to reply. Simply ignore this letter, and no further contact will be made.

Further Questions and Inquiries

Please refer to the Researcher for further questions and inquiries

Thank you for taking the time to help with this research project. Please keep this sheet for your information

Date: 14/07/2017

A-2 Consent Form for Interview

Research Project Title:	The Governance of Urban Green Spaces in Lahore: Discourses and Institutional change
Research Investigator:	Rizwana Alam

Thank you for agreeing to be interviewed as part of the research project. Ethical procedure for research undertaken by the University of Leeds requires that interviewees explicitly agree to be interviewed and will be informed how the information obtained through their interviews will be used. This consent form is essential to ensure that you understand the purpose of your participation and agree to the conditions of your involvement. Would you, therefore, read the accompanying information sheet and then sign this form to confirm that you approve the following:

1. I have read the Information sheet dated 17/07/2017 and understand the aims of the project.

2. I am participating in this project voluntarily. I understand that I have right to stop the interview at any time and withdraw from it immediately without giving any reason but once the analysis is done with the collected data I cannot use my right to withdraw (the time limit has been mentioned in information sheet).

3. I consent for my participation to be audio-recorded.

4. I agree to be quoted directly if my name is not published and a made-up name (pseudonym) is used.

5. The transcribed interview or extracts from interviews can be used in academic papers, conference presentations.

6. I understand that the results of this study will be published as part of a PhD.dissertation.

7. I agree that data can be reuse and share for research purposes.

8. I will not receive any benefit or payment for my participation in this project.

Printed Name

Participants Signature   **Date**

Researchers Signature   **Date**

Contact Information

For further questions or any inquiry please contact:

Name of researcher: Rizwana Alam

Mobile: 03018173814

Tel: 00447413150426

E-mail: ee14ra@leeds.ac.u

Appendix B

B-1 Ethical Review Approval

UNIVERSITY OF LEEDS

Rizwana Alam
School of Geography
University of Leeds
Leeds, LS2 9JT

ESSL, Environment and LUBS (AREA) Faculty Research Ethics Committee
**University of Leeds**

15 March 2017

Title of study:	**The Governance of Urban Green Spaces in Lahore: Discourses and Institutional change**
Ethics reference:	**AREA 16-085**

I am pleased to inform you that the above research application has been reviewed by the ESSL, Environment and LUBS (AREA) Faculty Research Ethics Committee and following receipt of your response to the Committee's initial comments, I can confirm a favourable ethical opinion as of the date of this letter. The following documentation was considered:

Document	Version	Date
AREA 16-085 (R1) CF_focus_group_V_1.1_20_2_17.docx	2	21/02/2017
AREA 16-085 (R1) CF_interview_V_1.1_20_2_17.docx	2	21/02/2017
AREA 16-085 (R1) Ethical_review_form_v1.1_20_2_17_JL -.doc	2	21/02/2017
AREA 16-085 (R1) IS_focus_group_V_1.1_20_2_17.docx	2	21/02/2017
AREA 16-085 (R1) IS_interview_V_1.1_20_2_17.docx	2	21/02/2017
AREA 16-085 CF_focus_group_V1.docx	1	17/01/2017
AREA 16-085 CF_interview_V1.docx	1	17/01/2017
AREA 16-085 DMP_V1_14_1_17.docx	1	17/01/2017
AREA 16-085 Ethical_review_form_v1_14_1_17_JL.doc	1	17/01/2017
AREA 16-085 Fieldwork_Assessment_Form_high_risk_final_checked.docx	1	17/01/2017
AREA 16-085 Interview Schedule.docx	1	17/01/2017
AREA 16-085 invitation letter.docx	1	17/01/2017
AREA 16-085 IS_focus_group_V1.docx	1	17/01/2017
AREA 16-085 IS_interview_V1.docx	1	17/01/2017

