Understanding Stakeholders' Perceptions of Current and Future Park Management Practices

By Jinvo Nam

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Department of Landscape
The University of Sheffield

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Abstract

Today, there is increasing recognition of the importance of urban green space for our health and wellbeing. However, funding and budgets to manage urban parks are under threat in the UK and subject to significant reductions. These difficulties are being addressed through innovative practices which include community food growing, urban park plantings and income generation models, among others. Such practices reflect a shift in responsibility for park management involving multiple stakeholders who share responsibility.

However, we know little about the perceptions of stakeholders, users and residents in relation to these different landscape management practices. How acceptable and feasible are such innovative practices in urban parks? What effect might their introduction have on users and their propensity to spend time in urban parks? The aim of this research is therefore to understand stakeholders' perceptions of current and future park management practices by focusing on six urban parks in the city of Sheffield to explore their acceptability. This research explores different landscape management practices by examining stakeholders' perceptions via semi-structured interviews (local authority stakeholders, Friends/ community groups, consultants and academics), focus group (park officers and managers) and household questionnaires (users and local residents). The sites are selected according to indicators of deprivation, urban park type and size, involvement of Friends of Parks groups or community groups, and geographical spread across the city.

The findings suggest that socio-economic neighbourhood characteristics affect residents' perceptions of acceptability and feasibility of park management practices. Funding pressures and a lack of workforce to manage parks are significant factors for community groups and professionals, among other factors.

This research proposes that the place-keeping normative concept could be used to better understand park management contexts, allowing recommendations to be made for better park management in the city of Sheffield and the study sites.

This research contributes valuable knowledge to our existing understanding of park management practices in an era of austerity. It is hoped that this will provide the foundation for further research focused on cities and urban parks in the future.

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Chapter One

Introduction

Chapter One - Introduction

Emerging urbanisation signifies that over 54% of the world's population in 2016 lives in urban areas which will be rising to a projected 60% by 2030 (United Nations, 2016). This has led to increasing pressure on land and insufficient provision of green spaces in many cities and towns (Bertram and Rehdanz, 2014). This can bring a disconnection between nature and people in green spaces, negatively influencing urban residents' mental and physical health (DEFRA, 2011; HM Partnerships, 2017). As such, this pressure on urban spaces points to a need for maximising the benefits from existing green spaces. One way to capture the benefits of urban natural resources has been identified as green spaces in cities (Clavin, 2011; Permaculture Research Institute, 2017) which can also help protect and safeguard green spaces including urban parks against expanding urbanisation (Bullivant, 2012). As wellbeing and health research grows in its focus on an accessible and important way of connecting with well-managed urban public spaces and parks to play a significant role in promoting individual well-being (Newton, 2007; Tzoulas *et al*., 2007; Beck, 2009), mental and physical health (CABE Space, 2003 and 2004), reducing vandalism (CABE Space, 2004), recreation (Lovell and Taylor, 2013) and contribute positive economic and environmental values to our towns and cities (CABE Space, 2009). Regular upkeep of landscape is emphasised so that it can guide and harmonise changes which can also contribute social, economic and environmental processes (Council of Europe, 2000). However, there is evidence that, overall, the condition of green spaces has been declining since the mid-1970s in the UK (Department of Transport, Local Government and the Regions (DTLR, 2002)). Funding cuts constitute a major reason for the declining standards of green spaces (Barber, 2005, p. 29). From the perceived halcyon days of the 'Victorian era', park management has been adversely affected during the 20th century by funding cuts, post-war in the 1940s, the 1970s-1980s and again from 2010. Reflecting these changes, this research focuses on the effects of the funding cuts up to 2015.

The New Labour and Conservative/Liberal Democrat Coalition Governments from 1997 to 2017 adopted a range of policy and strategy visions which highlighted the importance of stakeholders' engagement, in particular community involvement to help share the responsibility of local authorities for green spaces and park management. Such policy contexts have paved the way for alternative and innovative management models based on increased community

involvement such as community-led long-term stewardship (ODPM, 2003) and The Community Ownership and Management of Assets (COMA) Programme (DCLG, 2015). In the context of austerity and the cuts to local authority budgets, while different management models are being explored and put into practices.

Different landscape practices (community food growing, urban park plantings and income generation models) are examined as they reflected recent interests and demands on park management practice. This research reflects the current park management contexts which are underpinned by financial constraints, an emphasis on community involvement and people's interest. In this way, the research focuses on three park management practices: the pursuit of low-cost interventions in relation to plantings and different approaches to income generation in an era of austerity, and community food growing. These are all selected for their potential approaches as an alternative to traditional park management to keep minimum quality standards of parks to permit green spaces to continue providing social, environmental and health benefits. In this way, ongoing urbanisation pressures on urban land use encourage alternative spaces for these potential park management practices in different forms, such as parks (Plymouth City Council, 2012). Therefore, this thesis aims to identify how acceptable and feasible are these practices in the park setting in the city of Sheffield according to different stakeholders. The following sections describes the need for this research and outlines the methods.

1.1 Understanding park management contexts and practices

1.1.1 Policy changes and declining standards and funding cut in park management

Policy regarding funding and budget cuts have brought about changes which have negatively affected all public services (Wilks, 1997). However, the changes were more detrimental on park management service as a non-statutory service than other statutory services (Weightman, 2013), meaning that there is more pressure on non-statutory services to raise money. Along with financial cuts, others change such as Compulsory Competitive Tendering (CCT) have also caused the decline of standards of parks, resulting in loss of skill and on-site staff (Jones, 2000; Barber, 2005). Accordingly, there was a need to address the severe decline of urban parks at the

end of the 1990s in the UK where the 2001 Public Park Assessment revealed that the condition of 39% of all parks and open spaces was reported to be declining (Urban Park Forum, 2001). The declining standards of urban parks had been recognised earlier within policy contexts by, for example, City Park Life (Greenhalgh and Worpole, 1995, p.3), the Urban Task Force Report (1999), DETR (1999) and ODPM (2000). However, financial reduction continued: for example, annual revenue expenditure for 1979/80 compared to the 2001 annual revenue expenditure reveals a deficit of £126 million a year (Urban Park Forum, 2001). Public policy facilitated local authority funding and budget cuts, for instance, The Local Government Act 1988 introduced Compulsory Competitive Tendering (CCT) for a range of local authority functions including parks maintenance. The reductions in funding for urban parks had negative consequences for them: for example, loss of on-site staff, increasing vandalism, reducing horticultural areas, increasing perceptions of fear and neglected parks (Woudstra and Fieldhouse, 2000, p.117; Urban Park Forum, 2001: Barber, 2005, p.31: Layton-Jones, 2014). However, according to a survey of the State of the UK's Public Parks conducted by the Heritage Lottery Fund in 2016, 95% of park managers reported that budget cuts would continue over the next three years. Therefore, to address these difficulties, along with an understanding of policy changes, innovative management practices are being explored which are necessarily required to be cost-effective (CLGC, 2017).

1.1.2 Park management models

To make sense of park management in practice, De Magalhães and Carmona (2009) provide a framework of different management models. Their 'state-centred model' describes the typical starting point for public spaces in which a local authority takes responsibility for delivering and maintaining the place, possibly with minimal external resources (De Magalhães and Carmona, 2009). While this has traditionally been the case, stakeholder participation has become increasingly popular, marking a shift from past decision-making in which only practitioners or landowners took part (Azadi *et al*., 2011) which is argued to result in a positive effect and lead to better outcomes for the local population (Smith, 2009). De Magalhães and Carmona describe this as the 'user-centred model' to explain the involvement of community groups. There have

long been organised community groups involved in green space management in England, and the 'user-centred model' currently fits well with national and local government attempts to devolve responsibility and resources from the state (DCLG, 2013; Smith *et al*., 2014; Mathers *et al*., 2015). For example, because of a reduction in their parks budget of over 90%, Newcastle City Council is currently handing over the management of all its parks (and allotments) to a non-governmental, charitable trust (Newcastle City Council, 2018). This is also made manifest in calls for funding and awards, where community involvement is now a prerequisite (as discussed earlier). For example, standards for green spaces to be awarded a Green Flag stipulate that local communities must be involved in the decision-making and management process (Speller and Ravenscroft, 2005). Community-based organisations with specific interests in the management of open spaces often call themselves 'Friends of Parks' groups (also known as park user groups) (Smith *et al*., 2014). The involvement of such groups arguably reflects a closer representation of the perceptions and interests of the general public/ residents through non-governmental organisations and professionals (Forbes *et al*., 1997; Hofmann *et al*., 2012). It is necessary that users' perceptions should be reflected in the fundamental aims of managing parks where the aim can potentially be to improve people's mental and physical quality of life. It can be difficult to meet users' preferences for park management because use can differ according to demographic characteristics such as age, gender, past experience and specific individual interests (Rohde *et al*., 1997, p.325-326; Roovers *et al*., 2002). The representativeness of the members of Friends Groups is called into question, however, when they tend to be retired, white and have interests that don't necessarily reflect those of all park users (Mathers *et al*., 2014). This points to a wider issue of who has the capacity to volunteer which will be returned to later. De Magalhães and Carmona's final model is the 'market-centred model' where management tasks are devolved to private entities. This is discussed in more detail elsewhere (Dempsey *et al*., 2016) and is in use in some English urban parks. For example, Southwark Borough Council in London has contracted out many of its parks management tasks since 1996. Many English parks already have private traders working within them through concession agreements, for example with ice cream traders and cafés. This is a form of income generation from parks which, it can be argued, 'fits' within this market-centred model. There is a spectrum of activities that can generate income from the parks and depend on the nature of the park itself, ranging from e.g. car parking, tennis court hire, and hiring space for events. In some

places, this can be the main source of income for a park. For example, Potters Field Park in London is in a high-profile location on the south bank of the River Thames and generates income from hire days throughout the year of its space for events such as cultural festivals and filming locations for TV and film (Dempsey, 2018).

Collaboration in decision-making is also stressed in the concept of 'MSI (Multi-Stakeholder Involvement)' which is defined as a harmonic collaboration among actors which can be influenced by urban green space development to pursue perceived goals (Azadi *et al*., 2011). De Magalhães and Carmona (2009) conclude that the inter-relationship between the state-, market- and user-centred models could contribute to maximising the advantages of effective public space management. This research uses this theoretical framework of public space management to begin an examination of such potential park management practices within the urban park context, which involves an identification of the stakeholders involved. The stakeholders involved in the practices tend to be community groups, local authority and users (DCLG, 2012b).

1.1.3 Introducing innovative park management practices

A number of landscape management practices have been proposed and introduced in practice to secure better landscapes and address social problems. Such practices are argued to contribute to increasing social cohesion, environmental enhancement and people's health (Harnik and Welle, 2009; Nowak, 1993; Jackson, 2003; Jennings *et al*., 2016), and the thesis will outline how and why such practices are necessarily prioritised, based on an understanding of raising park management issues, which are the financial crisis, policy context and community involvement and their impacts on the features of park management practices. This thesis examines the driving changes of the selected practices in details: community food growing, urban park plantings and income generation models.

Food growing-based practices such as allotments and community garden in urban areas have been promoted in interventions that can contribute to food security, health and sustainable community development (Barron, 2017). Along with the popularity of allotments referring to long waiting lists (DCLG, 2012a) and its long history since Anglo-Saxon times (The National

Allotment Society (NAS), 2017), active use of allotments has been handed over in part from Dig for Victory campaign in a wide range of sites across Britain (Ginn, 2012) which reflects the financial crisis of the time (Evans, 2011). As another food growing-based practice, community gardens have been claimed to contribute to strong community engagement and cohesion (Stocker and Barnett, 1998), learning behaviours (Clavin, 2011) and providing food, energy and shelter in a sustainable way (Mollison, 1990, p. 4). Successful community gardening such as the 'Incredible Edible Project' in Todmorden, UK, have delivered the benefits of shared participation in food growing in public spaces (Thompson, 2012). It is argued that food growing can also take place in parks where there is an opportunity to grow fruit (e.g. bushes and trees) as well as to designate areas of land for food growing (Kinnaird, 2012; ACRE, 2012). Therefore, considering a demand for allotments and community-led gardening emerging from such successful examples, CFG may be applicable in current park management contexts which are under constrained economic circumstances. For this reason, food growing as a relevant landscape management practice is of interest in this research.

Many parts of parks are covered with different types of vegetation, contributing positively to physical, social and mental well-being (Shanahan *et al*., 2015) as well as ecosystem diversity (Ferrer-Sanchez and Rodriguez-Estrella, 2016), natural habitats and biodiversity (Sousa-Silva et a., 2014). However, the threat to local authority budgets has resulted in a reduction in maintenance of parks including fewer formal horticultural plantings (Wilson and Hughes, 2011; Barber, 2005, p.30). Formal bedding plantings have historically been recorded since Roman Britain (1st century AD) and were prevalent in parks from the Victorian era times. Since the Georgian period (1714-1830), *naturalistic plantings* have been introduced in green spaces and parks (Shoemaker, 2001). The early 2010s saw structural complexity in planting becoming more popular with an underlining matrix and scatter plants by Oudolf and Kingsbury (2005 and 2013). In 2012, large-scale meadows with wildflowers using perennial plants gained widespread in London's Publicity Olympic Park. This planting design reflects contemporary planting designs - in which planting is recognisably inspired by a meadow with wildflower habitats - which have been driving changes in planting patterns from those with a dominant horticultural influence to those with a strong, dominant, ecological influence (Dunnett and Kingsbury, 2004; Dunnett and Hitchmough, 2004). The Urban Park Project, which is based on reducing grass cutting, conducted by Sheffield city in 2013 has the objective of enhancing ecological efficiency

whilst being low-maintenance. However, the roles of vegetation are often associated with people's perceptions because characteristics of vegetation vary in colour (Kendal *et al*., 2012a; (Hoyle *et al*., 2017b) and leaf texture (Williams and Cary, 2002) as well as the diversity of vegetation (Fuller *et al*., 2007). In addition, it is argued from professional perceptions of whether or not there are such naturalistic plantings that contribute to a better planting management process (Özgüner *et al*., 2007). However, we do not know about different stakeholders' attitudes towards different plantings.

There is a need for sustainable park management driven by significant funding cuts (Policy Exchange, 2014). This pressure from continuing funding cuts turns to focus on income-generating models in park management contexts. Policy contexts and consultancy projects (such as CABE Space, 2006, NESTA, 2013, Policy Exchange, 2014 and Layton-Jones, 2016) have proposed a number of traditional and innovative income-generation models for park management, for examples, from taxation as the longest standing approach to income-generation (Hollister, 1962; Saul, 2000; Lawson, 2001; Dowell, 2013) to private or business-oriented income generation such as the Housing Development and Community Infrastructure Levy and Business Improvement District (BID). However, such income generation models such as entry fees, car parking charges and hiring fees e.g.) sports and venues could be an argumentative issue between local authority and park users in the UK because of the public nature of urban parks. Funding opportunities derived from business and commercial such as cafés, restaurants, events and festivals may require community involvement to organise and manage. Other innovative income generation models proposed include subscription, sponsorship, business tax, development tax and endowments have been part of an ongoing process in the UK (Layton-Jones, 2016). These models are mostly based on additional money from different sources, both private and public, as well as users, forming an alternative park management practice. However, there have been no studies examining the acceptability and feasibility of this in parks, and this study addresses this gap in knowledge.

1.2 Research aim and objectives

The previous sections have established the range of features of the park management contexts that are cited both in UK policy contexts and theory. It has also been highlighted that the features are considered to be significant at city and local levels, in policy and theory as well as practice. The overall aim of the research is therefore as follows:

• To understand stakeholders' perceptions of current and future park management practices.

The research objectives are set out in two categories: theory and practice. The aim overall is addressed through three objectives. The first objective is to be determined by literature reviews and the second two are to be examined by a combination of quantitative and qualitative research:

• To explore features of urban park management and practices in relation to policy contexts and stakeholder involvement in the UK.

• To assess the acceptability and feasibility of park management practices according to different stakeholders in different socio-economic contexts in Sheffield.

• To make recommendations for effective park management at Sheffield city scale and the study sites.

1.3 Examining park management practices in Sheffield

The previous sections outlined the changes driving park management and their association with stakeholders. To examine acceptability and feasibility of potential park management practices in park settings, based on the associations between features which are identified by theoretical findings, this research requires study sites to provide empirical evidence.

Sheffield is selected as the study city which contains a varied range of landscapes, and a substantial green space network and an extensive system of publicly provided spaces (Beer, 2005). Sheffield is described as one of England's greenest cities covered with widely distributed green spaces (45% of Sheffield) (SCC, 2014) and with a categorisation of parks of three different types: city, district and local parks with 83 parks in total (SCC, 2000). According to

the English indices of deprivation undertaken by DCLG (2015b), Sheffield is ranked as the 60th most deprived local authority in England, out of a total of 326. It is clear that the socio-economic characteristics of Sheffield vary: in general, the south and south-western areas have lower levels of deprivation than across other areas. This reflects the uneven spatial distribution of access to green spaces that is found across socio-economic groups in English cities (Combera *et al*., 2008). According to examinations of socio-economic characteristics on users' perceptions and activities of park and green spaces, users from lower socio-economic status are more likely to have negative perceptions of parks or green spaces (Jones *et al*., 2009), engage in fewer physical activities (Kavanagh *et al*., 2005; Kristensen *et al*., 2006; Macintyre *et al*., 2008) and have access to inferior provision (Estabrooks *et al*., 2003) than more affluent residents. This research, therefore, tests the associations between residents' perceptions and different features concerning park use and current and potential park management practices based on different socio-economic contexts.

Different park types have variety in features of management and maintenance. The objective of categorisation of sites is to determine a readily understood and accepted framework to guide how sites could be managed, maintained and developed in the future and identify key strategic sites for future priority action and resource allocation in a climate of service and budgetary constraint (SCC, 2000). In the context of park management in Sheffield, it is assumed that a disparity may be found between park types. In fact, 70% of Sheffield's city parks were awarded the national green spaces 'Green Flag Award (GFA)' as measuring standard of green spaces and parks management. By contrast, only 10% of Sheffield's district parks were awarded the GFA. It is viewed that city parks are better managed than district parks in general. In addition, city parks have a higher profile as destination parks given they have potentially wider numbers of users than district parks, meaning that concerns of park management are concentrated on city parks rather than district parks. Importantly, there has been increasing gaps between parks in relation to standards of parks indicating that well-managed parks are getting better and poorly-managed parks are getting worse (Urban Park Forum, 2001). Furthermore, a lot of urban green spaces and parks are inadequately managed, resulting in a loss of green space quality (Perkins, 2010; Burton *et al*., 2014). To contribute to better park management as natural and recreational spaces for local residents, this research focuses on the features of Sheffield district parks.

As outlined in the previous sections, current/ ongoing policy contexts prioritise the encouragement of community groups in park management. However, we do not understand the extent of involvement of community groups and, crucially, the influence of their perceptions of park management practices. This research will reveal an understanding of the impact of community involvement on park management in Sheffield's district parks. Therefore, to explore acceptability and feasibility of potential park management practices in parks, six parks were selected in Sheffield according to the following criteria:

• Park type: district parks were selected as they were felt to be the most likely of park type for these potential management practices to apply as opposed to high-profile city parks and smaller local parks.

• Geographic location: parks located in different areas across the city in both deprived and less deprived areas were selected to reflect the significant differences in deprivation levels of people living in the east (generally more deprived) and west of Sheffield (generally more affluent) (DCLG, 2010; IMD, 2015).

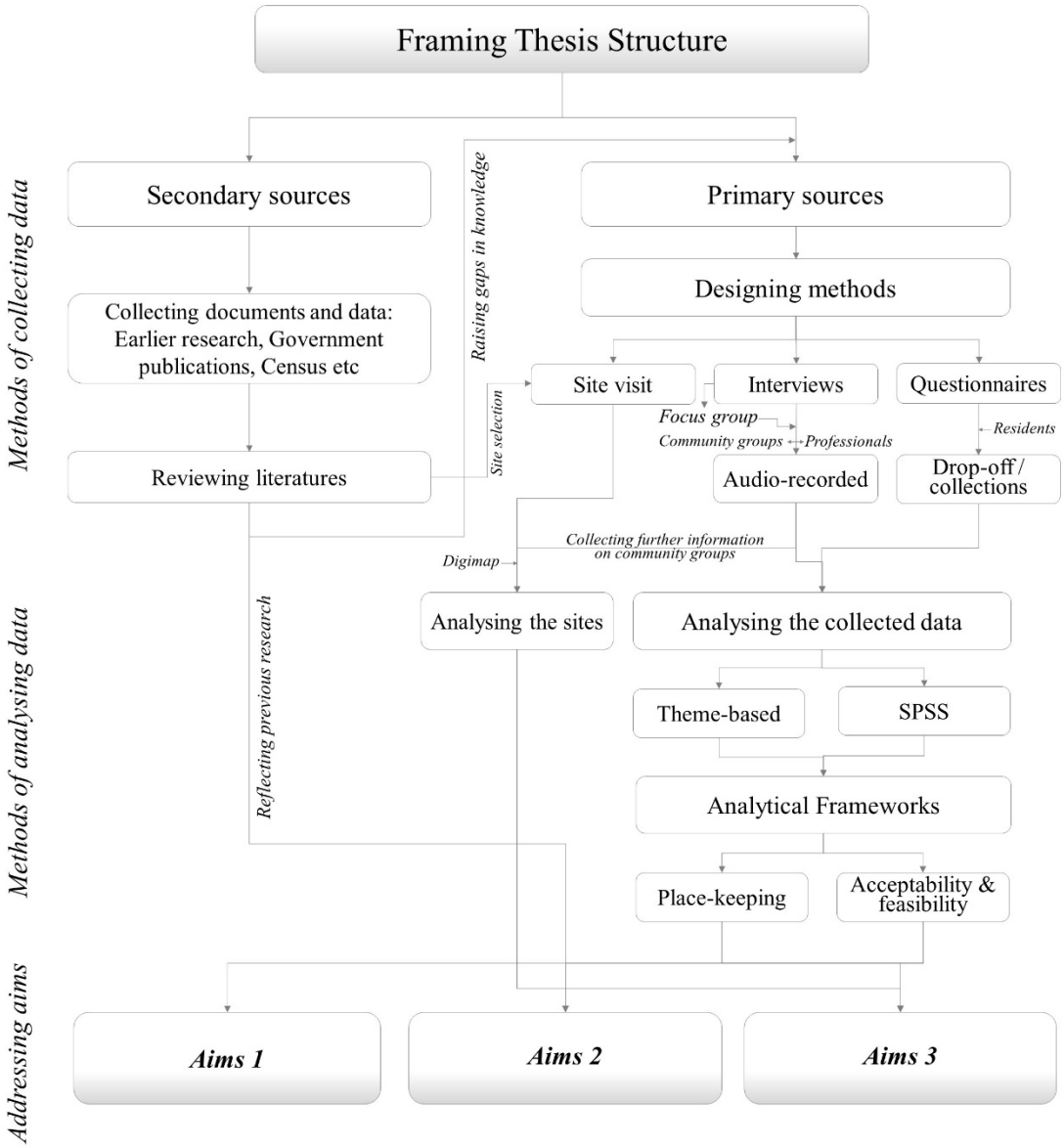
• Community group involvement: to ensure that multiple stakeholders who have an active interest in the overall management of the park could be consulted, parks were selected with an associated community group.

According to the criteria, six parks were selected as study sites: Parson Cross, Manor Fields, High Hazels, Richmond, Meersbrook Parks and Bolehill Recreation Ground.

1.4 Research approach

To achieve the research aim and objectives based on providing the most suitable set of methods and analyses, a multifaceted methodological approach is adopted for this research (See Figure 1.1).

Figure 1.1 Framing thesis structure



A detailed literature review explores the contexts driving changes in park management. This research adopts a combination of quantitative and qualitative methods on account of their widespread use in social sciences as a method of collecting rich data (Goodchild and Cole, 2001; Bryman, 2008).

Prior to the empirical investigation, a physical site survey was undertaken to understand the characteristics of the study sites based on socio-economic (English Indices of Deprivation) and geospatial data ('Digimap' produced by EDINA). The Indices of Deprivation are published every three years by the Department for Communities and Local Government (DCLG, 2015b).

They are designed to show comparative levels of multiple deprivations across England at a small area level and include income, employment, education, health and disability, skills and training, crime, barriers to housing and services and living environment. Overall, Sheffield ranks a little higher than the average at 84th (1=most deprived, 326=least deprived) in England. Considering the impacts of socio-economic contexts outlined in the previous section 1.3, site selection, therefore, aims to take into account the influence of socio-economic contexts on people's perceptions in relation to characteristics such as park types, geographical location and community involvement.

To examine perceptions between stakeholders, semi-structured interviews are conducted to explore the perceptions held by community groups and professionals currently involved in parks management. The interview is a well-used method of data collection to shed light on people's perceptions, meanings, definitions of situations and constructions of reality (Punch, 2014, p 144). The interview questions are structured around interviewees' perceptions of three practices as a potential park management practice and probed how acceptable and feasible these stakeholders considered the potential practices to be within the management of their local park. Representatives from the six community groups are interviewed. Five further interviews are carried out with other stakeholders involved in parks management with different affiliations. They are two local authority officers (coded as ProLA-1 and 2), two University academics (ProAC-1 and 2) and a prominent third sector social enterprise involved in urban land management (ProSE). Because of difficulties in interviewing them individually because of how busy they are, a focus group interview is conducted with the six local authority park managers for the parks and their line manager (ProLA-Ms).

A household questionnaire survey is employed in this research because it is an effective method of asking a large number of people in a given geographical area to identify their perceptions of current and future park management practices in their parks and obtain other household profile data.

For the interview data, thematic analysis is conducted to better understand the varying perceptions held by stakeholders involved in parks management. Thematic analysis is a commonly used approach to qualitative data analysis, to identify, analyse and report the themes within data (Donovan and Sanders, 2005). In this way, the data is systematically searched for patterns to provide an illuminating description of the phenomena under scrutiny (Tesch, 1990)

to glean how acceptable and feasible the potential park management practices could be in the six Sheffield parks. This research follows thematic analysis as set out by NatCen (NatCen, 2012) in their 'Case and Theme Based Approach' (CTBA) to allow for looking down (thematic analysis), looking across (case analysis) and combining both to explore explanations and patterns in responses.

The household questionnaire survey data is analysed using Statistical Package for the Social Sciences (SPSS), to conduct a range of statistical tests including one-way ANOVA, Independent samples t-test and correlations. The data collected is analysed using a wide range of statistical tests to draw the findings in the acceptability and feasibility of different residents' perceptions of park management practices.

To examine the acceptability and feasibility of potential park management practices, it is necessary to develop these two broad concepts to elicit indicators, 'acceptability and feasibility'.

A review of the relatively small number of studies which examine acceptability and feasibility, show that definitions are often not provided (Vandelanotte and De Bourdeaudhuij, 2003; Plaete *et al*., 2015; Lattie *et al*., 2017). and have not been applied to the context of urban landscape management. The work by Johnson *et al*. (2014) was adapted who conceptualise the meaning of acceptability and feasibility in their 'Evaluating Strategy' for application in different contexts. According to Johnson *et al*., (2014), acceptability is defined as whether the expected performance outcomes of a proposed strategy meet the expectations of stakeholders, for instance, positiveness and negativeness, reaction to proposed strategy, public concern and benefits to stakeholders. Feasibility is also identified as the need to collect data on people's skills, knowledge and experience as well as funding requirements (ibid.)

Analytical frameworks underline transparency in data analysis and the links between the stages of analysis (Pope *et al*., 2000). Providing an analytical framework in the management of public spaces (De Magalhães and Carmona, 2009) and a holistic and comprehensive perspective on policy and its evolvement in environmental domain (Arts *et al*., 2006) is a method of combining or contextualising contributions of varying management models and dimensions. Frameworks of different concepts explore policy, governance, partnerships and evaluation separately, but green space management involves complex (Bulkeley, 2010; MacKenzie, 2017). It is indicated that green space management in practice is necessarily objected to holistic approaches comprising the key frameworks above. Hence, to address this, this research adapts the holistic

framework approach of 'place-keeping' (Dempsey and Burton, 2012). This provides a framework for understanding long term environmental, social and economic benefits for future generations in innovative urban management contexts by encompassing six dimensions: (1) Policy, (2) Governance, (3) Funding, (4) Partnership, (5) Maintenance and (6) Evaluation (Dempsey and Burton, 2012). This research will adapt the place-keeping analytical framework to provide an examination of park management practices. In these ways, these research approaches will address the aims and objectives of this research.

1.5 Thesis structure

This thesis is organised into nine chapters. Following this introductory chapter, Chapter Two and Three form the literature review which is the foundation for this research. Chapter Two provides an examination of the features of urban landscape management contexts, focusing on parks and green spaces. Policy contexts in the UK are examined, and the discussion focuses on those features claimed to contribute to an understanding of stakeholders' perceptions of park management practices. Chapter Three provides rationales and further review of selected potential park management practices. These chapters address the research aim and objectives focusing on determining the features of urban park management and practices, particularly on policy and a critical review of stakeholder involvement in landscape management practices.

Chapter Four consists of a discussion of the research methodology, outlining how the empirical research is to be undertaken. The methods by which the data is collected are highlighted in this chapter. The reasons for selecting a multifaceted investigation employing a combination of quantitative and qualitative methods of data collection and analysis are presented.

Chapter Five presents the characteristics of the study sites based on a physical site survey. A number of analyses of historical changes and park management contexts are carried out.

Chapter Six details the characteristics of the sample under scrutiny and the study sites. Quantitative and qualitative data are provided about the characteristics of the random sample from the household questionnaire survey. This chapter provides the findings on features of park use and perceptions of current park management based on socio-economic characteristics. The

data from interviews provides findings on the perceptions of community groups and professionals. Descriptive findings provide a broad overview of the sample and the characteristics of the study sites. The data presented in this chapter is therefore relevant to the household and the individual respondent levels.

Chapter Seven addresses one of the research objectives: to assess the acceptability and feasibility of park management practices according to different socio-economic contexts based on the perceptions of various stakeholders. The chapter presents the data and identifies evidence of an association between stakeholders' perceptions and park management practices. This analysis is based on the samples of the household questionnaire survey and interviews.

Chapter Eight discusses the implications of the findings and makes recommendations for effective park management at the city (Sheffield) and local (the study sites) scales, based on the findings from analysing all the data collected in this research and place-keeping analytical frameworks.

The final chapter, Chapter Nine, provides the conclusion of the thesis and examines the contribution that this research makes to theory and knowledge. In addition to this, the implications of the research findings for policy and practices in the UK are set out and considered. Finally, the chapter provides the limitations which this research acknowledges and considers the scope for further study.

Chapter Two

The changing context of urban park management

2.1 Introduction

The main aim of this chapter is to explore the contexts of urban park management and to present the analytical framework. This will then be adapted, in the context of this research, to take a holistic approach to long-term management, with particular reference to policy changes, stakeholder involvement and funding which emerge from the literature as important factors. The relevant literature is examined through a discussion broadly led by recent developments in urban landscape management, both in research and practice. A wide range of sources has been used to collect and review the related literature from both academia and practice. This chapter deals with the extensive scope of urban landscape management, then with detailed focus on park management contexts. The UK policy context will be analysed through a review of strategy, guidance, plans and other relevant sources in order to understand the development of parks management in England, both at national and city scales. This chapter will provide the analytical framework for the research: a framework based on place-keeping as a theory of long-term green space management, encompassing six dimensions: policy, governance, funding, partnership, evaluation and maintenance. Finally, the importance of stakeholder involvement will also be explored to address the involvement of non-public sector actors within park management.

2.2 Aspects of landscape management

2.2.1 Defining landscape management and maintenance

Landscape management constitutes a complex and wide range of activities based on the principle of involving practitioners and users to manage landscape resources (Hitchmough, 1994, p.19). Fundamentally, the definition and categories of landscape management relate to actions of development, planning and maintenance (Jedicke, 1996; Randrup and Persson, 2009; Jansson and Lindgren, 2012). Some expanded definitions of landscape management include the totality of all measures for safeguarding (Jedicke, 1996), marketing and environmental

education (Randrup and Persson, 2009) and long-term planning (Hitchmough, 1994; Codham, 1997). However, since the 1980s when political change indirectly led to the decline in landscape management budgets (which will be discussed later on), the importance of 'funding' has been highlighted in landscape management contexts. To expand, Naidoo *et al*. (2006), Naidoo and Ricketts (2006), Dempsey and Burton (2012) and Grunewald *et al.*, (2014) state that, along with funding and budget cuts and the negative impacts this has on the quality of green spaces, all landscape management activities have more recently been associated with changing financial situations and the generation of income. Linked to this contextualisation is the involvement of stakeholders (De Magalhães and Carmona, 2009), whose actions towards generating income for landscape management, contribute to the shaping of the overall quality of landscape management (ODPM, 2004). Accordingly, income for park management is widely generated by different stakeholders e.g.) private contractors, in-house providers, public-private ventures, local social enterprises, third sector organisations such as trusts and community groups (Dempsey *et al.*, 2016), in particular, the contribution of community groups to maintaining parks.

The term 'landscape management' in the context of parks and green spaces has close associations with the term 'maintenance': Welch (1991) describes how traditional park management is concerned with ensuring appropriate and high standards of maintenance. In practice, maintenance includes weeding, hedge cutting, mowing, etc., but also the organisation of outsourcing procedures, producing maintenance quality descriptions, cleaning and tidying and snow clearing (Randrup and Persson, 2009) all of which are delivered using a range of land management techniques and day-to-day operational approach (Welch, 1991; Barber, 2005). According to Hitchmough (1994), landscape management applies to the bigger picture, whilst landscape maintenance tends to focus on specific issues. The definition of maintenance therefore, commonly refers to regular, routine and often physical activities.

Both management and maintenance are considered important because in contemporary landscape management contexts, arguments have been put forward which consider the meanings of landscape management to encompass a broader range of inter-related dimensions. For example, '*place-keeping*' is a holistic concept which describes the management of public spaces as a long-term process, encompassing dimensions of long-term open space management - policy, governance, funding, partnerships, evaluation and maintenance (Dempsey and Burton, 2012). These dimensions are inter-related and can be applied to a number of different scales such as

site, neighbourhood, city and region (ibid). Furthermore, the concept of place-keeping as long-term and responsive management strategy can help ensure that the social, economic and environmental qualities and benefits a place brings can be enjoyed by present and future generations (Dempsey, *et al.*, 2014). Place-keeping and its dimensions also address the limitations of frameworks to understand changes of green space management which mostly underline policy e.g. Policy Arrangement Approach (PAA) (Arts *et al.*, 2006), policy & governance (Mattijssen *et al.*, 2018) and evaluation e.g. Green Flag Award (Greenhalgh and Parsons, 2004). The rationale behind this research is that landscape management is conceptualised within an understanding of place-keeping which, in contrast to other frameworks, allows for the understanding of different aspects of both current and future initiatives. This will be further discussed in Section 2.5.3.

2.2.2 Understanding a well-managed landscape and its impacts

Urban green spaces are claimed to provide benefits for people's health and wellbeing (Tzoulas *et al.*, 2007). According to the literature, a number of benefits can be made manifest from well-managed spaces: for instance, providing physical and mental health benefits (CABE Space, 2004), which arise by encouraging people to walk more, play sport, or merely to enjoy a green and natural environment are described as ways of addressing obesity and ill-health, (CABE Space, 2003) reducing mental and physical health inequalities (Ward Thompson *et al.*, 2013; Mitchell *et al.*, 2015) as well as contributing to positive well-being (CABE Space, 2009).

In environmental contexts, well-managed parks and green spaces can play a crucial role in improving the climate resilience of cities, reducing summer heat and decreasing the risk of urban flooding (National Trust, 2016). Economically, CABE Space (2003) concludes that well-managed public spaces attract customers, employees, and services and can also have a positive impact on the price of nearby domestic properties. Well-managed parks play a significant role in contributing towards the economic and environmental value of our towns and cities (CABE Space, 2009). This includes providing opportunities for regular exercise and access to nature, saving money by using a free public service, educational benefits and contributing to children's development (CABE Space, 2009a).

Elsewhere, CABE Space (2004) argued that the social benefits of well-managed and maintained urban green spaces include making users feel safer from vandalism and antisocial behaviour. The meaning of 'well-managed landscape' emphasises human perceptions and actions. The activities or actions required to achieve a well-managed landscape can positively influence users' positive perceptions of well-managed landscapes which in turn can contribute positively towards people's physical and mental health (Landscape Institute, 2013).

In practice, the meaning of 'well-managed' can be linked to cleanliness while 'well-maintained' relates equally to the condition of space as well as the maintenance services provided in that space (CABE Space, 2009a; Dempsey and Burton, 2012). Successful, urban landscape management is argued to be based upon a holistic and pragmatic management view of the world and involves 'doing'; primarily, intellectual activities such as planning, no matter how valuable, must be a means to an end rather than becoming ends in themselves (Hitchmough, 1994, p.2). This expanded definition coincides with understandings of a well-managed landscape as something which is long-term and strategically managed (Miller, 1997; Randrup and Persson, 2009; Dempsey and Burton, 2012).

Conversely, these benefits could be limited to well-managed green spaces and parks. Unmanaged or derelict urban open spaces are found to create or exacerbate anti-social behaviour including graffiti and vandalism (European Commission, 2010). The 'Broken Windows Theory', an academic theory developed by Wilson and Kelling (1982) that used broken windows as a metaphor for disorder within neighbourhoods, helps explain these effects and emphasises the necessity of management. Poor quality green spaces in urban areas are likely to further decrease the use and enjoyment of those green spaces and may have negative repercussions on people's physical health and mental well-being (Newton, 2007). For example, abandoned or insufficient management can again cause more severe anti-social and criminal behaviour (Wilson and Kelling, 1982) as well as a profound loss of safe, good quality green space (Burton *et al.*, 2014; Perkins, 2010).

It is clear that there is considerable evidence to support the claims that well-managed landscapes and green spaces are more likely to have positive associations with people's quality of life, while poorly managed or unmanaged landscapes are more likely to bring negative impacts.

2.2.3 Green space management and the socio-economic context

Socio-economically, there are challenges because investment made in places does not mean that people's behaviour or perceptions change. Political achievement often has been measured in accordance with its impact on places (e.g. investment in infrastructure improvement) rather than directly on people since it uses evidence of the direction and scale of socio-economic change in deprived neighbourhoods (DCLG, 2009). In contrast, people perceptions of places can be affected by socio-economic characteristics of each individual place. Policy approaches to green space management demonstrate area-based initiatives (Dekker and Van Kempen, 2004; Carpenter, 2006). Further, funding streams also show similar area-based approaches to green space management in the UK, particularly in disadvantaged areas (Shaw *et al.*, 2004; Amion Consulting, 2010; Lupton *et al.,* 2013). This means that the characteristics of places play an important role in understanding people's perceptions of green spaces, highlighting the importance of socio-economic characteristics of urban residents in recognising the benefits derived from urban green space (Lin *et al.*, 2014; Shanahan *et al.*, 2014), because they have very often different demands (Escobedo *et al.*, 2011). However, distribution of the demand can be unequal, as a result of the impact of different socio-economic characteristics in green space use. This can result in less use of resources in green spaces (Estabrooks *et al.*, 2003; Abercrombie *et al.*, 2008; Moore *et al.*, 2008). In this way, residents in socially deprived areas may lose the opportunity for benefits through connections with poorer quality green spaces. There is therefore evidence of disparities between different socio-economic contexts in relation to use of green spaces.

Access to parks or green spaces can vary according to the socio-economic characteristics where poorer residents have fewer opportunitys for park use (Heynen *et al.*, 2006) and lower frequency of visits (Wilson *et al.*, 2004; Moore *et al.*, 2008; Dahmann *et al.*, 2010) than more affluent residents. Importantly, this association between unequal access and frequency of visit in disadvantaged areas is related to psychological perceptions (Jones *et al.*, 2009): for instance, in relation to a high frequencies of crime (Wilson *et al.*, 2004; Leslie *et al.*, 2010) and low perceived safety (Jones *et al.*, 2009; Leslie *et al.*, 2010; Cohen *et al.*, 2013), indicating that people living in more affluent areas are more likely to have positive perceptions about their local green space than people living in deprived areas (Cohen *et al.*, 2007). It is argued by

Moore et al. (2008) and Dahamann et al. (2010) that residents in higher income areas with good quality living conditions have access to green spaces and parks more than residents in lower income areas with poorer conditions. However, this is contested elsewhere, as Cohen *et al.,* (2013) argue that residents who experience a higher rate of poverty are more likely to visit parks than those who experience less. Perceptions of green space differ, depending on demographic characteristics, such as user/ non-user (Deshpande *et al.,* 2005; Giles-Corti *et al.,* 2005; McCormack *et al.,* 2010), gender (McCormack *et al.,* 2010; Peschardt *et al.,* 2012; Cohen *et al.,* 2013), age (McCormack *et al.,* 2010; Peschardt *et al.,* 2012; Cohen *et al.,* 2013; Zhang *et al.,* 2015; Zhang *et al.,* 2017), length of residence (Beyer *et al.,* 2014; Zhang *et al.,* 2015; Zhang *et al.,* 2017) and household composition (Coolen and Meesters, 2012; Gaube and Remesch, 2013; Houlden *et al.,* 2017). In park management contexts, people's perceptions need to be demonstrated in detail, in order to show the influence of socio-economic characteristics in reflecting their perceptions on the future provision of park management. Research which assessed users' perceptions of park management/ maintenance, park quality (Crawford *et al.,* 2008) and maintenance (Weiss *et al.,* 2011) including vegetation (Parsons and Daniel, 2002), species richness (Clarke *et al.,* 2013; van Heezik *et al.,* 2013) graffiti and litter (Cohen *et al.,* 2013) as well as cleanliness (Ives and Kelly, 2016) found associations with socio-economic characteristics, in which people living in less deprived areas had more positive perceptions than those living in more deprived areas. It is viewed that peoples' perceptions in less deprived areas, according to socio-economic characteristics, have positive associations with standards of park management.

Policy instruments relating to green spaces have often been enacted in deprived areas, which create potential challenges for the claimed benefits of stakeholder involvement. It is claimed that living in more deprived areas can negatively affect community activities (Estabrook *et al.,* 2003; Mitchell and Popham, 2008; Wilkerson *et al.,* 2018) and public participation (Ives *et al.,* 2017) than living in affluent areas. As a socio-economic index, deprivation covers a broad range of issues and refers to the unmet needs caused by a lack of resources of all kinds (DCLG, 2010b). The English Indices of Deprivation are published every three years by the Department for Communities and Local Government (DCLG, 2015) and are designed to show comparative levels of multiple deprivation across England at a local area. Factors include income, employment, health and disability, education, skills and training, barriers to housing and

services, crime and living environment. Understanding the influences of these socio-economic indicators can contribute to planning, provision and practices of park management (Pham *et al.*, 2012; Wilkerson *et al.,* 2018) and they should function as a key planning and management consideration (Cowling *et al.,* 2008; Lyytimaki and Sipila, 2009; Gómez-Baggethun and Barton, 2013). On the other hand, a lack of understanding of the impacts of socio-economic contexts can risk the quality and quantity of green space and similarly adversely affect the levels of equality in regard to benefits for people. Ultimately, this interpretation can affect people's health and well-being in relation to green space connection, which can result in decreasing access to green spaces, less frequency of visit and feelings of insecurity (Jones *et al.,* 2009; Leslie *et al.,* 2010; Cohen *et al.,* 2013).

2.3 The wider context of policy ideology and urban park management

2.3.1 Exploring policy ideology for public services, 1979-2015

Since the Conservative government of 1979-1997, Britain's economy and its impact on public service has been on a remarkable rollercoaster ride, one which has included two significant recessions (Wilks, 1997). Over the past forty years, political leadership has changed from Conservative (1979-1997), New Labour (1997-2010), and Conservative-Liberal Democrat coalition (2010-2015), bringing with it changing policy drivers. Each government has presented ambitious manifestos and policy instruments, resulting in differing approaches to public service provision (Table 2.1). However, underpinning these manifestos were ideologies which were macro-economic[1] (Conservative), communitarianism[2] in The New Labour and Big society in the Conservative-Liberal Democrat coalition.

[1] Macroeconomic policy making in the Conservative Party were used to target unemployment and underlying trend growth and target inflation (Wade, 2013).
[2] Communitarianism as a social philosophy emphasises the centrality of the individual, emphasizes the importance of society in articulating the good: their interest in communities (and moral dialogues within them), the historical transmission of values and mores, and the societal units that transmit and enforce values – such as the family, schools, and voluntary associations (including places of worship), which are all parts of communities (Etzioni, 2015).

Table 2.1 Summary of the manifestos of three British governments

Government	Core manifestos
Conservative (1979-1997)	1. **Health** of Britain's **economic** and **social life** 2. Genuine new **jobs** are created in an **expanding economy**. 3. **Parliament** and the **rule of law**. 4. **Family life**: housing, children's **education** and concentrating **welfare** 5. Britain's defences and work with allies to protect British interests in an increasingly threatening world.
New Labour (1997-2010)	1. **Industrial relations**: basic minimum rights for the individual 2. **Economic management**: global economy 3. **Education**: all-in schooling in classes to maximise their progress in individual subjects 4. **Health** policy: safeguard the basic principles of the NHS 5. **Crime**: personal responsibility and punishing crime 6. Democratic renewal of the country through **decentralisation**
Conservative-Liberal Democrat Coalition (2010-2015)	1. **Communities** and **local government**: promoting **decentralisation** and democratic engagement 2. **Crime** and **policing**: reforming the British criminal justice system 3. **Environment**, food and rural affairs: protecting the environment for future generations, making Britain's economy more environmentally sustainable, and improving the quality of life and well-being of British citizens. 4. **Equalities**: helping to build a fairer society. 5. **NHS**: supporting professional responsibility, deliver better value for money and create a healthier nation. 6. **Public health**: promoting public health, and encouraging behaviour change to help people live healthier lives 7. **Education**- schooling: reforming the school system to tackle educational inequality 8. **Social action**: The innovation and enthusiasm of civil society

Adapted from the manifestos for Conservative (Conservative Party Manifestos, 1997), New Labour (Archive of Labour Party Manifestos, 1997) and the Coalition (Mabbutt, 2015).

In terms of public service spending and provisions in relation to parks and green spaces, New Labour provided area-based funding initiatives, based on need calculated by level of deprivation, while the Conservative and Coalition governments reduced funding. Public service expenditures were frozen under Conservative rule (Pliatzky, 1989, p.29) and substantial local government funding cuts were made during the Coalition government (Taylor-Gooby and Stoker, 2011; Lowndes and Pratchett, 2012). However, this approach did not apply to all public services: funding for statutory services were still slightly increased or lesser decreased in comparison to non-statutory services. For instances, social security, welfare, health and education in Conservative (1979-1997), health and education in New Labour and health, education and pension in the Coalition (2010-2015), budgets and funding for these services went up (Talbot, 2001). This means that funding and budget support among statutory and non-statutory services are treated differently. This resulted in non-statutory services beginning to rely on volunteering, charitable donations or other avenues of revenue such as European funds or lottery grants, to fulfil their roles and responsibilities (Weightman, 2013). Subsequently, non-statutory public services were exposed to more competitive conditions to generate funding.

Another manifestation within policy contexts shows emerging themes of 'competitiveness' made manifest in different forms of the governments i.e.) Compulsory Competitive Tendering (Conservatives), Best Value (New Labour) and the diversity of public service provision (the Coalition). This was the legacy of the Conservative government where new policies were enshrined in legislation which incited competitiveness through market-based-doctrine (Wilks, 1997; Dempsey *et al.,* 2016b). This doctrine introduced Compulsory Competitive Tendering (CCT) into local authority procurement practices. The purpose of CCT is to stimulate greater efficiency, effectiveness (Talbot, 2001) to secure the better value for money through fairer competition (Wilson, 1999). The Department of the Environment of 1999 insisted that the application of competition through CCT had been abandoned in The New Labour, criticising CCT for its inflexibility and over-emphasis on efficiency and competition (Dempsey, *et al.,* 2016b). In 1999, the UK's New Labour legislated to replace CCT with the Best Value regime (Entwistle and Laffin, 2005), moving away from CCT which required local authorities to procure their services through competitive bidding processes. This was an attempt to provide local people with effective and efficient services through the concepts of value-for-money and quality (Dempsey *et al.,* 2016b). However, the normative aspect of competition remained until the influence of the (post-2015) Conservative government was reshaped locally. The competitive principle in the Coalition was manifested through the way in which the diversity of public service provision borrowed heavily from competitive tendering regimes (Lowdes and Pratchett, 2012).

The driving changes of policy ideology are often (and currently) underpinned by financial austerity. Competition emerged in the late 1970s as a central paradigm for the reform of responsibility in regard to public services (MacLeavy, 2011). In that time, localism or decentralisation were often mentioned in conjunction with the principle of sharing or transferring responsibility for public services against financial austerity. The Conservatives extended CCT by sharing the responsibility for public services with local authorities, which in turn led to the consideration of community engagement (Wilson, 1999). New Labour continued to identify mechanisms to ensure that the government was more decentralised for public services (Gamble, 2010). This was followed by the Coalition who offered a form of localism that offered autonomy, pluralism and diversity in regard to empowerment. (Pratchett, 2004). Based on the interaction between central and local government, the distance and the government,

the relationship between the two varied, particularly in the context of governance as a potential solution against financial austerity and its impacts, as the roles of communities and their individual responsibilities were enlarged. This can be illustrated by three paraphrases: the Conservative's use of 'knocking on community doors', the New Labour's 'opening community doors' and the Coalition's 'entering community doors'.

Conservatives (1979-1997) began to offer radical community-centred solutions, but the focus on community-led regeneration was negligible (Marinetto, 2003) because they were more likely to approach private sectors. For example, partnerships between public and private sector agencies were encouraged and private sector investment was secured through fiscal incentives (ibid). However, according to its manifesto, the New Labour took an approach based on governance which emphasised community participation, performance and partnership (Lowndes and Pratchett, 2012). The increasing importance of communities continued with the Coalition whereby local authorities and their communities were given much higher decision making responsibility in regard to public services than under New Labour (Cmnd-7942, 2010, p.8). It is shown that there was involvement of significant transfers of responsibility from central to local, resulting in a relationship between community and financial austerity (ISUFAJ, 2014).

Overall, in relation to public service provision, the policy context has been one where change is made according to funding, with a consistent increase in shared responsibility and governance through the prolonged era of increased localism through partnerships between communities and local authorities. While not the direct focus of this study given that the research was conducted in 2015, it is worth noting that the policy context continues in the same vein with the change of government. The Conservatives were voted in again in 2015 which brings with it continued focus on efficiencies, private sector involvement in service delivery and legislation-supported localism. The next section will explore the influence of policy in relation to the public service of park provision and management.

2.3.2 Overview of the policy context for park management

Park management has evolved from traditional management (pre-1988), through Compulsory Competitive Tendering (CCT) (1988-1997) to the system of Best Value (post-1997) (Jones,

2000). Contemporary park management contexts may hark back to the Victorian park era as a high levels of horticultural beauty, safety, ownership and cleanliness (Smith *et al.,* 2014), similarly generated funds for park provision, allowing the local authority to carry out their statutory duty (Barber, 2005, p.29). However, it is argued that pre-1988 parks were at an ebb where the decline of parks began with non-statutory responsibility after the Second World War (Conway, 1996, p.39) and accelerated during the 1970s to 1980s (Woudstra and Fieldhouse, 2000, p.11). Between the late 1970s-1990s, the power of the Conservatives lowered local government expenditure where parks were an easy – non-statutory – target (Dempsey *et al.,* 2016b). The CCT management regime introduced in The Local Government Act (1988) changed local authority from a public service provider to a purchaser (Bailey, 1995, p.367) which brought with it rules which prevented local authorities from acting "*in a manner having the effect or intended or likely to have the effect of restricting, distorting or preventing competition*" with private sector contractors (Barber, 2005, p.30).

The first round of CCT projects were successful in cost saving through lower wages (Dempsey *et al.,* 2016b). However, the operation of CCT led to a loss of skill and park-based staff and park standards (Jones, 2000; Barber, 2005, p.30-31; Dempsey *et al.,* 2016b) as well as a loss of community contact, largely because of the abolishment of park-keepers (English Heritage, 2005). 1988 to 1997 was a period of absence of supportive policy implementation and there was a decline in green space. Nonetheless, efforts were made to ensure that public parks survived (Layton-Jones, 2016), despite the transitional period from traditional management to Best Value, and the budgetary restraints this brought. The introduction of the system of Best Value was a response from New Labour to CCT. Significant factors of the system of Best Value included community involvement, vision and strategic planning and partnerships between park stakeholders (Jones, 2000; 2002). In addition to this, the system of best value supported the reclaiming of parks, meaning that pre-CCT contexts, such as site-based staff, horticultural beauty, increasing public use and recovery of park quality, could come back into fruition (Jones, 2000). After an era of conventional management (pre-1988), there needs to be further understanding regarding the ideologies of New Labour (1997-2010) and the Coalition (2010-2015). Therefore, the next section focuses on the policy contexts of both governments in the continuing period of austerity.

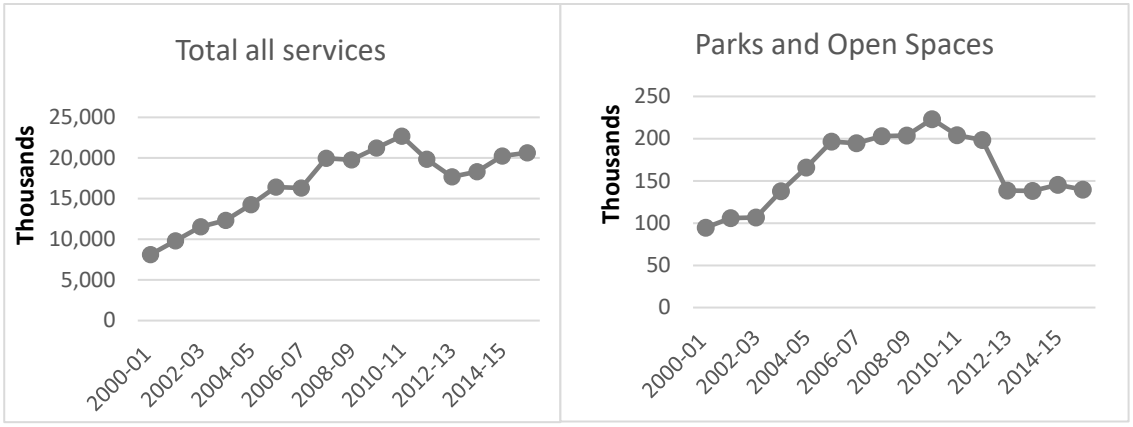
2.3.3 New Labour: emerging concept 'equality' and 'partnerships' with governance and funding

"New Labour is a party of ideas and ideals but not of outdated ideology.….Our values are the same: the equal worth of all."- New Labour Party Manifestos, 1997.

New Labour policy involved a distinctive response to the old Conservative right with manifestos and visions underpinned by the concept of equality (New Labour Party Manifestos, 1997). They aimed to evenly share the involvement of the majority of public services between central, local and related partners. The manifestos demonstrated a commitment to public services, with an emphasis on education, health, crime, environment, industrial relations, economic management, decentralised political power and leadership in EU (ibid).

There is an argument within the normative framework of equality, that inequality would ultimately prevail. This is due to the key manifestos of New Labour indicating that funding was made easily available for statutory services through ring-fencing (Talbot, 2001). However, non-statutory services such as cultural heritage, green space provision and management and libraries, were not in such a position (ibid.). While these non-statutory services were funded by New Labour, sustaining them was not possible as there was no possible as the lack of ring-fencing resulted in an inability for requisite long-term management and maintenance (ibid.).

Figure 2.1 Capital Expenditure on parks and open spaces by service and category for England: 2000 to 2016.



Source adapted from Local authority capital expenditure and financing in England, DCLG, 2001 to 2016.

In fact, funding and budgeting for green space provision and management during New Labour was significantly less than other services (Figure 2.1). It can be argued that green space management was never as high on the political agenda as other services, despite the well-known

social, environmental, health and economic benefits. They inherited from the Conservatives a poor quality legacy based on the lack of investment in parks.

Awareness of quality of existing green spaces: A discourse on policy contexts of green space service started in relation with urban policies such as 'Towards an Urban Renaissance' by the Urban Task Force which was commissioned by the government and published in 1999 (Jones and Ward, 2004). New Labour adapted (some of) the Task Force's findings in relation to the value of green spaces and the causes/effects of declining standards in its 'Urban White Paper' (DETR, 2000), 'PPG 17: *Planning for Open Space, Sport & Recreation*' (ODPM, 2002) and 'Green Spaces, Better Places' (DTLR, 2002). Under New Labour there was a concerted effort to improve the quality of urban parks and landscape designs under the broader agenda of 'urban renaissance' (Layton-Jones, 2014). The Urban Task Force Report 1999 and Town and Country Parks (ETRA Twentieth Report) published by the Environment, Transport and Regional Affairs Select Committee (1999) stated that the New Labour government identified "a spiral of decline" in parks, whereby graffiti and anti-social behaviour were occurring in an increasing number of neglected parks. This awareness led to the need for a green space assessment to verify the current green spaces in standards. Public Park Assessment (Urban Park Forum, 2001) showed evidence that conditions of green spaces were deteriorating. Simultaneously, the impact of assessment performance on green space management led to audit tools such as the Green Flag Award, in a move towards improving the management of existing spaces (Wilson and Hughes, 2010).

Equal partnership: Improving the mainstream policies of New Labour involved partnerships and the voluntary sector in UK policy agenda (Kendall, 2003). Importantly, the norm 'equality' was radically associated with partnerships in the New Labour. The New Labour's insistence on equality was intended to promote bottom-up changes through partnership (Pollitt and Bouckaert, 2000) by which this principle stressed collaboration rather than competition in achieving an equal statutory relationship through policy agenda (Lewis, 2005). The Urban Green Spaces Taskforce (DTLR, 2002) underlined the significance of active partnership in working towards improving the standards of green spaces. Ultimately, partnership working in the form of governance is argued to help to generate a greater quality of green spaces and social cohesion (NAO, 2006).

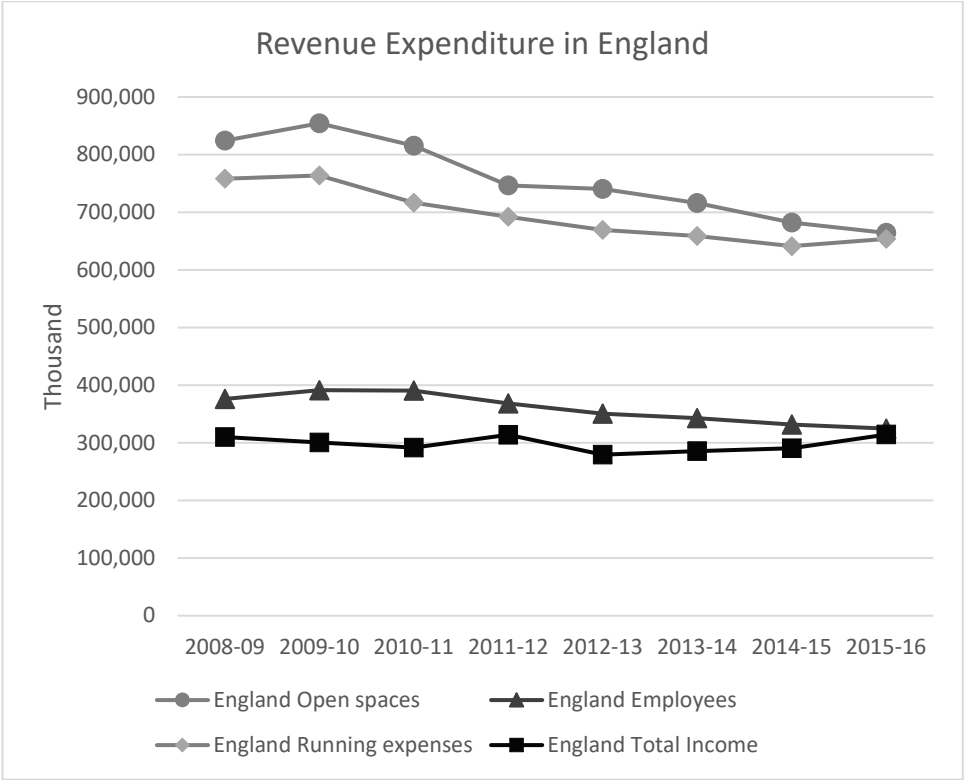
More importantly, *equal opportunity for funding* for green space management was introduced to stakeholders involved in partnerships. Partnership working generates advantages over local authority-funded projects through fairly targeting funding schemes within community groups working in disadvantaged areas (Wilson and Hughes, 2010). In particular, the New Labour Government made available new funding sources through the New Opportunities Fund (£2.4 billion) in 1998 (Big Lottery Fund, 2004) and the Green Spaces and Sustainable Communities Fund from 2001 to 2006 (£113.9 million) as well as the (Big Lottery Fund, 2008) in 2004. The aim of these funds was to create and improve green spaces as well as Section 106 (currently Community Infrastructure Levy). These new funding streams were given to newly emerging partners in green space governance, for examples, Natural England, Groundwork, and the British Trust for Conservation Volunteers. Policy agendas supported these streams through the Sustainable Communities Act 2007 (DCLG, 2007) and The New Deal for Communities programme (DCLG, 2010). However, some have argued that it is difficult to promote new equal partnerships in relation to governance and fundraising because the funding streams consistently fluctuated and were insecure (Lewis, 2005) for long-term enhancement (Dempsey *et al.*, 2015). These also reflected the ongoing focus on marketization and sharing responsibility for parks (and the costs of parks) with other stakeholders – not only the local authority. These interpretations raised a wide range of fundraising opportunities including CABE Space: *Urban Parks: Do you know what you're getting for your money?* (2006a) and *Paying for parks*, (2006b), in which income generation practices available in green spaces were proposed by stakeholders' engagement.

New Labour departed from the ideology of equality within part of the vision presented in the manifestos, thus a full vision of equality failed to be reflected. The benefits derived from the manifestos related to specific services, as not all public services included a service of green space. However, it is obvious that the concept of equal partnerships in relation to governance and funding contributed towards setting the context for new frameworks of green space management.

2.3.4 the Conservative-Liberal Democrat coalition government: 'Big Society' and unequal responsibility

In 2008, a global recession hit which led to economic pressure resulting in significant budgetary cuts for all public services under the Coalition government (Layton-Jones, 2016). Revenue expenditure on open space services were declining in 2008/2009 and a significant decline arose in 2013/2014 in which the expenditures of employees and running expenses continued to fall (Figure 2.2). Similarly, government grants decreased in direct proportion to revenue expenditure on cultural, environmental and planning services in 2010 when the Coalition government came into power. Capital expenditure on parks and open spaces and all services also showed a decline by 2010.

Figure 2.2 Revenue expenditure on cultural, environmental, regulatory and planning services (RO5). Expenditure on open spaces, employees/running expenses and income from open spaces in England (2008-2016).



Source adapted from revenue expenditure and financing in England, DCLG, 2009 to 2016

Alongside these historic cuts in public spending cuts, the 'Big Society' became the primary UK political discourse. Key features of Big Society policies, which aimed to mend 'Broken Britain',

are discussed here, with particular reference to the implications for green spaces. The Big Society focused on the responsibility of government and every citizen (Cabinet Office, 2010), a concept illustrated within these summarised manifesto statements: give communities more power which encourage people to take an active role in their communities; transfer power from central to local government; support co-ops, charities, mutuals, and social enterprises; and publish government data. The approach of the Coalition to green space management differentiated by the fact that inequality manifested among central, local and local citizens, resulting in the transference of responsibility within central, local and the third sector. Through the Localism Act (DCLG, 2011) financial support for communities was linked to the need to transfer duty from central and local governments to local citizens (Alcock, 2012). Importantly, the form of local citizens was characterised within third sector as a whole range of voluntary organisations and informal community groups (Macmillan, 2013). While this stream tended to consider well-trained and developed community workers (Chan and Miller, 2010), it also takes into account how to increase the level of community activity (Wilson and Leach, 2011). Hence, the balance of power concerning public services was tipped towards, and in favour of, the third sectors. It is noted that this change affected third sector actors, as it demanded the direct engagement with government in a number of different ways (Alcock, 2012); for instance, manifestos were produced in which third sector organisationss played a role in meeting various policy priorities and campaigning strategies. Similarly, the third sector research centre, TSRC, was required to make various commitments (Parry *et al.*, 2011).

A broad policy context was created by the central government concerning green space management, which emphasised localism (the Localism Act 2011 (DCLG, 2011)) and community engagement (The Sustainable Communities Act 2007 update report (DCLG, 2013)). Some evidence which supports the key manifestos has appeared since 2010. An emphasis on community involvement in park and green space management can be seen through encouraging the Green Pennant Awards to give awards to volunteer and community-run urban green spaces, an act which was designed to show the Big Society in action (DCLG and Stunell, 2010). With the intention of promoting community involvement as '*good practice guidance for green infrastructure and biodiversity'*, the Local Green Space designation, introduced by the Localism Act 2011 (DCLG, 2011), offered further potential avenues to enhance green infrastructure and underline community involvement (TCPA, 2012). The National Planning Policy Framework

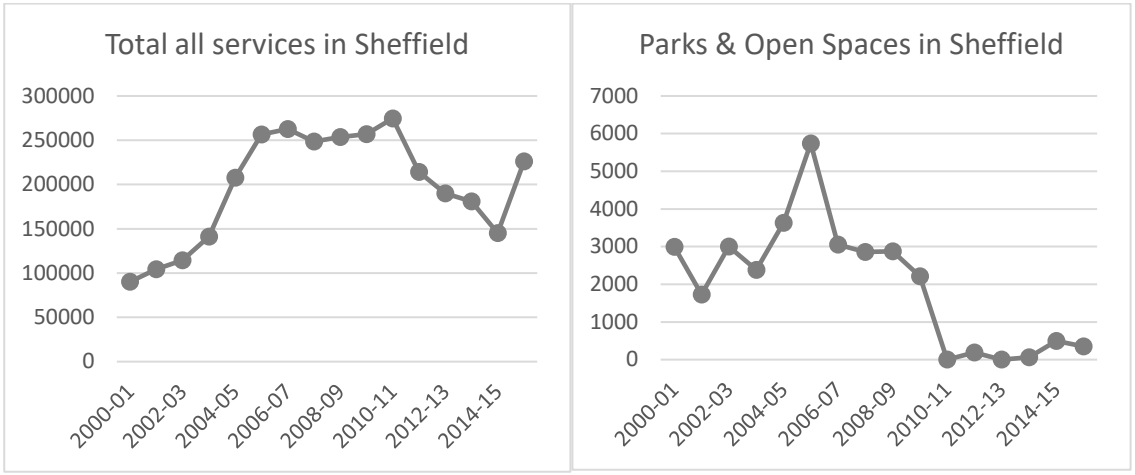
(NPPF), published by the DCLG in 2012a, stated (in para. 76): *"Local communities through local and neighbourhood plans should be able to identify for special protection green areas of particular importance to them. By designating land as Local Green Space local communities will be able to rule out new development other than in very special circumstances"*. The NPPF was setting out the Government's planning policies for England so that local planning authorities could create a shared vision with communities for the residential environment and facilities they wished to see. Similarly, local communities, through local and neighbourhood plans, should be able to identify green areas of particular importance to them for special protection (Regulations 69 and 76).

There are also influential policy-related documents produced by third sector research centres since 2013, i.e.) Rethinking Parks (NESTA, 2013), Policies to improve the UK's urban green spaces (Policy Exchange, 2014) and the State of UK Public Parks reports (HLF, 2014 and 2016 updated). All of these focused on how parks could make financial improvements to income generation to manage parks. It is clearly understood that there has been a need to address the profound financial crisis in the context of park management.

2.3.5 The state of Sheffield's green space policy and strategy

Given this study's focus on Sheffield, there is a need for more understanding of the policy drivers in urban green space management at a local level (Wilson and Hughes, 2010). In the context of park management, the changing amount of funding from central government (enacted by the local authority) underpinned the changing priorities of New Labour and the Coalition governments, reflecting the financial high and ensuing crisis (Figure 2.1 and 2.3). These data reveal that, based on capital expenditure on parks and open spaces from 2000 to 2016, capital funding cuts occurred in Sheffield between 2006/2007 till 2010/2011. Two periods - 2006/2007 and 2009/2010 – show a dramatic reduction in capital funding. In particular, funding cuts for parks and open spaces began earlier than for all other services, with the drop in total funding starting from 2010/2011 (Figure 2.3).

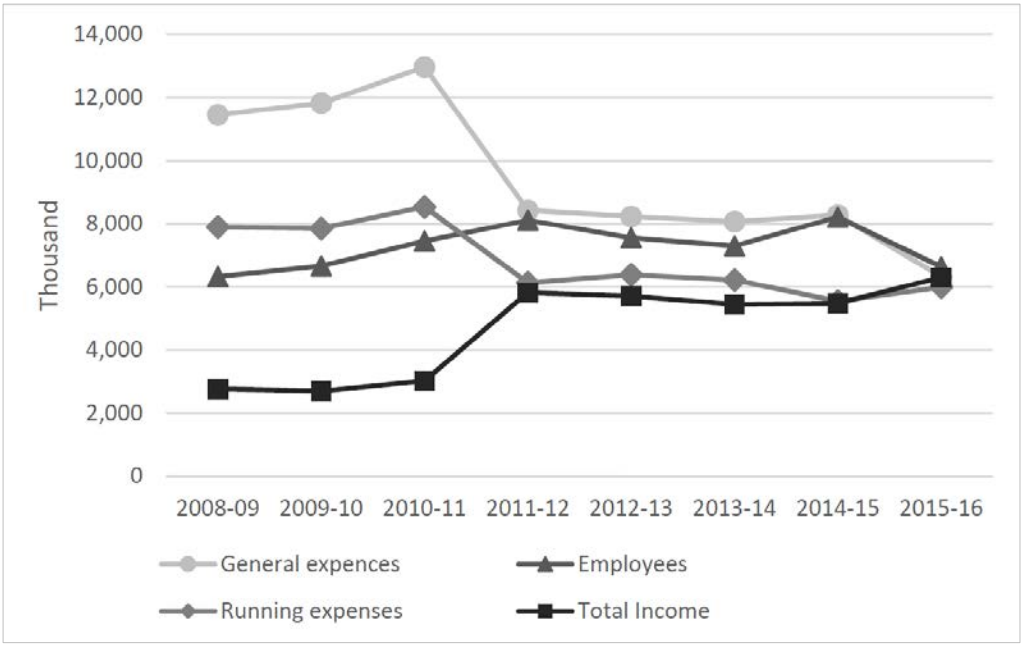
Figure 2.3 Capital Expenditure on parks and open spaces by service and category for Sheffield: 2000 - £ thousand.



Source adapted from local authority capital expenditure and financing in England: individual local authority data, DCLG, 2000 to 2015.

More seriously, revenue expenditure in England and Sheffield also gradually declined from 2011/2012, as shown through the running expenses from 2011/2012 and employees from 2012/2013 (Figures 2.2 and 2.4). However, total income increased from 2011/2012 when revenue funding began to decrease.

Figure 2.4 Revenue expenditure on open spaces, employees/ running expenses and income in open spaces services between 2008 and 2016 in Sheffield.



Source adapted from local authority revenue expenditure and financing, England, DCLG, 2009 to 2016.

Sheffield City Council has produced local policy and strategy which is underpinned by focus of central government policy, for instance, Sheffield Park Regeneration (1993), based on the Local Government Act (1988) and PPG17 (1991), emphasised the need to keep a high standard of parks, cost-effective management, developing partnership and maximising external funding and partnership (Table 2.2). Along with a wide range of Sheffield's policy and strategies, a recent strategy titled 'Sheffield's Great Outdoors' aimed at improving park standards, securing funding and encouraging partnership, in particular, community engagement led by central government policy.

Table 2.2 Green space strategy and policy in Sheffield

Year	Policy or strategies
1993	• Sheffield Park Regeneration
1998	• Sheffield Unitary Development Plan
1999	• Sheffield Park Regeneration (updated)
1999	• Sheffield's Countryside Strategy,
2000	• Sheffield Site Categorisation
2007	• Sheffield City Strategy (2005-2010), revised
2008	• East Sheffield Green and Open Spaces Strategy
2009	• Sheffield Development Framework
2009	• Sheffield's Great Outdoors: Green space & open space strategy 2010-2030
2013	• Sheffield Local Plan, (formerly Sheffield Development Framework)

Reflecting central and local policy as well as budgetary changes, it is shown that different park management delivery models were employed in some cases; leading, for instance, to the involvement of an increasing number of community groups (SCC, 2009). Another aspect of policy change affected park management structure: third sector organisations, e.g. local Wildlife Trusts, who have been involved in managing some of Sheffield's green spaces. In addition, Green Estate Ltd can be seen as an experimental and successful third sector case. It is a social enterprise, which in 2008 was funded by a substantive SRB grant which allowed it to get directly involved in park management in Sheffield. However, since 2011, the structure of Green Estate has changed to self-sustainability, meaning that their funding does not come from central government. According to local policy and the financial changes in Sheffield, there is a continuation of central policy emphasis on community engagement and decentralisation, which is being delivered within local park management practices. Ultimately, different park

management models show how to create and manage the quality of green spaces for the benefit of everyone.

2.4 Stakeholder involvement in park management

Alongside the definition of landscape management, and the prevalent policy contexts, emerging texts which document 'stakeholders' and 'community' involvement play important roles in landscape management contexts. This section explores the contextualisation of stakeholder involvement in specific elements of park management.

2.4.1 Introduction to stakeholders in the park context

The word "stakeholder" originates from the seventeenth century, describing a third party entrusted with the stakes of a bet (Ramı´rez, 1999) and is used to indicate groups or individuals ''without whose support the organisation would cease to exist'' (Bowie, 1988, p.112). Public participation is becoming increasingly embedded in national and international environmental policy, as decision-makers recognise the need to involve who is affected by the decisions and actions they take, and who has the power to influence their outcome (Freeman, 1984).

There are many associated stakeholder groups relating to decision-making. According to Friedman and Miles (2006), the most common groups of stakeholders to be considered are shareholders, customers, suppliers and distributors, employees and local communities, NGOs, government, policymakers, the media and academics. In park management practice, a wide range of stakeholders, including the local authority, local park (Friends) groups, local trusts and social enterprises, user groups and academics, can contribute to decision-making (Sheffield City Council, 2009; Dunnett *et al.,* 2002). It is argued that in empirical research, the most useful information to address process directly linked to improving green space demand and supply can be provided by interviews and focus groups including community-based surveys that examine residents' perceptions, usage and experience of green spaces (Wilkerson *et al.,* 2018). This can

be particularly useful for developing strategies tailored to the specific barriers or concerns associated with any one community (ibid). Community perceptions can help managers gauge low and high demand so that they can prioritise management of particular ecosystem services related to the neighbourhoods of that area (TEEB, 2010). For instance, in communities where personal safety is considered an important barrier to green space use, social strategies that include increased policing (Wilbur *et al.,* 2002) or planning strategies that improve green space design to increase perceptions and visibility of safety (Schroeder and Anderson, 1984) may be appropriate. This research will focus on three different stakeholder groups which are specifically involved in park management and these are discussed in the next section.

2.4.2 Stakeholders' perceptions in park management

Regarding the context of urban park management, stakeholder participation has been enhanced, unlike in the past, when decision-making involved only practitioners or landowners (Azadi *et al.*, 2011). Increasing the types of stakeholders involved, and their involvement, has positive effects such as sharing information through communication, active engagement (Arnstein, 1969), active citizenship (Martin and Sherington, 1997) and promoting social learning (Blackstock *et al.,* 2007). It is also argued that it leads to higher quality information inputs (Reed *et al.,* 2008), ameliorating unexpected negative outcomes (Newig, 2007) and enhanced decision-making (Richards *et al.,* 2004). The earliest model, 'Arnstein's (1969) ladder of citizen participation model', conceptualised the participation of local people and citizen groups in any decision-making process. This emphasis on community involvement in decision-making process constitutes the increasing empowerment of community groups. However, it is argued that contemporary cascade is derived from the contexts of park management from not only understanding community involvement but increasing it in relation to decision-making processes. The changes reflect greater awareness by professionals of the part perceptions of the general public/ residents can play (Forbes *et al.,* 1997; Hofmann *et al.,* 2012). It is necessary that citizen' attitudes and perceptions should be reflected in the fundamental aims of managing parks since an objective of park management is to improve people's mental and physical quality of life (Lee and Kim, 2015). There is supporting evidence that citizens/ residents have played a

crucial role in the governance of green space (Rosol, 2010) in contribution to funding management (Perkins, 2010; Rosol, 2010), environmental and social benefits (Mattijssen *et al.*, 2017a). The key aspects of policy contexts express a need for empowering citizens (Bailey, 2010; Mattijssen *et al.*, 2015) and generating a trend for active citizens, through the emergence of bottom-up initiatives in the decision-making process (van Dam *et al.*, 2015). These outcomes involve many citizens in a wide variety of green space management practices, both independently and in cooperation with authorities (Mattijssen *et al.*, 2017b). One could talk about the interests of different stakeholders – some are focussed on people (e.g. development trusts like Heeley, and Manor & Castle), some on biodiversity (e.g. Wildlife Trusts), some on sports (bowling groups; football groups) and some on heritage. This raises questions around who does or doesn't get involved in such stakeholder groups, and who or what they are representing. It is argued that it is difficult to meet users' preferences for park management because users have varying characteristics based on demographic characteristics such as age, gender, ethnic background, past experience and specific individual interests (Rohde and Kendle, 1997; Roovers *et al.*, 2002) as discussed above. There could also be different perceptions of the development and management of green spaces between residents and professionals (Hofmann *et al.*, 2012; Daniels *et al.*, 2018). These different perceptions can produce difficulties in providing sustainable implementation (Harrison *et al.*, 1998; Bonners *et al.*, 2007). Therefore, solutions put forward by professionals such as academics and practitioners, focus on sustainable development and management of urban landscapes (Dempsey *et al.*, 2014b), they crucially involve more people with an awareness of sustainable processes (Kendle and Forbes, 1997).

The role of authorities is also key in enabling and legitimising a long-term perspective (Mattijssen *et al.*, 2017). Models such as the 'State-centred model' point towards the typical starting point for public spaces in which a local authority takes responsibility for delivering and maintaining a place (De Magalhães and Carmona, 2009). Furthermore, the Heritage Lottery Fund (2014) suggests that the local authority provides opportunities for sharing and collecting ideas and data in conjunction with community groups. Accordingly, consultation opportunities such as community forums between authority and community groups can help encourage councillors and local communities to discuss local issues (Carmona and De Magalhães, 2006). Given the potential of a community forum, its purpose it to raise community members, awareness of important issues and to motivate community members to participate in the

discussion (Whitley, 2002). However, it is argued by Carmona and De Magalhães (2006) that this opportunity for incorporation between authority and communities is in practice less of a priority, indicating that this, therefore, tends towards a less responsive outlet to address community needs. Considering stakeholders' involvement brings added value and benefits to landscape management, the efforts of the authority is considerably insufficient in relation to people. Arnstein's theory (1969) of 'a ladder of citizenship participation' shows that the local authority gets involved in certain ways, but unfortunately those are not always wholly positive.

Another focus of De Magalhães and Carmona's work (2009) regarding community engagement is the 'User-centred model' which explains that community groups such as 'Friends of…' are involved in accepting devolved responsibility from state resources. Community-based organisations (CBOs) link to organised groups such as the UK based 'Friends of…' groups, especially around the management of open spaces (Smith *et al.,* 2014, p.61). This is partly because of the increased community ownership of parks (Aiken *et al.,* 2008; COMA, 2016). It can be highlighted that achieving meaningful community involvement is placed at the centre of provisional success (Mathers *et al.*, 2011). In addition, standards for green spaces such as Green Flag stipulate that local communities should be involved in the decision-making process concerning parks (Speller and Ravenscroft, 2005). As the literature review has already shown, policy contexts (regardless of political ideology) encourage community groups to get involved in park management (DTLR, 2002; ODPM, 2003; DCLG, 2007; DCLG, 2013). These policies underline communication between local authority and community groups to promote long-term sustainability of urban green spaces.

Non-governmental collaboration in decision-making is also underlined in Multi-Stakeholder Involvement (MSI) which is defined as a well-balanced collaboration between actors, which can/will be influenced by development of urban green space to pursue specific goals (Azadi *et al.,* 2010). In contrast, Beierle (2002) argues that considering the cost-effectiveness of decision making, stakeholder's participation processes can in fact increase costs compared to a solely expert process. There are other challenges for stakeholder participation because it is an expensive, time-consuming process, which can lead to identification of new conflicts and the involvement of stakeholders who are not representative (Luyet *et al.,* 2012).

Nevertheless, it is suggested that a combination of the state-, market- and user-centred models could contribute to maximising advantages and lead to efficient public space management (De

Magalhães and Carmona, 2009). Funding bodies, such as The Civic Trust and the Heritage Lottery Fund, are examples of the evolving process of funding and partnership in landscape management; and they increasingly require local authorities to facilitate the formation of community groups (e.g. Friends groups) to develop meaningful relationships with the users of such spaces (Speller and Ravenscroft, 2005). This section has explored park management-related stakeholders, professionals, local authorities, community groups and users and their necessity in decision-making processes. However, there is little empirical evidence which explores the differing perceptions held by these stakeholders in the context of park management. This research will address this knowledge gap by focusing on stakeholder perceptions.

2.4.3 Substantive inclusion of community participation in parks management

With a policy emphasis on stakeholders' participation, community involvement is increasingly important for green space management. The involvement of community/volunteer groups has a long history (over one hundred years) whereby community activities have often related to nature and landscape management (Molin *et al.*, 2014). When communities and/or citizens recognise the environmental and social benefits of green space, the extent of community participation increases (Mattijssen *et al.*, 2017a). These organisations have engaged in practical tasks such as regular maintenance, i.e. litter picking and arranging events (Hjortsø *et al.*, 2006). The echoed contribution of community involvement to park management aims at improving social benefits. Some insist that community participation offers positive social benefits, linking to establishing a strong sense of community which can be associated with people gathering (Sense of Community Partner, 2004; Francis *et al.*, 2012; MacMillan and Chavis, 1986), increased feelings of safety and security (Francis *et al.*, 2012; Sense of Community Partner, 2004), improved well-being (Davidson and Cotter, 1991), and belonging and social cohesion (McMillan and Chavis, 1986). Community participation where all age ranges are involved, particularly the younger generation, is important in the sense that outcomes are more effective in overall management activities as well as in decision-making, monitoring, evaluation and sharing ideas (Scottish Executive, 2006). Reflecting on this claim, third sector organisations, such as Groundwork, focus on encouraging young people to take action in their local areas

(Groundwork, 2017). In this way, community participation can play a crucial role in managing and maintaining the quality of green spaces (Selman, 2000) and delivering other public services (Wilson, 1996). Demonstrating this mentality is that fact that there is an increase in community involvement in the decision-making process of green space management. The substantive inclusion of community participation in parks management may be associated with the financial crisis. Declining funding and budget for green space management occurred earlier, since the late 1990s (Randrup and Persson, 2009). More recently, 92% of park managers in the UK have experienced funding and budget cuts over the past three years and 95% of them anticipate the cuts to continue for the next three years (Neal, 2016). In financial terms, an emphasis on community involvement of green space management can be explained by the potential economic value of their activities. According to the Office for National Statistics (ONS), the value of volunteering in all types of organisations was worth about £23 billion in 2014, equivalent to 1.3% GDP and potentially higher in the UK. In the park management context, the value of volunteering can be evaluated through thousands of volunteer hours of Friends groups on the sites being valued at £13,000 per site (CLGC, 2016). In addition, Friends groups have been raising £30m per year for parks (HLF, 2016). Local authorities therefore seek non-financial contributions from some community groups for the upkeep and maintenance of parks and green space, where community activities do not charge members for involvement or ask them to raise money (CLGC, 2017). In the policy context, the Localism Act (2011) includes new community rights which supports community groups who are helping to manage green spaces and also sets out a wide range of potential funding opportunities for community organisations (MHCLG, 2012). To explain further, there is a shift in park management whereby the capacity to raise funding is transferred to community groups, as funding streams require that communities are involved in funding applications. In other words, extensive community involvement from regular maintenance to fundraising invites them into the decision-making process, indicating that they are more responsive to the overall process.

Alongside these contributions of community participation to park management, the National Council for Voluntary Organisations (2018) recently highlighted the positive benefits of volunteering in regard to awareness and motivation, self-esteem, keeping busy, meeting people, fulfilling a need to help the community, spending time with friends and/or family and as a way of enhancing one's career. Further, community ownership of public space can generate a

willingness to engage in its upkeep (Saunders, 1993, p.85–86). However, there are gaps in knowledge between people's perceptions of how likely people in park management practices in relation to feasibility would get involved in volunteering. This research will examine these gaps in knowledge.

2.5 Analytical frameworks examining park management

An analytical framework often provides the concept behind the approach to the management of public spaces (De Magalhães and Carmona, 2009). In the context of green space management, the framework reflects the 'process nature' of green space management through understanding the context, defining a vision, and combining and coordinating actions to deliver change on the ground, as well as reviewing what has worked and what has not (CABE Space, 2004). Arts *et al.*, (2006) and their theory of 'Policy Arrangement Approach (PAA)' claim that a comprehensive perspective on policy can help understand overall contexts of environmental domain. Mattijssen et al.'s study (2018) supports this notion and further employs the PAA to understand governance in urban green space management. However, in the context of green space management, a holistic approach to management focuses on how to combine or contextualise the positive contributions of varying management models and dimensions (Dempsey and Burton, 2012).