Appendix C

C-1 Conceptual Framework of Governance Arrangement
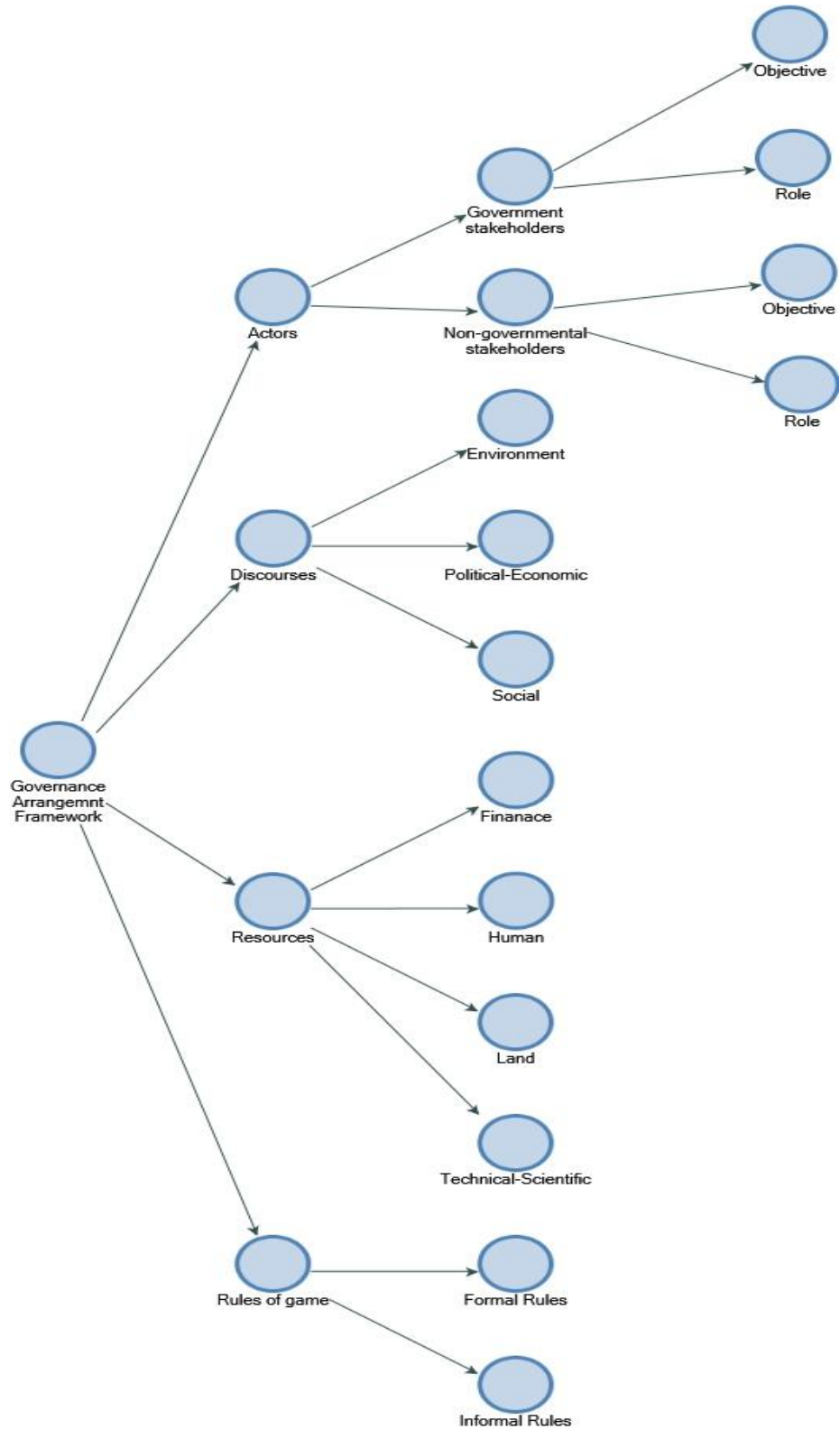
C-2 Interview Schedule

Introduction:

- How do you understand urban green spaces? Any example.
- Can you identify some specific issues regarding the quality (facilities and maintenance) and quantity (amount and accessibility) of existing green spaces?

Actors:

- Can you identify different actors in the planning and management of urban green spaces in Lahore? What role they play, or in what ways they are important?
- What sort of relationship exists among these actors for the governance of green spaces?

Discourses:

- Why are urban green spaces important?
- What are the main objectives of the planning and management of the green spaces in Lahore? Probe for benefits such as economic, aesthetic, recreational, city image, etc.
- Do you agree with the objectives mentioned above, or what do you think it should be? (difference and similarities)
- What factors do you think can hinder the achievement of your goals?
-

Rules of the game:

- How are green spaces planned and managed in Lahore?
- Does the development of a green space associate with some other types of developments in Lahore?
- What is the role of your organization? How do you participate in this process?
- Does the government facilitate the participation of other actors, and to what extent?

Resources/power:

- How are the resources for the green spaces in Lahore ensured or obtained? Probe further for financial, political and human resources
- Does the procurement of resources disturb the balance of power by giving some groups extra leverage during developing and managing green spaces in Lahore?

Conclusion:

- How can the green spaces in Lahore be related to sustainable development? (economic, social and environmental development)
- What are the challenges to achieving this goal?
- Which is the most critical factor? Why?

- Which institutions/organizations should be improved for the development and management of green spaces?
- What constitutes a way forward for the successful governance and management of green spaces?

C-3 Q-Sort

A printed version of the distributional grid to record Q-sort and Questions for Post Q-sorting interviews.

Least Agreed   Neutral   Most Agreed

−4	−3	−2	−1	0	+1	+2	+3	+4

Q 1: Do you feel there is any statement missing form these cards?

Q 2: Do you think this arrangement of cards explains your point of view?

Q 3: Why the cards on the extreme right (most agreed) make the statement so important for you?

Q 4: Why are you least agreed with the cards on the extreme left?

Q 5: Is there any card that has stood out to you? Maybe it does not make any sense to you, or you think it should not be the part of the Q sort. Which card? Why do you think that?

C-4 Factor Array: The Comparative Ranking of Statements in Four Factors.

Statements	Factor 'A'	Factor 'B'	Factor 'C'	Factor or 'D'
People do not realize what is quality of life. Quality of life is not about taking the big house; quality of life is what is inhaling, how you feel, or is your brain at peace. That is quality of life.	3	3	4	2
At least all the parks in Lahore should be digitized and mapped in GIS and as online information, where people can know when its maintenance is due, and when it is done. How much is the budget, how much has been spent? There should be information sharing, so that people will come to know the government preferences towards the parks and the green spaces.	2	0	−2	3
I feel that these local group environment groups should come forward. They should take the lead and the NGO should back them up by giving excellent solid scientific support.	1	−2	3	2
NGOs have a very limited scope. They can do some pilot projects which can address four or five schools, but if you want a big scale, then you need to involve the government.	−2	2	2	3
I think there is no community culture here. They need to develop a community culture. Where there are parks, people in the neighborhood should have meetings, or they should have clubs, so they can specify that in this area what do they need.	2	0	−4	−4
Parks and Horticulture is authority, why do we have authorities? WAPDA is another authority, and so is LDA, so why authorities? Why are not these services? If these are services, you can involve people.	−2	−3	−2	−2
Every citizen has to contribute to green spaces, because they are using these resources or nature. They are consuming, so they must play their part.	4	4	−2	−3
When we write PHA at an institutional level they bluntly refused us and said we do not have plants. And when we ask them by using personal contacts, they told us do not worry, you will get all the plants.	−2	−1	−1	1
The government does not allocate enough budgets for EPD. That shows the priority of our leaders, our politicians and our government, and if they think that the environment is OK this is a western agenda, and these are rich people tantrums.	−1	−4	−1	4
The cantonment belongs to the military, so it is the responsibility of the Ministry of Defense. So, the chief executive of the cantonment is not	−2	−2	1	0