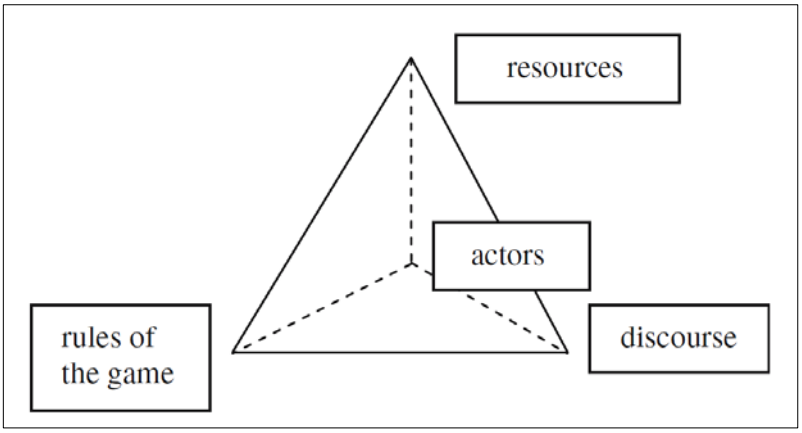
Evaluation tools for parks and green spaces have been developed at a national scale in support of policy contexts, for example, the Green Flag Award (GFA) was nominated and re-nominated by central policy (DETR, 2000; MHCLG, 2015) and aims to evaluate well-managed green spaces and parks. Even though GFA is most reliable as a national assessment tool, its practical methods show that there are limitations to a holistic approach to green spaces management, as GFA assesses purely on the basis of maintenance standards (Greenhalgh *et al.*, 2006). However, such models of public space management pursue combined dimensions encompassing maintenance, investment and regulation are in differing relationships with stakeholders – both of which contribute to the examination of emergent practices (De Magalhães and Carmona, 2009). The discussion below will show that Place-keeping theory permits an understanding of

the variety of dimensions underlined by policy contexts regarding public space management. Place-keeping theory as a holistic approach to long-term management encompasses six different dimensions including policy, funding, partnership, governance evaluations and maintenance as well as co-ordination (Dempsey and Burton, 2012). Hence, this chapter will explore three analytical frameworks: PAA, GFA and place-keeping.

2.5.1 The Policy Arrangement Approach

Environmental policy has been a much studied policy area in Western countries (Arts *et al.*, 2006). These studies contributed to the understanding of policy changes, for example, the strategic responses to problems, integrated area-based environmental policy and local policy and the movement of policy going beyond the current formal institutional frameworks (Bovens *et al.*, 1995; Duyvendak, 1997; Witteveen, 2000). However, these approaches to policy domains does not mean that policy changes understand the everyday interactions of policy in practice (Arts and Leory, 2006). Accordingly, the 'Policy Arrangement' concept in their study described and analyse the interplay between dimensions of environmental policy domain, made up of actors, resources, rules and discourse (ibid.) (Figure 2.5).

Figure 2.5 The tetrahedron as symbol for the connections between the dimensions of an arrangement



Adapted from Arts *et al.*, 2006.

The 'actor' refers to organizations and individuals involved in governance: 'Rules' helps determine the opportunities and barriers for actors when acting in a governance process, while

'resources' encompass attributes, skills, financial- and material resources that can be mobilized to achieve certain outcomes (Arts *et al.,* 2006). The 'discourse' dimension comprises of interpretative schemes which are used by actors to create norms within social and physical realities (Hajer, 1995). This includes an orientation and an objective that motivates people to act (Schatzki, 1997). The PAA has recently been used to analyse green space contexts to understand the role of governance (Buizer *et al.,* 2015; Lawrence, *et al.,* 2013; Van der Jagt *et al.,* 2016). However, the PAA does not contextualise a holistic understanding between policy objectives and the actions of actors. According to Schatzki (2012), contemporary social reality is often understood as being constituted by people's activity to reach objectives. In addition to this, the PAA was developed based on policy arrangements, which lacks an explicit focus on human activity as a way of understanding green space practices (Ayana *et al.,* 2015). Activities are a key part of practices (Schatzki, 2012) and actions undertaken by involved actors or stakeholders when attempting to realise the aims of green space activities (Mattijssen *et al.,* 2018). To address the limitations of PAA as an analytical framework, additional dimension 'activities' are adapted by Mattijssen *et al*., (2018) to examine the activities regarding physical and political awareness and knowledge (Table 2.3). The analytical frameworks reflect the contexts of management and maintenance of green spaces including plantings through the dimension of 'activities', meaning more approaches to green space management from the particular point of view of governance.

Table 2.3 Criteria and categories of PAA developed by Mattijssen *et al.*, 2018

	Criteria	**Categories**
Discourse	Objectives	. Physical objectives Nature protection Cultural history and landscape Use of green and recreation Food production . Social objectives Awareness and education Active involvement Social cohesion Health . Economic objectives
	Intended type of green space	. Parks, public gardens, urban green . Forest, heathland, other nature . Landscape elements . Grassland, agricultural green . Specific species . Edible green

	Criteria	**Categories**
Actors	Number of involved citizens Involved actors	. Only citizens . Authorities . Companies . NGOs . NCOs
Rules	Within or outside NNN Within of outside of Natura 2000	. Fully within NNN . Partly within, partly outside NNN . Fully outside NNN Fully within Natura 2000 . Partly within, partly outside Natura 2000 . Fully Outside Natura 2000
Resources	Sources of financing	. Internal income Own resources Contributions . External income Sponsoring Donations Government subsidies . Revenues
Activities	Actions taken to reach objectives	. Physical activities Management and maintenance Planting/realizing new green . Political activities Protesting/campaigning Deliberation/cooperation . Awareness and knowledge Monitoring and research Education

Adapted from Mattijssen *et al.,* 2018.

In relation to nature-based policy, a large emphasis on responsibility and the roles of citizens were discussed, resulting in the involved actors having an important influence on the activities and financial sources of green space practices. However, even though actors within the concept of governance play a significant role in the management and maintenance of green spaces, Mattijssen *et al.,* (2018)'s research points to a lack of understanding of wider green space contexts as a holistic approach is still needed, one that can employ multi-dimensions of policy, governance, funding, evaluation, partnership and maintenance (Dempsey *et al.,* 2012).

Based on the policy impact on green space domain discussed in section 2.3, policy, finance, partnership and governance since 1979 have been contextualised in relation to managing and supporting public services. Moreover, two governments, New Labour and the Coalition, importantly embodied the concepts of partnership and governance. Policy contexts, particularly within New Labour tended to aim at managing green space through proper standards evaluated by policy contexts, i.e. Urban Parks Assessment, indicating that the aspects of evaluation, management and maintenance could be emphasised in order to relay benefits of green spaces.

Besides, well-managed green spaces are the places which provide these benefits. Further, place-keeping evaluation is designed to monitor the adequate quality of green spaces (Dempsey and Burton, 2012), indicating that there is a need for evaluation and holistic indices when examining green spaces.

2.5.2 Green Flag Award: Understanding green space management

2.5.2.1 Background and development of GFA

The Green Flag Award (GFA) was first launched in England in 1996, with the actual award being implemented in 1997. The main aims of the GFA are to improve the quality of parks and green spaces, and to create better parks in response to the high expectations of users (Greenhalgh *et al.,* 2006). It has been implemented since 1996, underpinned by scoring and evaluation of the GFA which leads to awards for high-scoring parks (DETR, 2000).

According to the above policy, the importance of urban parks was recognised and the overall evaluation of existing green spaces is therefore verified through the GFA. In turn, the GFA was the first national green space assessment, and approved by the UK Government Department for Communities and Local Government (DCLG), licenced by Keep Britain Tidy in 2012 (MHCLG, 2012). The GFA was authorised for another five years as a national green space evaluation index in 2015 (MHCLG, 2017). The National Audit Office (2006) recommended the GFA to be actively used as a national standard for the development of urban green space management. This emphasis on the GFA and the development of green management standards at a national level was cascaded to local governments. Local governments have also used the GFA to launch their own independent green space assessments in metropolitan areas such as Sheffield. Sheffield City Council's 'Sheffield Standard' can be used as a representative example of a case which uses the GFA-based green evaluation criteria developed for local governments.

In 2010, Sheffield City Council announced the Sheffield Standard as an independent green assessment tool (Sheffield City Council, 2013). There are 76 sub-evaluation items within 13 main evaluation items and question types. It is aimed to be the basis of annual assessments and used as a tool to evaluate various green spaces such as parks, gardens, recreational grounds and

cemeteries. Sheffield Standard has similar indicators to the GFA, in particular the way it underlines the evaluation of community participation, (DELD, Sheffield City Council, 2008). However, there are a few differences; one being the way in which Sheffield Standard involves community groups to understand green space management from different perspectives, including those of experts. In addition, the 76 sub-indicators encompass the detailed assessment of the impact of community participation on park management. This may reflect the emerging paradigm of park management and equality in the decision-making process.

2.5.2.2 Understanding and critiquing indicators of GFA

The purpose of the GFA is to provide access to quality green spaces and open spaces wherever everyone lives, emphasizing user, location and green management (Ellicott, 2016). GFA delivers policy contexts through indicators which are necessary to monitor the implementation of the policies and provide the feedback needed to accomplish the desirable state of sustainable urban development as well as evaluating the impacts of environmental issues (Dizdaroglu, 2017).

Table 2.4 Criteria and sub-criteria of the Green Flag Award and Green Flag Community Award

Green Flag Award Criteria			**Green Flag Community Award Criteria**	
Desk Assessment	Field Assessment		Field Assessment only	
Presentation	A welcoming Place	1. Welcome 2. Good and Safe Access 3. Signage 4. Equal Access for All	A Welcoming Place	1. Welcome 2. Good and Safe Access 3. Signage 4. Equal Access for All
Healthy, Safe and Security	Healthy, Safe and Secure	5. Appropriate Provision of Quality Facilities and Activities 6. Safe Equipment and Facilities 7. Personal Security 8. Control of Dogs/Dog Fouling	Healthy, Safe and Secure	5. Appropriate Provision of Quality Facilities and Activities 6. Safe Equipment and Facilities 7. Personal Security 8. Control of Dogs/Dog Fouling
Maintenance of Equipment, Buildings and Landscape	Well Maintained and Clean	9. Litter and Waste Management 10. Horticultural Maintenance 11. Arboricultural Maintenance 12. Building and Infrastructure Maintenance 13. Equipment Maintenance	Well Maintained and Clean	9. Litter and Waste Management 10. Overall standard of maintenance

Green Flag Award Criteria			**Green Flag Community Award Criteria**	
Desk Assessment	Field Assessment		Field Assessment only	
Litter, Cleanliness, Vandalism	Environmental Management	14. Managing Environmental Impact 15. Waste Minimisation 16. Chemical Use 17. Peat Use 18. Climate Change Adaption Strategies	Biodiversity, Landscape and Heritage	11. Conservation of landscape & historic features 12. Conservation of biodiversity
Environmental Management	Biodiversity, Landscape and Heritage	19. Management of Natural Features, Wild Fauna and Flora 20. Conservation of Landscape Features 21. Conservation of Buildings and Structures	Community Involvement	13. Promotion of green space / project 14. Links to the wider community 15. Involvement in decision making 16. Involvement in operations 17. Appropriate provision for the community
Biodiversity, Landscape and Heritage	Community Involvement	22. Community Involvement in Management and Development 23. Appropriate Provision for Community	Management / Achievements	18. Innovation and creativity 19. Resources secured / used 20. Graffiti and vandalism
Community Involvement	Marketing and Communication	24. Marketing and Promotion 25. Appropriate Information Channels 26. Appropriate Educational and Interpretational Information	Environmental Management	21. Sustainable materials use 22. Waste recycling and minimisation 23. Chemical Use 24. Peat Use
Marketing and Communication	Management	27. Implementation of Management Plan		
Overall Management				

Reformed table: Original sources adapted from Greenhalgh and Parsons, 2004 and the Green Flag Award website

A significant emphasis on the GFA assessment focuses on investigating conditions of green spaces. Such landscape or green space audit tools have a shared ability to deal with different focuses i.e.) amenities, facilities & equipment, general conditions (Broomhall *et al.*, 2004; Cavnar *et al.*, 2004; Foster *et al.*, 2006; Bedimo-Rung *et al.*, 2006; Gidlow *et al.*, 2012; Edwards *et al.*, 2013), natural or ecological diversity (National Naturlandschaften, 2008; URBIO, 2012) and plantings (Entente Florale Europe, 2011). While the GFA is considered appropriate to assess regular maintenance, environmental, ecological, marketing and overall management, it has not been applied wholesale to other contexts. For example, in Nordic countries, the Nordic Green Space Award (NGSA) (2014) has been adapted (in part) from GFA,

with some distinct variations. Firstly, the NGSA refers to structure as a leading indicator; assessing the size, character and location of the green space as a measure of quality alongside evaluation of functionality, experience, management, organization and user participation (Lindholst *et al.*, 2016; Nordic Green Space Award, 2014). It does not however have any indicators to measure community involvement, focusing instead on communication (Lindholst *et al.*, 2016).

In regard to governance in particular, community involvement in decision-making process is key to managing green spaces in the UK context. The GFA involves assessing community empowerment or activities as discussed in Mattijssen *et al.*, (2018)' research. In a similar context, some audit tools, such as TAES (2007) and The International Awards for Liveable Communities (2013) evaluate community-related activities, meaning that an awareness of community involvement and activities in the process of evaluating green spaces may be contributing more to understanding green space management.

There are weaknesses of the GFA in relation to the fact that some green spaces awarded GFA already met proper standards, pre-evaluation. This means that it can be difficult to apply GFA to poor quality green spaces, particularly in deprived areas (National Audit Office, 2006). Another issue takes into account that only judges who are trained or qualified as experts can take part in the process of assessment. Understanding the user's thoughts of, and experiences in, the park are not taken into consideration, which is a weakness considering the management plan is based on a park's users, as an essential component of the decision-making process to prevent degradation of the park (D'Antonio *et al.*, 2013). In line with policy, such decision-making should be based on partnership. Nevertheless, it can be said that the reliance on expert evaluation does not reflect the part that users, their satisfaction and their opinions play in the management of parks in the UK. Furthermore, given the increase in community involvement in green space decision-making processes, the process of the GFA assessment may be required to reflect this and involve communities in the evaluation itself.

Finally, the GFA does not take into account funding and the pre-requisite partnerships that have already been mentioned as key factors of park management in exploring the UK's policy context. As a result, the GFA can be employed to understand the conditions of current park maintenance, while it is restricted in its ability to analyse the overall park management in relation to policy issues such as funding and partnership.

2.5.3 Understanding Place-keeping in park management

Public spaces such as green spaces and parks can become unused and unwanted through inadequate management. This can lead to more serious situations such as the 'Broken window syndrome' in which abandoned or insufficient management can cause more severe anti-social and criminal behaviour (Wilson and Kelling, 1982) as well as more a severe loss of quality green space (Burton *et al.,* 2014; Perkins, 2010). However, profound changes derived from policy contexts represent a shift towards austerity of finance and resources. If the current state of urban green spaces goes under budget reductions, there will be much less of a contribution to improving them (Randrup *et al.,* 2017). At times of austerity, green space management is widely acknowledged for contributing towards sustainable development (Council of Europe, 2000; James *et al.,* 2009) and long-term management (Randrup and Persson, 2009).

Considering the importance of the ways in which policy change affects finance, a number of theoretical or analytical frameworks seek to understand both the different approaches to the management of green space and the applicable norms which underpin them. For instance, a framework for governance viewed as having primary role in green space management (Falkner, 2003) and the importance of harnessing the community (Butler, 2016) are also emphasised by MacKenzie *et al.,* (2018). Their framework underpins the level of stakeholder interest in participation during decision-making. An extended focus on governance is found within the Policy Arrangement Approach framework (PAA) (Arts and Leroy, 2006; Arts *et al.,* 2006), which was originally developed in conjunction with policy arrangements rather than governance (Ayana *et al.,* 2015). The PAA has recently been employed to scrutinise relevant aspects of green self-governance practices (Mattijssen *et al.,* 2018). With an emphasis on a partnership framework, multiple stakeholders or groups have varying roles of responsibilities for green space management (Bulkeley, 2010), as shared responsibility is often associated with partnerships (Barnes *et al.,* 2008; Burton and Mathers, 2014). However, there is a need for a framework which is appropriate for evaluating the efficiency of management (Roe, 2013). Emerging frameworks tend to highlight the limitations and weaknesses of other frameworks. Frameworks relating to different concepts such as policy, governance, partnerships and evaluation may appear coherent, but in reality green space management involves a multi-dimensional approach (Bulkeley, 2010; MacKenzie, 2017). In addition, these frameworks do

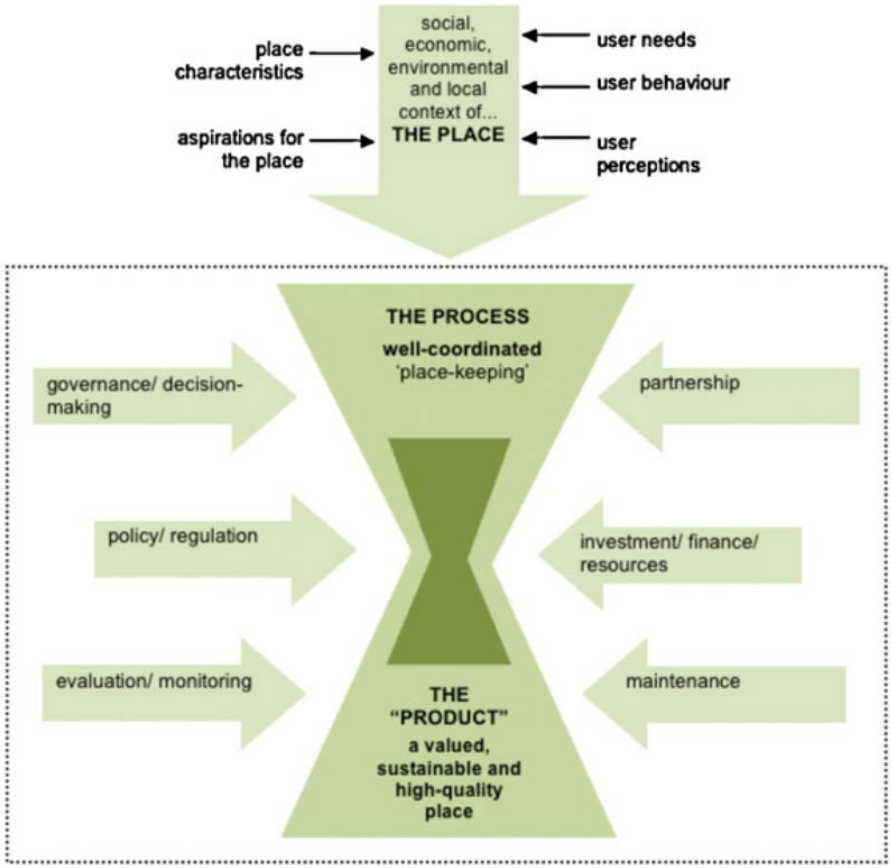
not recognise that there are differences to be aware of between the place-making and place-keeping stages of landscape design, planning and management. Place-making – when capital investment is spent – takes centre stage in urban planning and design shaping and involved in the creating and shaping of high-profile places in towns and cities all over the world (Roberts, 2009). Place-keeping is what happens after such high-quality places have been created (Dempsey and Burton, 2012) referring to the long-term management. It is therefore argued here that green space management in practice necessarily must be subjected to holistic approaches to analysis. Hence, by addressing the range of issues occurring in green spaces and emphasising sustainable management, a holistic framework approach of 'place-keeping' aiming at long-term management constitutes a useful starting point for the analytical framework in this thesis.

2.5.3.1 Defining place-keeping and its dimensions

The notion of 'place-keeping' was introduced by Wild *et al.,* (2008) in an EU-funded, multi-stakeholder project and was developed by researchers at the University of Sheffield after 2012 (Burton, Mathers and Dempsey *et al.,* 2014). Place-keeping focuses on how long-term management has the potential to bring environmental, social and economic benefits for future generations (Dempsey *et al.,* 2012). Scholarly research asserts that the ultimate aim of place-keeping is to enhance and maintain the qualities and benefits after initial place-making through long-term management. Place-keeping is a holistic approach to long-term management comprised of six dimensions: Policy, Governance, Partnership, Funding, Maintenance and Evaluation (Figure 2.6). The impact of policy has led to the process of creating and maintaining public spaces (de Magalhães and Carmona, 2009). In addition to this, underpinning policy has made contributions towards improving social disadvantages (Walsh, 2001) and has been applied to deprived neighbourhoods (Carpenter, 2006). This contribution has the potential of reaching all places throughout the UK, through a political context which aims to promote a better quality of life in urban areas (VROM, 1997; Stead and Hoppenbrouwer, 2004). However, place-keeping *policy* has a significant influence on practical place-keeping and its dimensions. This is due to it instigating an analysis of the (changing) policy context and providing a broader contextual understanding of green space management, for example, taking into account the

long-term liveability, area-based initiatives and stakeholder perceptions within the policy context of sustainable communities (Dempsey *et al.*, 2016).

Figure 2.6 The concept of place-keeping



Source: Dempsey *et al.*, 2012.

Furthermore, place-keeping policy reflects the recent driver changes made to policy in particular, emphasising the decentralisation of responsibility (Carmona *et al.*, 2004). It is clearly interpreted that recent policy plans can, therefore, have a profound impact on management contexts (Mattijssen *et al.*, 2017). However, previous research has not really examined how the policy context affects other dimensions of urban landscape management, which is what the Place-keeping analytical framework can do.

In the current era of austerity, the lack of public funding for parks is a critical issue (HLF, 2014, 2016). *Funding* is fundamental to place-keeping (Dempsey and Burton, 2012), linking to skilled and experienced labour, indicating that the extent of funding can affect the ability to maintain and manage the quality of parks. (CABE Space, 2006b). Sustainable income

generation is an issue that recent park management and maintenance need to address in effective long-term management funding plans which can tackle how to secure it in practice, rather than through a superficial focus on the day-to-day (Carmona *et al.*, 2004a) and how to secure it in practice (Dempsey and Burton, 2012). Importantly, to generate income to manage parks, the roles of stakeholders such as community and private sectors have been extended within the policy stream. Therefore, their perceptions are important in understanding the acceptability and feasibility of different income generations and proposals for future management planning. A place-keeping analytical framework will allow this research to examine perceptions and consider the interactions between other aspects of landscape management such as governance and partnership (who gets involved in the funding side of things, and who is affected, which is why this research will be asking people's opinions about different revenue generating).

Governance as a part of place-keeping describes the relationships between the range of stakeholders in the decision-making process surrounding landscape management (Dempsey and Burton, 2012). Governance pursues a strong focus on community engagement (Bovaird, 2004; Delago and Strand, 2010), derived from participatory governance (Murdoch and Abram, 1988). In turn, governance, as manifested in park management contexts, relates to the strong involvement of community groups which can often be driven by a desire to improve the park (Dempsey and Burton, 2012; Mathers *et al.*, 2015; Dempsey *et al.*, 2016a). However, recent policy changes, in particular during the Coalition government (2010-2015), aimed at encouraging community groups and citizens to engage more in volunteering through its 'Big Society' and associated policy instruments. The effects of the 'Big Society' have not yet been examined in the parks context in the UK to date, although recent research examined citizens' engagement and continuity in connection to place-keeping activities in Berlin, Amsterdam and Milan (Mattijssen *et al.*, 2017). This research concluded that it was local authorities, rather than citizens, whose role was critical in enabling long-term green space management. It is therefore important to take into account the nature of governance in parks management in the UK context in this study, to make a direct contribution to knowledge in this area.

Place-keeping is dependent on strong *partnerships* (Dempsey and Burton, 2012). De Magalhães and Carmona, (2009) identified three models of partnership: state-centred (mainly local authority), market-centred (large-scale town or city centre management programmes and BID: Business Improvement Districts) and user-centred (community groups). Another

partnership model, the 'Public-private partnerships (PPPs) are widely spreading in open space management (Loader, 2010) and concerning parks management; PPPs call on resources from outside the public sector (Carmona *et al.*, 2008). However, partnerships in park management tend to underline external input (Burton and Dempsey, 2010; De Magalhães and Carmona, 2009) such as contractors (which is a legacy of the Compulsory Competitive Tendering (Dempsey *et al.*, 2016b), broader participation (Smith, 2004, p. 64), democratic approaches (Bovaird, 2004) in/to decision-making and more importantly sharing responsibility/ ideas for park management (Dempsey and Burton, 2012). However, there is a question of how place-keeping partnerships provide spaces to share ideas and knowledge, where knowledgeable experts in government and community groups as well as other stakeholders gather and who can organise. This also raises questions of how governance structures in place might affect the partnership – and vice versa – which can lead to differences in the effectiveness of capacity of some partnerships compared to others (Mathers *et al.*, 2015) and the influence of austerity-led policy measures. With this in mind, place-keeping provides an analytical framework which allows for a holistic analysis of parks management within its wider political and socio-economic context.

Maintenance is associated with the perceived quality and use of public spaces (Dempsey, 2008), affecting people's propensity to use spaces – they are less likely to use them if the space is poorly maintained (Dunnett *et al.*, 2002; Shoreditch Trust and OISD, 2009). Maintenance is related to changes over time, reflecting seasonal use, plant growth and user requirement (Dempsey and Burton, 2012). Therefore, it places importance on the right time rather than on how much work is completed (Carmona *et al.*, 2004a). It relates again to conditions of green spaces based on incorporation of a longer-term process of management (Dempsey and Burton, 2012). However, more importantly, importantly, it has been recognised that the local authority has identified that the numerous problems relating to maintenance was influenced by costs cut derived from policy changes, in particular, CCT (Carmona and De Magalhães, 2006). These policy changes regarding urban green space maintenance are linked to the exercise of 'contracting-out' which related to partnership ideas (Patterson and Pinch, 1995; Persson, 1996) in relation to partnership ideas focusing on integrating the state, the market, and the local community in public space management (de Magalhães and Carmona, 2009). A further impact of maintenance-related contracting-out, is the implication of integrating aspects between contexts such as budgets, strategy, park policy and citizen involvement (Lindholst, 2009).

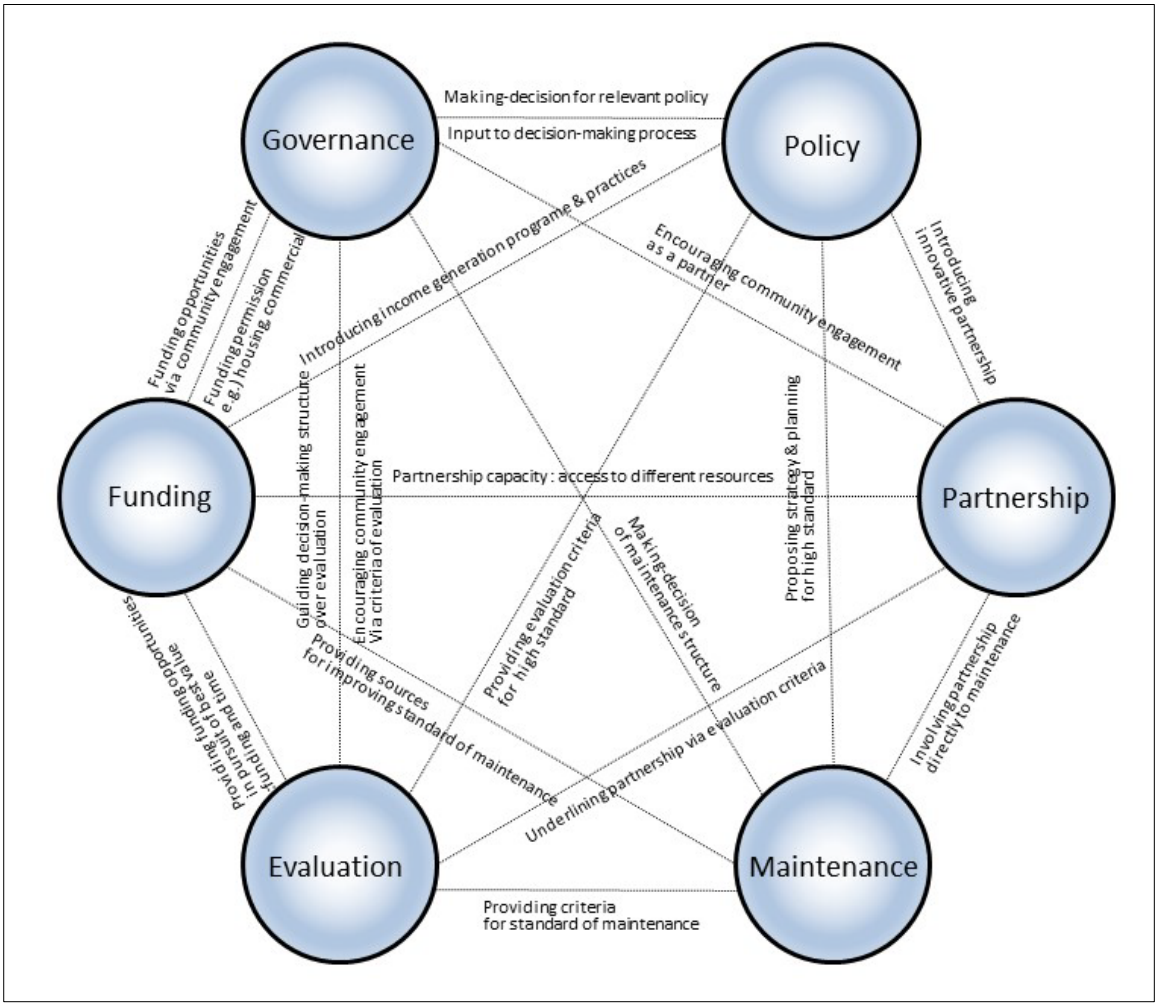
Therefore, place-keeping can be employed to look at the interactions between maintenance and funding, as well as other raised texts, such as partnership and community involvement.

The underlying aim of *evaluation* in parks management is to monitor and deliver the associated economic, social and environmental benefits of parks provision (Greenhalgh and Parsons, 2004; Dempsey and Burton, 2012). Evaluations of green space management in the UK are measured by existing awards or competitions e.g. the Green Flag Award and local authority monitoring. As an award, The Green Flag identifies good practice of maintenance and effective management of public spaces (Barber, 2005; Greenhalgh and Parsons, 2004; DETR, 2000; NAO, 2006) which contribute to raising standards (Barber, 2005; Carmona *et al.*, 2008).

However, real-world evaluations of green spaces may cost a significant amount of time and money due to the requirement that they remain regular. Local authorities do not have the people, resources and time to evaluate. Sometimes parks management evaluations might be compromised because it is done by the people who deliver the parks management (Dempsey *et al.*, forthcoming). This shows that using the place-keeping framework is a useful way to study parks management within particular evaluation.

The discussion above has set out the different aspects of parks management. As has been reiterated throughout, a benefit of the place-keeping analytical framework is that is requires an understanding of how these aspects, or dimensions, can be *coordinated*, acknowledging the overlapping nature of partnerships, governance, funding, evaluation, policy and maintenance. By analysing these aspects through the lens of place-keeping, researchers are able to better understand the interactions between the dimensions. Successfully coordinated place-keeping would therefore consist of long-term quality and efficiency based on stakeholder engagement that has both a strategy and a local focus, which is underpinned by reliable funding resources and a regular evaluation process (Dempsey and Burton, 2012). Adapted from the applications of place-keeping in the literature, Figure 2.7 provides a diagrammatic visualisation of the interpretation of the inter-relationships between the dimensions of place-keeping which shows how successful long-term management through the norms of place-keeping might be achieved.

Figure 2.7 The concept of coordinated place-keeping



Derived from the literature (including Mattijssen *et al.*, 2017; Mathers *et al.*, 2015; Dempsey *et al.*, 2016a, 2016b; de Magalhães and Carmona, 2009).

This framework for coordinating place-keeping explains the inter-connection between the dimensions. However, coordinating place-keeping faces barriers and difficulties such as uncertainty over time and resources, changes in funding or unstable funding challenges and the imbalance between less- or over-management in practice (Adair *et al.*, 2000; Burton and Dempsey, 2010; Carmona, 2010). It is clear that the effective coordination of place-keeping needs to understand and address the barriers to practice underpinned by the aspects of each dimension.

2.5.3.2 The parks management context and place-keeping

To demonstrate the usefulness of place-keeping as a concept that can help us understand parks management in practice, it is useful to reflect on the ensuing inter-relationships, which can be gleaned from the literature, between the different aspects of parks management in the UK context (Figure 2.6). The New Labour Government (1997-2010) pushed such park management strategy, e.g. area-based regeneration and the increased involvement of communities in the context of policy-led neighbourhood regeneration, which led to relevant funding changes. Dempsey *et al.,* (2012) argue that the political context had a predominant impact on green space management, particularly in regard to funding. Acknowledging the importance of long-term funding and how to secure it in practice is fundamental to parks management (Dempsey and Burton, 2012). The securing of regeneration funding during this time was dependent on cross-sector partnerships which were emphasised by the political context (Dempsey *et al.,* 2016a). A key policy guidance document at the time was 'How to create quality parks and open spaces' produced by the then Office for the Deputy Prime Minister (2005). This guidance, based on partnership working, highlights the need for a widespread broadening of the range of stakeholders in managing green spaces and parks than was previously sought in the state-centred model (De Magalhães and Carmona, 2009). This reliance on a broad range of stakeholders continues today, supported by the Big Society ideals of the Coalition government (2010-15), which have survived into the current Conservative government. This marks the continued political support for local decision-making processes with strong community engagement for non-statutory matters such as parks (after Delgado and Strand, 2010). It can be noted that a number of political initiatives continue to have the objective of harnessing community involvement in managing green spaces and parks effectively (e.g. CLG's recent pocket parks funding stream which made cross-sector partnerships a necessary condition for funding applications). For these stakeholders to work together effectively strong partnerships and effect decision-making is an essential requirement (Mathers *et al.,* 2015; Dempsey *et al.,* (2014). It can therefore be interpreted that governance, particularly meaningful community involvement, underpins successful partnerships, as highlighted in the concept of coordinating place-keeping in section 2.5.3.1. Place-keeping governance is defined as the relationship between stakeholders, including governmental and non-governmental stakeholders, involved in the decision-making process (Dempsey *et al.,* 2012). As outlined in previous sections which

reviewed the empowerment of community engagement, there have been great contributions by community groups to green space and park management. The definition of place-keeping encompasses a wide range of maintenance skills and their appropriateness for certain purposes (Welch, 1991; Barber, 2005), aiming to retain good park condition and to incorporate them within a longer-term management process (Dempsey and Burton, 2012). Maintenance clearly links to the quality of public spaces, including parks (Dempsey, 2008). In the landscape context, evaluation is defined as a process to assess the systematic collection and analysis of both quantitative and qualitative data, to provide supporting evidence for decision-making (Smith *et al.*, 2014). The broad literature on the evaluation of public spaces has introduced criteria and indicators to monitor or assess green spaces and parks in landscape contexts. The criteria and indicators of the evaluation tend to measure aspects and factors which are related to place-keeping (Dempsey and Burton, 2012). It is clear that the evaluation of place-keeping is the process of discovery, allowing us to make sense of how long-term management happens in practice. The final stage, as this research examines, is the development of new thinking about working together to deliver different park management practices. Park management practices, therefore, should include a discussion of different people delivering park management to local government. These linkages between the dimensions of place-keeping and park management clarify that the concepts of place-keeping can be employed in this research to explore and understand drivers of change behind the park management context in practice in UK cities, which to date has not be examined in detail. This research aims to address this gap in knowledge by examining a number of parks in Sheffield as the following chapters will outline.

2.6 Conclusion

The review of the literature has examined aspects of landscape management examined a range of theoretical and policy-focused debate around landscape management. Emergent meanings and interpretations of landscape management vary, but consistently across the literature is the need to focus on stakeholder involvement. This is within a context of well-managed landscape which can have positive impacts on people's quality of life. UK government policy instruments

have supported a shift of park management, one which incorporates stakeholder involvement within the context of profound financial crisis, despite different ideologies and drivers of governments. The drivers of decentralisation and competitiveness are affecting public services overall but are having an acutely detrimental effect on non-statutory services including green space management. This has cascaded down to local government policy contexts where budget cuts are significant and, in some cases, devastating. To understand how this policy context affects stakeholder involvement in parks management, there is a need for a holistic approach to park management within this research's analytical framework. The concept of 'Place-keeping' is proposed because it can be used to examine park management contexts: its six dimensions are suited to help understand the specific and inter-related features of park management in the UK context. Reflecting these emerging features of policy contexts, the place-keeping framework allows for a robust analysis of stakeholders and community participation, in a wide range of park management settings including decision-making processes. This review of the literature provides the foundation for exploring park management practices and stakeholders' perceptions of them in the research. This will be used to examine different perceptions of stakeholders, such as residents, community groups and professionals, across a sample of six parks in Sheffield, UK. Before this, Chapter Three explores the potential landscape management practices which are potentially relevant and applicable to district parks and subsequently forms the basis for the empirical examination of this study.

Chapter Three

Introducing landscape management practices: focus on community food growing, urban park plantings and income generation models

3.1 Introducing landscape management practices in park settings

The main aim of this chapter is to explore the range of landscape management practices in park settings, while also outlining the features of the predominant practices. A number of landscape management practices are claimed to contribute towards establishing better green spaces and reconnecting with nature. Such practices have the potential to contribute to increasing social cohesion, environmental enhancement and improvements in people's health (Nowak, 1993; Jackson, 2003; Harnik and Welle, 2009; Jennings *et al.*, 2016). For the purposes of this research, such practices are necessarily prioritised based on an understanding of two emergent park management issues. Firstly, local authorities operate within the context of austerity which has come about from the global financial crisis. Secondly, community involvement has emerged as a dominant policy focus across the political spectrum in the UK. The relevant literature on landscape management practices is therefore reviewed within this broad context and the research examines a selection of landscape management practices which have relevance in the park setting: planting-based practices, community food growing and income generation models.

3.2. Exploring the range of landscape management practices in park settings

An increase in urbanisation means that 54.5 per cent in 2016 and 60 per cent by 2030 of the world's population will live in urban settlements (United Nations, 2016). However, this change has led to the inadequate provision of green spaces in cities and towns (Bertram and Rehdanz, 2014). This may lead to a disconnection between green spaces and people, resulting in a decline of people's health and well-being (HM Partnership, 2011; DEFRA, 2011). Pressure on space means we must maximise the benefits of green spaces. By harnessing the benefits of urban natural resources in cities, there can be benefits of reconnecting people with green spaces (Permaculture Research Institute, 2017), something which can also protect and safeguard green spaces against increasing urbanisation (Bullivant, 2012). To meet these demands, a range of innovative practices are being explored. This variety of landscape management practices can be found in existing or completed landscape initiatives. These practices are either already

employed or potentially applicable in urban neighbourhoods and park settings. The following sections explore a wide range of landscape practices in different primary sources or purposes.

3.2.1 Planting-based practices

Many areas of urban parks are covered with different types of vegetation, which can contribute positively to physical, social and mental well-being (Shanahan *et al.*, 2015). Planting-based practice puts its emphasis on ecological contributions: practices might relate to rare or endangered species of plants playing important roles in ecosystem diversity (Ferrer-Sanchez and Rodriguez-Estrella, 2016), as well as restoring natural habitats and biodiversity (Sousa-Silva et a., 2014). In urban parks, planting-based practices can include conservation of plants and habitats, wildlife conservation, formal planting, formal garden settings, naturalistic plantings and tree planting practices including woodland and park forestry (CABEspace, 2004; CABEspace, 2009a). The role of vegetation in urban settings has been examined in relation to people's perceptions: for example, research has explored how people's perceptions change as characteristics of vegetation vary in colour (Kendal *et al.*, 2012a; Hoyle *et al.*, 2017b), leaf texture (Williams and Cary, 2002) as well as in diversity of vegetation (Fuller *et al.*, 2007). According to demographic variables (such as age, education, gender) and expertise (Hofmann *et al.*, 2012), human perceptions of planting can differ. However, the changes of park management affected by funding shortages can't meet people's demands and therefore calls for more sustainable urban landscapes (Barbosa *et al.*, 2007). There continues to be an exploration into lower-maintenance plantings and planting styles to help re-invigorate public preference (Hitchmough and Dunnett, 2008, p.2). For instance, meadows with perennial flowers were examined by Hoyle *et al.*, (2017c), which showed that perceptions differed between the local authority and the public: residents are more likely to prefer wild-flowers with short-cut grass, while park managers mostly wanted to manage long grasses and limited flowers. However, there is little empirical evidence on how different stakeholders (including residents and community groups) perceive different types of plantings as landscape management practices in their local parks, which this research aims to address.

3.2.2 Food growing-based practices

Food growing-based practices in urban areas, such as allotments and community gardens have been promoted as interventions that can contribute to food security, health and sustainable community development (Barron, 2017). Active use of allotments has a long history, marked by events such as the Dig for Victory campaign in a wide range of sites across Britain in the 1940s (Ginn, 2012). 'Dig for Victory' during the Second World War was a campaign aimed at addressing the lack of resources, particularly as it was time of financial crisis (Evans, 2011). It was considered to improve bonds between communities and promote good citizenship (Alexsander, 2007). The popularity of allotments continues today and is demonstrated by the long waiting lists of allotment plots in UK towns and cities (DCLG, 2012a). Along with food growing in allotments, community garden sites have become important places that can contribute to strong community engagement and cohesion (Stocker and Barnett, 1998), learning behaviours (Clavin, 2011) and the provision of sustainable food and energy (Mollison, 1990, p. 4). However, it is argued that community gardens tend to manifest themselves as small schemes rather than as large-scale sites such as allotments (Stock and Barnett, 1998). On the other hand, community gardening such as guerrilla gardening or community food growing in 'Incredible Edible in Todmorden' can contribute to a network of small garden spaces across a town or city (Warhurst and Dobson, 2015). Successful community-led food growing practices are based on sharing responsibility among community members and members and management practitioners (Certomà and Tornaghi, 2015).

Therefore, arguably a demand for allotments and community-led gardening has emerged from such successful examples, which may potentially function in current park management contexts but which are facing constraints from economic pressures. For this reason, food growing as a relevant landscape management practice is of interest in this research and discussed in more detail below.

3.2.3 Income generation-based practices

Funding programmes for parks, such as the Heritage Lottery Fund's *Parks for People*, have encouraged a focus on developing new income streams in parks such as cafés, shops and events, as a way of providing long-term enterprises which can supplement the funding of parks (HLF, 2016). Food available to visitors at cafes, restaurants and sometimes shops can provide a well-used service and become valued gathering points for visitors (Harnik and Martin, 2015; Layton-Jones, 2016). Year-round business practices in parks can involve the private sector which can include profit-generating organisations (Walls, 2013). In similar ways, events, festivals and concerts also tend to be led by private businesses and can positively contribute to generating revenue (Walls, 2014; Harnik and Martin, 2015), similarly, parks have long had private companies or individuals take on concessions such as ice cream vans and boat hire (Gilroy and Snell, 2012). However, there are issues around holding such events in public parks. Concerns have been raised about parks being privatized, which is argued to lead to increasing inequalities as some events require the fencing off of large parts of parks which are only accessible through (high) entrance fees (Dempsey, forthcoming) and use of concessions which might be unaffordable for less affluent users (Harnik and Martin, 2015). Examples include the British Summer Time festival in Hyde Park (sponsored by Barclaycard) and in Sheffield they include the recent Jurassic Kingdom in Norfolk Park and Tramlines Music Festival in Hillsborough Park. There may also be issues around noise for residents (e.g. Hyde Park, London, concerts generate noise complaints (The Telegraph, 2012; Smith, 2018). In addition, disruption such as increased traffic and litter caused by some income generating activities in parks can create friction with local residents and stakeholders (Harnik and Martin, 2015). In this case, there is an argument as to who provides and manages these kinds of business practices with scope for non-profit making stakeholders to also get involved (Layton-Jones, 2016).