answerable to the chief minister of Punjab. So, it becomes a very difficult proposition.				
In our country our bureaucratic system there are turf wars. There is less coordination, unity, and not a single united policy on which everyone is agreed.	1	3	1	1
If the state is a signatory of Biodiversity (CBD) they need to conserve flora and fauna both. They need to conserve it as an obligation.	1	1	2	0
The civil society should take responsibility. Sometimes there is limited capacity and knowledge, so civil society can bridge that gap and ensure that good laws are enacted and complied with.	1	2	4	−3
The local government needs to generate funds. So, if we go to any park or historical place in the western country, we have to pay for that. Why cannot we pay the fee? They can generate their own resources.	0	3	1	−4
EPD cannot do enforcement efficiently. The most important reason is if someone plants trees, where is the land?	−3	−1	0	0
We have brought back the local government system again after a nine-year gap, but they do not have any power. All the authority is held by the chairman of the LDA or the chairman of the PHA.	−1	2	−1	3
In our country not much importance is given to the environment. Once climate change was a ministry, and then it becomes a department, which again became a ministry, but a toothless kind of ministry.	3	−2	−3	0
Nothing can be seen in the parks that involves the user to take the ownership of the parks. So, this concept of ownership is not here, in which people think this is my park, and there should be flowers and the trees of my choice.	0	1	−2	0
Civil society sometimes cannot get that support which is needed from media, judiciary, and local people.	−2	−1	1	−3
Green spaces are not adequate in the inner city. We do have funds, but people don't want to leave their places. they are ready to die for every single inch of land	−4	0	−1	2
If local government needs a budget, they cannot increase a few fines or fees or tax, as they need to take permission from the provincial government, and the provincial government will not allow it. They cannot generate their own funds. So, the cities cannot be run.	0	1	−2	2
For a long time, new parks have not been formed, as the government does not have sufficient land.	−4	4	0	−2
This is cuckoo land. These people in the inner city do not have any money to maintain their houses, so how do you ask these people to make a garden on their rooves.	−4	0	3	1
I believe that academia can be used to sensitize and to communicate the importance of the environment and urban green spaces to the people.	4	3	0	0

Statement				
There should be a department who plays the leading role in coordinating, and it is the Planning and Development Department, because recently all the planning and development is being done under it.	−2	−2	0	−1
How many people have the budgeting concept? Even if I have it, I will not want that headache. In this situation, it is unnecessary interference to involve a layman.	−3	−4	3	−1
NGOs have not done any significant project on urban green spa spaces. What they did is in bits and pieces, like lobbying, advocacy, with journalists, students and the private sector	−1	1	−1	−3
The latest trend is that private housing societies import plants from China or Thailand that are fully grown plants. So that is how they are getting good business, but that is neither our economy, not the indigenous plant.	−1	−2	−2	1
I think things are getting commercialized. People go to green spaces for a walk, but they have increased the grey structure. You are bringing that kind of facilities which are damaging the true spirit of UGS.	1	4	−4	3
The environment is not our priority. Our policymakers want to show that stuff to the masses, on the basis of which, they will get more votes in the coming elections.	3	0	2	−2
Planning varies from area to area in Lahore. Posh areas where policymakers live and have their influence are better looked after and managed.	0	−3	2	4
The goal of the PHA is a politically infused goal based upon a CM vision, and that is; Lahore should be green. They want to make it a beautiful and a model city.	−3	1	0	1
I must say that the role of Ulemas can be very positive. They are being used for the wrong things. If we engage them, I mean to say that we can use that institution as well.	3	−1	2	−1
The local government is a significant stakeholder, as it has the authority to identify the areas for the provision of green spaces.	1	2	0	0
I think technocrats should have a bigger role; the right man for the right job is what needed. But it is not being done.	4	−2	1	−1
Green spaces are meant to be used by users, but if you ask me, if they have any role in policy making and decision making, it is not like that they should be involved in this process.	2	2	−3	0
I have seen that our private sector is more aware than the government sector on the virtue of environment protection, as most of the private housing schemes have green spaces as their dominant features.	−1	0	−4	−4
I think in our system the NGOs need to interfere, because when they protest on something, it catches the attention of the media, resulting in some progress, negotiation, and so there is some betterment.	0	−3	4	1

If you talk to the forest department they talk about forestry, but they do not have any clarity and comprehension on urban forestry, as it should be.	0	−1	0	−1
The primary use of UGS is none other than having a walk or jogging, or holding social gatherings with friends in the park, where our children can play.	0	0	−1	2
Media covers the issues, but not that much, because it is not in the advertisers' interest, nor is it of the corporate interest, so they do not focus on them.	2	−3	−3	2
UGS are controlled by the bureaucracy. So, if one bureaucrat comes for six months and is replaced by another, they have little chance to understand the problem comprehensively	0	−1	−3	−2
The green spaces and its problem cannot be solved until it is not taken at the government level. Other problems can be solved at the individual level, but for green spaces and tree plantation, government has to give some policy. Yet at city level, government has to give some policy.	−1	1	1	4
EPD should be effective because it is the environment that it is supposed to deal with exclusively, but at present, the EPD hardly makes its presence felt.	1	0	3	−1
Students are doing research, but they do not have any facilities. Even if you ask data from the PHA, they will not share data with researchers.	−1	−4	−1	−2
When talking about the Lahore city, the local environmental group is a powerful pressure group, so its activists do not let anything go wrong here easily. They are quite vigilant; parks cannot be transformed for any other purposes.	−3	−1	2	−1
We do not have coordination among departments. So, if our mayor and his institutions are cooperating with the PHA, the PHA is not coordinating with the forest department. It wastes the resources in overlapping, and thus we cannot benefit from each other's expertise.	2	2	0	1
Private participation is too little. And if we talk about what the private sector is doing, it is mostly undertaking tree planting initiatives. They have no participation in policymaking.	2	1	1	−2

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Appendix D

D-1 Transcript of an in-depth interview

R= Researcher

I= Interviewee

R: First of all, I want to know how do you conceptualise urban green spaces?

I: Well… every urban area particularly megacities should have…. you know …. dedicated places which have vegetation, there are trees, there are parks, there are gardens, both for the health of the people …who… you know… live in those cities and also for the local ecology and local biodiversity. We have seen the newly planned areas and even the old cities. There are also dedicated spaces for such things… for vegetation, for trees, for parks. So, it provides some opportunity for people to spend some time outdoors, out of their houses for a lot of activity. So, they are a critical part of an urban setup.

R: If we talk about Lahore, can you identify some issues regarding the quality or quantity of green spaces?

I: I think for any megacity, planning is very important. Every megacity ….and we have seen examples all over the world. They have always got Master Plans and then the other bodies like city authority, politicians, public, a private sector they ensure that they follow that Master Plan. In any Master Plan, there are spaces for residential, commercial, for utilities, for health and education along with that, they ensure that there are adequate green spaces available. Whether they are in the shapes of parks, gardens, green belts, along the roads, along the footpaths. So.. you know…and also if there is any old vegetation which already exists in that area, then ensuring that that space is maintained. I can give you so many examples… take the example of Delhi where within the city they have protected area they call it national park, which is like the old vegetation. So …then you make laws, and you plan the city in a way that whatever development is being done or planned, you maintain [-----] you maintain those green spaces. In case of Lahore …. we have seen……yes…. Master Plans were developed, were made. Unfortunately, many times when those Master Plans were being developed, the whole process was not very consultative not very transparent. So you assign a group of engineers and consultants to develop a master plan. I mean it is followed everywhere….it is followed everywhere, but the way is ….that once the draft is available, you advertise it. You seek comments from the relevant stakeholders. The people of that city and then you know…. then they give their

opinion, and then you look at it and incorporate that feedback and then revise. Then you make that document public. Once it is public, then everybody has the right and has access to that knowledge. So they should know where to develop a housing society, in what place you have to develop a flyover, here is the education city, this is a market…. so this is the place which is green space. So at some places, the town planners have some formula as you know as that much percentage of the area be the green spaces. So, first of all, we had the problem in this process, and then they changed it according to their own will. All the rulers and bureaucracy and the even private sector they influenced it to manipulate it and they just played around this document. So my point is that literally, nobody followed the master plan in its true sense. It became kind of living document in the sense that whenever you want to draw a line, you do it. When I want it I made square smaller than other, or a green belt smaller than before made a change in it and whenever they wish they change the scale and made the green spaces small or declare it a commercial area. So that is very unfortunate. That is what actually happens, and even in the last few years, there were road widening and a lot of development projects being planned and being implemented in Lahore. So we as the largest environmental organisation we took up these issues. We said… for God sake ….have some thorough the comprehensive Master Plan. Seek the support of all the stakeholders ….get that master plan approved and then follow it. Right now, most of the development is haphazard. So ok if there is traffic congestion … ok….so what is the solution? So still the focus is instead on managing the problem, coming up with ad-hoc solutions …or…which have a limited lifeline…firstly. Secondly, the phenomenon which is called as the concretisation of cities. You just bring everything…. literally… everything …every open space under concrete. So if there is too much traffic, just add one more lane to it. So what is the feasibility of adding new road; how much traffic is coming , what is the reason ; what are facilities over here; what are commercial schools in the area due to which there is more traffic and how to manage it; what are bottlenecks here; is there people who sell meat for charity purposes and make cars to stop here or either vendor of fruits on the road. So there are a lot of issues. But you add one lane, and you cut thousands of trees. And after a few years, you realise that oh my God the traffic is still there. So you address the problem on a short-term basis you try to make yourself happy ….you try to show that you are very pro-development and you really want to provide the all kind of transport facilities to your people but thas not the sustainable long-term solution. You try to adopt short-term ad-hoc temporary solutions.

R: Sir you were talking about most of the things about development around roads and this kind of things but if we talk about the parks are you satisfied with the park qualities over here?

I: Ok again, there are two sides to my response. One…Yes, the good or positive or bright side is that some of the parks, unfortunately not all, Lahore used to be the city of the gardens where are those gardens? One has to really…. you know…. ranging from the old Shalimar garden to the open spaces of Lahore fort to Bagh e Jinnah …you know ….then Nasir Bagh and all those gardens, they have shrunk, and few of them have really gone. The few new ones which were developed like Racecourse park, Model town park and few parks which have been developed in the new residential areas, which is the good sign. Now, this is the good sign that few new parks were also developed. A lot of them are in affluent residential colonies. We can see having a new trend which is the golf club we all know that golf courses are the places with just green grass with a lot of water which may be looks green. Or you can say it is green space, but it is not the real you know. The second problem is, even in some of the new parks the trend is, to plant a lot of exotic species. A lot of species which are ..like…for aesthetic or maybe decorative but most of them obviously because they are not native species, so they do not provide shades, no fruit, no birds… you know…normally chooses that tree for nesting, and then few of them are also invasive. We have examples like Conocarpus. So yes if you have targets… you are a government official and have targets you plant Conocarpus, and you will see a mushroom kind of ….within one year or two. And the whole belt becomes green. But that is like again…. that is not native and kind of invasive so I think we have to be very careful. So in a one way… a good point, at least some green belts are being maintained some of the new parks are developed. But the flip side is that the kind of species which are being used and, also the part of the development, where we are cutting the old trees. That is not acceptable at all that is too bad for the city.