Community-led organisations are involved in such activities already: "Small-scale community events are also important for animating parks and increasing local use of spaces. We will continue to support an annual events programme including events organised by local community groups" (Bristol Parks Forum, 2002). According to similar community event guides in cities such as Sheffield (Sheffield City Council, 2016) and Leeds (Leeds City Council, 2016), the local authority is supportive of more events in parks organised by the community because

they help generate income. However, there is still the question that we do not substantially know the way in which different stakeholders, including community groups and local residents, react towards business practices in parks. With this in mind, this study will explore income generation practices which are applicable to park settings in Sheffield, within the context of financial austerity measures.

3.2.4 Physical activity-based practices

Physical activity is important for people's health and urban parks can facilitate opportunities for physical activities (Han *et al.,* 2013; Kent *et al.,* 2011). According to Cohen *et al.,* (2007), users visiting parks often are more likely to engage in physical activity. Accordingly, numerous physical activities are provided in urban parks: for instance, outdoor gyms, sports facilities including tennis, bowling green, sports pitches and age-specific facilities such as multi-use games areas, BMX and skateboard tracks as well as organised activities including ParkRun.

Equipment such as outdoor gyms can contribute to increased park use and active recreation (Brown *et al.,* 2014). However, the location of such equipment needs to be accessible to large populations: i.e. it should be well-connected through formal paths and without significant level changes (Cohen *et al.,* 2012). It may be argued that there is the same need for users living around local or small parks as well as the larger parks.

The designated areas for skaters and BMX bikers are argued to make a positive addition to parks, and passing pedestrians and bus passengers can enjoy watching young people showing off their skills and engaging in risky and stimulating activities (Shackell *et al.,* 2008). However, sometimes perceived conflicts arise, such as skateboarders' anti-social behaviour proving a problem for other users (Woolley, 2003b; Karsten and Pel, 2000). Skateboarding sites are available in different spaces from city centre to skate parks (Woolley, 2003a). These activities offer opportunities for meeting, relaxing and learning from others (Woolley and Johns, 2001). However, they require regular inspections to help catch vandals and remove/ repair the damage quickly (ibid.). On the other hand, it can be argued that these kinds of physical activity practices can't be prioritised in public spaces. Shackell *et al.,* (2008) pointed out that good public spaces

are shared spaces, meaning that such skate/bike recreation can be limited to specific ages. This indicates that different users or groups of users have differing needs.

3.2.5 Other practices

There is a range of other practices, some of which are touched on briefly here. Heritage preservation management practices are increasingly driven by communities as manifestations of a sense of place and belonging (Tuan, 1977) and awareness of historical significance (Relph, 1797) as well as a site of memories for users (Bagnall, 2003). An ongoing lack of funding in landscape and built heritage means that groups may form to help protect and restore, for example, walled gardens, bandstands, fountains and other structures in urban parks (Layton-Jones, 2016). Such community-led heritage can help bring local people together and increase awareness and use of sites (HLF, 2015).

Waterway management practice in parks is related to environmental benefits such as sustainable drainage to help filter pollution and support increasing ecological diversity through the creation of ponds and wetlands (RBA, 2018). While water bodies in parks have positive social, recreational and health associations for people who visit parks (Jennings *et al.,* 2016), the requisite management practices require a lot of work and resources, and similarly produce issues such as litter removal and disposal, clearing fallen leaves and special controls of vegetation spread, e.g. Himalayan Balsam (RBA, 2018). Water management needs to be carried out through local-level management (Brill *et al.,* 2017) and increasingly involves a range of stakeholders including landowners and the community (Ghimire and Pimbert, 2013).

Cemeteries as recreational and cultural green spaces, have a long history (Al-Akl *et al.,* 2018) and are framed as 'urban green spaces with cultural identity'. The incorporation of cemeteries into landscape planning is crucial for park-like settings (Etlin, 1984), providing spiritual healing as well as sustainable urban development (Sandström, 2002). Research has examined the value of cemeteries as green spaces, focusing on restorative (Nordh *et al.,* 2017) and recreational (Deering, 2010; Evensen *et al.,* 2017) benefits. Further, their upkeep as historical and cultural sites are linked with effective bonds to the community (Al-Akl *et al.,* 2018). Restoration of cemeteries has driven the formation of local friends groups to restore buildings- some of which

have income generation practices including gift shops and regular events, e.g. Arnos Vale Cemetery in Bristol (Nesta, 2013). It is clearly understood that an emphasis on community involvement is prevalent in a wide range of park management practices. While not exhaustive, the practices explored briefly in this section are those most likely to be found in parks of different sizes, and with different characteristics (e.g. heritage preservation of a building or garden within a park). As the focus of this research is to examine the acceptability and feasibility of management practices that could occur in a district park setting, park management practices were selected that were relevant and appropriate to the six specific parks in Sheffield under study. This process is discussed in more detail in Chapter Four. The next section focuses on the three park management practices selected for this research.

3.2.6 The focus on three park management practices in this research

As Chapter Two has shown, the recent policy context is one where there are significant financial pressures on park management practices: dominant government-led approaches to addressing this have been to underline the need for community engagement and alternatives to address ongoing funding cuts. The threats to budgets and the consequent lack of maintenance have led to an exploration of alternative park management and a successful model for community involvement that attracts an increase in users, e.g. Nesta's programmes 'Realising the value' in 2016 and 'Community Resilience in Emergencies' in 2018.

Parks are spaces managed or maintained for the public interest, based on an understanding of 'public spaces' as something which can intuitively belong to all citizens. In this way, the different practices already discussed have the potential to affect positively and negatively the management process in relation to community organisation or interest groups with particular governance arrangements of responsibility (De Magalhaes and Carmona, 2009). For example, it is not clear what the accountability of non-public sector organisations is when they are managing public goods such as parks (Dempsey *et al.,* 2014). However, the involvement of community and other non-governmental organisations continues regardless, with some park funding programmes contingent on their involvement, despite a lack of clarity of how management, responsibility and accountability is manifested (CABE Space, 2006). Given the

policy support for the ongoing involvement of community groups in park management around the country, this was one of the selection criteria for choosing sites for this study.

As a landscape management practice which has an emphasis on community involvement and people's interests, an interpretation of the allotment and community-led gardening in park settings is explored, given its potential for application in current park management contexts. Previous studies tend to focus on food growing practices in non-park settings and for these reasons, community food growing as a relevant landscape management practice is of interest in this research.

Another manifestation of the pressure of financial austerity on park management and maintenance is the pursuit of low-cost interventions in relation to planting. There has been something of a shift from formal bedding plants dating back to the Victorian era to a different approach of planting types such as perennial flowers and long grass plantings (Kingsbury, 2016) (See images Figure 3.1-4). People's perceptions relating to planting types do not favour a single type of planting (Oudolf and Kingsbury, 2005, p.9), meaning that some people may like traditional formal bedding planting while, others may prefer naturalistic planting types such as meadow flowers. These planting approaches do however differ in terms of maintenance costs with formal bedding plants being more costly than naturalistic planting. There is currently a small amount of research being conducted into perceptions of naturalistic planting (Hoyle *et al.*, 2016c), but there is little empirical research examining people's perceptions of these different planting types. For these reasons, this research will address this gap in knowledge around park management practices in relation to different types of planting within the context of financial austerity and community involvement.

The literature (academic and grey) on public green space highlights a strong theme of the need to explore different solutions to generating funding for park management (CABE Space, 2006; Nesta, 2013; HLF, 2016). The ongoing loss of financial resources for parks has led to problems in the delivery of overall management and maintenance such as the reduction/ loss of on-site management staff (Carmona and De Magalhaes, 2006). This negatively affects park management to keep proper standards of parks and to continue providing social, environmental and health benefits. To address this issue, income generation is becoming increasingly considered in parks. However, the acceptability of income generation models that are implemented in parks across the country has not been empirically examined. Hence, this

research takes this as its focus. As many models proliferate and life in an era of austerity continues, different approaches to income generation models should be tested in essence.

Therefore, this research tests three different park management practices which address community participation and funding cuts: (1) community food growing, (2) urban park plantings and (3) income generation models in park settings. There is little empirical research examining the perceptions of users, residents and communities as well as other stakeholders concerning these park management practices. This research therefore aims to ask: How acceptable and feasible are such innovative practices in urban parks? What effect will this have on users and their propensity to spend time in urban parks? The following sections will discuss the features of the selected park management practices and subsequent chapters will answer these research questions.

3.3 Community food growing

One way of harnessing the benefits of green spaces may be through community food growing (CFG) (Nam and Dempsey, 2018). CFG is a community coming together to manage the available growing space (CCB, 2013), defined as the cultivation of land by groups or individuals for the purpose of growing food (Sustain, 2014a). Some possible land sources for CFG could be communal land on waste ground, a housing estate and derelict sites, land within existing parks and recreation grounds, land awaiting development, hospital grounds, rooftops, old churchyards and cemeteries, school grounds and allotment plots (Sustain, 2014b). In spite of various land types being available for food growing projects, there are some difficulties to overcome before such land can be used, e.g. CFG projects may need to negotiate a site with the landowner (Community Council for Berkshire, 2013). Food growing-related activities are found to deliver positive benefits for physical and mental health (Bragg *et al.*, 2012), children's education (Welsh Government, 2012; DCLG, 2012a; Mayor of London, 2012), community interaction and cohesion through social gatherings (Plymouth City Council, 2012; Mind, 2014), addressing environmental problems such as climate change (Sustain, 2014) and providing animal habitats, as well as supporting a clean environment and preventing the over-use of

natural resources (Hayes, 2014). According to case studies conducted by DCLG (2012b), CFG can contribute to a sense of community, in particular, encouraging social cohesion, increasing ownership, reducing isolation, improving a sense of safety in sites and providing relevant skills. A sense of community and its positive impacts have been associated with people gathering (Sense of Community Partner, 2004; Francis *et al.*, 2012; MacMillan and Chavis, 1986), increased feelings of safety and security (Sense of Community Partner, 2004; Francis *et al.*, 2012), improved well-being (Davidson and Cotter, 1991), belonging and social cohesion (McMillan and Chavis, 1986).

In recent years, gardening, including food growing, has been re-appearing in a wide range of sites across Britain (Ginn, 2012). Gardening is argued to be one of the most common ways of connecting with nature which can enhance psychological, physical and social health (Soga *et al.*, 2017). Community-led initiatives which address the connections between food-growing activities, health and wellbeing include Growing together, Groundwork's food growing projects, Social farms and gardens (formerly Federation of City Farms and Community Gardens) as well as the long-standing popularity in England for allotments (Crouch, 1989; Hawkins *et al.*, 2011; Speak *et al.*, 2015). The 21st century has seen adaptations of CFG such as guerrilla gardening (Black, 2013; Hardman and Larkham, 2014) and 'Incredible Edible', which originated in Todmorden, Yorkshire, and has been adapted in urban setting in the world (Warhurst and Dobson, 2014). The Incredible Edible project constitutes a response to 'Big Society' of the Coalition government's vision of enhancing community involvement (Thompson, 2012). Incredible Edible adapts different types of green space for CFG, spaces not restricted to allotments and which could be placed in valley land, playgrounds, park edges and abandoned sites (DCLG, 2012b). However, urbanisation pressures on land result in adapting alternative spaces in public neighbourhoods, including parks (Wiltshire, 2010; DCLG, 2012c; ACRE, 2012). Plymouth City Council (2012) claims that food growing will be a significant aspect of urban park settings for land sharing (DCLG, 2012a), echoing the popularity of allotments (which will be discussed in section 3.3.1). Likewise, Kinnaird's (2012) study shows that food growing activities can be inbuilt into the character of parks, as feasible public areas. ACRE's (2012) report also suggests that parks can be alternative possible land resources for food growing. Demands for food growing and its benefits mean that there is a now a challenge to

find suitable green spaces. This research therefore sets out to examine the acceptability and feasibility of community food growing in the park setting.

3.3.1 Food growing: Allotments and people's demand

The key period in the rise of allotments is between 1870 and 1919, affecting the formation of land and social communication (Nilson, 2014, p 248). Sandover (2016) argues that World War One was a significant period when allotments increased in number, which encouraged the UK government to create allotments across towns, cities and villages. Alongside this historical background, the features of allotments contribute to a wide range of benefits including environmental, health, recreational, educational and social cohesion (Golden, 2013). Similarly, specific training and development of skills (Bendt *et al.,* 2012) can provide opportunities for young people to engage in the community (Silva *et al.,* 2016) and to locate a sense of belonging to their environment (Kelly, 2012). However, allotment users do face challenges in terms of difficulty in physical access (Holland, 2011), vandalism (Teig *et al.,* 2009) and people having insufficient time (Meernar and Hoover, 2012). Nevertheless, allotments are still highly demanded by people. According to allotment waiting lists, allotments continue to be popular: there was an average of 52 people waiting for every 100 plots whereas around 78,800 people were on waiting lists for just over 152,400 statutory plots managed by principal local authorities in 2013 (DCLG, 2012a) (Table 3. 1).

Table 3.1 Allotment waiting list surveys since 1970

Year	Total plots	Council surveyed	Total waiting lists	People waiting per 100 plots
1970	532,964	*All	5,870	1
1977	497,793	All	121,037	24
2009	156,490	Principal	76,330	49
2010	157,796	Principal	94,124	59
2011	152,442	Principal	86,787	57
2013	152,432	Principal	78,827	52

* Numbers for 1970 & 1977 apply to England and Wales: 2009 to 2013 numbers apply to England only.

At a local scale, Table 3.2 shows that there are about 70 allotment sites in Sheffield with just under 33,000 plots (in 2017). The popularity of allotments is demonstrated in the waiting lists for Sheffield allotments (Table 3.2) which indicates that there are about 22 people per 100 plots waiting for a plot. Allotments in the least deprived areas are more popular than those in most deprived areas in Sheffield.

Table 3.2 Allotment waiting list surveys in Sheffield, 2017

IMD	Total plots	Number of people on total waiting list	People waiting per 100 plots
Most Deprived	977	108	11.1
Middle Deprived	1035	239	23.1
Least Deprived	976	320	32.8
Total	2988	667	22.3

Data collected by author visiting websites for allotments provided by Sheffield Parks and Countryside Services Department, but information of two sites is not available.

Considering the positive impacts of allotments and urbanisation pressures on new lands, the demands for allotments in park settings can be assumed to be a positive intervention. However, we do not know how acceptable and feasible allotments are in terms of food growing, without empirical evidence.

3.3.2 Community Food Growing (CFG) as a socio-political activity

There is a long-standing practice of food growing in English cities, which manifests itself in ongoing urban food growing initiatives such as 'Feed Leeds' (Kinnaird, 2012) and the London Food Link (Sustain, 2013) among others. Local authorities increasingly acknowledge the importance of CFG activities. For example, Sheffield's citywide green and open space strategy (GOSS) explicitly mentions community involvement and partnerships in support of food growing, acknowledging the need to 'develop the necessary resources and partnerships to deliver local practical skills training such as for horticulture/ food growing conservation etc.' (Sheffield City Council, 2009, p.65). These activities reflect an overall tendency within the context of green space management in England for local authorities to underline the importance of partnerships which involve a range of stakeholders: for example, Sheffield's GOSS

highlights a network of national and local public sector and non-governmental organisations (NGOs) and community groups.

Partly this acknowledgement of CFG is in response to the stipulations of green space funding bodies: local authorities which maximise community involvement cannot gain access to such funding without involving NGOs and community groups (Nam and Dempsey, 2018). For example, the Big Lottery will currently only fund projects through its People's Park programme if community groups are involved in park management. This is particularly relevant in the current era of austerity which is significantly affecting park management, and adversely affecting standards of quality (e.g. Layton-Jones, 2016).

A significant manifestation of local authority involvement in CFG relates to allotments which have a long history in England (Nam and Dempsey, 2018). The Enclosure Acts of the 18th-19th centuries used the term 'allotment' to refer to small plots of tenanted land for small-scale food cultivation. As Sheffield's population increased in the 18th century, most housing did not include domestic gardens so allotment garden plots were located in tracts of land nearby (Boulton, 2017).

Allotment plots in the 18th and 19th century were often cultivated by working craftsmen and tradesmen (Curtler, 2005), suggesting a relatively high level of means, motivation and capacity of allotment holders. Given its long history of local authority involvement in its management, the allotment is a heavily institutionalised manifestation of land preservation to exercise one's right to grow food (Miller, 2015). Allotments constitute a symbol of the preservation of the right to land for food growing although today's allotment communities might not perceive themselves as 'explicitly politicised' (Certomà and Tornaghi, 2015).

3.4 Urban park plantings

Vegetation in urban public parks contributes a range of benefits (Tzoulas *et al.*, 2007) to people's psychological well-being (van den Berg *et al.*, 2003; Luck *et al.*, 2011; Fuller *et al.*, 2007) and physical health (Pereira *et al.*, 2012) as well as biodiversity maintenance (Kurz and Baudains, 2010). There have been numerous studies which explore the associations and effects

of vegetation on people's perceptions, such as trees and shrubs (Schroeder, 1987; Jim and Chen, 2006; Kurz and Baudains, 2010), the neatness of vegetation (van den Berg and van Winsum-Westra, 2010) and how vegetation characteristics such as forms (Özgüner *et al.,* 2007), colour (Kaufman and Lohr, 2004; Kendal *et al.,* 2012a) and leaf texture (Williams and Cary, 2002) can influence people's preferences. The diversity of vegetation present in a landscape can be accurately perceived by people (Fuller *et al.,* 2007; Qiu, Lindberg, and Nielsen, 2013). Importantly, plants are highly related to the health and well-being of people, for instance it can help reduce stress levels (Brethour *et al.,* 2007), increase recovery time after medical procedures (Lohr and Pearson-Mims, 2000; Park and Mattson, 2009), improve relationships between people (Brethour *et al.,* 2007) and enhance performance at work (Dravigne *et al.,* 2008; Brethour *et al.,* 2007) as well as helping people to learn better (Kuo and Taylor, 2004). Further, plants with flowers play a crucial role in people's happiness, relaxation (Hall and Dickson, 2011) and psychological restoration (Hoyle *et al.,* 2017a) indicating that plants and flowers can significantly contribute to people's quality of life. Natural vegetation as part of urban planting is argued to positively affect people's psychological and visual perceptions, helping to reduce fear (Bixler and Floyd, 1997; Jorgensen *et al.,* 2002) and discomfort (Talbot and Kaplan, 1984). Formal bedding plantings are very popular with the general public and contribute to mitigating anti-social behaviour (Özgüner *et al.,* 2007). Özgüner and Kendle (2006) claim that formal bedding plantings are preferred by people based on positive accounts which note them as being well-managed, helping to create a quiet, peaceful and safe atmosphere and provide relief from stress.

Such studies were conducted to determine people's perceptions according to the atmosphere and physical form of plantings such as manicured, romantic and wild (van den Berg and van Winsum-Westra, 2010) and comparative studies between formal and natural plantings were also made (Özgüner *et al.,* 2007). The results showed that manicured and formal planting is positively related to people's perception of beauty. However, the definition of specific plantings which were employed in this research is unclear in its classification of planting types and does not include recent types that have been occurring in various public spaces, e.g. meadows with wild flowers. In a similar vein, these studies were carried out in private as opposed to public spaces. The perception of different planting types in a public area (woodland) was examined by Hoyle et.al. (2017) and the results showed that herbaceous and flower covered plantings have

the strongest effect on people's aesthetic perceptions. This study conducted in public areas resulted in important factors affecting people's perceptions: structure, species and flower cover. However, there is still little empirical evidence on people's perceptions of different types of plantings in park settings.

3.4.1 Pressures of budget cuts on urban park plantings

Financial difficulty and the negative impact it has on park management results in planting plans having a reduced amount of vegetation. This indicates that financial circumstances need to be carefully considered in the park context, as it influences the ability to manage and maintain vegetation. In the late 1990s, the financial crisis affected park management practices including planting plans which were cost-dependent on allocated maintenance budgets (Dunnett *et al.*, 2002). Over time, Parks Departments began shrinking and were finally merged into Departments of Leisure and Amenity Services in 1974; consequently, the budgets for park management declined (Bains, 1974). This change, along with CCT in the 1980s, directly affected maintenance, so that species, forms and sizes of formal bedding planting which demanded technical skills were only possible in a few local authorities that had retained experts and trained members of staff (Woudstra and Fieldhouse, 2000; Barber, 2005). Most authorities were forced to consider business and financial accountability rather than horticultural management (Ruff, 2016, p.210).

Recent major changes in park management have been forced to address the negative impacts that budgets and funding cuts have created. In order to do this, there has been a need to understand the opinions of key stakeholders such as park visitors and the general public more widely (Ives and Kendal, 2014). Similarly, park managers have attempted to determine public preferences in regard to planting types, including specifics such as form, species and flower cover (Southon *et al.,* 2017). However, it is difficult to meet all the demands, as people's preferences park to park vary significantly. Subsequently, these differences could have important implications for the management of different types of landscapes (Harris *et al.,* 2017). This research acknowledges a lack of understanding of different users, e.g. recognition of the

impact that socio-economic characteristics have on people's perceived value of vegetation spaces. This means that research needs to capture the perceptions of a wide group of users.

Budget cuts have prompted explorations into new low-cost park management methods which involve urban park plantings. Expenditure on the management of vegetation in urban greenspace has declined in real terms in Britain and other northern European nations over the past 20 years (Dunnett *et al.*, 2002). This ongoing decline in public landscape maintenance and the reality of funding cuts have initiated a search for new, relatively low-maintenance planting styles, which are simultaneously low cost and do not require intense labour (Dunnett and Hitchmough, 2004). The much-reduced budgets started to directly affect the high-cost (bedding) plantings causing them to be replaced by low-cost alternatives (Woudstra and Fieldhouse, 2000, p.118). Traditional horticultural plantings including formal bedding plants are increasingly being replaced by lower maintenance-based plantings, which also attract biodiversity and wildlife including pollinating insects (Hitchmough and Dunnett, 2008. p.2). The impacts of budget cuts resulted in the decline of formal bedding (Hitchmough and Woudstra, 1999). However, we still see both formal bedding plantings as well as naturalistic plantings in parks.

Figure 3.1 Maintaining bedding planting at Weston park, Sheffield

Photos by author

It is argued that formal bedding planting requires higher maintenance than naturalistic planting in a management context (Brooker and Corder, 1985; Özgüner *et al.*, 2007). However, it is further noted that naturalistic plantings practices require different skills, which can involve additional management enhancement costs (Lickorish *et al.*, 1997). Oudolf and Kingsbury argue that the consideration of the difficulty of maintenance at the planting stage depends on the skill

of the landowner or managers (Oudolf and Kingsbury, 2005). They go on to suggest that naturalistic patterns do not guarantee low costs at all times. The complicated patterning of the naturalistic style and the consequent management operations can lead to higher costs (Kendle and Forbes, 1997), meaning that the use of structurally complex plants or the use of a variety of plants in naturalistic planting techniques may increase management costs (discussed in more detail in 3.4.3).

The use of mown grass is a very important component of park landscapes. The frequency of mowing is also associated with maintenance costs, whereby more frequently cut grass such as mown amenity grassland, generates increasing maintenance costs (Hoyle *et al.,* 2017c). According to Buri *et al.,* 2015, frequently mown grass such as amenity grassland could generate intensive management with subsequent high maintenance costs. Two-thirds of urban green infrastructure in the UK is covered with mown amenity grass used for recreation (Forestry Commission, 2006). The lawn, as the most visually dominant element, understandably has fewer associated costs than the other forms of planting already discussed (Oudolf and Kingsbury, 2005, p.66).

Park managers' personal perceptions and ecological background can affect the provision and choice of planting in relation to the extent of planting maintenance (Hoyle *et al.,* 2017c). In addition, the decision-making behind what is planted can be influenced by local people (ibid.). Local people may prefer formal bedding plants, but they do not necessarily consider the cost of the plantings, instead perhaps expressing their preference based on what parks tend to have. It is clear that there is little research which focuses on understanding the gaps between practical perspectives and public perceptions of planting in urban parks. In addition, considering how community groups are increasingly involved in park maintenance, their perceptions may be importantly associated with planting maintenance issues.

3.4.2 Understanding formal and naturalistic plantings

There have been two underlying texts within a wide range of vegetation and plantings. The terms 'formality' and 'naturalism' constitute two contrasting concepts in landscape design and management (Özgüner *et al.,* 2007). It has been discussed that the difference between these two

concepts includes contrasting features in terms of form, ecology, society and management (Table 3.3). Formal bedding plantings, in general, have a geometric structure in landscape design and form a symmetrical or regular pattern (Wauch, A. 1927, p.15). Besides, the boundary of the planted area is legible, and the overall image is tidy (Özgüner *et al.*, 2007).

Table 3.3 Features of formal and naturalistic plantings

	Formal	**Naturalistic**
Forms	Uniformed, geometric, tidy, appearance, regular layout, bilateral or radial, abrupt and distinct edges	Spontaneous, unplanned, uncontrolled, absence of uniformity, maximised use of plant, minimised use of artificial elements, overt human control Fluent and complex edges,
Ecological	Small planting areas and limited animals invited	Vast areas, species diversity, wild animals invited, more CO2 absorb
Social	Less vandalism and more preference	More vandalism, less preference,
Management	Intensive maintenance, short-term regular maintenance, annual reforming circle, clear cut and more labour inputs	Low-maintenance generally, less labour inputs, perennial reforming circle, longer-term regular maintenance, skilled job
Representative planting	Formal and carpet bedding plants	Structural complexity, wild-flower meadows and less frequently cut grass

Adapted from Wauch. A, 1927, Oudolf and Kingsbury, 2005 and Özgüner, *et al.*, 2007

Formal bedding planting found typically in parks, began to appear in local government parks in the 1860s. In the 1870s, formal carpet-planting began to appear in the UK (Woudstra and Fieldhouse, 2000, p.111). It was emphasised in 1898 that as a fundamental flower-planting concept in Regent's Park, formal bedding flowers should last throughout the year, which was positively received by users.

The last 30 years have seen a tide of interest in the development of nature in cities across Europe, and the increasing amount of landscape development in urban areas has involved the use of 'naturalistic' styles (Özgüner *et al.*, 2007). The use of the words 'ecological' and 'naturalistic' can be seen to be ambiguous, having been described as, or perceived to be, in some way 'ecological'; some others however, would deny that this is the case (Dunnett and Kingsbury, 2004. p.58). In psychology, the meaning of 'ecological' is often used as a synonym for 'naturalistic' (Valsiner and Benigni, 1983).

Naturalistic styles, including natural settings, in the management of urban parks or open spaces could be highly-valued socially, economically and environmentally. Social approaches to naturalistic plantings encompasses psychological benefits. Naturalistic planting in natural

settings can help with stress reduction (Ulrich, 1983; Hartig *et al.,* 2003), lead to increasing focus and attention (Kaplan and Kaplan, 1989), have a restorative effect (Kaplan and Kaplan, 1989; Laumann *et al.,* 2001), lower mental fatigue (Kuo, 2001) and increase life satisfaction (Kaplan, 1993). A shift to a more naturalistic management style may alter the nature of maintenance tasks and this can increase the opportunities for making use of voluntary help and community involvement (Lickorish *et al.,* 1997). Kuo *et al.,* (1998) stated that a natural setting offers strong social ties. In addition, from a social perspective, naturalistic styles of planting can help contribute to a higher sense of safety and adjustment (Kuo *et al.,* 1998) and lower crime rates (Kuo and Sullivan, 2001).

In a variety of aspects, naturalistic planting is claimed to encourage spontaneous natural regeneration of vegetation on-site and allow distinctive common urban vegetation to develop (Dunnett and Hitchmough, 1996). In addition, naturalistic designs can contribute to sustainability as they are better associated with community participation in the design process, flexibility over the final use and the use of locally-derived materials while reducing labour input (Dunnett and Clayden, 2000). Native species are typically seen as being inherently ecological, whereas exotic species are not always, unless considered in the context of the country (Hitchmough and Dunnett, 1997). The early proponents of naturalistic plantings, such as Capability Brown, included native species as an element in artistic compositions (Kendle and Forbes, 1997. p.110). In different research, mixed uses of native and non-native species can indicate a contribution to the imitation of natural communities and a reduction in the amount of human intervention needed for upkeep (Özgüner *et al.,* 2007). Similarly, its use promoted the importance of ecological processes when designing vegetation within an urban context (Dunnett and Hitchmough, 2004, p.9). However, more recent research by Hoyle *et al.,* 2017b, shows that only 20% of people would rather not see native species in parks. Therefore, it can be summarised that uses of native and non-native species in park management plantings have less impact on the perception of park management plantings.

3.4.3 A shift from formal to naturalistic planting

In the 21st century, contemporary plantings based on people's perceptions are not necessarily aimed at informal shaped-designs, as traditional patterns such as formal bedding plantings can still be seen within the urban landscape (Oudolf and Kingsbury, 2005, p.9). This indicates that the planting style reflects users' perceptions of different plantings in urban areas. Understanding people's perceptions plays an important role in deciding the style of each urban landscape (Rohde and Kendle, 1997). Traditionally, the practice of formal bedding continued and will continue, largely due to the fact that allow the park to be showcased and celebrated and thus, enjoyed (Woudstra and Fieldhouse, 2000, p.118). However, recent research conducted by Southon *et al.,* (2017) has explored which planting it is that people enjoy. Their research showed that users of green spaces preferred flowering meadow treatments where flowers were mostly of short or medium height. A more recent study based on park or green space managers' perceptions showed that people's preference leaned more towards floral meadows with grassy mixes (Hoyle *et al.*, 2017c). However, it is argued in their research that meadows would be not well-matched in high profile formal park settings Due to potential negative responses from residents, suggesting that green space planting needs to combine users' perceptions with their values and interests. In the case of less high-profile parks, these authors seem to support a search for 'new' planting styles to help re-invigorate public landscapes (Hitchmough and Dunnett, 2008, p.2). Therefore, contemporary park plant design should include: plant species diversity, sustainability, inter-plant communities and minimum management including naturalistic planting techniques (Oudolf and Kingsbury, 2005 and 2013; Dunnett and Hitchmough, 2004).

3.4.3.1 Structural complexity planting

As a naturalistic planting technique has emerged from the English garden since the 2000s, structurally complex plantings contribute to plants having a positive role in a variety of plant patterns, species diversity and ecological habitats (Munro, 2009). This planting underlines the communication between different species and groups of plants, while forming borders with other species through the same plant species. Structure-based plants generally provide visual

interest through forms and colours that change seasonally (summer-autumn) (gardeninacity, 2014).

As the technique employs 'Primary-group and drifts', 'Matrix' and 'Scatter' plants, limited plant species are applied as groups (Oudolf and Kingsbury, 2013, p.82). Primary plants show the majority of the visual impact in a grouping (gardeninacity, 2014) while also providing a different view from every angle (Environment, Grounds Maintenance, Garden design, 2016). Matrix plants are low mounds, such as hardy geranium or Pennsylvania sedge (*Carex pennsylvanica*), which provide a background or filler function (gardeninacity, 2014). However, the number of species employed in primary plantings is often restricted to three or five species (Oudolf and Kingsbury, 2013, p.83). Matrix plants are placed on low mounds to function as a filler (gardeninacity, 2014) and to represent visual unification (Spencer, 2016) as they are quiet and neat with soft colouring. (Environment, Grounds Maintenance, Garden design, 2016).

Figure 3.2 Primary, matrix and scatter plantings

Primary-group at Pensthorpe Reserve (Top-left), Primary-drifts at the Royal Horticultural Society garden (Top-right), Matrix at West Cork garden (Bottom-left) and Scatter at the High Line (Bottom-right): adapted from Oudolf and Kingsbury, 2013.

Scatter plants are placed individually within the groups of matrix and primary plants; they have a distinctive personality and can bloom for a long season (Environment, Grounds Maintenance, Garden design, 2016). Similarly, they are sometimes placed at random to provide accents and to add a sense of spontaneity (gardeninacity, 2014). However, we do not know, from this theoretical understanding, which are interpreted positively and further we are not aware of how these types of plantings are described in park management contexts based on different people' perceptions.

3.4.3.2 Meadows with wildflowers

During the London 2012 Olympic games, the wildflower meadow in the Olympic Park received much acclaim; using various plant species in semi-natural plant communities (over 50m^2) (Oudolf and Kingsbury, 2013, p78). They suggest that meadow planting using perennial plants has to have an appropriate ratio of flowers, grasses, or ground-covering-plants. It is noted that traditional meadow plantings focus on visual richness using a range of wildflowers and grass species (Oudolf and Kingsbury, 2005, p.42). In recent years, there has been increasing interest in naturalistic plantings of native and exotic (non-native) plantings whereby non-native perennial planting was perceived to be more colourful, interesting and attractive than native planting (Hoyle *et al.*, 2017b). In the UK, there has long been both types of species used in public planting (Hansen and Stahl, 1993; Hitchmough, 1994; Hitchmough and Dunnett, 1997; Kingsbury, 1997).

Unlike the formal bedding and structurally complex plantings, planting techniques through sowing are preferred in a wide area (Dunnett and Hitchmough, 2004). Based on managers' perspectives, managers expected the public to prefer more floral arrangements, accompanied by mixes (Southon *et al.*, 2017). In general, park managers concurred with this expectation (Hoyle *et al.*, 2017c), but they found that the public did not prefer meadow plants over 1m in height. In terms of management perspectives, the cost of a meadow with perennial flowers can increase due to complex and time-consuming mowing scheme. This means that failure to manage on time can cause communication problems between flowers resulting in poorly planted areas (Figure 3.3 right). Further, these researchers' findings claimed that a number of negative issues were raised, e.g. responses to public pressures and vocal members of public, loss of supervisory staff due to funding cuts and poor communication with maintenance staff working. It can

therefore be assumed that meadows with wildflowers affect people's perceptions both positively and negatively as limited stakeholders (public and managers). Therefore, this research examines the perceptions of stakeholders according to the acceptability and feasibility of different types of planting in areas outside of the high-profile city park setting.

Figure 3.3 Meadows with wildflowers at Goodwin Sports centre in Sheffield

Photos by Author.

3.4.3.3 Letting the grass grow

As a response to the UK's economic downturn, budget deficits and increasing ecological concerns, Sheffield's launched the Urban Nature Park project in 2013 which was based on the principle of keeps grass lengths high by restricting grass cutting. This was argued to provide more ecological and natural spaces and to simultaneously enhance ecological efficiency such as plant species diversity. Notably, it was also expected to be a low-cost management planting technique by reducing the management required for maintenance. According to Buri *et al.*, (2015), frequently mown grass, such as amenity grassland, is an intensive management technique generating high maintenance costs.

Two-thirds of the UK's urban green infrastructure is covered with mown amenity grass mostly used for recreation (Forestry Commission, 2006). The lawn, as the most visually dominant element inevitably objects to a low-cost approach (Oudolf and Kingsbury, 2005, p.66).

However, it is argued that these patterns do not activate a positive response in people's psychological and visual perceptions. According to Jorgensen *et al.*, (2002), planting patterns can have an effect on the perceived safety of users, leading to fear and discomfort (Talbot and Kaplan, 1984; Bixler and Floyd, 1997). A recent study (Hoyle *et al.,* 2017c) showed that the public were against long grasses over 1m, regardless of the form, texture and flower mixes of the plantings. Considering these negative manifestations, the question is raised as to whether these types of planting are realistically acceptable within the park setting.

Figure 3.4 Less-frequently cut grass at Crookes Valley Park, Sheffield

Photos from author

There needs to be an examination of the extent to which these practices, both formal bedding and other newly emerging naturalistic plantings, such as structural complexity, meadows with wildflowers and less-frequently cut grass, are acceptable to different stakeholders in specific park settings. This research addresses this gap by testing stakeholders' perceptions of these plantings within different urban park settings.

3.5 Income generation practices

Previous discussion in the thesis has already shown that funding for public park and urban green space management has been significantly reduced over time in England. Because of the substantial cuts, local government funding often struggles to find financial resources (Mell, 2017). To respond to funding cuts, different funding models for green spaces and parks have been proposed and discussed in the UK, calling on worldwide examples (CABE Space, 2006; Nesta, 2013; Layton-Jones, 2016). Some practices proposed in these reports involve the public. However, there is a big gap in the awareness of funding problems between local authority and the public. Residents are less aware of the financial difficulty in generating income for the management of green spaces long term (Defra, 2011). Therefore, an understanding of residents' perceptions of income generation practices can help to determine the extent to which these practices are viewed as acceptable and feasible.

Historical funding models applied by local authorities are closely linked to the prevailing political contexts, where park management is considered a non-statutory service and dealt with differently by political parties, e.g. the Conservatives introduced 'Compulsory Competitive Tendering' (See section 2.3.1 and 2.3.2). There is a longer history of 'philanthropic donations' which contributed to the creation of some Victorian parks (Jordan, 1994). Prior to the beginning of the 2000s, such funding generation practices tended to rely on the local authority, public sector and community groups. However, after the 2000s, some developing and newly-emerging funding was specifically made available for green space management (during the New Labour government) through government departments (DTLR, 2002 and ODPM, 2002-3) and quasi-governmental/ non-government organisations such as CABE, Nesta and Heritage Lottery Fund emerged (Table 3.4).

Table 3.4 A selection of funding models

Publisher	Funding models	
DTLR, 2002	• External funding	• Heritage Lottery Fund • The Single Regeneration Budget • Landfill • Section 106 • City challenge: New Deal for Communities • European Regional Development Fund

Publisher	**Funding models**	
ODPM, 2002-2003	• Local authority • Private funds • Lottery funds	• The Liveability Fund • Business Improvement Districts • The New Opportunities Fund
CABE, 2006	• Traditional local authority funding • Multi-agency public sector funding • Taxation initiatives • Planning and development opportunities • Bonds and commercial finance • Income-generating opportunities • Endowments	
Policy Exchange, 2014	• Local authority • Public sector • Private sector	• Levy on top of council tax • Endowments and property portfolios • Rents, events, fees and charging • Funding new green spaces and regeneration • Bonds and tax increment financing • Developer contribution • External grants • Green spaces and public health budget • Social prescribing and green prescribing • Police and Crime Commissioners budget • Schoolyards to playground programme funding • Local Enterprise Partnerships funding • Charitable donations • Living legacies • Gift aid • Subscriptions and crowdfunding • Match funding • Sponsorship
Historic England, 2016	• Philanthropy • Subscription • Taxation • Grants • Loans • Speculative Development • Endowment • Revenue creation parks	

However, both within the UK and internationally, significant ongoing funding opportunities for parks are being made available through income generation within the parks themselves. These include entry fees, car park charges and hiring fees for sports facilities/venues. However, there is little empirical research into how these income-generation models have been developed for effective park management and delivered to UK parks acceptably and feasibly for different stakeholders such as users, community groups, local authorities and non-private-sector professionals. Given the interest in this study on individual district parks, traditional funding from the central government is not considered in this thesis, but rather the focus is on income-

generation models and how they can be applied in parks. The next section explores how funding for parks has changed historically.

3.5.1 Historical funding for parks

Historically, taxation has been the longest standing approach as a form of income-generation in different forms since medieval England; for example, "common burdens" of military service, fortress work and bridge repair during Anglo-Saxon England (597–1066) (Lawson, 2001), the geld in Norman and Angevin England (1066–1216) (Hollister, 1962), the nobles tax in Plantagenet England (1216–1360), poll taxes in Late medieval England (1360–1485) (Saul, 2000), window tax in the 18th century, income tax from the end of 18th century and different income taxes introduced by Peel, Gladstone and Disraeli in the Victorian era (Dowell, 2013).
Today, such tax-based systems have been successful in many communities, especially those with independent parks systems (Walls, 2014). Along with motivation derived from stakeholder demands, threats of government intrusion into industry freedom and increasing public expectations (Campbell *et al.*, 1999), philanthropy contributed to the creation and maintenance of parks (Walls, 2014). Philanthropic donations often emerged in different forms categorised by charitable donations of land and the transfer of private land into public ownership for perpetuity (Layton-Jones, 2016). In most instances, charitable donations in the form of cash were generally provided by philanthropic donors or “local worthies”, e.g. Calthorpe Park, Birmingham (1857), Princes Park, Liverpool (1858), Firth Park, Sheffield (1875) and Hickman Park, Wolverhampton (1911) (Figure 3.5). These parks contributed greatly in providing public access to green space in towns and cities which were highly industrialised (Conway, 1991).

Figure 3.5 Some parks created through charitable donation.

Calthorpe Park (Top left), Princes Park (Top right), Firth Park (Bottom left) and Hickman Park (Bottom right). Sources adapted from https://www.birminghammail.co.uk/news/nostalgia/carl-chinn-right-royal-fanfare-1342534
https://www.chesterwalls.info/gallery/princespark.html
http://www.firthparkclub.com/old-pictures-firth-park-wmc-sheffield.html
http://www.historywebsite.co.uk/articles/Parks/Parks.htm

These parks made by charitable donations were found in wealthy industrial cities. Donation of land is another philanthropic form; for example, Wythenshawe Hall and Grounds, in Manchester (1926) was "given to the city, to be kept forever as an open space for the people of Manchester." (Manchester City Council, 2015). In some cases, a way of philanthropically donating was to transfer ownership of existing parks from landowners to the local authority at a discount price (Layton-Jones, 2016). However, during this time, a form of semi-public park emerged in some city parks (Conway, 1991). Some cases at the end of 19th century demonstrated that parks subsidised by the sale of private properties, allowed the previous owners to be given special access to the parks (Layton-Jones, 2016). Significant events, including the Second World War and the subsequent creation of the welfare state, led to the transfer of private land into public hands (Conway, 1991). After land had been transferred, public parks became the sole responsibility of local authorities (Anon, 2015). This has been said to have occurred at a time when local authorities were reluctant to manage parks. Philanthropic donations have been decreasing in contemporary park management contexts, but its vestiges

remain in the endowments of parks (where they were provided) or cascaded in different types of recent income generation models and structures of park management. Although a huge amount of funding through philanthropic donations was raised in the past, these donations were not protected from financial downturns and many historic parks have suffered from neglect and vandalism over time (Layton-Jones, 2016).

'Subscription' applied to parks goes back to the mid-19th century in Britain, when it was used for funding for gardens (Conway, 1991, p.141; Corfield, 2008, p.3). Subscriptions are a form of donation and function as a short-term voluntary advance payment (Policy Exchange, 2014). In the 19th century, subscriptions were widely used and inclusively referred to anything from vocal support to a financial donation (Layton-Jones, 2016). It has been discussed that the establishment of formal urban green spaces in the 19th century was funded by private individuals prior to becoming dominated by municipal leaders working through public subscription (CABE Space, 2006), e.g. Queen's Park and Philips Park in Manchester were established by local public subscription in the mid-19th century.