R: Ok, the second thing is the quantity of green spaces can you shed some light on that. Quantity means the number of parks available to a citizen or their accessibility like how distant they should be from the residential areas. Or the settlements.

I: Well, I think again it varies. So there are areas like I live in Model Town, so the Model Town has a big park, so I feel fortunate…. you know… I am lucky. The people of the Model Town or maybe adjoining areas like Faisal Town and the Garden Town, they are lucky. But if you go to …. lot of…. you go to the old walled……you know the old town…. you see very few …you go to Shahdara side, and Ravi side you do not see any park. So again it varies from area to area as I said….some of the new housing estates such as DHA and Bahria they have open spaces, but, unfortunately, they are more like kind of…. they are parks, but obviously, they have limited access also in their true sense….they are not true parks. Yes, they have jogging tracks, they have a

lot of kind of rides for play areas for kids you do not see big trees and the vegetation which everybody requires in the big city of Lahore.

R: You mentioned there is different kinds of green spaces in different areas, can you tell why these differences are there?

I: I think if you compare the new ones, the new area they know it is a good selling point. The people who can afford to buy land in those areas they also preferred to have such …. you know….parks and open spaces. That's the reason that developers they do not have any choice. They ensure they include in it. But if you go to low, middle-income housing colonies, you don't see that. There are very limited…. you see very limited open spaces, and even those open spaces may be meant for other purposes, but not like a real green area. so I think that's also….. and then again … I think….a lot of things that come down to bylaws of any development like… you know…. the bylaws of Lahore development authority. If they have bylaws required for a certain area to be and if they are not being enforced and they are not being complied with then what's the point of having those bylaws. When there is sheer negligence, criminal negligence I would say on the part of the regulatory bodies, and also I think I will say that even the local developers they know how to play around and how they can bypass those bylaws? We have seen that at many places this is going on.

R: So Sir, is it is bureaucracy negligence, political negligence, or citizen negligence ? whose negligence?

I: I would say all of them, to be very honest, Including myself the civil society. I think it is collective responsibility, but the thing is media, civil society, which obviously, the citizen is part of the civil society, bureaucracy and the private sector, the developers and the people . So if there are laws, the bureaucracy should ensure. First, they should develop the laws that have to be a consultative, participatory process, and once they have developed the laws. It is their prime responsibility to enforce those laws. The private sector's responsibility is to ensure that they follow those laws. And citizen also obeys those laws. And the citizen and the media they provide firstly they participate when these laws have to be developed. Secondly, if there is a clear violation, they should highlight, they should protest. I mean, we do It as an organisation. We had, even you know, file writ petitions against the government. Sometimes we are successful, a lot of times, many times we are not successful so as it is a collective responsibility. Media should highlight this along with other political issues. The civil society should take this …as you know…. their responsibility. Because sometimes there is limited capacity there is limited knowledge and then it is civil society who can bridge that gap and provide that knowledge and a platform to ensure that good law are enacted and secondly comply with that.

R: Do you think civil society is not engaged positively …..

I: They are doing… but honestly speaking sometimes civil society cannot get that support which it needed from media, judiciary and local people. When the canal was widening so, we protested so we tool flags, and with trees, we protest a lot. So when people were passing through the roads in cars, some made a victory sign which means they supported us, but there were numerous who said that you are anti-development. What happened if these trees have fallen. It takes us time to travel, so it will be easy for us…. trees can grow later, so it is not a big deal. So this kind of people stay happy for two or three years, and then after that, they are again stuck in the traffic. Because it is a temporary solution, until unless you have a good public transport system. So, it is collective, and I will say civil society has tried their best. I think Save Lahore, Lahore conservative they are good examples of people struggle …of… literally, people fighting for a cause. It is a small group, but very dedicated people such as Kamran Mumtaz, Imrana Tawana, Faryal Gohar, I mean all these….. few dedicated journalist…. we use to have bloggers. But unfortunately the attention and support this group deserved from media and local people they could not get it.

R: These were different actors involved in this process which was my next question. So do you think there could be any more actor involved in this process?

I: Private or government?

R: Anyone

I: You see when you have relevant agencies …..if you think that Lahore Development Authority has the mandate and they are supposed to develop the city in a planned manner. Then they should ensure that there is compliance with a Master Plan about green spaces. And then there is another Authority that is Parks and Horticulture Authority, primarily responsible for developing, maintaining for these green spaces and parks. It is a huge infrastructure. If they are not playing their role correctly, then the actors I think again the civil society will come, local groups and the local population. And media, they should highlight the issue. Along with that, there is one governmental agency that is the Environment Protection Agency, so they should also ensure that if there are some development and the bylaws of LDA or others' are not being followed. They should have the teeth to stop that development and if we see the EPAs ….. because EPA is a powerful organisation. So as people become afraid of tax officer that, we are stealing tax, likewise, people should be frightened of EPA. If we are doing something against the rule, what NOC we have got, or do we have taken NOC, EPA should ensure that it is happening. So I think EPA role is also critical. And if it is not happening in some places, things will go for the judiciary. They should

be taken such decision… although some have made…. maybe they were not like they should be. So there should be a strong message.

R: So you just talk about EPA, so why do you think EPA is not that much strong? What is the reason behind that?

I: Because it is not the priority of the government. The government does not allocate enough budget to EPD. They don't have resources. They don't have the equipment. They don't have the capacity. The government intentionally… government does not want to equip them. They do not want to provide them deserving funds. Look at the budget which is allocated to EPA. Its peanut…..it is nothing. Look at the…You compare that budget with other governmental departments. So I think that is very unfortunate. That shows the priority of our politicians and our leaders and our government. They think that the environment is just ok, this is a western agenda, and these are rich people tantrum. So I think that is unfortunate.

R; Ok Sir now we will come to another side we had a lot discussion about it, so can you tell how these green spaces are important for us?

I: I think it is repetition just like a textbook, so first of all, it is about that heat island in cities which is due to increase concrete, so these are lungs. So they sink carbon, people get fresh air. …The shade ….the fruit. The second thing is that a city like Lahore depends on groundwater. The way we are pumping groundwater again, it is not sustainable. When you have this kind of urban green spaces which is less concrete and when there is rain it uses to recharge the aquifer and groundwater. Now, what happened, there is a flash flood because it is concrete…. Soosh… Runoff and gone… so you must have observed last week there was a little rainfall and roads became like canals. In the past, it used to seep down, used to trickle down, used to recharge the aquifer. That is not happening. There is one reason that you are creating heat islands as concretisation causes an increase in temperature. We have done some studies on local biodiversity. There are many bird species which are getting extinct, so there are more, for example, fireflies, butterflies, you do not see them a lot…. because you are just getting rid of green spaces and all vegetation.

R: As you told that these green spaces are serving the environmental purposes so, do you think that PHA has the same objectives as to help the environment?

I: You need to ask them. But see… but in my opinion, ideally, its main aim should not plant exotic species, but yes their intention should be to develop and maintain green spaces. They need to think beyond beautifying the green belt. And their purpose should be…again how to plant native species and how to maintain the local ecosystem. I am not saying totally … either-or…. but it

has to be a mix, but right now it is inclined in one direction because it also involves that you need a lot of funds as you have to do different tasks, you plant different species as you develop a green belt, it requires watering, maintenance, huge man-power. Ok, I think it is not a balanced approach unfortunately yet.

R: if we talk a little bit about your organisation, as you mentioned earlier that you do not mostly focus on urban green spaces, so you are just working for nature. So how can you link yourself with green spaces? If you have done anything which you want to mention in this regard.

I: You see WWF as a nature conservation organisation is a major focus on protecting the natural habitat. A natural wilderness so either it is your northern areas in Pakistan, wetlands, they are coastal areas or other ecosystems. Urban areas we also -----. So wherever we work more on policy issues where we take part in advocacy and lobbying and also providing scientific and technical support to the local groups. I gave you an example of 'Save Lahore' and 'Lahore conservative society'. If they want any particular kind of information like kind of species, what is the impact of the development projects? So we used to provide that. Because we feel that these local groups should come forward, they should take the lead, and we should back them by giving good solid scientific support. Now other than that, we also work with the private sector and push them and influence them sometimes even to maintain urban green spaces. So our past president was Mr Qurshi. You can see that the main boulevard, the Qurshi park, and Qurshi avenues, so they tried to maintain this kind of things. Likewise, our plantation campaign where we engage the student with them. So recently we took a group to jallo park and planted some trees. We also have identified a place near Ravi, so wherever we get this kind of opportunities…. because we also work with thousands of students. And even sometimes with employees of private companies to engage them because there involvement is also essential. To sensitise them, that it is important. And because of the fact, they all belong to Lahore urban areas, so we engage them in activities like plantation near Lahore or the suburbs.

R: So do you think that you have enough resources that you can do all this work easily… I mean I also include in this… like data or environmental information as you said earlier, you share technical knowledge.

I: No I can not say that, that we have enough….so… we are a project-based organisation. We develop projects…. we approach donors, and then we implement them. In urban areas because of the fact… because people do not think that WWF fits in urban development and urban landscape, so we have …. as such…I mean I do not recall we have done such a project. So if we do such kind of activity, we use the funds we generate locally, nationally. You

know like through individual members…. like that.. and to be honest, we have not done any significant project on urban green spaces due to the reasons as I mentioned before. We have not developed even. So we did it in a bit and pieces like lobbying, advocacy with journalist and students and private sector… we do that.

R: Sir just two more questions. As we have this discussion it gave me an idea that green spaces in Lahore are not moving towards sustainable development…so can you tell me that how can we find a way forward in this direction?

I: The first question which I answered earlier, basically link with that. We identified the issue or problem that there is a lack of proper planning. We do not see it. So I will repeat that while summarising it. There should be a transparent consultative process of finalising the master plan. So then all the stakeholders can ensure that we have adequate green spaces or other things related to that. Development should not be haphazard. It can be reviewed scientifically or other different ways. And secondly, there should be a process to ensure the compliance of that plan. Whichever relevant agencies they are doing that. The private sector is doing that. Thirdly the role of civil society… media to continuously highlight this. And one thing I want to say that in our curriculum, there should be a subject separately dealing with the environment. I was used to advocating that. Now I believe that it is complicated…..that you change the curriculum in fourth or fifth grade, teach the children about the environment. I think as your subject…. I firmly believe that in Geography or Pakistan studies or even in Urdu and English books, if you look at them…… even for young ones like one, two or class three students…..where we teach them different things we should also add some small changes. Such as why the environment is necessary? What is the component of the environment? So they learn gradually as they move upward. You need to add just one chapter in Geography or other subjects. Just tell them that this country is blessed with some good natural assets. Why is it essential to protect them? What can you do as an individual, as a student, as a kid, as a father or a mother? So I think it is education and I also say the important role teachers have in it. Our programme of environmental education….. we are doing with a hundred thousand students. It is a long struggle because I strongly feel that these kids are the future leaders….. they are the next policymakers….. they are future decision-makers, and they need be to sensitised now. So we have started giving some benefits. Our many kids in spellathon are now in professional life so when we go to them, they told us that you know, I participated in spellathon, so I am already […], tell me what you want me to do? So it is a good response. I think that teacher should add these kinds of things in the curriculum. So you see… if it is hard or impossible that you can change the curriculum, then make changes in school policy…. in free periods

or assembly regularly talk about environment, water resources, natural assets, about wildlife, air quality, water conservation, energy conservation.