Contemporary subscription tends to have medium or long-term implications by regular payment or annual renewals (Layton-Jones, 2016). However, the extent of subscriptions can be affected by an economic recession. Nevertheless, city parks such as the Sheffield Botanical Gardens are evaluated as successful subscriptions-based parks, showing that green spaces kept to a high-standard can be managed to be economically sustainable; ensuring free public access, which is in contrast to parks like Kew Gardens in London which require entry fees (Layton-Jones, 2014).

Traditional public subscription as a form of donation has contributed to public parks being financed locally, with contemporary subscription needing to be handled by communities (Drayson, 2014). The Heeley Subscription Society in Sheffield is a useful example. Heeley Development Trust was given a cash injection from Nesta funding of almost £98,000 via the Rethinking Parks programme "to develop and test the how a subscription scheme for Heeley Park can create a sustainable revenue base" (Nesta, 2016).

Importantly, park management structures in the 21st century are distinct from historical parks which were derived from philanthropic donations and endowments. Prior to 1991, many municipal parks, donations had come into local authority control from private companies, trusts, and the royal estate (Conway, 1991). There is still interest in the endowment model: for instance,

Nesta's Rethinking Parks programme also funded the National Trust and Sheffield City Council (£100,000) to develop an endowment model for Sheffield's parks "to pursue contributions towards the endowment from health and environmental organisations, philanthropic and corporate sources" (Nesta, 2016). However, what seemed liked philanthropic generosity when industrialists handed over their land to become public parks, was often not supported financially through revenue streams such as endowments – the 'gift' of the land alone was perceived to be sufficient (Layton-Jones, 2016). As a consequence, acute financial issues have emerged in park management streams, as the impacts of historical funding models are not necessarily true to philanthropic principles and, without long-term ring-fenced revenue funding, we will see how it has raises challenges for providing fully publicly accessible green space, by inevitably expecting the user to pay.

3.5.2 User-sourced funding for parks

Continuing weak government budget allocations and low revenues have resulted in inadequate management, including a vicious circle of financial operations (Sickle and Eagles, 1998). To address these situations, funding for generating revenue income from users of green spaces and parks can be sourced (CABE Space, 2006). CABE Space's work indicates that user-based income generation can provide extra money, provide long-term investment and stimulate the local economy. The method of user-based income generation demonstrated through mechanisms such as entry fees and car parking charges, was found as far back as 1908 when Mount Rainier National Park was recorded as the first US Park to impose visitor fees (Laarman and Gregersin, 1996). In the UK, parks including Crystal Palace Park in Sydenham and Kew Gardens in London have had a long history of charging entry fees (Layton-Jones, 2016).

Figure 3.6 Kew Gardens, London

Source adapted from Layton-Jones, 2016

Thus, the imposition of user fees and charges for public services is not a new idea (Sickle and Eagles, 1998). Even though entry fees were a historical method of raising income for specific parks, successful examples for imposing entry fees in publicly-owned green spaces are rarely convincing, particularly in the UK where the legacy of the post-WWII welfare state ideology is so strong (Layton-Jones, 2016). Walls concurred that charging fees for most urban parks would be difficult because it would limit the use of the park (Walls, 2013). Nevertheless, high-profile parks such as Kew Gardens, London (Figure 3.6) and Dalkeith Country Park in Edinburgh, charge entry fees. In other countries, users of national, state or provincial parks in North America are familiar with the idea of paying fees for park facilities and programs (Sickle and Eagles, 1998). Additionally, it is claimed that pricing strategies such as token and peak-time charges to produce a profit from parks would be accepted to impute value to a visit (Macintosh, 1984). It is argued that users in parks should play a role in park financing and it is therefore appropriate to charge for the many services that parks provide (Walls, 2013). While these conflicting viewpoints raise questions, in many instances, the methods of revenue creation within parks, such as cafés, concessions and car parking, have long been sources of income generation for the upkeep of the parks. In city parks, music concerts have also long been put on in parks, with a very recent critical assessment highlighting the challenges for residents living nearby noisy events (Smith, 2018). In almost all cities in the UK, these schemes have proven financially successful in supplying resources in high profiles parks (Layton-Jones, 2016).

However, there is little empirical evidence of how these income-generating schemes might apply to lower-profile parks or those categorised as district and local parks.

For example, events, festivals and fayres have been common features of many municipal parks since the 19th century, but have since become much more popular since the recent economic recession (Layton-Jones, 2016). UK parks already generate income through events which, in some instances, replaces up to 25% of the reduction in public subsidy (Jenkins, 2013). These income generation events can involve community groups working together with the local authority or partnerships with private entities (CABE, 2010). Depending on the nature of ticketed events, this can be a form of direct fundraising for parks which either goes back into a local authority's parks budget, its wider council budget, or directly to the individual park. Community groups are therefore involved to varying extents depending on the nature and scale of the events being organised.

In the future, it is expected that visitors, as one of funding resources, will be charged additional costs to use parks. According to the Heritage Lottery Fund (2014), 83% of managers reported that fees for hiring resources such as car parks, sports pitches and grounds or buildings for private events will increase. Recent research conducted by Britainthink (2016) reveals that 53% of UK adults disagreed with increasing charges for using park facilities. However, it is unclear to what extent users are actually prepared to pay additional charges on specific park uses. For instance, in 1995, Central Park users in New York were asked for a donation, ranging between $10 and $25, for the use of public recreation facilities such as tennis. Such voluntary donations are of interest here in the UK (and pilot projects have recently been funded by Nesta, as discussed earlier) although it is not clear how acceptable or feasible that would be as a model of parks income generation in the UK. This research therefore addresses this gap in knowledge by examining different stakeholders' perceptions for income generation in the district parks in Sheffield.

3.5.3 The policy drive for community involvement in funding for parks

With a growing awareness of the decline of green space quality due to a lack of funding to manage it, New Labour Government's Urban White Paper (2000) determined a funding

programme for green space enhancement through the Heritage Lottery Fund and the New Opportunities Fund (now the Big Lottery Fund). After the introduction of this White Paper, community involvement in green spaces was cited as a positive means to increase the use, quality and richness of experience and to give access to additional funding (DTLR, 2002; ODPM, 2005, 2003).

Initiatives such as the Green Flag Award (established in 1996) undoubtedly led to marked improvements in the maintenance of some sites. From just seven parks in 1997, 1424 parks now have won the Green Flag Award (Layton-Jones, 2016). This award has run alongside the *Green Flag Community* (Formerly the Green Pennant Award), launched in 2006, which focuses on the involvement of voluntary and community groups in green space management, and has been awarded to over 1,700 parks and green spaces. The NAO (2006) identified that promoting a Green Flag Award scheme as a key national policy initiative to enhance urban green space can improve national standards and encourage better green space management. According to GFA criteria, community groups should make contributions to fundraising, meaning that such income generation programmes with community involvement are compulsory to qualify for the award. The '*Parks for People'* programme run by the Heritage Lottery Fund was launched and targeted local authorities to award parks for their involvement with community groups, in part based on the GFA criteria. The *Green Spaces and the Sustainable Communities* programme run by the Big Lottery Fund cooperated with partners, mainly from nature conservation groups and the voluntary sector (Wilson and Hughes, 2011). Overall funding opportunities were however contingent on community involvement, particularly communities in deprived areas, according to policy drivers for community involvement in park funding (Table 3.5). According to Downs and Millward (2008), the Sustainable Communities programme was designed so that the scheme could contribute to engaging volunteers and community groups in disadvantaged areas. For instance, community-based schemes such as *People's Places*, *Wildspace* and *Doorstep and Millennium Greens* contributed to encouraging less advantaged communities through high-profile, national funding support.

Table 3.5 A selection of funding opportunities for park and green space management

Green spaces-related funding opportunities	Aims	Notes
People's Places, Big Lottery Fund in partnership with BTCV, English Nature and Rio Tinto, 2001	Community-based scheme to transform derelict areas of land in less advantaged communities into community green spaces.	Part of the Big Lottery Fund's Green Spaces and Sustainable Communities Fund (2001 – 2006). Benefited 722 communities with total of £6.5 million funding.
Wild-space /Big Lottery Fund in partnership with English Nature, 2001	To support the creation or enhancement of Local Nature Reserves in disadvantaged communities that lack access to natural green space.	Part of the Big Lottery Fund's Green Spaces and Sustainable Communities Fund (2001 – 2006). Total of £7 million funding.
Doorstep Greens/Big Lottery Fund in partnership with the Countryside Agency, 2001	To help people who experience disadvantage by creating or enhancing local green spaces.	Part of the Big Lottery Fund's Green Spaces and Sustainable Communities Fund (2001 – 2006). Total of £33.6 million funding.
Heritage Grants Heritage Lottery Fund, 2002	for grants for all kinds of heritage including gardens, habitats and landscapes	It is open to all not-for-profit organisations. Above £100,000, supported around 400 projects through this programme in 2002–3, declining to around 300 in 2006–7
Parks for People, Heritage Lottery Fund, 2006	To regenerate public parks of national, regional or local heritage value.	Applicants tend to be local authorities. Every successful park funded is expected to achieve Green Flag status
Access to Nature/Big Lottery Fund in partnership with Natural England, 2008	To encourage people from all backgrounds but especially those who face social exclusion to understand, access and enjoy our natural environment.	Part of the Big Lottery Fund's Changing Spaces programme that runs from 2008 to 2011.
Community Spaces/Big Lottery Fund in partnership with Groundwork, 2008	Empowers community groups to improve public spaces.	Part of the Big Lottery Fund's Changing Spaces programme that runs from 2008 to 2011.
Greener Living Spaces/ Marks and Spencer in partnership with Groundwork, 2008	to improve their living spaces, giving new life to derelict land. Through this joint initiative Groundwork and M&S transformed over 100 parks, play areas, and public gardens across the country	Between 2008 – 2011 the profits from the sale of carrier bags raised £5.2 million which was donated to environmental charity Groundwork UK who works with communities
Green Places Fund, 2012	Developed by national parks charity Green Space with Birmingham and Nottingham has been launched to safeguard the future of public green spaces by allowing community groups and philanthropists to give and influence locally.	The Green Places Fund concept is supported by Nottingham City Council, Birmingham Open Spaces Forum and Birmingham City Council.

Sources adapted from Wilson and Hughes, 2011 and Potential funding for community groups, DCLG, 2012

According to NAO (2006), community groups and volunteers are highly valuable for the time and effort they put into green spaces: between 2004 and 2005 these contributions were quantified at between £17-£35 million. This exemplifies the strong policy drive towards extended community involvement in partnerships. The 'Sustainable Communities Act 2007' proposed strong regulation regarding sustainable communities as a statutory instrument by Regulation 7: Sustainable community strategy. Continued funding opportunities, e.g. *Access to*

Nature and *Community Spaces*, from 2008 to 2011, were provided by the Big Lottery Fund in partnership with other funding bodies such as Natural England and Groundwork. These funding schemes also stressed the value of community participation for future sustainability. The Chief Executive of Groundwork UK said: *"A fundamental principle behind Community Spaces has always been that we should help community groups to make a difference now and in the future"*. In 2008, a private funding scheme, launched jointly by Groundwork and Marks & Spencer, aimed to regenerate over 100 parks, play areas and public gardens between 2008 and 2011 with funding of £5.2 million. Groundwork administered this funding stream to projects which involved communities. Locally, the Green Places Fund was started in Birmingham and Nottingham to highlight the benefits of community involvement in green spaces. Other interesting issues arose from private sector funding such as 'Greener Living Spaces' for communities alongside government-based funding opportunities.

The opportunities conducted by funding programmes for community-involved parks tend to focus on parks at a city scale. For instance, the Sheffield city parks awarded Lottery or Heritage Lottery fund grants are the high-profile parks such as the Botanical Gardens, Weston Park, Norfolk Heritage Park (Heritage Lottery Fund Grants) and Hillsborough Park (National Lottery Funding). This indicates that such funding opportunities have not necessarily helped the lower-profile district and local parks in Sheffield. Instead, community groups here may have contributed to fundraising in different ways as outlined in the previous section. They are increasingly involved in income generation derived from events. Such lower-profile parks in Sheffield generate income from events, festivals and fayres by involving community participation. In some cases, it can be argued that policy is driving community involvement, but this policy context tends to be delivered in high profile parks, not low profile parks. Through this interpretation, there is a question of how acceptable and feasible different park management practices in lower-profile parks are in relation to community groups' perceptions. Hence this research sets out to examine this.

3.5.4 Other sources of funding for parks

In 2002, 'Improving Urban Parks, Play Areas and Open Spaces' (DTLR, 2002) introduced external funding for local authorities through introducing specific programmes. This echoed income generation models in 'Living Places; Cleaner, Safer, Greener' (ODPM, 2002-2003) which expanded local authority funding opportunities to the private sector. Increasing the involvement of the private sector in public spaces including parks was explained by De Magalhaes and Carmona in their 'market based-model' (2009). In their study, service delivery through the private sectors is common in a range of public services such as grass verge maintenance, tree pruning and park maintenance services. This strengthens the financial gain for both public and private sectors. In this case, the public sector presents a means to private sectors (Harding, 1998) in which sharing responsibility is formalised through contracts (Magalhaes and Carmona, 2009). Contracts associated with private sectors can contribute to public management in several ways and involve the sectors in sponsorships and local businesses (Carmona and Magalhaes, 2006).

Along with increasing involvement of private sectors, such income generation models which are applicable for park management were proposed in different approaches to centre-based (public sector-led) and market based (Private sector-led) practices. In 2006, income generation models examined by CABE were discussed to propose more applicable models based on eight different categories. These models underlined the connection between local authorities and the public, business and private sectors. The models introduced in 'Paying for Parks' (CABE, 2006), all referred to local authority or public sector-led programmes except for 'voluntary and community sector involvement'. Recently, increasing the role of private sectors is shown in such proposed models like 'Green Society' (Drayson, 2014). In Drayson's research, income generation models have emphasised funding approaches for two different sectors: public and private. The models refer to the sharing of roles between local authority, public and private sectors, which indicates again that the role of the private sector in generating income has increased.

Mathers *et al.,* (2015) argue that a role for central government is still required in fundraising. However, recent policy and the income generation models introduced mark a move away from traditional local authority funding and taxation initiatives. It is argued that future funding for parks will still rely to a significant extent on local authorities (Nesta, 2013). In some examples, local authorities tend to share some parts of green space budgets, management or ownership

with communities to minimise the risk of failure of effective achievement between public and private sectors (Drayson, 2014). However, the income generation models explored in this section show that some funding models involve the private or business sectors through sponsorship, business-related tax, new planning/development funds and endowments.

3.5.4.1 Private development

There is a long history of private developers supporting the creation of new parks and the rejuvenation of existing green spaces. Some of this has been through policy support such as Housing Development and the Community Infrastructure Levy (Formerly Section 106 agreements) (Nesta, 2013). Parks can contribute to housing price increases (Crompton, 2001) and the creation of some urban parks was predicated upon the investment of housing developments and economic growth (Crompton, 2007). There is a tendency among planners around many UK parks to develop the relationship between housing developments, suburbanisation and the evolution of park landscapes (Layton-Jones, 2016), including Queens Park development in Blackpool, Manor Fields Park in Sheffield, Kingfields Park in Hull, Longford Park in Oxford and others.

Local authorities have responsibility through the Community Infrastructure Levy to raise funds from new developments for new infrastructure works, including green spaces (Drayson, 2014). ODPM Planning obligations in 2005 provided the guidance from the government on the use of Section 106[1], while Planning Policy Guidance 17 makes clear that planning obligations can be used to mitigate deficiencies in the provision for enhancing quality of green spaces. It is suggested that developers can make significant provisions for the development and maintenance of green space in different ways through the planning processes, e.g. by increasing land value, incorporating it into housing management fees or tying it to the sale of private houses (CABEspace, 2006). However, it has been found that there are potential weaknesses, such as restricted land use and uncertain long-term negotiated agreements (CABEspace, 2005, 2006; Layton-Jones, 2016). Further, some argue that there is anecdotal evidence that S106 monies remain unspent by some local authorities and that new planning and development funding can result in a long-term management structure (Policy Exchange, 2014).

[1] S 106 has since been replaced by Community Infrastructure Levy.

3.5.4.2 Endowments

Endowments involve property, stocks and/or a cash sum invested before/ when a park is created or handed into public ownership (Layton-Jones, 2016), providing long-term funding for urban green spaces (CABEspace, 2006). Historically, this model was developed in the USA and was introduced to the UK in the 19th century (Layton-Jones, 2016). Local authorities in the UK are still discussing whether endowments can be an effective model for the funding of green spaces in the UK's landscape management context (Drayson, 2014). According to CABE Space (2006), endowments can secure income, spread financial risks and increase the value of the property. However, there is a need for endowments to require investment expertise and management, a situation for which only a few local authorities have the capacity (Drayson, 2014). In Drayson's research, the best solution for endowment success relies on endowment funds which are derived from a variety of sources, in particular, Charitable Trusts. For instance, The Land Trust, an independent charitable trust, uses endowments to manage green spaces based on a range of funding resources generated from the public and private sectors, e.g. The Endowment Match Challenge fund, £10 million donations and £50 million government investment (Community Development Foundation, 2013). Examples, such as the 'Chorley Formula' conducted by The National Trust charity and 'Catalyst Match Funding'[2] for endowments undertaken by the HLF, suggest that the use of endowments could be spread across the UK (Layton-Jones, 2016) as a way of addressing the fact that not enough sustainable income has been sourced from the Chorley Formula to ascertain the level of endowment (National Trust, 2014). Endowments have been shown to constitute a successful way of ensuring a long-term practice for generating income for green space maintenance. However, the very high asset sum needed to create the necessary income remains a barrier to most organisations who manage green space, and ultimately high-level financial skills are needed to manage the investment portfolio (CABE Space, 2006).

3.5.4.3 Sponsorship

[2] £36 million match-funding initiative which offers UK heritage organisations the opportunity to create an endowment and bring additional private money into the heritage sector.

With increasing funding pressures on park management, it is argued that there is a need for parks to find new sources of income from private funding such as sponsorship (Nesta, 2013). Large sources of income can come from corporate sponsorships which are an established way to raise funds for parks from businesses, such as Potters Fields Park in London (Harnik and Martin, 2015; Nesta, 2016a). There are different approaches to sponsorship in relation to funding. Recent approaches to sponsorships have been connected to sports, e.g. football pitches. For instance, in Liverpool, the sponsorship of the city's sports pitches can contribute a great value to the development of the city's public spaces (Mell, 2016). Further, as a method of generating funds from private business for green spaces, sponsorship has many advantages such as: instant accessible money, long-term investment, the encouragement and involvement of local businesses and motivating the local economy (CABEspace, 2006). However, it is argued that complex techniques are required for sponsorships with cafés, kiosks and shops in popular parks (New Yorkers for Parks, 2010). Similarly, it has been discussed that an agreement of a sponsorship does not guarantee a welcome from stakeholders in public green spaces, especially if it is from a 'Big Business' (Nesta, 2016a).

3.5.4.4 Business-oriented income generation

On-going funding opportunities include other business-oriented approaches in the UK (Mell, 2017). As an alternative to taxes levied across the UK and administered by a local authority, the imposition of investment money on property owners in Business Improvement District (BID) schemes (CABE Space, 2006) has been suggested. BIDs have a long history over the last 20 years in Canada and the US (Ward, 2006). In the UK, the Local Government Act 2003 paved a way for the introduction of BID (Hoyt and Gopal-Agge, 2007). BIDs are described as private organisations which "supplement public services within geographically defined boundaries" by taxing businesses within a given boundary: there are 174 formal BIDs in the UK and the Republic of Ireland, mostly in town centres (British BIDs, 2014). An approach to supporting parks managed by local authorities, BIDs build on alternatives regarding long-term income generation. In relation to business, for example, this could be designed around how BID levies based on business assets can be transferred to funding for parks (Nesta, 2016a). A BID proposal

must describe the levy rate (including discounts and/or exemptions), and the length of time: the BID, in general, operates for a maximum of five years (Drayson, 2014, p.65). It is discussed that a "Parks Improvement District" (PID) could contribute significant funds to improve parks, but none are particularly focused on parks in the UK (Nesta, 2016b). A pilot project funded by Nesta did not lead to a PID in the Bloomsbury area of London. In some instances, BIDs are already involved in green space management, Victoria BID established in 2010 and funded by a BID levy of 1% of businesses' rateable value had the objective of partly investing in improvements to existing green spaces and the creation of new green spaces (Victoria BID, 2014). Hence, working with the business sector can help facilitate a developing dialogue between stakeholders to generate funding (Mell, 2017).

However, there is no existing evidence which examines what income-generating models are acceptable and feasible as fundraising models for parks or evidence which explores stakeholders' perceptions thereof. This research aims to bridge that gap in knowledge.

3.6 Conclusion

This review of the literature has examined the associated practices which contribute to park management in relation to policy pressures of austerity and the push for community involvement. It has highlighted the range of theoretical debates on landscape management contexts around specific park management practice and provided a discussion of the relevant literature. Park management practices were reviewed with three main and representative practices emerging, which have resonance and relevance in the context of urban district parks. Underpinned by the growing popularity in allotments, and community gardening, Community Food Growing as a potential practice in urban district parks will be examined. The shift derived from financial pressures from formal bedding planting towards other more naturalistic types of plantings is a significant one in the literature. Considering the features of plantings such as form, colour and associated maintenance, there is evidence that this shift is already occurring in different types of parks – and hence this is of interest in the context of the urban district park. The recent financial crisis (2008) is leading to over a decade of austerity which, for parks, has led to a rise in income generation activities. While these are often directed at high-profile city parks, the relevance for such income generation will be explored here within the urban district park. The policy focus on stakeholder involvement is an important contextual factor to be

considered in this study. Building on De Magalhaes and Carmona's state-based, market-based and user-based models in public space management, this study will examine the nature and extent of existing and potential stakeholder involvement – i.e. residents, community groups and professionals including the local authority – in the proposed park management practices. Chapter Four outlines the overall methodological approach developed for this research.

Chapter Four

Methodology

4.1 Introduction

The benefits of well-managed landscapes have been discussed in Chapter 2 while, poorly-managed green spaces manifested profound social problems such as anti-social behaviours (European Commissions, 2010), disorder within neighbourhood (Wilson and Kelling, 1982) and negative impacts on people's well-being (Newton, 2007). Welch (1991) insists that therefore, park management aims at appropriate high standards. However, under threats to financial status and its' negative impact on park management, as mentioned as Chapters 2 and 3, contemporary park management contexts encourage stakeholders, in particular community groups, to get involved in park management and decision-making process. In addition, the pressure of urbanisation on protecting green spaces and people's well-being have a profound impact on park management in which a variety of new potential park management practices are proposed in urban green space settings. However, there is little empirical evidence examining how such practices might apply to parks, might contribute to better park management, and indeed if they are acceptable and feasible for different stakeholders. To address these gaps in knowledge, this study examines stakeholders' perceptions of the potential park management practices; community food growing, urban park plantings and income generation models. To do this, this study employs a mixed methods methodology based on the use of primary and secondary data collection underlined by the ideas of 'acceptability and feasibility' and using the analytical framework of 'place-keeping'. In this chapter, the overall methodological approach is presented with a discussion of the specific practical issues arising, and alternative methods of data collection and analysis, where applicable. The specific components of the methodology adopted are then examined in further detail, with a focus on the following aspects of the research:

• The overall methodological approach: a large-scale cross-sectional investigation employing a combination of qualitative and quantitative research methods.
• The method of sampling: the criteria by which the six parks were selected, such as park type, geographical location considering socio-economic contexts and community involvement.
• The methods of data collection: consisting of physical site survey, interview including focus group and household questionnaire survey.

• The methods of data analysis: including thematic (qualitative), SPSS (quantitative), and adaptation of the place-keeping analytical framework.

4.2 Methodological approach

The aim of a methodology is to provide the most suitable set of methods and analyses to achieve the research objectives. These research objectives, as set out in Chapter 1, are as follows:

• To explore features of urban park management and practices in relation to stakeholder involvement in the UK.

• To assess the acceptability and feasibility of park management practices according to different stakeholders in different socio-economic contexts in Sheffield.

• To make recommendations for effective park management at Sheffield city scale and the study sites.

To address these research aims, a large-scale cross sectional survey was conducted in relation to six parks to define representative sample and the population of interest (Bowling and Ebrahim, 2005, p.120-122). Different methods of data collection were carried out, based on primary and secondary sources. In addition to these data collections, to address weakness of a single methodology to explore a wide range of components, a mixed methods approach was taken: a combination of quantitative and qualitative data collection and analysis is recommended to counteract this weakness and to enhance understanding of the subject under scrutiny (Amaratunga *et al.*, 2002). Further indicators of acceptability and feasibility as well as analytical frameworks are explored in this chapter.

4.2.1 Methodological approach to secondary sources

To address the research aims, the first stage of data collection relates to secondary sources. These sources include a wide range of documentary evidence, for example, existing research,

books, government publications and Census data (Kumar, 1999, p. 104). The literature review is an essential stage to understand a research topic (Bell, 2005), explore a key source of evidence-based information (Petticrew and Roberts, 2006) and cover relevant policies (Bastain and Rober, 1998). Critical literature provides a picture of the state of knowledge and can help the derivation of major objectives in the study subject (Bell, 2005). Ultimately, such a review aims at giving a novel synthesis of existing work, which may lead to new ways of looking at a subject or identifying gaps in the literature (Jesson *et al.,* 2011, p.30). The process of literature review in this study was concentrated on landscape, green spaces and park management study and practices in urban landscape contexts, including park management, stakeholder involvement, green spaces and park management policy, planning and strategies. Other methodologically focused keywords included quantitative, qualitative methods, acceptability & feasibility and analytical framework. Additional secondary sources were referred to including the Census which ensures that socio-economic and demographic data on the UK population is as complete as possible (Burton, 2000). Prior to primary data collection, Census data was employed to collect demographic data about the study sites in relation to socio-economic characteristics. Socio-economic and demographic data required for this research was extracted from 'Neighbourhood Statistics[1]' produced by the Office for National Statistics (ONS) and the 'English Indices of Deprivation 2015[2]' dataset produced by DCLG (now MHCLG).

However, all the relevant information required to answer the research objectives of this study is not available through published sources, meaning that further information such as characteristics of community groups and the selected sites in the study was collected through primary data methods. Primary sources of data collection were derived from existing empirical data and methodologies. The choice of a methods is dependent on the purpose of the study, resources available and the skills of the researcher (Kumar, 1999, p.105). The methods are detailed in relation to this study below.

[1] Available at https://www.ons.gov.uk/help/localstatistics
[2] Available at https://www.gov.uk/government/statistics/english-indices-of-deprivation-2015

4.2.2 Methodological approach to primary sources

A mixed-methods approach to primary data collection was taken in the study: physical site survey, a large-scale household questionnaire survey and set of semi-structured interviews were carried out in 2015 and constituted the main data collection methods.[3] The combination of quantitative and qualitative methods is common in social science (Docherty *et al.,* 2001; Stafford *et al.,* 2003): having sequential explanatory strategy that the findings from qualitative work can assist in interpreting the findings from the quantitative (Adamson, 2005, p.234). The research strategy essentially uses the deduction of a hypothesis, arising from existing theory as well as from practices and political contexts which is then 'subjected to empirical scrutiny' (Berg, 2004; Bryman, 2008, p.8).

4.2.2.1 Physical survey

The general data to understand the current park management characteristics was collected at each of the study sites using a physical site survey. A physical site survey aims to be comprehensive and reliable, and reveal important associations as well as provide valid guidance (Burton *et al.,* 2006). Prior to understanding the current physical site survey, geospatial data and maps were located to identify historical changes of the study sites, using 'Digimap'. Digimap, produced by the EDINA national data centre, is a range of on-line maps & geospatial data for UK academia, providing historical, geological, environmental and other geographical sources. This digital map was used to illustrate the features of historical land cover since 1990 in this research. An on-site survey was also completed to understand the current land use of the study sites focused on different functions of places within the study sites. The findings in the physical site survey also prompted further discussions and analysis. For example, some spaces in the study sites were recommended for the different functions of park management practices based on the integrated empirical analysis of the physical site survey.

[3] Additional data is adopted from Sheffield Green Spaces Forum meeting convened at the Arts Tower at the University of Sheffield bi-monthly. The author is a student volunteer and has been involved in this forum since the PhD began. Accordingly, this research is informed by the shared information and ideas for better park management which emerged informally from discussions at SGSF.

4.2.2.2 Interview survey

"In order to understand other persons' constructions of reality, we would do well to ask them…and to ask them in such a way that they can tell us in their term and in a depth which addresses the rich context that is the substance of their meanings (Jones, 1985, p.46)."

The interview in qualitative research constitutes the most prominent data collection method to determine people's perceptions, meanings, definitions of situations and constructions of reality (Punch, 2014, p.144) as well as benefiting from higher response rates than questionnaire method (Bowling, 2005, p.208). Importantly, interviewing is a valuable method exploring negotiation of meanings in natural settings (Cohen *et al.*, 2007, p.29)

In this study, semi-structured interviews were conducted to explore the perceptions held by community groups and professionals currently involved in parks management. The semi-structured interview encompasses a range of instances in which the interviewer has various questions that provide the general form of an interview plan as well as the sequence of questions (Bryman, 2008. p.196). The most useful empirical data can be collected from community and focus groups interviews that investigate residents' perceptions and usage and experience of green spaces, which are particularly useful for developing strategies tailored to the specific concerns or barriers associated with community (Wilson *et al.*, 2004). Community interview can contribute to decision-making process of manager to understand the extent of communities' demands so that they can prioritise management of particular ecosystem services relevant to the neighbourhoods (TEEB, 2010). For instance, in communities where personal safety is considered an important barrier to green space use, social strategies that include increased policing (Wilbur *et al.*, 2002) or planning strategies that enhance the design of green spaces to increase visibility and perceptions of safety (Schroeder and Anderson, 1984) may be appropriate. These strategies can play the interaction between management of green space and human needs and activities as intervened by considerations on future plan and policy (Wilson *et al.*, 2004). However, individual interviews have drawbacks in terms of validity (Alshenqeeti, 2014). In particular, participants can provide in-depth information by this relates only to a small sample, and so is less valid in terms of representativeness (Ho, 2006, p.11) and generalisation (Cohen *et al.*, 2007). In this case, according to Alshenqeeni (2014), using alternative data collection methods as well can help provide valid research findings. For this reason, this research carries

out mini questionnaire survey to collect another supporting data which asks community groups about the acceptability of potential park management practices during interviews. This aims to provide a better estimate and more accurate results (Kelley *et al.*, 2003).

There are other drawbacks to interviews, particularly in relation to how their time-consuming nature (Brown, 2001; Bowling, 2005, p.209; Robin, 2002, p.94). Hence, because of difficulties in interviewing them individually because of how busy they were, a focus group interview was conducted with the seven local authority park managers and their line manager. Group interviewing is a general process that makes an important contribution to social science research (Punch, 2014, p.147) and further develops ideas as well as creates theory grounded in their knowledge (Berg, 2007, p.45). The hallmark of focus groups is the explicit use of the group interaction found in a group (Morgan, 1988, p.12). However, it is the case that focus group potentially manifests drawbacks, such as if there is a reluctance to communicate within the group (e.g. if one's 'boss' is there) and producing messy data due to unfocused discussion (Carter and Henderson, 2005, p.225). In order to address these cases, a fellow interviewer (the author's supervisor) attended the interview to allow for a subsequent discussion of group dynamics and to help administer the interview itself. As Barbour and Schostak (2005, p.46) outline, focus group interviews should be focused on specific topics, and in this study the focus group interview focused on the same topics and created a comfortable setting in which participants could contribute as freely to the discussion as they felt able to.

4.2.2.3 Household questionnaires

A household questionnaire survey was employed in this research because it is an effective method of asking the opinions of a large number of people in a geographical area (Punch, 2014, p.242). However, in terms of response rates, sensitive questions result in lower rates (Bowling, 2005, p.208). According to McColl *et al.*, (2001), the structure of respondent-friendly-questionnaires can enhance the accuracy of answers to questions and less sensitive questions can increase response rates and hence the validity of collected questionnaires. In terms of statistical reliability, large samples produce a better estimate and are more powerful and produce more accurate results (Kelley *et al.*, 2003) than smaller sample sizes (Crichton, 1993). This is also to minimise sampling error which is the probability that any one sample is not completely

representative of the population (Bowling, 2005, p.191-192). To achieve a fuller completion and more effective collection of questionnaires, this research conducted a pilot test as a formal stage of the questionnaire design process which led to the Drop-Off/Pick-Up (DOPU) collection method being employed.

A pilot survey is conducted to help make sure that everyone in your sample not only understands the questions, but that respondents are able to answer the questions comfortably (Polit and Beck, 2005) as well as to identify unclear or ambiguous items and troubleshoot issues concerning the content or wording of items in a questionnaire (Welman and Kruger, 1999, p.146). Prior to administering main questionnaire survey, a pilot means that the questions can then still be adapted and modified accordingly (Blaxter, et al., 1996, p.121). In preparation for this main data collection method, the pre-testing of questionnaires was conducted (Van Teijlingen and Hundley, 2001) through 12 pilot surveys. This was done with PhD candidates in the Department of Landscape at the University of Sheffield to test whether the questionnaire was comprehensible, appropriate, and to check that the questions were well defined, clearly understood and presented in a consistent manner. The completed pilot questionnaires were reviewed and helped improve the original questionnaires with modified wording and images.

To maximise as efficient a data collection method as possible, and increase response rates, the DOPU survey was used. This is a typical questionnaire method and can result in higher completion and response rates than questionnaires administered by post (Steele *et al.*, 2001; Riley and Kiger, 2002). More recent research conducted by Jackson-Smith *et al.*, (2016) highlights that the DOPU survey method has also been claimed to be more effective alternative to Internet and telephone methods to address declining survey response rates. To increase response rates, most DOPU surveys schedule a specific time and date for personal pick-up by the survey researcher or staff (Smith *et al.*, 2001; Steele *et al.*, 2001; Riley and Kiger, 2002; Trentelman, 2011), which was adopted for this research.

4.2.3 Methodological approach to data analysis

In the study, collected data from the primary sources were analysed qualitatively employing ‘thematic analysis’ and quantitatively using statistical analysis via ‘SPSS’.

4.2.3.1 Thematic analysis

For the interview (and focus group) data, thematic analysis was conducted to better understand the varying perceptions held by stakeholders involved in parks management. The analysis based on interview data was led by relevant research objectives:

• To assess the acceptability and feasibility of park management practices according to different stakeholders in different socio-economic contexts, in particular analysing community groups and professionals' interviews.

• To make recommendations for effective park management at the city and local scales, contextualised between thematic analysis and two concepts 'acceptability & feasibility' and 'place-keeping analytical frameworks'.

Thematic analysis is a commonly used approach to qualitative data analysis, to identify, analyse and report the themes within data (Braun and Clarke, 2006; Donovan and Sanders, 2005). In this way, the data were systematically searched for patterns to provide an illuminating description of the phenomena under scrutiny (Tesch, 1990) to glean how acceptable and feasible potential park management practices could be in the six parks of Sheffield. This research followed thematic analysis as set out by NatCen (2012) in their 'Case and Theme Based Approach' (CTBA) to allow for looking down (thematic analysis), looking across (case analysis) and combining both to explore patterns and explanations in responses. In this research, the thematic analysis focused on summarising key texts and ideas based on interview questions.

In addition to thematic analysis, further analytical framework was required to draw more profound findings and application for future park management, meaning that the method of thematic analysis is restricted in identifying key texts or information within qualitative data of what interview participants state. In this research, analytical methods could interpret not only the outcome of thematic analysis to assess acceptability and feasibility, but also develop to make recommendations for better park management employing holistic analytical approach 'place-keeping, and its dimensions.

4.2.3.2 Statistical analysis

A large quantity of data from six study sites was collected, using the household questionnaire survey. The data was analysed by the Statistical Package for the Social Sciences (SPSS). The analysis based on empirical data was led by relevant research objectives:

• To assess the acceptability and feasibility of park management practices according to different stakeholders in different socio-economic contexts.

To address this objective, the data was analysed using a wide range of statistical methods such as descriptive, chi-square test, one-way ANOVA, independent samples t-test, correlation, regression and factor analysis. Descriptive analyses were conducted to provide background information about the physical characteristics and socio-economic data as well as relevant samples of the study sites. The data relate to some detailed information and features about the residents who responded to the household questionnaire survey.

The chi-square test was used to analyse and identify the differences between group and categorical data. It is explained that the chi-square test can examine a relationship between two categorical variables (D. Bolboacă *et al.,* 2011). Odds ratios were employed to measure the effect size for categorical data: *Odds ratios = odds after a unit changes in the predictor/original odds* (Field, 2009, p. 700). In this research, these analyses were employed to determine difference between demographical groups i.e.) gender, age, disabled and household composition and categorical questions i.e.) frequency of visit park, types of transport, companion visiting park and other categorical questions.

One-way ANOVA examines the differences between different socio-economic groups and scores in residents' perceptions. It is highlighted that ANOVA is a way of comparing the ratio of systematic variance to unsystematic variance in experiment-based studies (Field, 2009, p.350). To verify detailed difference and effect sizes between specific groups, *post-hoc* tests (Games-Howell and Turkey HSD depending on the results of the Test of Homogeneity of Variances) and effect size (Eta squared (h^2) = SS_{effect} / SS_{total} : 01 is classified as a small effect, .06 as a medium effect and 0.14 as a large effect) (Pallant, 2010). Tests of one-way ANOVA were very useful to assessing whether claimed differences between demographical groups (more than two) and their perceptions of current and future park management practices.

Independent samples t-test was used in situations in which there are two experimental conditions and where different participants (groups) have been used in each condition (Field, 2009, p.334). Effect sizes were also calculated by Cohen's effect size (Cohen's $d = M_1 - M_2 / \sigma_{pooled}$: 0.2 (Small), 0.5(Medium) and 0.8 (Large)). Tests of independent samples t-test were used to analysis difference or sometimes no difference between binary groups i.e.) gender, disabled in this research and interval variables i.e.) 3, 4 or 5 Likert scales.

Correlation is an important part of analysis. It relates the indicators measuring demographical features and the indicators measuring residents' perceptions. The correlation analyses were conducted to verify a relationship or connection between two variables statistically (Field, 2009. p.167). The value of Spearman's rho varies between -1 and +1, and the closer the value generated is to +1 or -1, 'the stronger is the relationship between variables (Bryman and Cramer, 1997. p.176). The values between two variables are defined as below .29 (or-.29): a small correlation, .30 to .49 (or-.30 to -.49): a medium correlation of .50 or above (or -.50 and above): a large correlation (Pallant, 2010). A value of zero means that there is no association between the variables. In this research, a few variables i.e.) IMD were tested by the correlation analyses, such as how the intervening variables are associated with the indicators of current and future park management practices.

It is necessary at some point in the analysis to determine the outcome of the work in more detail. Statistical tests such as regression to analyse the relationship between a set of independent variables and a single dependent variable (De Vaus, 2002, p.343). In this research, this test was used to identify the impact of indicators to assess park management standards.

4.2.4 Methodological approach to the development of indicators of acceptability and feasibility

To examine the acceptability and feasibility of future park management practices, it was necessary to develop indicators to operationalise these two broad concepts. There is a need for research contexts to contribute to practical processes or decision-making concerning the theory. An effective way of achieving this in this research is, therefore, through the development of indicators to operationalise the theoretical definitions of acceptability and feasibility. A review

of the relatively small number of studies which examine acceptability and feasibility, showed that definitions are often not provided (e.g. Vandelanotte and Bourdeaudhuij, 2003; Plaete *et al.,* 2015; Lattie *et al.,* 2017). Such studies defined the two concepts in relation to political decision-making (Taylor *et al.,* 2008), interaction between political negotiation and perceptions of local residents (Daneshpour and Shakibamanesh, 2011), analysis of area characteristics (Gul *et al.,* 2006) and measuring physical activities (Jorstad-Stein *et al.,* 2005). In medical or psychological studies, the concepts were utilised to test patient satisfaction (Molina *et al.,* 2015) and rehabilitation (Rae and White, 2009). These previous studies have not been applied to the context of urban landscape management while, these studies provide a range of conceptualisations, for which there are no overarching definitions. However, there are studies in the discipline of business which conceptualise the meaning of acceptability and feasibility in detail (Johnson *et al.,* 2014; Jeffs, 2008), in particular Johnson *et al.,* (2014) who conceptualise the meaning of acceptability and feasibility in their 'Evaluating Strategy' for application in different contexts (Figure 4.1). Given its application of stakeholders and broad applicability to governance processes, the potential for this concept as a starting point for this research was recognised. Therefore, this study primarily adapted the work by Johnson *et al.,* (2014) and widely reviewed further contextual concepts to apply the two concepts for this study to understand acceptability and feasibility of stakeholders' perceptions.

Table 4.1 The concept of acceptability and feasibility

Acceptability			**Feasibility**		
The expectations of stakeholders			**Work in practice**		
Risk	**Returns**	**Reaction**	**Resources**	**People**	**Integration**
• Extent to negative outcomes • Unpredictable strategic outcomes • Public concern	• Benefits • A measure of financial effectiveness	• Positiveness and negtiveness of stakeholders	• Funding requirement	• Experience and skills knowledge: relationships, work organisation, training development rewards, and recruitment and promotion	• Management of resources e.g.) Building, information, technology, other resources.

Adapted from Johnson *et al.,* 2014, p.379-393.

Johnson *et al.,* (2014) claim that *acceptability* is defined as whether the expected performance outcomes of a proposed strategy meet the expectations of stakeholders, for example, positiveness and negativeness, public concern, reaction to proposed strategy and benefits to stakeholders. This concept emphasises the '3Rs': Risk, Returns and Reaction of stakeholders. The first R is the risk, which concerns the extent to which strategic outcomes are unpredictable, particularly in terms of possible negative outcomes. The second R is return, which is a measure of the financial effectiveness of a strategy. The third R is reaction of stakeholders which will be incorporated into analysis of this research to test perceptions of stakeholders of potential park management practices.

A similar definition of acceptability is found in Mendenhall *et al.,* (2014) which is regarded as the benefits and demands of stakeholders. Further definition showed that acceptability determines the concerns of organisation's stakeholders on new strategy and cultural changes (Jeffs, 2008) as well as reasons and baseline found by stakeholder's responses (Molina *et al.,* 2015). It is viewed that the norm of acceptability is stakeholders' perceptions in a wide range of contexts.

However, the concept of acceptability as primary sources to test such possibility based on stakeholders' perceptions can be employed in relation to the concept of feasibility. According to Gul *et al.,* 2006, the level of acceptability is to assess an understanding of possibility of urban planning. Elsewhere, feasibility constitutes a practical stage to create a development plan (ibid) and evaluate its acceptability according to individual perceptions (Taylor *et al.,* 2008). In these studies, the concept of feasibility is conceptualised to stimulate and improve provision and is underlined by an understanding of interaction between individuals and local authority performance management framework.

In overall contexts, *feasibility* is concerned with whether a strategy could work in practice (Johnson *et al.,* 2014). To understand feasibility, Johnson *et al.,* identify the need to collect data on people's skills, knowledge and experience as well as funding requirements. Similarly, feasibility evaluates implementation of the strategy based on the availability of the necessary resources (Jeffs, 2008). In interaction between varying stages of management, practicality and financial effectiveness in local management and improvement feasibility plays a crucial performance (Taylor *et al.,* 2008). It can be shown that the feasibility within a focus on practical

contexts, therefore, needs to be considered with regard to the ability to integrate and obtain existing and new resources.

Considering the interrelationship between acceptability and feasibility, it is clearly understood that acceptability can test possibility based on stakeholders' perceptions while feasibility is regarded to assessing acceptability and the practicality of a proposed solution.

Hence, in this research, these two concepts were used to determine stakeholders' perceptions of park management practices through relevant questions, for instance 'Would you like to see the approaches of community food growing, different urban park plantings and income generation practices in your park?' and 'Could these practices contribute to better park management?' (see Nam and Dempsey, 2018). The concept of feasibility was therefore adapted to examine stakeholders' perceptions of future park management practices in terms of funding for park management, stakeholders' involvement as human resources and other knowledge and skills for park management: 'Would you get involved in these practices?' (ibid.).

It is acknowledged that this study was not able to measure all aspects of acceptability and feasibility in the questions (e.g. the study did not fully explore the benefits of future park management practices to different stakeholders), given the time and resource constraints of the PhD project.

4.2.5 Methodological approach to analytical framework 'Place-keeping'

This research was contextualised to link thematic analysis to an understanding of park management contexts and conceptualised to make recommendations for better park management. As discussed in detail in Chapter 2, the theoretical and practical usage of place-keeping were explored among other analytical frameworks and was justified given its holistic approach to park management and the way in which interrelationships between relevant dimensions can be explored. However, it is worth reiterating here how the place-keeping analytical framework as conceptual framework can be operated and used in this research, based on existing literature and within this project's methodological approach. The thematic analysis provides the starting point for an analytical framework for managing themes in the qualitative data analysis (Bryman, 2008, p.555). Analytical frameworks constitute an effective method in

empirical research (Coral and Bokelmann, 2017), underlining transparency in data analysis and the links between the different stages of analysis (Pope *et al.,* 2000). This permits the researcher to follow a process that guides the systematic analysis of data from initial management through to the development of descriptive and/or explanatory accounts (Smith *et al.,* 2011). It allows researchers to achieve creative thinking and novel outcomes as well as future applications of the data and data findings (Coral and Bokelmann, 2017). Some analytical frameworks were reviewed in section 2.5.1 (Policy Arrangement Approach (PAA)) and 2.5.2 (Green Flag Award (GFA)) which highlight the impacts of policy and evaluation on landscape planning and management. Recent research supports PAA and further employs the PAA to understand governance in urban green space management (Mattijssen *et al.,* 2018). However, according to the literature review in section 2.5, the context of green space management calls on a holistic approach to management focuses on how to combine or contextualise the positive contributions of varying management models and dimensions (Dempsey and Burton, 2012). Accordingly, place-keeping analytical frameworks in this research can therefore be used to draw understandings of park management contexts thorough more effective approach to analysis. This procedure provided predominant evidence to make recommendations for better park management.

In some studies, analytical frameworks are often influenced by a number of external drivers including policy factors, decision-making process, community interactions (Coral and Bokelmann, 2017) and socio-economic characteristics of the sample (Liu *et al.,* 2013; Friis and Nielsen, 2014) as well as demographic changes (Ramankutty and Coomes, 2016). To help understand stakeholders' perceptions alongside socio-economic characteristics, site-specific and management practice characteristics, the place-keeping framework was well-suited to permit in-depth analysis. Place-keeping not only recognises six dimensions of long-term management, namely: (1) policy, (2) governance, (3) funding, (4) partnership, (5) maintenance and (6) evaluation, but it importantly allows for an analysis of the site characteristics, the sample characteristics holistically as "place". Its conceptualisation of long-term management as a "process", permits a discussion of "place", "process" in relation to a "product" which here can be used to describe the specific landscape management practices. Based on the data from the interview and questionnaire questions, this research therefore employed the place-keeping analytical framework. This as an example of an analytical framework provides a platform to

test perception and assumptions and allows for an analysis of the interactions between emerging (grounded) theories and the analysis of statistically-derived data. This study therefore acknowledges that place-keeping is not the only analytical framework that could have been applied, but in the context of parks management, it was considered to be a suitable one to test. Part of the discussion later in the thesis does relate to how the framework 'stood up' when the plethora of data was analysed.

4.3 Site selection

To explore acceptability and feasibility of potential park management practices in parks, six parks were chosen in Sheffield. Sheffield is the 4th largest city in England, and has a total of 83 (city, district and local parks) (Sheffield City Council, 2000). Sheffield has a varied range of landscapes, and a substantial green space network, which includes an extensive system of publicly provided spaces, both planned and unplanned (Beer, 2005). The primary criterion employed in the selection of the urban areas for this research is that they are considered local. According to Wilson and Hughes, 2010, current research which provides a deeper understanding of green space management and planning can be conducted at the local level based on the implications of green space discourses identified in political contexts. To conduct such a process of primary data collection across a city would be prohibitive in terms of time and cost. In response to this, selecting study or sample sites can save time as well as financial and human resources, while use estimated data where the sample is not a fairly accurate reflection of the population (Kumar, 1999, p.148). To avoid bias in the stage of the selection process, multiple criteria were adopted. Criteria such as environmental and socio-economic factors as well as geographical features of varying locations can help select sites when dealing with potentially complex analytical problems (Zucca *et al.,* 2008). An appropriate way to select the most representative possible samples would be to employ a set of objective criteria. The study parks were selected according to the following criteria:

• Park type: district parks were selected as they were felt to be the most likely type of park for future park management practices to be applied as opposed to high-profile city parks and smaller local parks.
• Geographic location: parks located in different areas across the city in both deprived and less deprived areas were selected to ensure a geographic spread.
• Community group involvement: to ensure that multiple stakeholders who have an active interest in the overall management of the park could be consulted, this research selected parks with an associated community group.

4.3.1 Park type

The objective of categorising sites is to determine a readily understood and accepted framework to guide how sites should be developed, managed and maintained in the future and identify key strategic sites for future priority action and resource allocation within budgetary constraints (SCC, 2000). Each site is categorised according to category and type. The site category consists of three groups**:** city, district and local park, based on a site's catchment[4]. Considering site category and site type, in Sheffield there are the following number of park: city (10 sites), district (20 sites) and local (49 sites) park in 2015. District parks located in Sheffield are described as providing high-quality green spaces, good accessibility, possibly opportunities for catering, outdoor events and indoor attractions (SCC, 2000), which is of particular resonance when considering potential income generation. As a local site for their local community, they are maintained to appropriate quality standards (ibid). However, according to park size, functions vary in which large parks such as generally city parks have more attractions for uses (Gobster, 1998). The contrasting land uses of small local parks surrounded by residential neighbourhoods provide users with limited functions (Martin, *et al.*, 2004). In terms of financial disparity to manage parks, city parks as high-profile parks receive more resources. This could reflect Roberts's (2009) observation stated that capital funding regarding place-making in urban planning and design is spent on the shaping and making of high-profile places in towns and cities all over the world.

[4] City parks: Not specific catchment area but, established visitor destination; District parks: around 1.2 to 2.0 km; Local parks: around 400 metres (SCC, 2000)

4.3.2 Geographic location

Parks located in different areas across the city in both deprived and less deprived areas were selected. As viewed in the literature review in Chapter 2, according to different socio-economic characteristics, inequality can detrimentally affect one's chances of gaining social, psychological and physical benefits of green spaces. It is the case that the impact of socio-economic factors can affect park management and maintenance. Ultimately, this is related to people's perceptions. In terms of practical data collection, it is important to note that the socio-economic-demographic characteristics are helpful to understand survey participants' perceptions, interests and attitudes (Kumar, 1999, p.105). Therefore, ensuring that there is some variation in socio-economic context is one of the criteria used here to select the study sites. To verify the difference of socio-economic characteristic, this research employed national statistics on relative deprivation in small administrative areas in England.

According to the Indices of Multiple Deprivation (2015), Sheffield has significant differences in terms of deprivation levels of people living in the east as generally more deprived and west of Sheffield as generally more affluent. The English Indices of Deprivation are published every three years by the Department for Communities and Local Government (DCLG, 2015) and are designed to show comparative levels of multiple deprivation across England at a small area level and including income, employment, health and disability, education, skills and training, barriers to housing and services, crime and living environment. District parks were therefore selected in both the east and west of the city, and according to the Indices of Multiple Deprivation (as Section 4.3.4 shows).

4.3.3 Community involvement

Community involvement in park management was the final site selection criterion, given its importance in the stakeholder literature. In Chapter 2, it is clear that policy interest continues to support the empowerment of community groups in park management contexts, indicating that their perceptions in relation to park management should be examined. In particular, many community groups who get involved in Sheffield's green spaces are now contributing to the

management of parks and green spaces in different ways. Community groups, in general called Friends Groups, and elsewhere used Park User Groups (Mathers *et al.*, 2015), are active in their local green spaces (National Federation of Parks and Green Spaces, 2018). In this research, based on the number of community groups involved in green spaces in Sheffield (over 80), their involvement was considered one of criteria to select the study sites (after Kumar, 1999). Friends groups as community groups are mostly involved in a wide range of park management activities. Based on their experience and knowledge, therefore, this research focuses on their perceptions. Each friends group can have varying characteristics or perceptions based on their skills and resources (Jones, 2002). The activities and perceptions of community groups differ in park, depending on socio-demographic and environmental drivers (Bell *et al.*, 2007; Kaczynsk and Henderson, 2007), low-income neighbourhoods (Glaser and Denhardt, 1997) and relationship with local government (Berman, 1997). Any potential gaps between the groups can be examined through the place-keeping framework to help understand, for example, different governance arrangements in the different groups.

4.3.4 The selected study sites

According to these criteria, six parks were selected of the twenty district parks as sites for this study: Parson Cross, Manor Fields, High Hazels, Richmond, Meersbrook Parks and Bolehill Recreation Ground.

Parson Cross Park (PCP) which was established in the 1950s, is located in a deprived residential area of Sheffield in which social problems such as vandalism and anti-social behaviours frequently occur around and in park, which often attributed to housing overlooking this park (Dempsey *et al.*, 2016a). This problem was increased when economic regeneration in the area in the 2000s led to park improvements, but planned housing around the site did not materialise, meaning that anti-social behaviour continues to date. The relevant PCP community group is not directly involved in park management. Instead, the community group is engaged in local community activities beyond, but partly including the park. Independent and fenced allotments named ‘Parson Cross Family Garden’ are being built in an eastern area of the park.

Manor Fields Park (MFP) is also another site, suffered from vandalism and anti-social behaviour over a long period of time. The park was regenerated with government funding from late 1990s-2000s which funded the creation of a social enterprise to manage the park. MFP was improved, incorporating environmental and ecological approaches such as ecological planting and sustainable drainage, from a derelict site to well-managed parks (Green Flag Award winning park) - the national standard of good quality green spaces (Greenhalgh and Parsons, 2004). The Friend of Manor Fields (CoFoMF) formed during the regeneration process and contribute to park management including regular maintenance, fundraising through event organisation and holding regular group meetings. The reduced area of Manor Allotments has been relocated in a western area of the park which is fenced since the end of 20th century that initiated part of Dig for Victory during the Second World War in Sheffield, but many parts of the allotments were incorporated into the park due to vandalism frequently.

High Hazels Park (HHP) is a long history park as a Victorian park. The park was originally the grounds of High Hazels House which was used as home of the first mayor of Sheffield. The Friends of High Hazel (CoFoHH) group was established in 1988 and is made up of a small group of active members. However, thery have long been involved in managing the park and the average age of members reflects this. Privately independent and fenced allotments, 'Infield Lane Allotments' are located at the northern side of the park.

Richmond Park (RMP) established in 1969 is located in the south-east of Sheffield. The Friends of Richmond (CoFoRM) formed in 2006 with particular interest in improving the facilities in the park such as playground settings, the pavilion, toilet and seating. This involves regular maintenance activities and events organisation to generate money for facilities. Six plot allotments are placed on a southern area of the park, but the site is unmanaged.

Meersbrook Park (MBP) is the oldest park in the sample, established in 1886, forming part of Sheffield's 'green necklace' of municipal parks created between 1875 and 1892. Set within steep topography, the Park is home to a walled garden sited northern area of the park and Bishop's House which is one of the city's oldest buildings. The Meersbrook User Trust Group (CoMBUT) was established in 1998 and has the largest number of active members. They are involved in all the projects. Small school groups are involved in food growing activities at 'the Walled Garden' in purpose for education.

Finally, Bolehill Recreation Ground known locally as Bolehill Park (BHP) was established in 1976 and was the original location of the Bolehill Quarries. Set in the least deprived area of the sample, the park is also placed on a steep incline, incorporating a range of features including a BMX track, two playing fields and a bowling clubhouse (which was partly destroyed in a recent arson attack). The Friends of Bolehills (CoFoBH) is a relatively new group, established in 2011, which focuses its activities on small-scale events and regular park maintenance (e.g. litter picks). 'Bolehill Quarry Allotment' is run in the southern side of the park. The allotments are very popular with long waiting lists. The characteristics of the selected sites will be further discussed in Chapter 5.

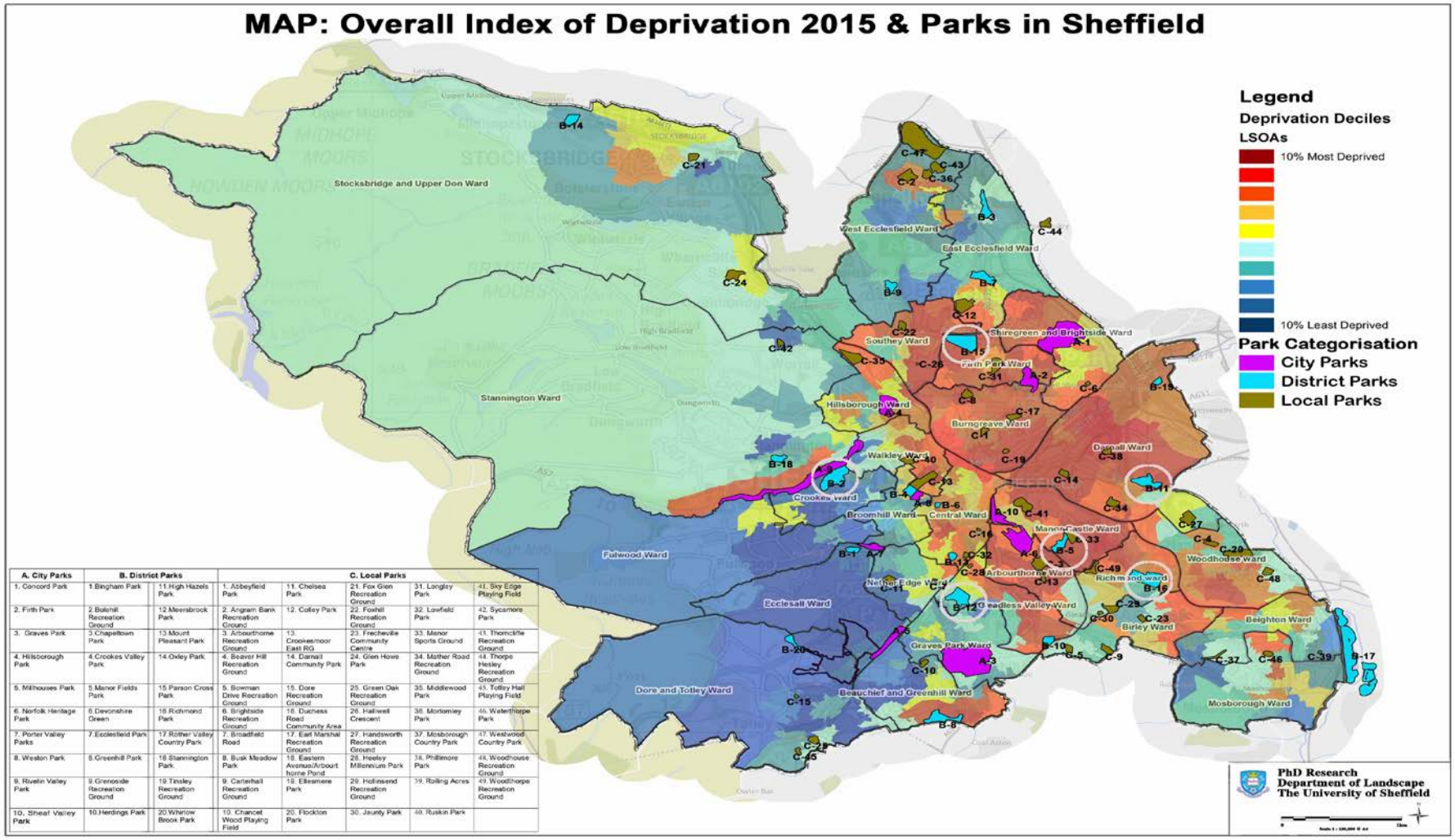
Table 4.2 Selected study sites based on criteria

Park Name	Socio-economic area/Deprivation (LSOA code*)	IMD**	Friends or community groups	Ward/ Location from city centre
Parson Cross	E01033277, E01008060, E01008061, E01008123, E01007946, E01008122, E01008118, E01008116, E01008117 and E01008119	1	Parson Cross Development Community	Firth Park/ Northeast from City centre
	E01008053	2		
Manor Fields	E01008012, E01008011, E01008013, E01008098, E01008097, E01008015 and E01008018,	1	Friends of Manor Fields	Manor Castle/ Southeast from City centre
	E01008095 and E01007881	2		
High Hazels	E01007902 and E01007906	1	Friends of High Hazels Park	Darnall/ East from City centre
	E01008014	2		
	E01007907	3		
	E01007909	5		
	E01007908	6		
Richmond	E01008008	1	Friends of Richmond Park	Richmond/ Southeast from city centre
	E01007967, E01033279 and E01008010	2		
	E01007963, E01007966 and E01008004	3		
	E01007838	6		
	E01007999	7		
Meers-brook	E01007976	2	Meersbrook Park Users Trust	Gleadless Valley/ Southwest from city centre
	E01007980, E01008045, E01008042 and E01007978	5		
	E01007981 and E01008046	6		
	E01007985	7		
	E01007983	8		
	E01007984	9		
Bolehills	E01008154, E01008151 and E01008152	6	Friends of Bolehills	Crookes/ West from City centre
	E01008074, E01008159 and E01008156	9		

* The Lower-layer Super Output Area

** The Index of Multiple Deprivation ranks every small area in England from 1 (most deprived area) to 10 (least deprived area).

Figure 4.1 The selected study sites (six white-circled)



A. City Parks	B. District Parks		C. Local Parks				
1. Concord Park	1.Bingham Park	11.High Hazels Park	1. Abbeyfield Park	11. Chelsea Park	21. Fox Glen Recreation Ground	31. Longley Park	41. Sky Edge Playing Field
2. Firth Park	2.Bolehill Recreation Ground	12.Meersbrook Park	2. Angram Bank Recreation Ground	12. Colley Park	22. Foxhill Recreation Ground	32. Lowfield Park	42. Sycamore Park
3. Graves Park	3.Chapeltown Park	13.Mount Pleasant Park	3. Arbourthorne Recreation Ground	13. Crookesmoor East RG	23. Frecheville Community Centre	33. Manor Sports Ground	43. Thorncliffe Recreation Ground
4. Hillsborough Park	4.Crookes Valley Park	14.Oxley Park	4. Beaver Hill Recreation Ground	14. Darnall Community Park	24. Glen Howe Park	34. Mother Road Recreation Ground	44. Thorpe Hesley Recreation Ground
5. Millhouses Park	5.Manor Fields Park	15.Parson Cross Park	5. Bowman Drive Recreation Ground	15. Dore Recreation Ground	25. Green Oak Recreation Ground	35. Middlewood Park	45. Totley Hall Playing Field
6. Norfolk Heritage Park	6.Devonshire Green	16.Richmond Park	6. Brightside Recreation Ground	16. Duchess Road Community Area	26. Hallwell Crescent	36. Mortomley Park	46. Waterthorpe Park
7. Porter Valley Parks	7.Ecclesfield Park	17.Rother Valley Country Park	7. Broadfield Road	17. Earl Marshal Recreation Ground	27. Handsworth Recreation Ground	37. Mosborough Country Park	47. Westwood Country Park
8. Weston Park	8.Greenhill Park	18.Stannington Park	8. Busk Meadow Park	18. Eastern Avenue/Arbourthorne Pond	28. Heeley Millennium Park	38. Phillimore Park	48. Woodhouse Recreation Ground
9. Rivelin Valley Park	9.Grenoside Recreation Ground	19.Tinsley Recreation Ground	9. Carterhall Recreation Ground	19. Ellesmere Park	29. Hollinsend Recreation Ground	39. Rolling Acres	49. Woodthorpe Recreation Ground
10. Sheaf Valley Park	10.Herdings Park	20.Whirlow Brook Park	10. Chancet Wood Playing Field	20. Flockton Park	30. Jaunty Park	40. Ruskin Park	

4.4 Administration of interview and questionnaire surveys

4.4.1 Interviews

Semi-structured interviews were conducted in 2015 to gather data on community groups' and professionals' perceptions of overall park management contexts and future park management practices. Twelve interviews were completed; six were undertaken with six community group member/s of the study sites, who are involved in park management (Table 4.3).

Table 4.3 Interview participants

		Community or Affiliation name / Position
Community groups	Parson Cross	Parson Cross Development Community / member
	Manor Fields	Friends of Manor Field / member
	High Hazels	Friends of High Hazels / member
	Richmond	Friends of Richmond / member
	Meersbrook	Park Users Trust / member
	Bolehills	Friends of Bolehills / member
Professionals	ProSE	Third sector Social Enterprise / CEO
	ProLA-1	Local authority / Deputy Head
	ProLA-2	Local authority / Community Partnership Manager
	ProAC-1	University of Sheffield / University Academic
	ProAC-2	University of Sheffield / Landscape Research Associate
	ProLA-MS	Sheffield City Council / 7 Sheffield Park Managers

Community groups/ Friends groups play an important role in partnership with local authority and other groups that meet these overarching criteria to improve parks and open spaces. Sheffield city council also encourages friends groups to get involved in Sheffield green space management in partnership (SCC, 2009). In addition to these, Dunnett *et al.,* 2002 also emphasis friends groups' involvement as their most devoted contribution to developing green spaces in park management. Further, to collect significant and practical data, friends groups were interviewed to demonstrate commitment to the protection and development of their sites in different ways (Mathers *et al.,* 2015). In addition, community groups in Sheffield have had involvement with the local authority. However, each community group may have different involvement in relation with communication and co-working of the local authority. This

research elicits significant data from community groups interviews concerning about how the community groups have had relationships and co-working with the local authority. Hence, this research carried out interviews targeting the community groups of the selected study sites.

Five further interviews and one focus group were carried out with other stakeholders closely involved in parks management. Local authorities play a significant role as the landowner and principle manager of urban green space (Van der Jagt *et al.*, 2016) and therefore having a key role in the long-term future of parks (Mattijssen *et al.*, 2017). The local authority often oversees the maintenance and management while it is recognised that local residents and community groups are increasingly involved in the process (Dempsey and Burton, 2012).

The role of universities with a great number of academic has contributed to regional knowledge-based growth (Morgan, 1997; Asheim *et al.*, 2003). Universities have been a key driver of institutional changes (Chartterton and Goddard, 2000) and local development (Feldman and Desrichers, 2003) towards a strong emphasis on regional engagement. Based on academia-generated interview data and surveys, it is acknowledged how new knowledge about the local context is produced in social and science research (Gunasekara, 2007). In particular, Sheffield University is well-placed through academic staff in the Department of Landscape who are engaged in research on green space management, helping to produce new knowledge analysed within the local context. To reflect this, this study involved two interviews with academics (Table 4.3).

As underlined in Chapter 2, the role of third sector have been increasing in park management (Dempsey *et al.*, 2016b). In Sheffield, local trusts such as the Wildlife Trusts and local social enterprise have been engaged in managing green spaces in Sheffield. To reflect this, the perceptions of social enterprise were gleaned to reflect park management contexts in different management structure as newly emerging norms. Hence, the interviews were conducted with nine local authority representatives, two University academics and one third sector social enterprise involved in urban land management.

The interviewees were asked questions to address research aims derived from the literature review and to examine the current context to permit an understanding of park management contexts, community involvement, socio-economic impacts on park management and perceptions of future park management practices. An additional question was asked of community groups to gather further information on the characteristics of their groups that were

not available in documentaries and secondary resources. As expected, these interviews revealed a wide range of contexts and views based on different positions.

Table 4.4 The themes for interview questions

The themes for interview questions*		**Relevant research aims**
• Information on characteristics of community groups**		• Aim 1
• Discovering significant changes over last 10 or 20 years in landscape contexts		• Aim 1
• Exploring stakeholders' involvement in park management focusing on community groups		• Aim 1
• Identifying impact of deprivation on park management		• Aim 1, 3
• Assessing potential park management practices	◦ Community food growing ◦ Urban park plantings ◦ Income generation models	• Aim 2
• Understanding ideal park management		• Aim 2, 3

* Full version of interview questions is presented in Appendix B.
** This question was asked to community groups to collect further data on the characteristics of the community groups.

The anonymity of all participants was maintained in the interviews and focus groups and were are associated with an anonymised coding system. The interviews were recorded and the audio files are kept confidentially on a password-protected laptop.

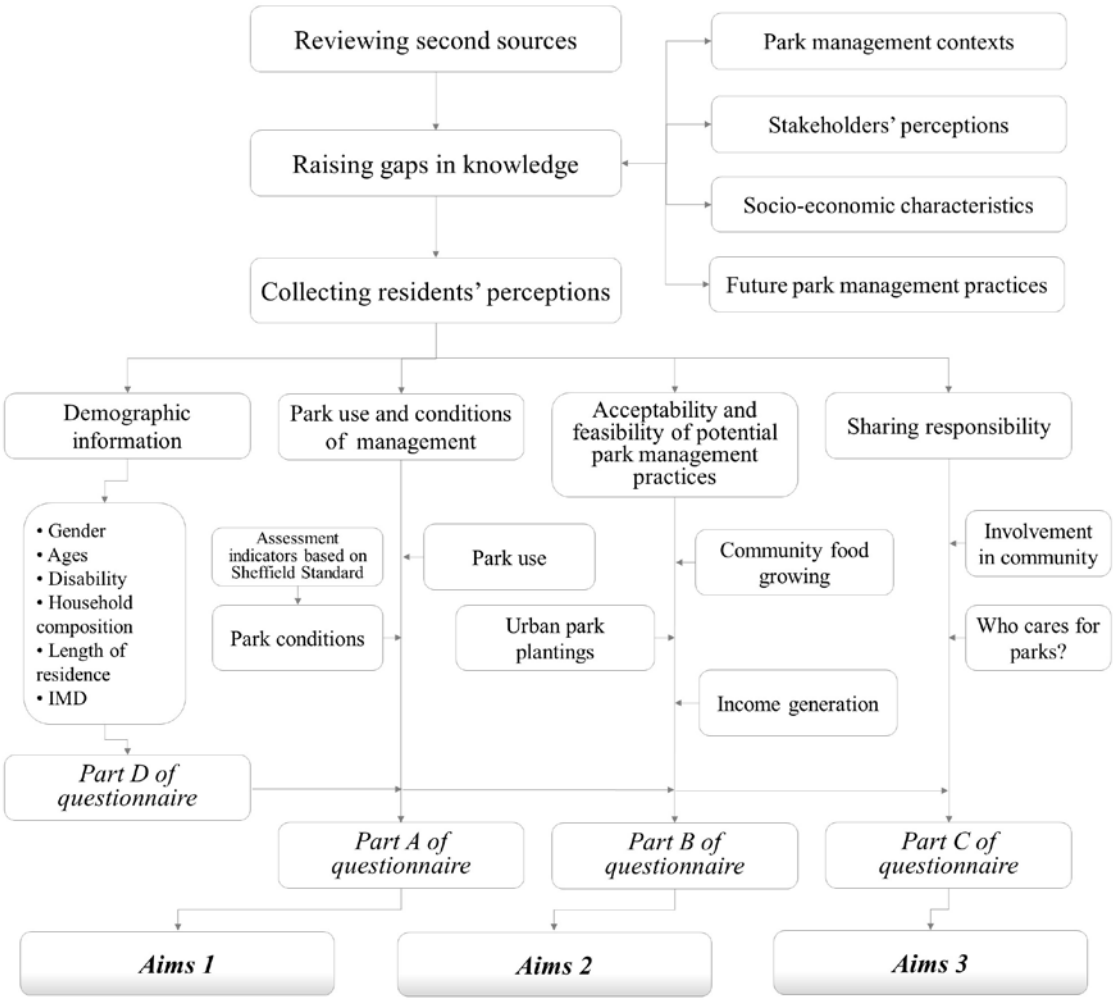
4.4.2 Questionnaire surveys

As mentioned earlier, the questionnaire was designed to be dropped off at people's houses who lived within a given radius of each park and picked up at a designated time and date.

4.4.2.1 Designing questionnaire surveys

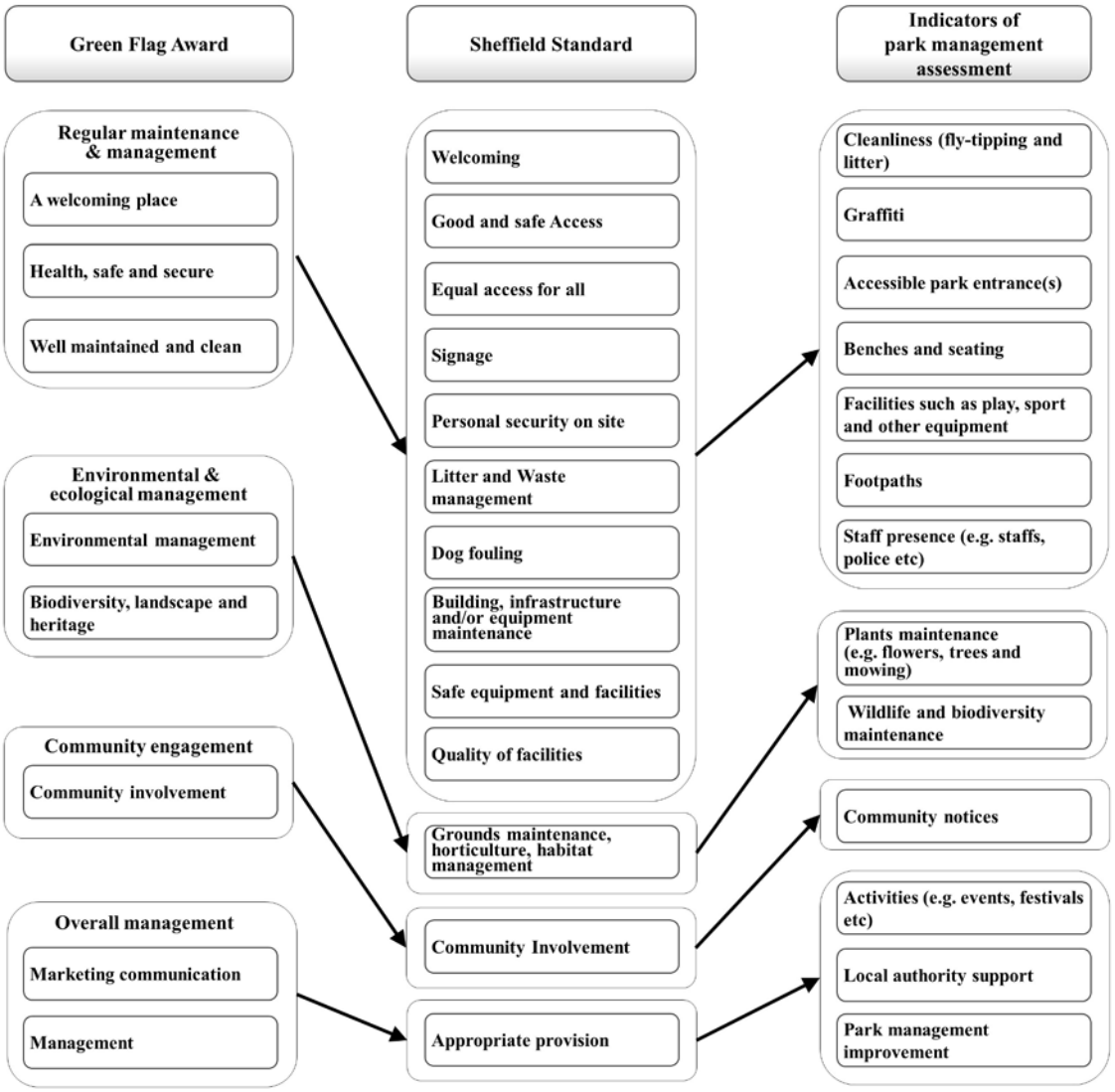
The questionnaire consisted of four parts where each part has different types of questions and its outcome, designed to address the research aims (Figure 4.2).

Figure 4.2 Designing questionnaires



Part A of the questionnaire asked questions to understand how residents use their parks including the frequency of visit, reason for visit, visit alone or with companion, distance from home, mode of transport and their perception of the management of the park. This information was used to draw comparisons between the perceptions held by residents of future park management practices according to varying park behaviour and use patterns. Part A also included questions about respondents' assessment of current park management in which the indicators of questions are based on Sheffield Standard which originated and developed from national standard 'Green Flag Award' (discussed in Chapter 2). The indicators of the Sheffield Standard tend to overlap between indicators, meaning that unnecessarily overlapping questions were consolidated and sorted out in appropriate and accurate wordings for residents' understandings with the supervisory team (Figure 4.3).

Figure 4.3 Process of adapting indicators of park management assessment



As a method of data collection, questionnaires should be designed for respondents to be able to understand clearly the purpose and relevance of the study (Kumar, 1999, p.105). Therefore, questions were based on a selection of indicators derived from the Sheffield Standard assessment which in itself is designed for the general public to understand, demonstrated in the resultant management plan which is displayed on-site in the assessed parks. The questions also posed questions about the management of different types of plantings, the role of the local authority, issues around community notices, all of which are underlined in park management literature as being important indicators to current park management (Hitchmough, 1994; Parsons and Greenhalgh, 2004; Dempsey *et al.*, 2014). Ultimately, the assessment questions

were not only designed to determine perceptions of the current quality of the study sites, but also to verify which components of indicators affect the perceptions of residents in their assessment of park (e.g. demographic data, levels of use etc.).

Part B of the questionnaire asked questions about how residents perceived future park management practices in their local park, which was designed to start acceptability and feasibility of potential park management. Using a mixture of photos and text to provide broad descriptions of the management practices (after Pettit, 2011), the questionnaire also asked whether residents would get involved in the management practices. The descriptions of income generation models and sample photos were specified to allow respondents to easily understand the questions and were therefore based on contemporary well-known practices e.g. Incredible Edible or planting designers who write for a general audience such as Oudolf and Kingsbury. Photo-based surveys could be preferable to landscape or environment-related research because of providing very close visual stimuli to real-life experience of the landscape (Barroso *et al.*, 2012), participants' responses, attitudes and views (Harper, 2002; Hurworth, 2003) and stakeholders' perceptions of the characteristics of green space (Lange *et al.*, 2008). However, there are some drawbacks that photo-based survey does not convey unknown area problems in hidden areas and reflect seasonal changes showing short-term period (NIBT, 2018). Nevertheless, landscape photo images can be considered to communicate existing conditions and alternative landscape scenarios, past and present, for widely educative and consultative purposes (Priestnall and Hampson, 2008; Pettit *et al.*, 2011). The descriptions of income generation models were also texted to minimise respondents vague or unclear understandings of the income generation models.

The questionnaire of Part C was designed to determine residents' perceptions of their willingness to get involved in overall park management as a member of community group. These questions were designed to understand the feasibility of implementing the potential park management practice. The questions were also designed to assess perceptions of park management and who cares for the park from residents' perceptions, analysing potential for sharing responsibility.

Part D of the questionnaire also asked questions about respondents' household characteristics to provide socio-demographic data which could then be used in subsequent analyses to help explain differences in responses (e.g. according to gender, age, IMD, length of residence,

disabled, household composition). The socio-economic characteristics have already been underlined in the literature chapter as helping us understand how impacts of a factor under study can be manifested differently through people's perceptions (after Kumar, 1999, p.105). It was a self-completion questionnaire, dropped off at respondents' homes and collected by a researcher a number of days later in an attempt to gain higher than average response rates (after Riley and Kiger, 2002; Steele *et al.*, 2001).

4.4.2.2 Administration of the quantitative surveys

A total of 2,670 questionnaires were distributed to respondents living within 300m walking distance of the entrance of each park by random sampling to enhance the representativeness of the study population (Bowling, 2005, p.196), with 535 returned questionnaires leading to a final sample of 506 valid questionnaires (average response rate of 19%) (Table 4.5). The response rates varied considerably and were higher in less deprived areas (e.g. 34% in BHP) and lower in more deprived areas (e.g. 13% in PCP and 12% in MFP).

Table 4.5 Response rate of questionnaires

Park	Collection	Response rate	Total collected	Valid Responses	Proportion of total sample
Parson Cross	83/650	12.7 %	83	80 / 83 (96%)	15.8 %
Manor Fields	81/650	12.5 %	81	78 / 81 (96%)	15.4 %
High Hazels	94/500	18.8 %	94	88 / 94 (94%)	17.4 %
Richmond	94/300	31 %	94	84 / 94 (89%)	16.6 %
Meersbrook	86/300	28.7 %	86	82 / 86 (95%)	16.2 %
Bolehills	97/270	33.7 %	97	94 / 97 (97%)	18.6 %
Total/Average	535/2670	20 %	535	506 / 535 (94.6%)	100 %

4.5 Conclusion

To carry out the research effectively and efficiently, the aims of the methodological approach in this research were to address gaps in knowledge identified through the literature review. To do this, the research employed a combination of qualitative and quantitative research methods. Varying methodological approaches within quantitative and qualitative methods were utilised and conceptualised analytical approaches around the exploration of acceptability and feasibility within the place-keeping analytical framework.

The chapter outlined how the methods of collecting data were identified as a physical site survey (Digimap and on-site survey), semi-structured interviews (including a focus group) and a household questionnaire survey. Semi-structured interviews were conducted to determine community groups and professionals' perceptions of current and future park management practices. The samples for the household questionnaires were randomly selected within 300m of the boundary of each study site. Thematic analysis was employed as a method of qualitative data analysis, while the large quantity of data collected from the questionnaire was analysed using a range of statistical tests through SPSS. To clarify the potential for future park management practices in each of the parks, the concepts of acceptability and feasibility were employed, rooted from mainly business scope and adapted accordingly. Further exploration of relevant literature justified to utilise the concepts in this research, such as the place-keeping analytical framework being used to create a platform of in-depth understanding of park management contexts and applications for better park management.

To demonstrate the justification of methodological approaches, the study sites were selected with the following criteria: Park type, geographic location and community group involvement. To gain the detailed characteristics of the study sites, physical survey was conducted and is discussed in the following chapter.

Chapter Five

Characteristics of the study sites

5.1 Introduction

This chapter describes the characteristics of Sheffield and the study sites. It aims to provide an understanding of the historical, socio-economic, physical and other aspects of park management, its structures and practices as well as community engagement in the study sites[1]. The snapshot that this thesis provides is up to 2015. Changes made subsequent to this time will be discussed at the end of the thesis.

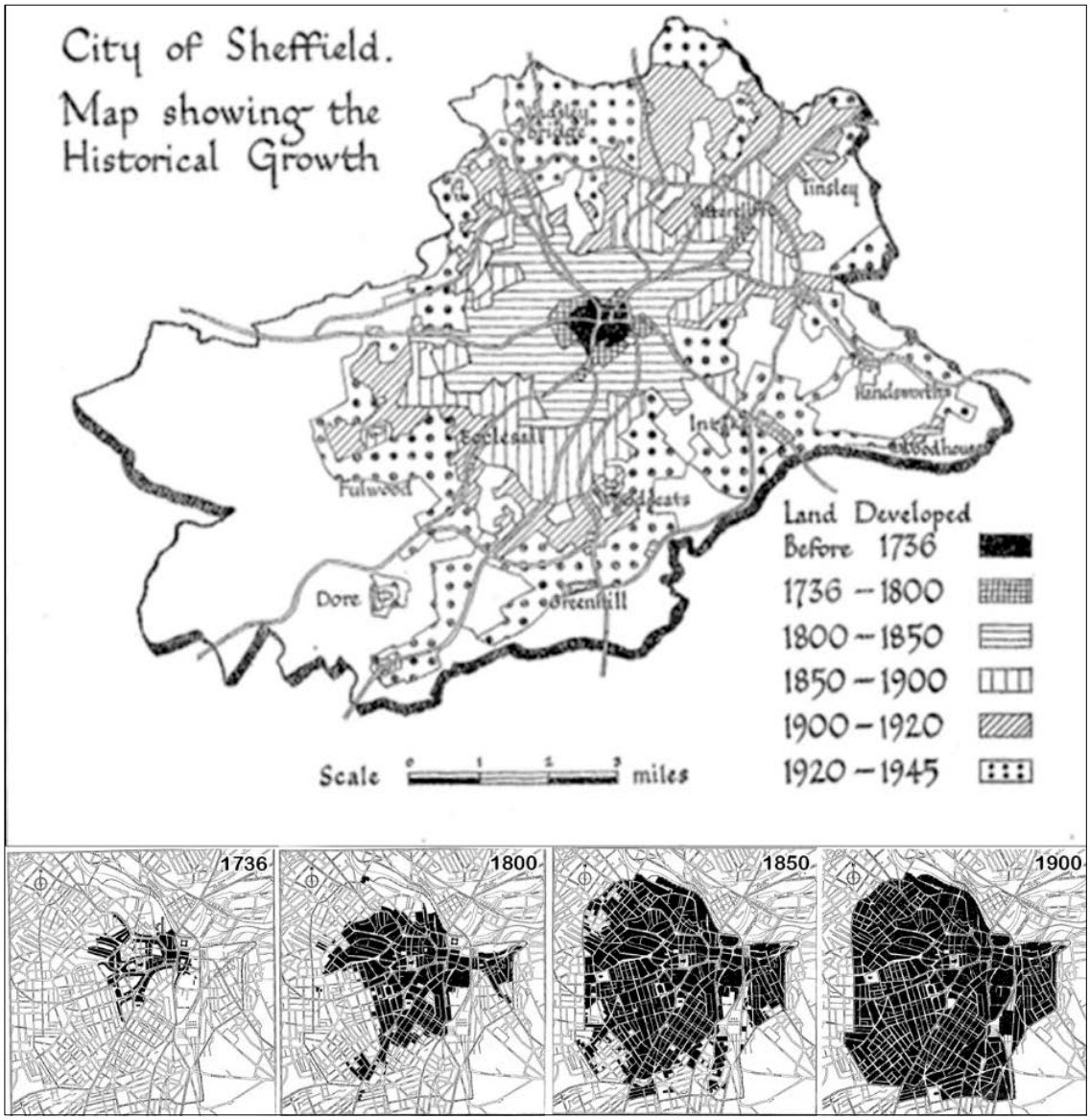
5.2 Characteristics of Sheffield's green spaces

The city of Sheffield is located in South Yorkshire in England. It is the fourth largest municipality in England with a population of 575,400 in 2015. Sheffield is a major European city with a long history and grew rapidly as a leader of the Industrial Revolution from the 18th century largely due to the topography with hills and valleys with fast flowing streams to provide power and its ready access to raw materials. This growth produced a predominantly urban society with the provision of public parks and green spaces in order to provide recreation for the growing population (Sheffield City Council, 1993). This makes Sheffield one of the greenest cities in England, providing a wide range of green spaces and recreation services to promote people's health and well-being. The norm of green space within Sheffield has tended to obscure the city's historic industrial background (Sheffield City Council, 1945).