R: Thank you so much, Sir. You gave me your precious time

I: Welcome … my pleasure.

D-2 Coding in NVivo for the interview in Appendix D-1

Codes	Number of coding references
Nodes\\Discourses\Public Participation\Satisfaction with Government policies	1
Nodes\\Discourses\Public Participation\Public participation as a solution\Private sector	3
Nodes\\Discourses\Public Participation\Public participation as a solution\Government	1
Nodes\\Discourses\Public Participation\Public participation as a solution\Civil Society	4
Nodes\\Discourses\Public Participation\Lack of trust in government\Sustainbilty\Social\unequal benefits	4
Nodes\\Discourses\Public Participation\Lack of trust in government\Sustainbilty\Social\inequity in representation	2
Nodes\\Discourses\Public Participation\Lack of trust in government\Sustainbilty\Environmental	4
Nodes\\Discourses\Public Participation\Lack of trust in government\Land use planning, policies and implementation	7
Nodes\\Discourses\Capacity building andLeadership\Leadership\Challenges	2
Nodes\\Discourses\Capacity building and Leadership\Leadership\Broker and Leader	4
Nodes\\Discourses\Capacity building and Leadership\Lack of knowledge and awareness	1
Nodes\\Discourses\Administrative\Organisational Fault Lines\Lack of resources	1

D-3 Stakeholder Groups and Discursive Themes

Participant. No.	Stakeholder Group	Discursive Themes
1	Academia	Environmental and social sustainability/ lack of trust in government/ public participation as an efficient management model
		Public participation as a viable solution/ public participation as an efficient management model
		Lack of knowledge and awareness / Capacity building and leadership
		Role of leader/Capacity building and leadership
		A new Actor/Capacity building and leadership
		Instability and inconsistency/ Organisational fault lines/ Administrative
2	User	Environmental and social sustainability/ lack of trust in government/ public participation as an efficient management model
		Lack of knowledge and awareness / Capacity building and leadership
3	Expert (Urban planner)	Lack of resources/Organisational fault lines/Administrative
		Lack of knowledge and awareness / Capacity building and leadership
		A new Actor/Capacity building and leadership
4	Media	Environmental and social sustainability/ Lack of trust in government/ Public participation as an efficient management model
		Public participation as a viable solution/ Public participation as an efficient management model
		Role of leader/Capacity building and leadership
5	User	Environmental and social sustainability/ Lack of trust in government/ Public participation as an efficient management model

		Lack of knowledge and awareness / Capacity building and leadership
		Knowledge about civic rights/ Capacity building and leadership
6	Expert (Horticulturist)	Environmental and social sustainability/ Lack of trust in government/ Public participation as an efficient management model
		Instability and inconsistency/ Organisational fault lines/ Administrative
		Lack of knowledge and awareness / Capacity building and leadership
7	Government (Forest Department)	Lack of resources/Organisational fault lines/Administrative
		Lack of coordination/Organisational fault lines/Administrative
		Lack of knowledge and awareness / Capacity building and leadership
		Public participation as a viable solution/ Public participation as an efficient management model
8	Academia	Environmental and social sustainability/ lack of trust in government/ public participation as an efficient management model
		Public participation as a viable solution/ public participation as an efficient management model
		Lack of knowledge and awareness / Capacity building and leadership
		Instability and inconsistency/ Organisational fault lines/ Administrative
		Concept of public participation/ Decentralisation
9	NGO	Environmental and social sustainability/ lack of trust in government/ public participation as an efficient management model
		Public participation as a viable solution/ public participation as an efficient management model

		Lack of knowledge and awareness / Capacity building and leadership
		Role of leader/Capacity building and leadership
		Lack of resources/ Organisational fault lines/ Administrative
10	Government (Walled City Authority)	Lack of resources/Organisational fault lines/Administrative
		Lack of coordination/Organisational fault lines/Administrative
		Lack of knowledge and awareness / Capacity building and leadership
		Knowledge about civic rights/ Capacity building and leadership
11	Government (Walled City Authority)	Mixed views towards public participation/ Administrative
		Lack of knowledge and awareness / Capacity building and leadership
		Knowledge about civic rights/ Capacity building and leadership
12	Government (Forest Department)	Lack of coordination/Organisational fault lines/Administrative
		Role of Leader/ Capacity building and leadership
13	Local Environmental group	Environmental and social sustainability/ lack of trust in government/ public participation as an efficient management model
		Public participation as a viable solution/ public participation as an efficient management model
		Lack of knowledge and awareness / Capacity building and leadership
		Role of Leader/ Capacity building and leadership
14	Local Environmental group	Environmental and social sustainability/ lack of trust in government/ public participation as an efficient management model

		Public participation as a viable solution/ public participation as an efficient management model
		Lack of knowledge and awareness / Capacity building and leadership
		Role of Leader/ Capacity building and leadership
15	Government (Environmental protection department)	Lack of resources/Organisational fault lines/Administrative
		Lack of coordination/Organisational fault lines/Administrative
		Mixed views towards public participation/ Administrative
16	Government (Environmental protection department)	Lack of resources/Organisational fault lines/Administrative
		Lack of coordination/Organisational fault lines/Administrative
17	Government (Politician)	Lack of resources/Organisational fault lines/Administrative
		Conflict between politician and bureaucracy/ Decentralisation
		Public participation as a viable solution/ public participation as an efficient management model
18	NGO	Environmental and social sustainability/ lack of trust in government/ public participation as an efficient management model
		Public participation as a viable solution/ public participation as an efficient management model
		Lack of civic rights/ Capacity building and leadership
		Lack of knowledge and awareness / Capacity building and leadership
		Role of Leader/ Capacity building and leadership
19	Government (Department of	Lack of resources/Organisational fault lines/Administrative