Sheffield's historical background was focused on the development of the centre of the city from early in the 18th century (Figure 5.1). According to Smith's report in 1842, 'The conditions of the town of Sheffield', people could walk and enjoy public gardens and open spaces. By that time, Sheffield Botanical Gardens had been established by a private company in 1833 and provided adequate spaces for recreation, but was only open to subscribers.

[1] Reference to Bolehills Park's full/ official name is 'Bolehill Recreation Ground'. This research follows residents and Friends of Bolehills by referring to it as 'BHP'.

Figure 5.1 The map of Sheffield growth plan

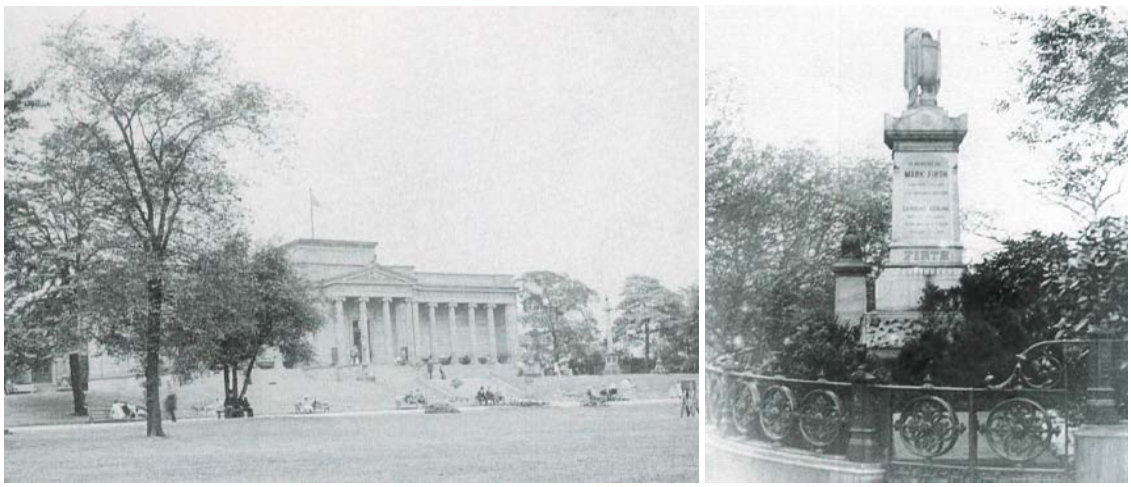


Sources adapted from Sheffield City Council, 1945, p.12.

However, changes which delivered recreation spaces for the working class were found with Norfolk Park opening in 1848 (Hindmarch, 2005, p.7). To Hindmarch, Norfolk Park was a meaningful symbol as one of the earliest public parks in the country to which, although the park remained in private ownership until 1909, the public had access at all times. In Sheffield, the year 1860 was significant as the local authority became involved in the maintenance of open spaces, imposing a levy on the rates to pay for the maintenance using the Public Improvement Act 1860 (Hindmarch, 2005, p.7). This change contributed an increase in public parks with Weston Park becoming the first municipal park (Figure 5.2, left). In the Victorian era, Sheffield's steel magnates and philanthropists built mansions for themselves, but at the same time endowed public

spaces (SCC, 2006). In 1875, Firth Park was opened as a public park through charitable donations. Parks continued to be developed by donation and purchases, for instance Abbeyfield (1909), Millhouses (1909) and Loxley Chase (1911).

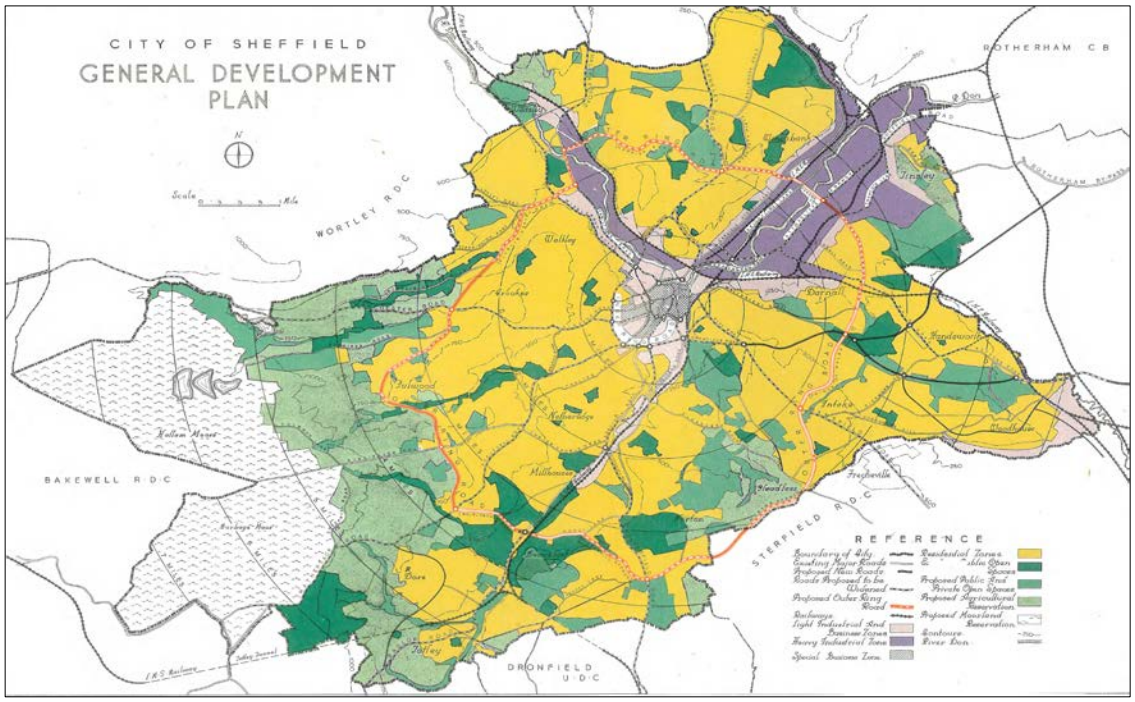
Figure 5.2 Weston Park (left) and the memorial to Mark Firth (right)



Sources adapted from Hindmarch, 2005, p.36 and 25

The general development of Sheffield continued in the Post War Reconstruction of the 1940s. Beginning from the city centre, it expanded residential areas across the city and into the industrial areas to the North of Sheffield (Figure 5.3).

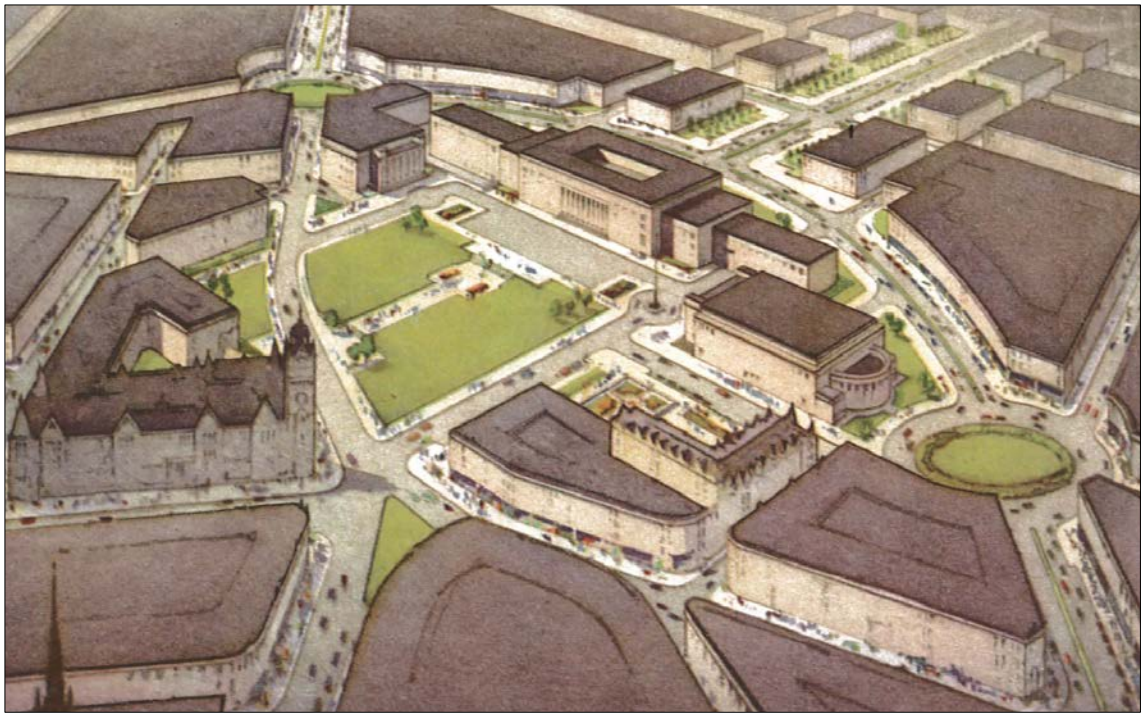
Figure 5.3 General development of Sheffield in 1945



Sources adapted from Sheffield City Council, 1945, p.49.

The green spaces of Sheffield were mostly agricultural land to the South of Sheffield or in parts of the central area where small green spaces were developed (Figure 5.4).

Figure 5.4 The picture of Sheffield's central green sapce development, The proposed Civic Square in 1945

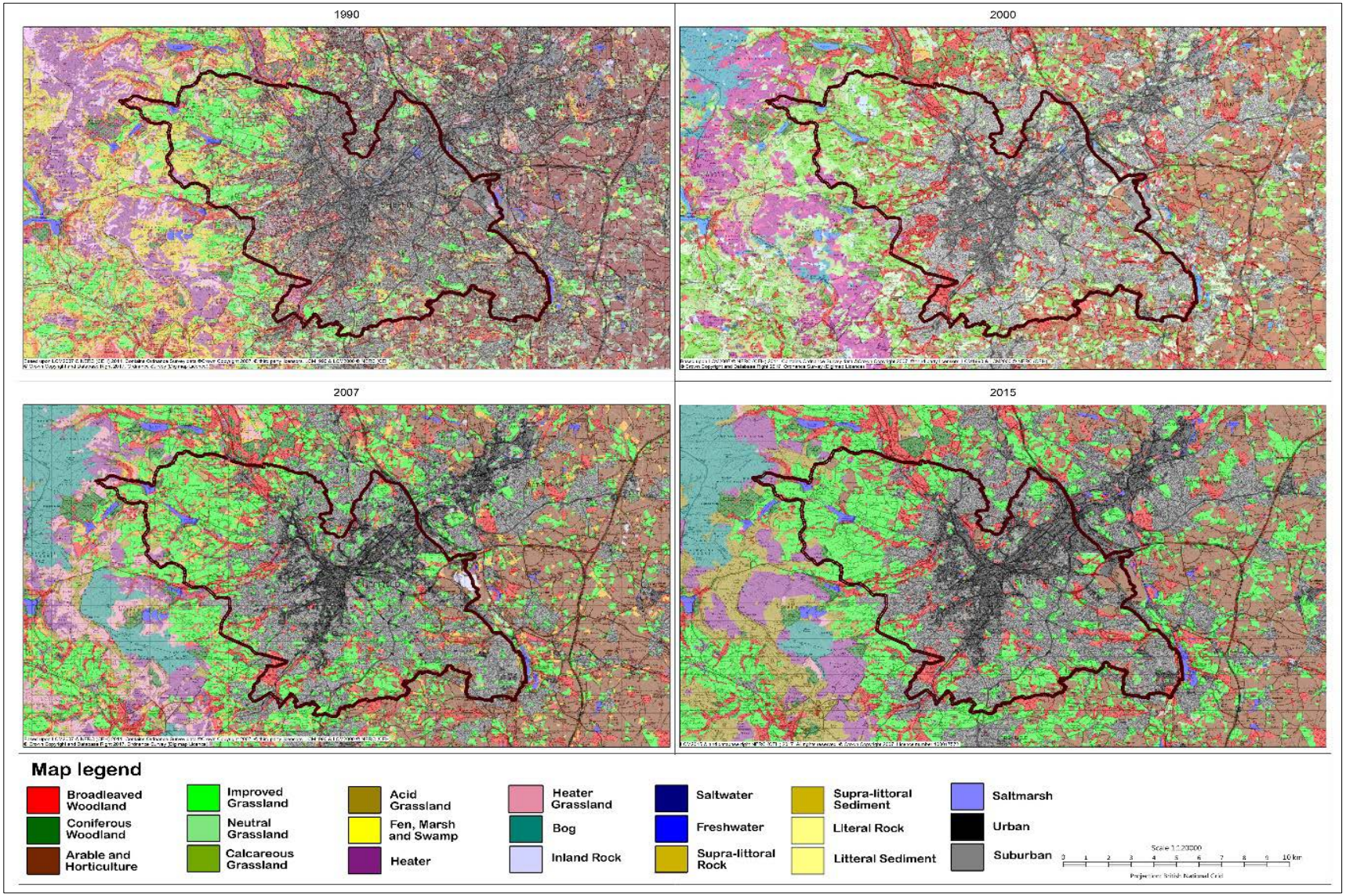


Sources adapted from Sheffield City Council, 1945, p.25

It can be clearly seen that green spaces in Sheffield had replaced suburban areas from 1990 to 2007, expanding improved grassland from calcareous grassland (Figure 5.5). In particular, in 2007 the improved grassland had been enlarged in the North West and South of Sheffield. However, there has been no outstanding expansion of green spaces in Sheffield between 2007 and 2015. Instead, the size of the urban area has been spread around the centre of Sheffield.

In 2015, Sheffield contains a wide range of green spaces including 10 city parks, 20 district parks, 50 local and green spaces and over 170 woodlands. The green spaces of Sheffield are evaluated as well-managed, for instance, 15 Sheffield parks have been awarded the Green Flag Award and evaluated by Sheffield's independent evaluation tool 'Sheffield Standard'. In addition, the green spaces are recognised as user-friendly sites.

Figure 5.5 Changes of Sheffield's land cover 1990-2015. Original sources adapted from Digimap [downloaded on 10. 07. 2017]



5.3 Characteristics of the study sites

The selected study sites have different characteristics in terms of green spaces themselves and management structures as well as stakeholder engagement. This section describes specific characteristics based on the historical, physical and socio-economic aspects of the study sites.

5.3.1 Introduction to characteristics of the study sites

Table 5.1 Characteristics of the study sites (PCP. MFP and HHP)

	Parson Cross Park (PCP)	**Manor Fields Park (MFP)**	**High Hazels Park (HHP)**
Location in Sheffield	3.2 miles North of city centre	1.9 miles South East of city centre	3 miles East of city centre
Site established	1950	1980	1895
Index of multiple deprivation[2]	352_{th} overall 10% (Most deprived area)	820_{th} overall 10% (Most deprived area)	9100_{th} (West) 30% and 15187_{th} (South East) 50% (Middle deprived area)
Size	26 ha	24 ha	20 ha
Facilities	Pavilion (Meeting rooms, Sports changing, showers, Toilet facilities), play area, tennis courts, skate area, multi-game area and football pitches	York House (Meeting room and small shop), play areas (Stonehirst and deep pits), allotments and pond	High Hazels House (café, toilet, refreshment, golf club house), play area, tennis court, basketball court, formal garden

Table 5.2 Characteristics of the study sites (RMP, MBP and BHP)

	Richmond Park (RMP)	**Meersbrook Park (MBP)**	**Bolehills Park (BHP)**
Location in Sheffield	3.5 miles South East of city centre	2 miles South of city centre	2 miles West of city centre
Site established	1969	1886	1976
Index of multiple deprivation	16564_{th} (North) 60% and 8637_{th} (South) 30% (Middle deprived area)	21924_{th} (South) 70% and 18455_{th} (North) 60% (Middle & least deprived area)	27442_{th} 90% (Least deprived area)
Size	21 ha	15 ha	22 ha
Facilities	Pavilion (Meeting rooms, Sports changing, showers, Toilet facilities), BMX Track, Zip Wire, Climbing Boulder, Football Pitch , Playground, , tennis courts, multi-use game area	Bishop house, toilets, multi-game area (tennis courts and playground), trim trail, walled garden, bowling green, skateboard area, community building, youth shelter and council offices	Pavilion (Meeting rooms, Sports changing, showers, Toilet facilities), bowling green, basketball court, football pitches, basketball courts, BMX track, playground and multi-game area

[*] Head office of the Sheffield City Council, Parks and Countryside Service has moved out since 2016.

[2] Where 1_{st} is most deprived and 32841_{th} is least deprived.

Parson Cross Park (PCP) established in 1950 is located 3.2 miles north of Sheffield city centre mostly in a deprived area, surrounded by residential parts of Firth Park and Southey wards. The north of the park is close to Tongue Gutter to link green networks. The site prior to PCP was farmland, providing a rich landscape tapestry. New housing developments appeared on greenfield sites to the west of the city in the 1970s and '80s (Figure 5.9) and PCP was developed from arable, horticultural and neutral grassland to calcareous grassland between 1990 and 2000.

PCP was further developed with improved grassland and vegetation around 2007. Figure 5.7 shows that improved grassland near and around PCP had been diminished until 2015. Currently, semi-natural broadleaved woodland is present on the north and north-east sides of park. Although tall grasslands lie to the north side of park, most of the vegetation is grass to be used for amenity purposes and sport activities such as football. PCP has an amenity pavilion and a range of sporting or play facilities such as football pitches, multi-game areas, tennis courts and playground areas.

Figure 5.6 Historical pictures of Parson Cross Park in 1989, 2004, 2010 and 2015

Sources adapted from Sheffield City Council's Archives and Local Studies Library [accessed on 10. 07. 2017]

Figure 5.7 Changes of Parson Cross' land cover since 1990. Origina l sources adapted from Digimap [downloaded on 10. 07. 2017]

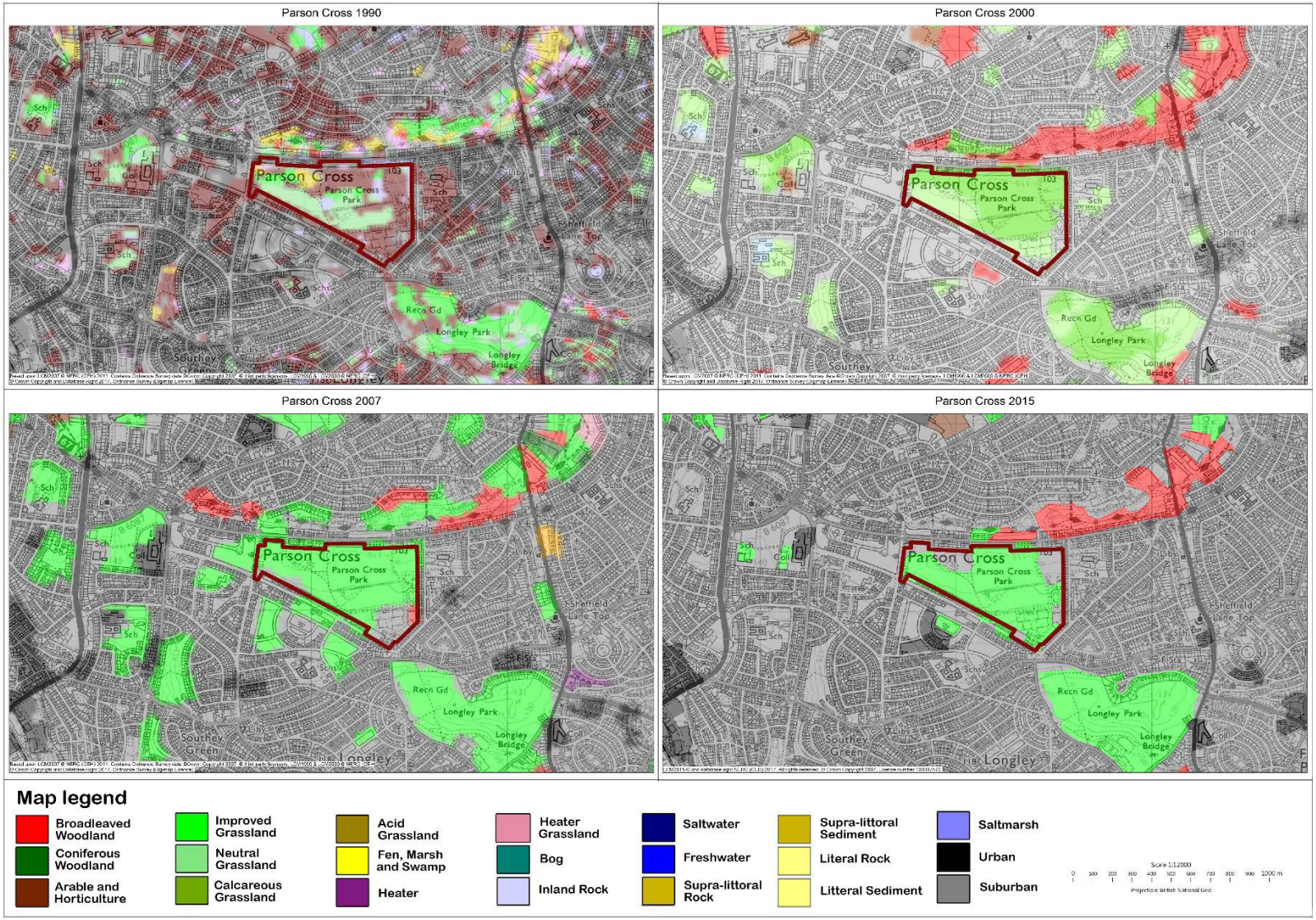


Figure 5.8 Site plan of Parson Cross Park. Original sources adapted from Digimap [downloaded on 11. 09. 2017]

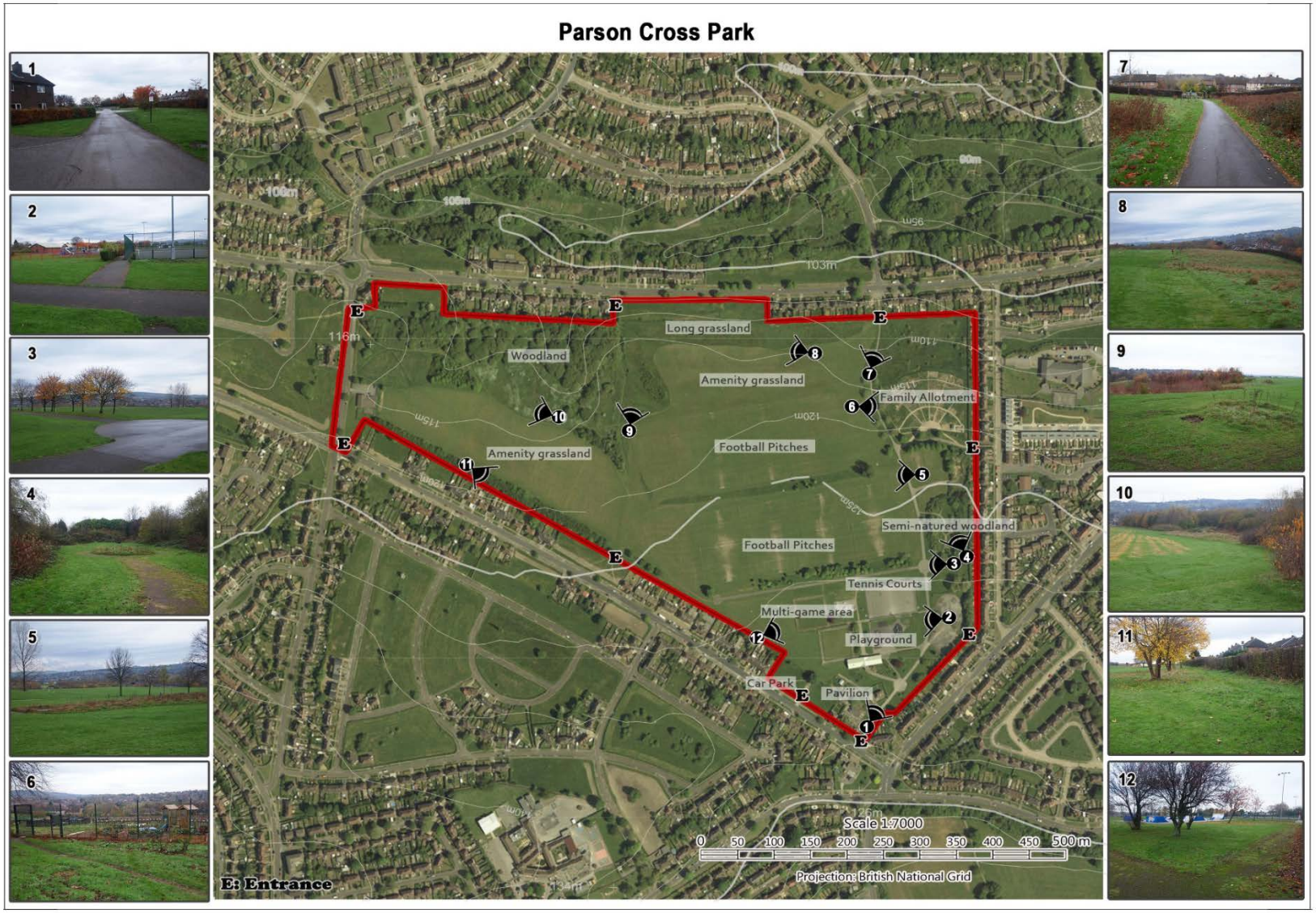


Figure 5.9 Housing development of Parson Cross Park in the 1970s (top) and 1980s (bottom)

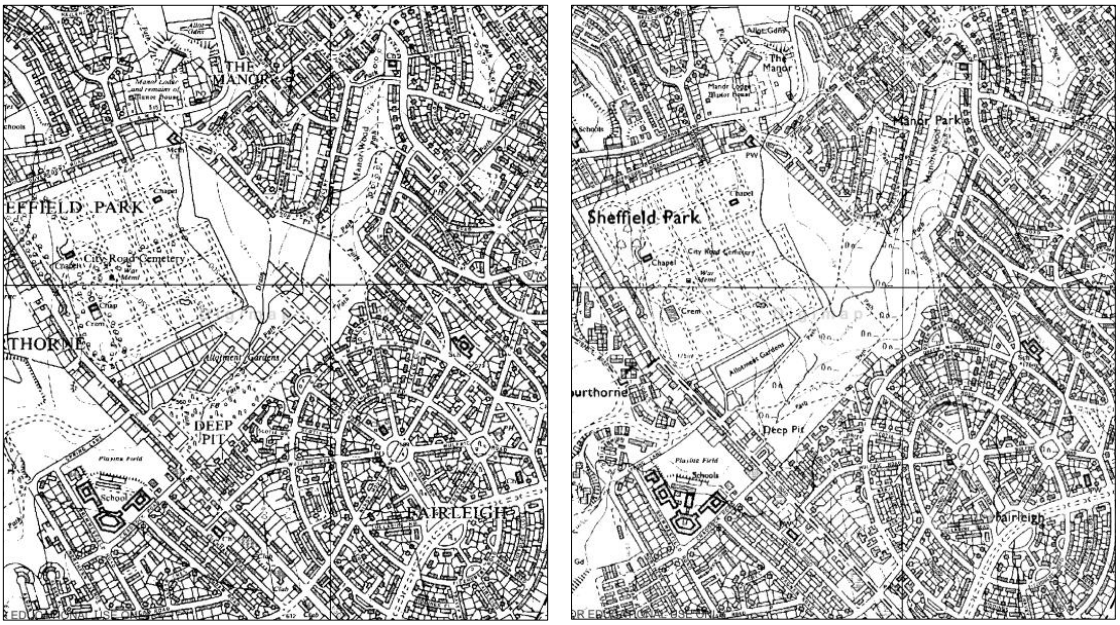
Original sources adapted from Digimap [downloaded on 10. 07. 2017]

Manor Fields Park (MFP) is located 1.9 miles east of the city centre in a mostly deprived area, surrounded by the residential areas of Manor, Castle and Arbourthorne wards and City Road Cemetery. In the 1980s, MFP was transformed into a park from allotments (centre of the park) and woodland (north of the park) (Figure 5.10). According to Manor Fields Parks Management Plan 2015, MFP was recorded as a surviving fragment of the Great Sheffield Deer Park that

covered a large area to the south of Sheffield and centred on a hunting lodge at nearby Manor Lodge.

Figure 5.11 Shows that MFP was covered with arable and horticultural land and looked like abandoned land (Figure 5.13, left) rather than a public park until the beginning of the 1990s. By this time, Green Estate Ltd started to manage MFP using a 5-year Single Regeneration Budget (SRB) programme set up by the UK government in 1998. After that, MFP has been dramatically developed by the regeneration project (Figure 5.13, right), with a range of vegetation and a flood alleviation system. MFP has a multi-purposed building named 'York House' which is used for Friends group's activities such as meetings, small events and fundraising (charity shop). Other facilities such as play areas lie to the north-east and south-west of the park.

Figure 5.10 Historical maps of Manor Fields Park in the 1960s (left) and 1980s (right).



Original sources adapted from Digimap [downloaded on 10. 07. 2017]

Figure 5.11 Changes of Manor Fields' land cover since 1990. Original sources adapted from Digimap [downloaded on 10. 07. 2017]

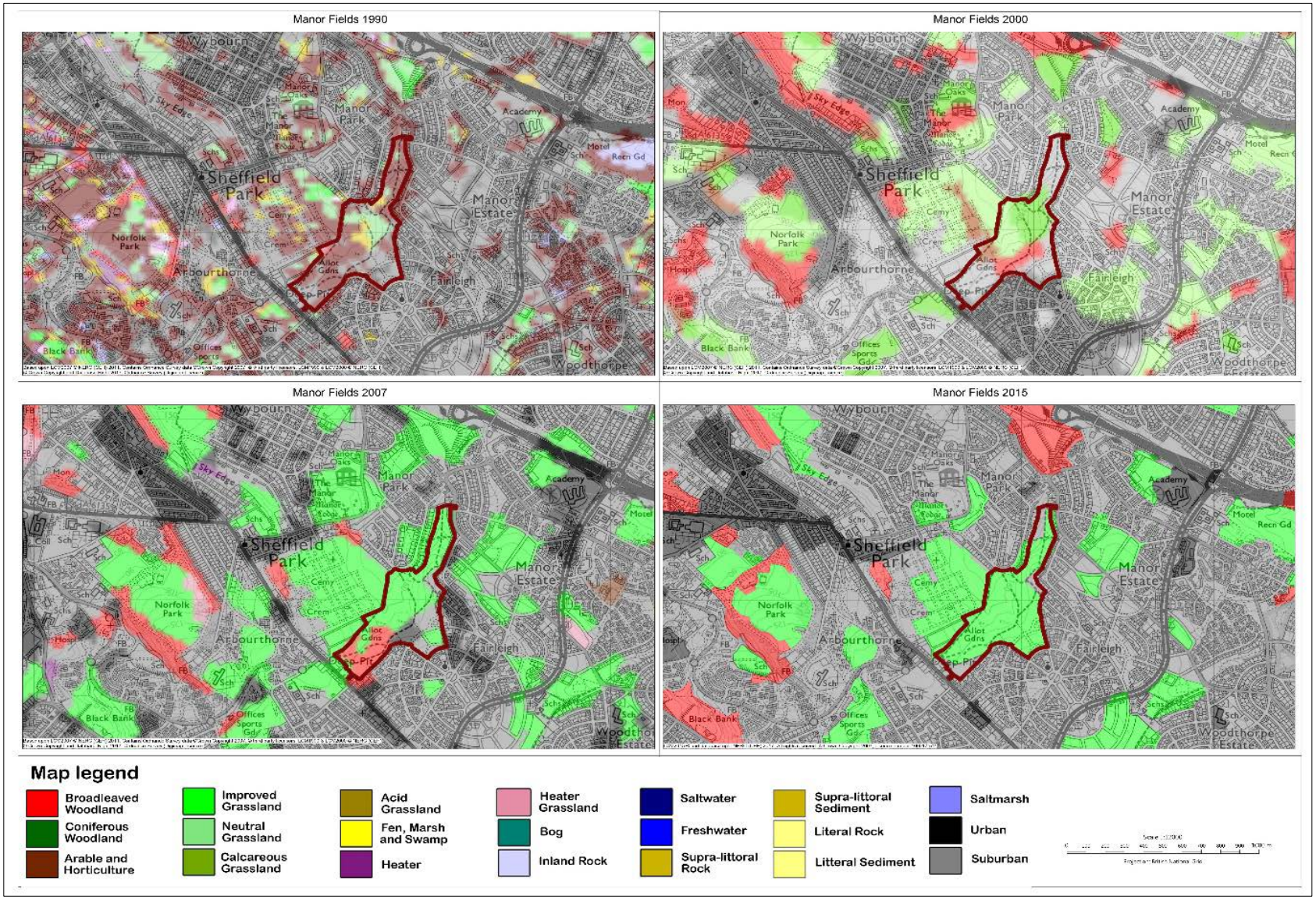


Figure 5.12 Site plan of Manor Fields Park. Original sources adapted from Digimap [downloaded on 11. 09. 2017]

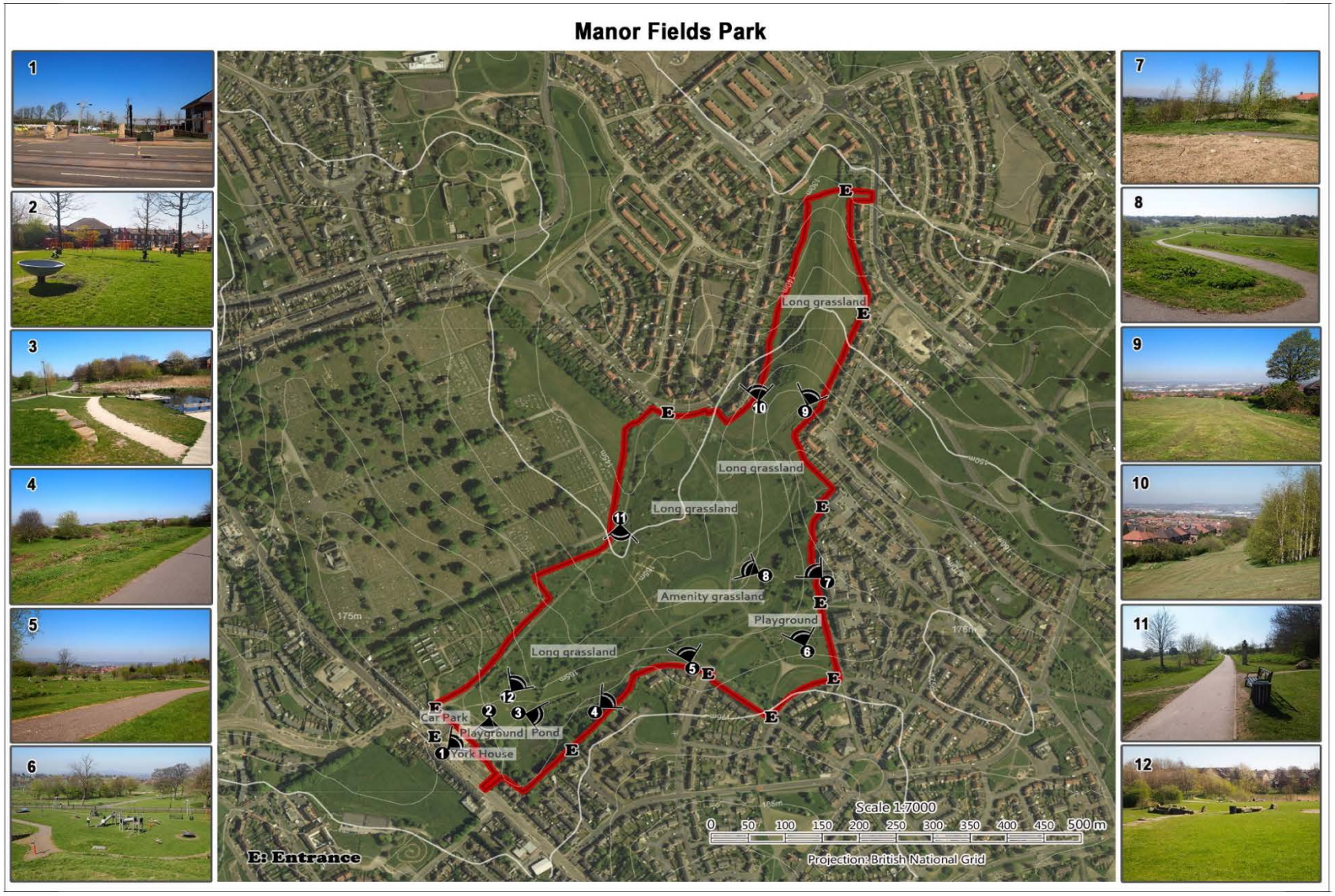


Figure 5.13 Historical pictures of Manor Fields Park in 2003 and 2016

Source adapted from Manor Fields Park homepage (left) [accessed on 10. 07. 2017] and author (right)

High Hazels Park (HHP) was established in 1894 owned by the Duke of Norfolk & the Jeffcock family and located 3 miles east of the city centre in a mostly moderately deprived area, surrounded by the residential and industrial areas of Darnall ward. It was originally the grounds of High Hazels House, the home of William Jeffcock, the first Mayor of Sheffield. The Grade 2 listed house was built in 1850, and is now the clubhouse for Tinsley Park Golf Club. The building contains a cafe which is open to the public. HHP has a long and varied history, opened to public in 1895; it is recorded in Sheffield as one of the finest parks in the city. The green space characteristics of HHP have been changed from pre-1990 to 2015. Mainly grassland, arable & horticultural vegetation dominated the site in 1990. The arable & horticultural vegetation was replaced by natural grassland in 2000 and some marsh & swampland was improved with grassland being created in 2007 (Figure 5.14). The marsh and swampland was further developed into a formal garden with recreational grassland in 2015. East of HHP is covered with coniferous woodland, helping to form a green network. Currently, most vegetation consists of grass for users' amenity. Semi-natural woodland and spinneys are present to the south and east of HHP. Tall grass is shown to the north of the park with bush areas. Along with being Tinsley Park clubhouse 'High Hazels House' has shops and a café for park users and is the home of the Friends of High Hazels. HHP has limited facilities such as a play area, tennis courts and a basketball court.

Figure 5.14 Changes of High Hazels's land cover since 1990. Original sources adapted from Digimap [downloaded on 10. 07. 2017]

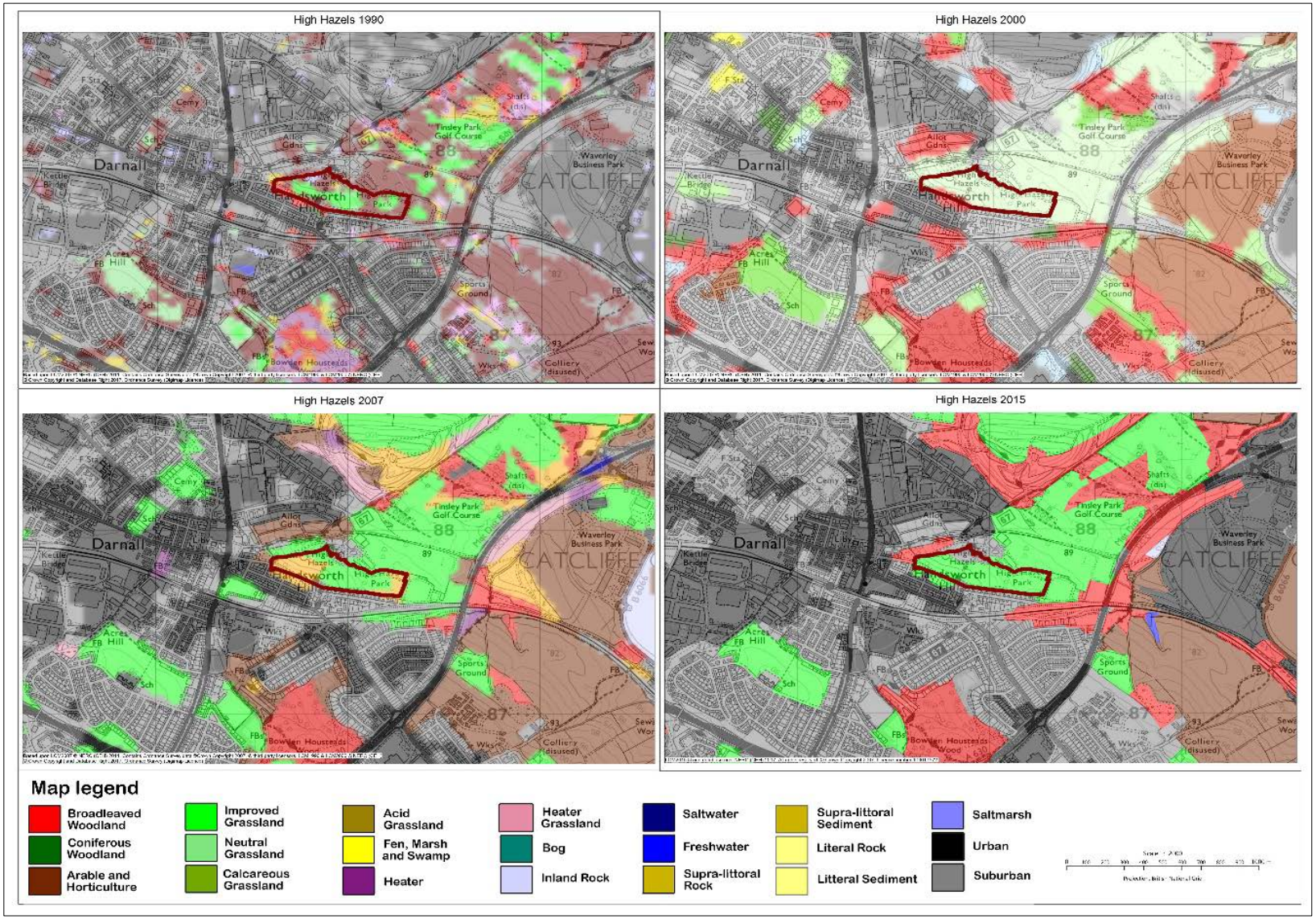
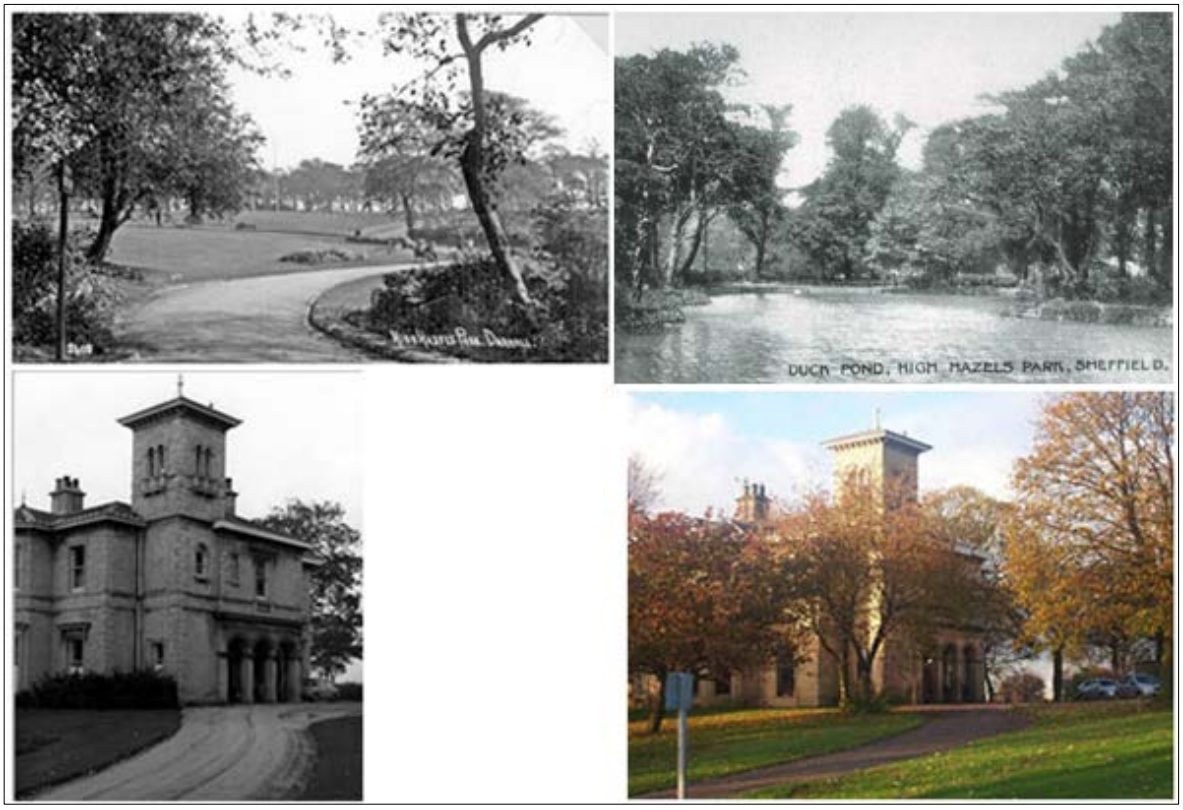


Figure 5.15 Site plan of High Hazels Park. Original sources adapted from Digimap [downloaded on 11. 09. 2017]

Figure 5.16 Historical pictures of High Hazels Park in pre-1900, 1966, 1967 and 2016



Sources adapted from Sheffield City Council's Archives and Local Studies Library [accessed on 10. 07. 2017].