	Planning and Development)	Lack of coordination/Organisational fault lines/Administrative
		Mixed views towards public participation/ Administrative
20	Government (Parks and Horticulture Authority)	Lack of resources/Organisational fault lines/Administrative
		Lack of coordination/Organisational fault lines/Administrative
21	Government (Cantonment Board)	-
22	Lahore Chamber of Commerce	Environmental and social sustainability/ lack of trust in government/ public participation as an efficient management model
		Lack of resources/Organisational fault lines/Administrative
		Lack of knowledge and awareness / Capacity building and leadership
		A new actor/ Capacity building and leadership
23	Media	Environmental and social sustainability/ lack of trust in government/ public participation as an efficient management model
		Lack of knowledge and awareness / Capacity building and leadership
		Role of leader/ Capacity building and leadership
		A new actor/ Capacity building and leadership
24	Private developer	A new actor/ Capacity building and leadership
25	Government (Metropolitan Corporation Lahore)	Lack of coordination/Organisational fault lines/Administrative
		Lack of civic rights/ Capacity building and leadership
		Mixed views towards public participation/ Administrative
26	Government (Parks and Horticulture Authority)	Mixed views towards public participation/ Administrative

27	User	Environmental and social sustainability/ lack of trust in government/ public participation as an efficient management model
		Public participation as a viable solution/ public participation as an efficient management model
		Lack of knowledge and awareness / Capacity building and leadership
28	Government (Politician)	Lack of civic rights/ Capacity building and leadership
		Lack of knowledge and awareness / Capacity building and leadership
		Role of leader/ Capacity building and leadership
		Conflict between Politicians and bureaucracy/ Decentralisation
29	User	Environmental and social sustainability/ lack of trust in government/ public participation as an efficient management model
		Lack of knowledge and awareness / Capacity building and leadership
30	User	Environmental and social sustainability/ lack of trust in government/ public participation as an efficient management model
		Public participation as a viable solution/ public participation as an efficient management model

Appendix E

E-1 List of Documents

Governmental Laws, Plans and policies

Land Tenancy Act 1868 retrieved from http://punjablaws.gov.pk/laws/11.html

Land Acquisition Act 1894 retrieved from
http://megrevenuedm.gov.in/acts/land-aquisition-act-1894.pdf

Land Alienation Act 1900 retrieved from https://www.punjab-
zameen.gov.pk/Documents/LawsAndRules/alienation%20of%20land%20act
%201900.pdf

Government of India Act 1919 retrieved from
http://www.legislation.gov.uk/ukpga/1935/2/pdfs/ukpga_19350002_en.pdf

Punjab Town Improvement Act 1922 retrieved from
http://lgpunjab.gov.in/upload/documentation/5a574fc87caaaPunjab%20Tow
n%20Improvement%20Act%201922.pdf

Cantonments Ordinance 1924 http://lcb.gov.pk/assets/media/cantonments-
act-1924.pdf

India Act of 1935 retrieved from
http://www.legislation.gov.uk/ukpga/1935/2/pdfs/ukpga_19350002_en.pdf

Land Acquisition Act 1973 retrieved from
http://nasirlawsite.com/laws/palha.htm

Punjab Development of Cities Act 1976 retrieved from
https://www.iucn.org/sites/dev/files/import/downloads/the_punjab_developm
ent_of_cities_act__1976.pdf

Punjab Local Government Ordinance 1979 retrieved from
https://openlibrary.org/account/login?redir=/works/OL4427040W/The_Punjab
_Local_Government_Ordinance_1979

Pakistan National Conservation Strategy 1992 retrieved from
https://www.sdpi.org/publications/files/P3-
The%20Pakistan%20National%20Conservation%20Strategy.pdf

The Pakistan Environmental Protection Act 1997 retrieved from
https://www.elaw.org/system/files/Law-PEPA-1997.pdf

IEE/EIA Regulations, 2000 retrieved from
http://extwprlegs1.fao.org/docs/pdf/pak115824.pdf

Punjab Local Government Ordinance 2001 retrieved from
http://wbgfiles.worldbank.org/documents/hdn/ed/saber/supporting_doc/SAR/
Finance/Pakistan_Punjab/Punjab%20Pakistan%20Local%20Government%2
0Ordinance%202001.pdf

Punjab Commercialisation Policy 2004 retrieved from
https://www.scribd.com/doc/72479768/Punjab-Local-Government-
Commercialization-Rules-2004

Punjab Environmental Protection (Amendment) Act, 2012 retrieved from
https://epd.punjab.gov.pk/system/files/pepa_2012.pdf

A Lahore Canal Heritage Act 2013 retrieved from
http://punjablaws.gov.pk/laws/2539.html

Punjab Land Use (Classification, Reclassification and Redevelopment)
Rules retrieved from http://mcsaraialamgir.lgpunjab.org.pk/Download-
files/Punjab_Land_Use_%20Rules_%202009.PDF

PHA Act 2012 retrieved from http://punjablaws.gov.pk/laws/2511.html

Integrated Master Plan for Lahore-2021 Volume I,II,III. Lahore retrieved from
http://www.urbanunit.gov.pk/Upload/Photos/99.pdf

Reports

Pakistan strategic country environmental assessment. South Asia Region,
World Bank. Available at:
http://documents.worldbank.org/curated/en/132221468087836074/Ma
in-report

Nature nearby: accessible natural greenspace guidance. *Natural England:
Peterborough.* Available at:
http://www.ukmaburbanforum.co.uk/docunents/other/nature_nearby.p
df

*Park And Green Space Self Assessment Guide: A Guide to the Self
Assessment of the Quality of your Parks and Green Spaces Using the
Green Flag Award Criteria.* Green Flag Award Scheme Wigan.
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