Richmond Park (RMP) was established in 1969 and is located 3.5 miles South East of the city centre in a mostly moderately deprived area, surrounded by residential areas of Richmond ward. Improved grass provides expansive amenity grasslands for outdoor sports such as football. Small, semi-natural woods lie on the south-east and south-west side of RMP including a range of broadleaved-trees. A spinney of birch trees with tall grass is found to the north-east of the park. Wide areas of tall grass are present at the boundary edges of the south side of the park. RMP has an amenity pavilion where very limited services are available, mainly used for Friends of Richmond. However, other sport or play facilities are present, such as a BMX track, zip wire, climbing boulder, football pitches, a playground, tennis courts and a multi-use game area.

Figure 5.17 Changes of Richmond's land cover since 1990. Original sources adapted from Digimap [downloaded on 10. 07. 2017]

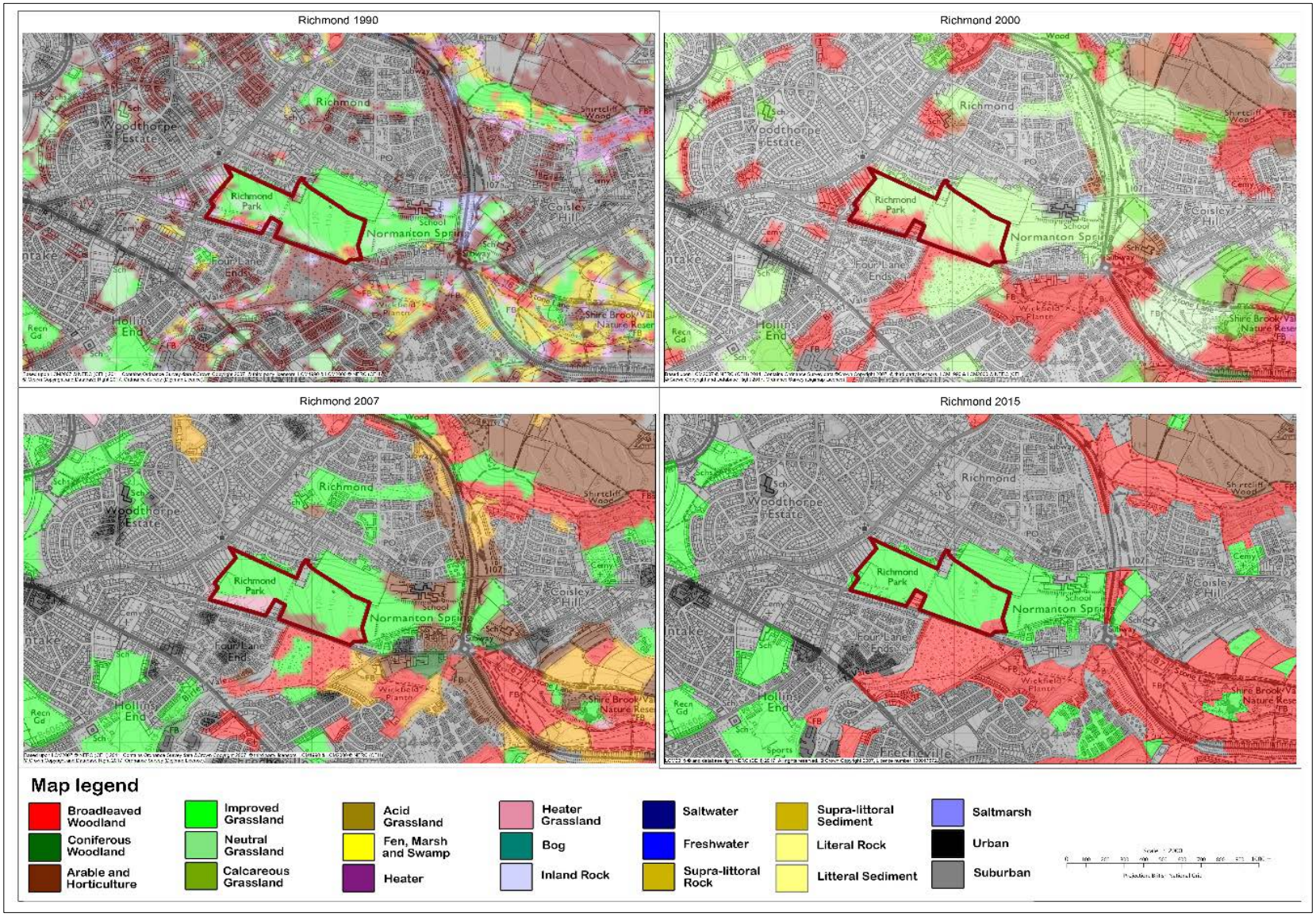


Figure 5.18 Site plan of Richmond Park. Original sources adapted from Digimap [downloaded on 11. 09. 2017]

Meersbrook Park (MBP) is located 2 miles south of the city centre, widely surrounded by the residential areas of Gleadless Valley and Graves Park wards in a heavily built-up area of the city. MBP was established in 1886 and opened to the public in 1887 by the meeting of the General Purposes and Parks Committee. MBP is a historic symbol of Sheffield's 'green necklace' of Victorian municipal parks from 1875 to 1892.

According to Meersbrook Park Management 2012-2017, the use of the park is dominated by local communities, schools and cyclists, as part of their commute to work and the city centre. Historic records of MBP found that schools and the community were actively used the park, for instance, The Whit Monday gathering (10,000 people including 7,000 children and teachers) in 1912 and an official meeting of the Meersbrook Park Sunday School Union in 1912 held in Oak Street Methodist Chapel (Hindmarch, 2005, p.53).

Physical characteristics include a steep topography and varied vegetation where grass-based ground with a spinney was laid out south of the park. The spinney has been expanded by broadleaved woodland with small trails since 2007 (Figure 5.19).

MBP offers stunning views of the city, a secret walled garden and Bishops' House, one of the oldest buildings in Sheffield. Sheffield City Council Parks and Countryside Department was located in the west of the park until it moved to the city centre in 2016.

Currently, amenity grassland is present throughout the park. Herb-rich grassland lies on the east side of the park. Semi-natural broadleaved woodland is located in the south and MBP has a range of historic buildings (Bishops' House) and amenity or sport facilities such as a multi-game area (tennis courts and playground), a trim trail, walled garden, bowling green, skateboard area, community buildings, a youth shelter and council offices.

Figure 5.19 Changes of Meersbrook's land cover since 1990. Original sources adapted from Digimap [downloaded on 10. 07. 2017]

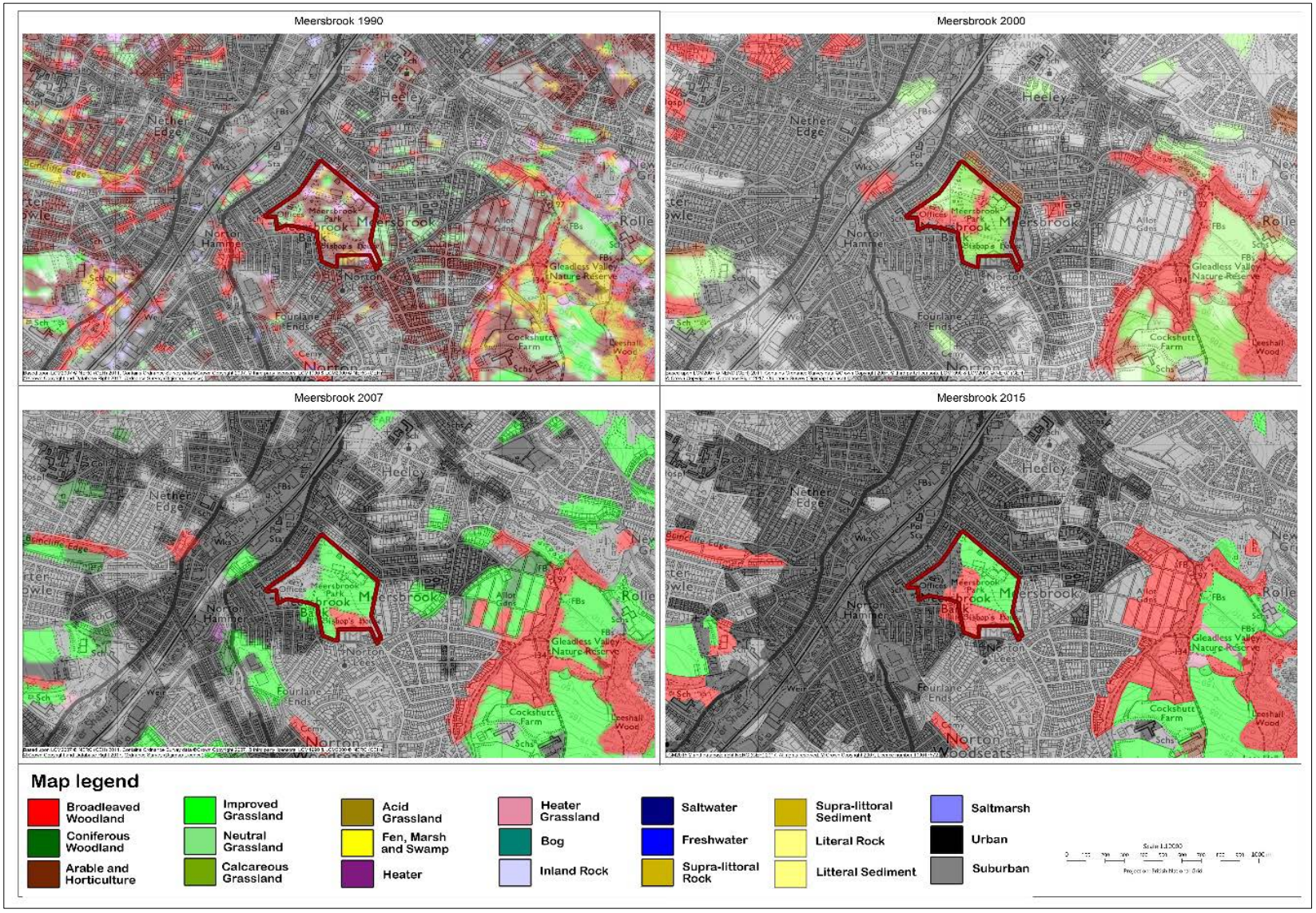


Figure 5.20 Site plan of Meersbrook Park. Original sources adapted from Digimap [downloaded on 11. 09. 2017]

Figure 5.21 Historical pictures of Meersbrook Park in 1968, 2004, 2010 and 2016

Sources adapted from Sheffield City Council's Archives and Local Studies Library [accessed on 10. 07. 2017] (top left, right and bottom left: Bishops' House) and author (bottom right)

Bolehills Park (BHP), named officially 'Bole Hill Recreation Ground', was established in 1976 and located 2 miles west of the city centre. The park is surrounded by the mostly residential areas of Crookes, Walkley and Stannington wards, being close to Rivelin valley and linking to the green network. BHP was previously a sandstone quarry in 1855 and its operation ceased in 1914. Ownership of the site was transferred to Sheffield City Council in 1899. After that, the site was used as a park before setting up recreational facilities from the late 1970's onwards. BHP has been gradually changed from sandstone ground with arable and horticultural vegetation to two well-mixed forms: broadleaved woodland in the north-west and improved grassland in the east and south (Figure 5.23). Currently, the north and east of BHP is covered by an amenity grassland playing field. A conservation area and tall grassland are found in the south-west of the park. Semi-natural woodland and woodland edges lie from the north to the west of the park including a wide range of species and trails. BHP has a multi-purpose pavilion being used for meetings, sports changing, showers and toilets. A bowling green lies adjacent to the pavilion. Sport and amenity

facilities are provided, for instance a basketball court, football pitches, BMX track, playground and multi-game area.

Figure 5.22 Historical pictures of Bolehills Park in 1988, 1995, 2000 and 2016

Sources adapted from Sheffield City Council's Archives and Local Studies Library (Top left, right and bottom left) [accessed on 10. 07. 2017] and author (bottom right)

Figure 5.23 Changes of Bolehills's land cover since 1990. Original sources adapted from Digimap [downloaded on 10. 07. 2017]

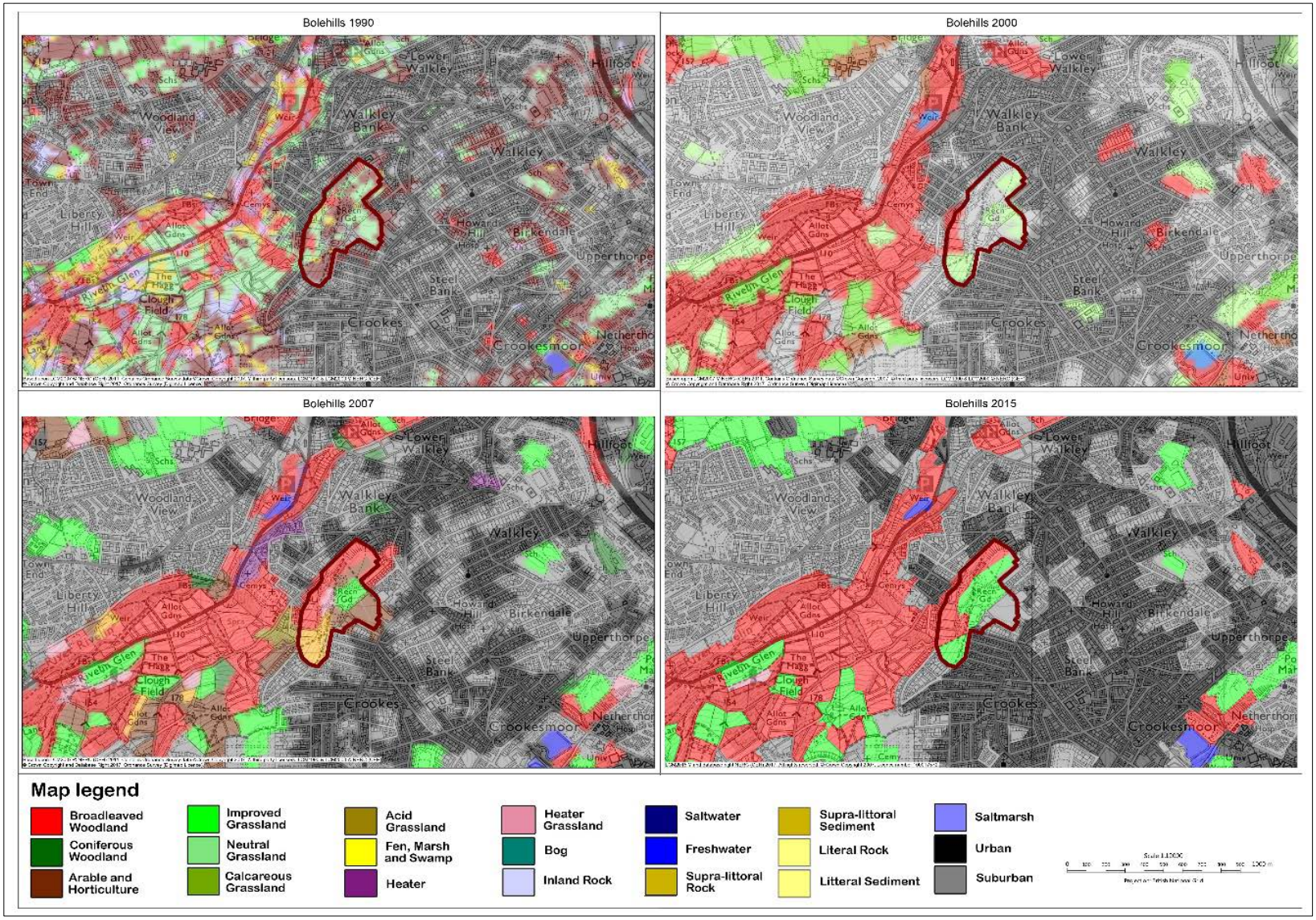
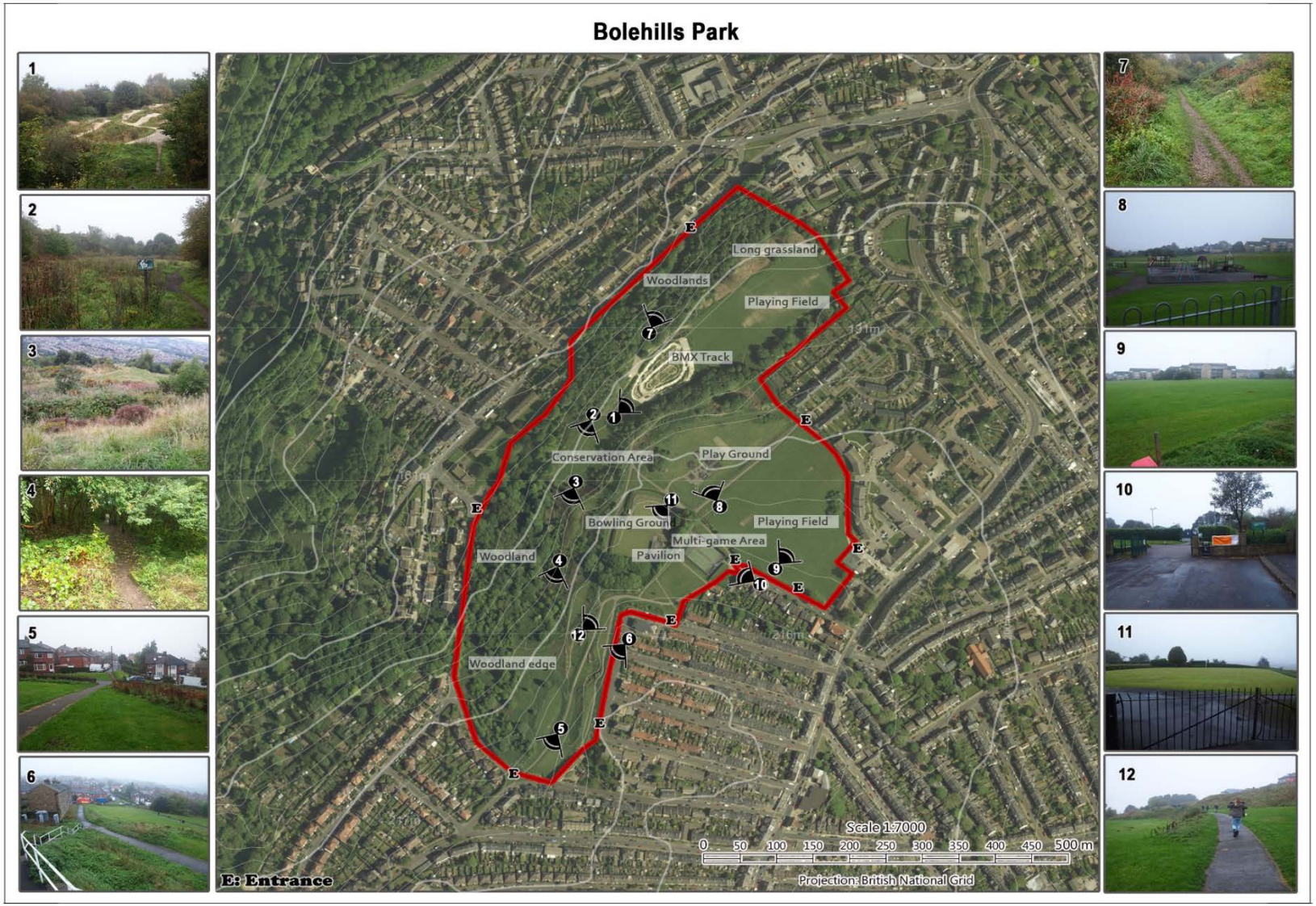


Figure 5.24 Site plan of Bolehills Park. Original sources adapted from Digimap [downloaded on 10. 07. 2017]

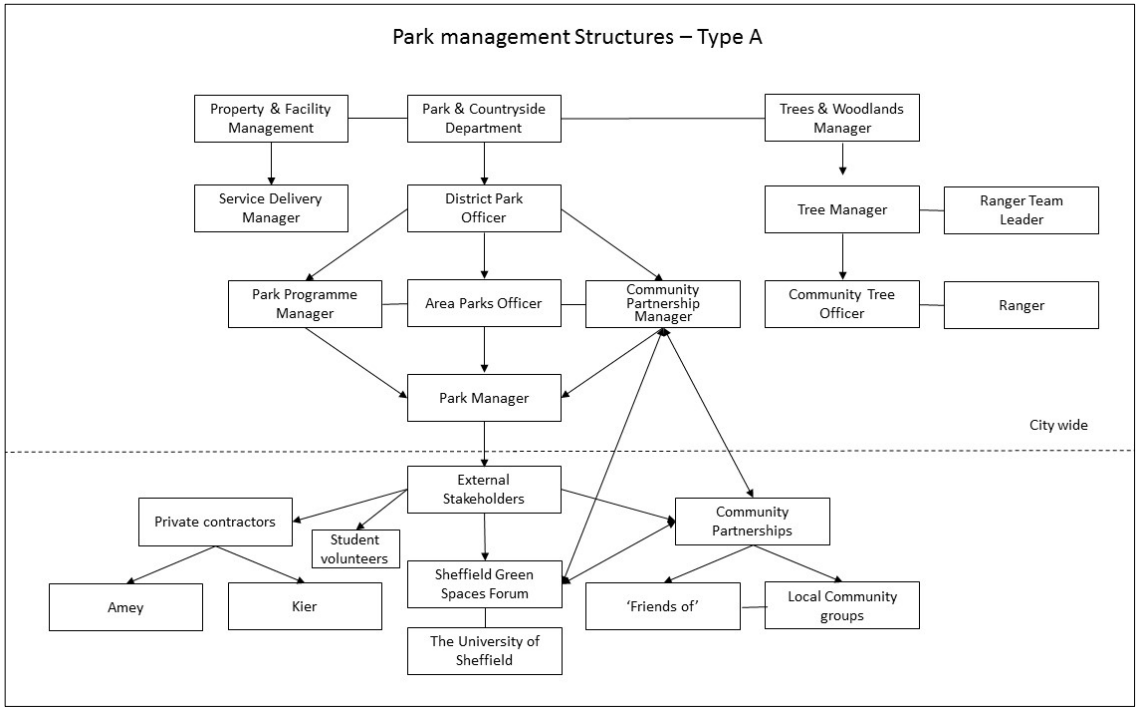


5.3.2 Characteristics of park management

5.3.2.1 Park management structures

In Sheffield, the overall responsibility for the management of parks is undertaken by the Parks and Countryside Head of Service. This is devolved to the District Parks Officer, the Parks Officer and the Park Supervisor, dealing directly with the day-to-day management of the park. The Organogram, Figure 5.25-Type A, shows all the relevant staff and their relationships. Five parks in this research: Parson Cross, High Hazels, Richmond, Meersbrook and Bolehills are included in Type A.

Figure 5.25 Park management structures: Type A



Source adapted from Meersbrook Park Management Plan 2012-2017.

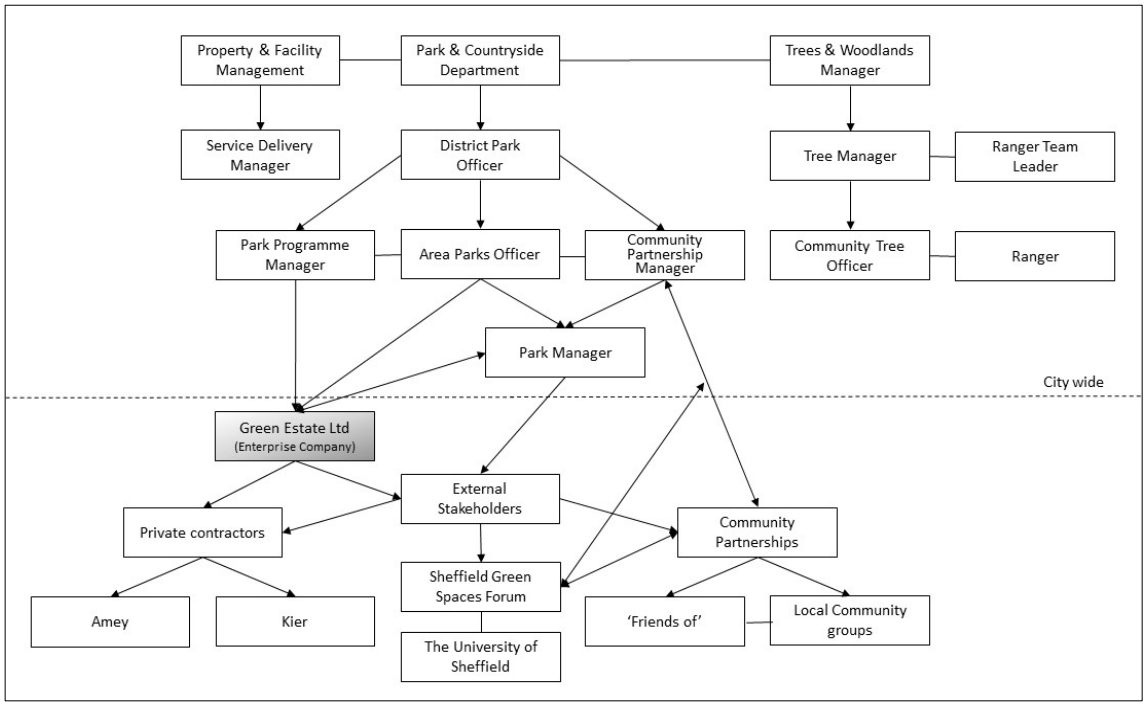
In addition to the Parks Management Service, the Property and Facilities Management Section of Sheffield City Council's (SCC's) PLACE Directorate maintains hard landscape features, including the museum, pavilion, Walled Garden, Parks and Countryside offices and fountains. The Outdoor Events Team works closely with the Park Manager and the Ranger Service to organise and facilitate the events which take place in the park. The Trees and Woodlands Manager has responsibility for overseeing the management of the site's trees and woodlands. Youth

workers and Activity Sheffield, use the park to encourage young people to engage with associated activities. Parks and Countryside are also responsible for maintaining parks in Sheffield and take the lead role. The responsibility for overall maintenance of landscape is taken by park staff and also volunteers, including community groups. Some areas are maintained by private partners or external contractors. Woodland P&C and Amey undertake maintenance of trees and woodlands. Kier Sheffield as a contractor maintain buildings, footpaths and structures, instructed by Sheffield City Council Property and Facilities Management. Community groups are also involved in a wide range of park management, from mostly working on regular maintenance and fundraising to organising events and festivals. Interestingly, Sheffield University, in particular the Landscape Department, is engaged in Sheffield's park management as a partner with the Parks and Countryside Department and community groups, providing sources of volunteering and research as well as venues for the Sheffield Green Spaces Forum where many community groups and the Parks and Countryside Department take part by sharing knowledge and information.

However, in the case of Manor Fields, the management structure is innovative where a 3rd-enterprise company named 'Green Estate Ltd' manages Manor Fields Park (Figure 5.26) in conjunction with Sheffield City Council. However, since 1998 when a 5-year Single Regeneration Budget programme was set up, even though funding ended in 2004, Green Estate signed a long-term contract for a self-sustainable innovative management scheme.

The staff structure and supervision regime allow for easy and regular transference of information in both directions. Structure for decisions is as follows: Quarterly meetings take place between Green Estate and the Parks and Countryside Partnerships Manager, together with informal meetings with the local Parks Officer. Green Estate communicates with residents and the community. The Friends group 'Friends of Manor Fields' meets monthly at which there is usually a representative from Green Estate where information is shared between all parties. Regular informal chats take place with the local policing team as well as more formal meetings. Informal meetings also happen between operational staff, the police and housing providers. Information is shared on a regular basis between users and operational and management staff. The other organisations involved are called upon when required. The management structure also has private partners maintaining facilities and woodlands as well as a relationship with Sheffield University as a site for planting experiments study site for teaching and volunteering opportunities for students.

Figure 5.26 Park management structures : Type B



Source adapted from Meersbrook Park Management Plan 2014 and Manor Fields Park Management Plan 2015.

5.3.2.2 Existing park management practices

This chapter explores park management practices such as community food growing, naturalistic plantings and income generation whether these practices are undertaken or not in the study sites.

Table 5.3 Existing park management practices of the study sites

Selected sites	*Park management practices*								
	Community Food Growing	*Urban park plantings*				*Income generation*			
		UP-A	*UP-B*	*UP-C*	*UP-D*	*IG-A*	*IG-B*	*IG-C*	*IG-D*
Parson Cross	-	-	-	-	◌	-	-	-	-
Manor Fields	-	-	-	◌	◌	-	-	○	○
High Hazels	◌	◌	-	-	◌	-	◌	◌	◌
Richmond	-	-	-	-	◌	-	-	○	◌
Meers-brook	-	-	-	-	◌	-	-	◌	◌
Bolehills	-	-	-	◌	◌	-	-	◌	◌

- : Never, ◌ : rarely, ○ : moderately and ● : mostly
UP: Urban park plantings (A-Formal bedding, B-Structural complexity, C-Meadow with wild flowers and D-Less frequently cut grass), IG: Income generation (A-voluntary donation or car park charges, B-managing cafe and kiosk, C-organising events, festivals and circus and D-other income generation practices)

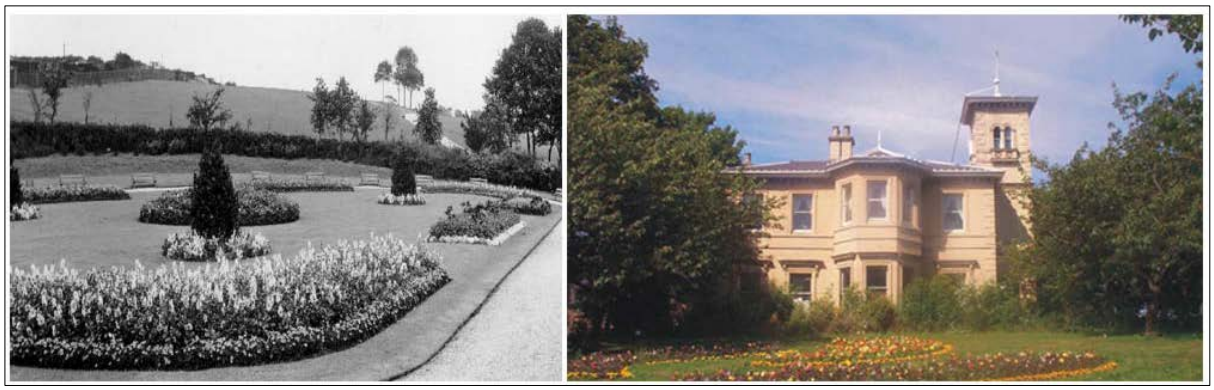
Community food growing

Some food growing-related activities are run in the study sites, but the activities are mostly emerged in a form of allotments around the study sites. In the case of PCP, Parson Cross Family Gardens, where the site is fenced and secured, are being run in the park, aiming at getting the community involved in growing fruits and vegetables in a friendly environment. The area of Manor Allotments has been relocated in a western area of MFP which has been fenced since the end of 20th century, but many parts of the allotments were incorporated into the park due to vandalism frequently. Nearby HHP, privately independent and fenced allotments named 'Infield Lane Allotments' are located at the northern side of the park. RMP has its own food growing areas in the park. Six plot allotments are placed on a southern area of the park, but the site is unmanaged. In MBP, small school groups are involved in food growing activities at 'the Walled Garden' in purpose for education. Allotments are also place nearby BHP. 'Bolehill Quarry Allotment' is run in the southern side of the park. The allotments are very popular with long waiting lists.

Urban park plantings

Green spaces of the study sites are mostly well-managed grassland with spinneys. Parson Cross, Meersbrook and Bolehills parks have large woodlands with trails and walking paths. Regarding planting types, formal bedding plantings are infrequent remaining only in High Hazels adjacent to High Hazels House (Figure 5.27, right). High Hazels Park actually had large formal bedding sites in a formal garden and around High Hazels House until the 1980s (Figure 5.7, left). However, the sites have been replaced by grassland.

Figure 5.27 Formal bedding planting previously in High Hazels Park



Sources adapted from Sheffield City Council's Archives and Local Studies Library [accessed on 10. 07. 2017]

Structurally complex plantings are not found in the study sites. Meadow with wild flowers has newly been challenged in Manor Fields Park where perennial species are mainly planted (Figure 5.28). Bolehills has natural planting areas in the south of the park, planted with wildflowers with long grasses. Less-frequently cut grass is found in all the study sites. The sites tend to be located near the boundary/fences.

Figure 5.28 Meadow with wild flowers in Manor Fields Park

Sources adapted from homepage of Manor Fields homepage [accessed on 10. 07. 2017]

Income generation

In this research, income generation practices are divided into four categories: voluntary donation & charges for hiring facilities, running a commercial business (café, shops and kiosks), organising events (including fun-fayres, festivals and circuses) and extra income generation schemes. The study sites, as public spaces, are owned by Sheffield City Council. Parson Cross, Manor Fields and High Hazels parks have small, free car park spaces near entrances, but where spaces are very limited although off-road parking may be available. In High Hazels Park, car parking spaces are used by Tinsley Park golf users. Most study sites except Manor Fields Park have sports facilities such as tennis courts and football pitches, and, in the case of Bolehills, a basketball court and a bowling green. At the time of this study, all of these facilities are freely available. High Hazels Park has a shop and cafe in High Hazels House managed by Sheffield City Council, mainly used for Tinsley Park golfers. The income generated does not contribute to the park management of HHP.

Different fundraising activities occur including events, organised mainly by community groups in all the study sites except Parson Cross where there is no community group actively involved in park management. In particular, community groups at Manor Fields, Richmond, Meersbrook and Bolehills parks have been organising events and festivals (Figure 5.29).

Figure 5.29 Organising events in Richmond, Manor Fields and Bolehills

Sources adapted from homepages of three parks [accessed on 10. 07. 2017]

Meersbrook park has also been successful in securing a range of external funding applied by community group 'Meersbrook Park Users Trust' (Table 5.4).

Table 5.4 Funding resources secured by Meerbrook Park Users Trust

Year	***Type of funding***
2002	Seed funding
2004	Lightman in Leisure (local company), Police ABC Fund, SSP Community Chest Grant
2005	Local Business fund, Sheffield City Trust, Sheffield Town Trust, Living Spaces
2007	Barclays Spaces for Sport
2008	Skatebowl Development Fund
2011	Sheffield Town Trust, Graves Charitable Trust, Community Spaces, Section 106, MPUT(events)
2013	Graves Charitable Trust, Community spaces
2014	Veolia/Biffa/Wren bid

Source from Meersbrook Park Management Plan 2014

5.3.3 Community engagement

Over 80 green spaces in Sheffield have community groups associated with them called 'Friends of…' (Figure 5.28) where the groups are involved in a wide range of management and maintenance works from regular maintenance to fundraising. As highlighted above, all the study sites have their community groups getting involved in park management and maintenance (Table 5.5): Parson Cross community group named 'Parson Cross Community Development Forum' is not directly engaged in the park. Community groups of the study sites contribute to park management in different ways: regular maintenance work, fundraising from varied opportunities or funding bodies, organising events and improving facilities and sharing ideas for a better park through regular meetings. However, there are some differences in the type and extent of group activities, and the number of members.

With a small number of members, the *Parson Cross Community Development Forum* started as a local community group in 1999**.** This community group, in general focuses on the quality of life for local residents rather than involvement in park management, organising 15 different activities at St Thomas More Community Centre and Church which is 0.5 mile away from the park.

Friends of Manor Fields was established in 1998 and works at high level maintenance, events organisation and fundraising with a total of 35 members (10 active). There are two-monthly regular meetings and frequent communication. Differently, active members are from a younger generation compared to the groups in the other study sites, 20% of active members are less than 40 years old. The group works mostly in collaboration with Green Estate Ltd, sharing ideas and labour. This group undertakes cooperative co-working with the local community in Manor Ward such as the Manor Castle community group, Manor allotment community, volunteering group, MASKK[3] and the local history group.

Friends of High Hazels group has a long history, established in 1988 it is one of the oldest community groups in Sheffield. They have contributed to park management by 10 active members and through close communication with the local authority. However, all active members are over 70 years old, but they are still physically active. This group has set up a community network with

[3] Manor After School and Kids Klubs (MASKK) is a growing local charity, started in 1999 by local people, that provides a range of activities for children and families in the Manor and Castle area of Sheffield

other local community groups within Darnall Ward: Darnall Forum, Darnall Well-being and Infield Land Allotment. Interestingly, volunteering groups from Sheffield University have participated in regular maintenance work since 2012.

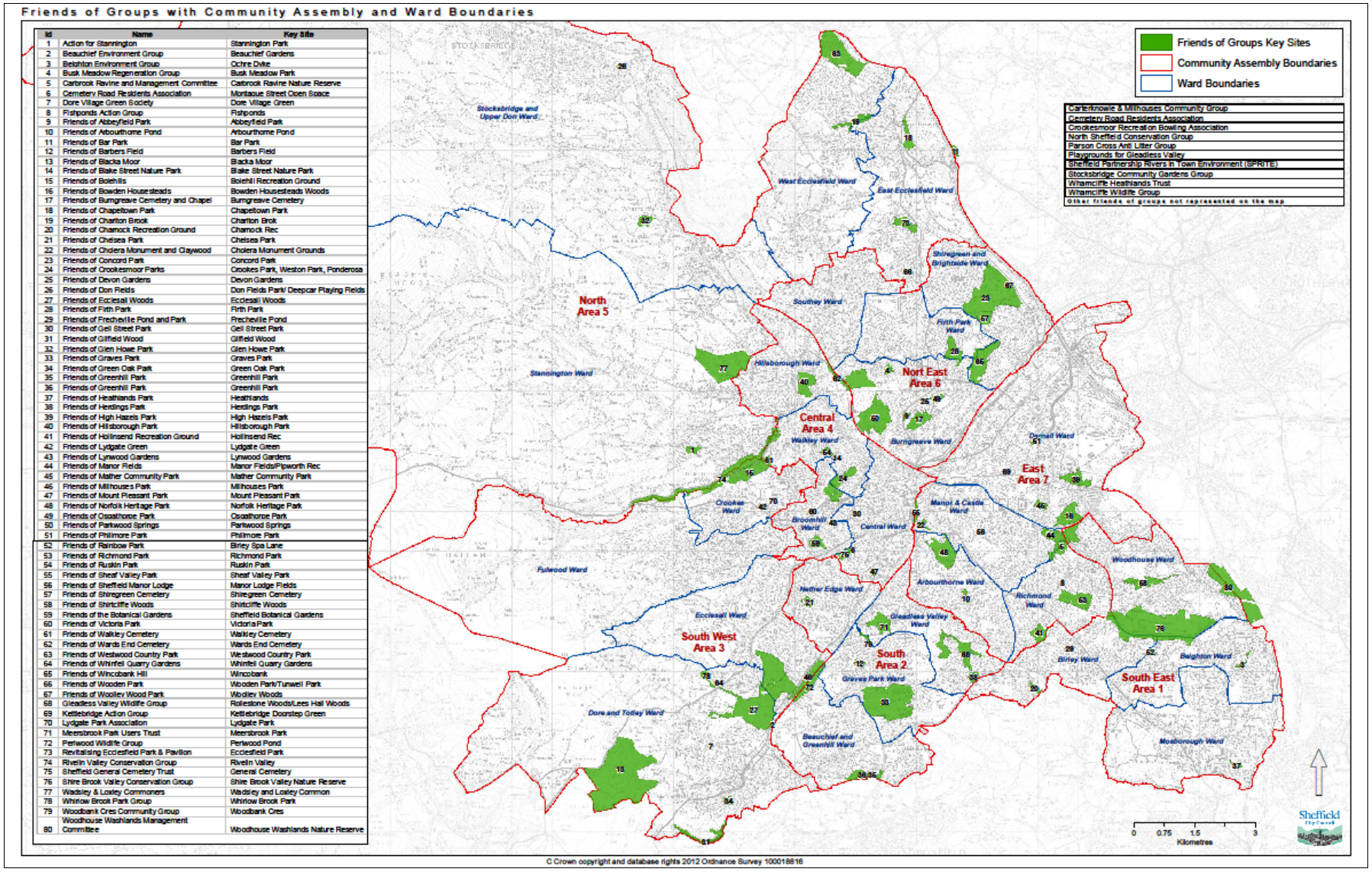
Friends of Richmond was established in 2006 and works by a stewardship contract. Their activities vary, for instance, regular maintenance, events organisation with other local community organisations, fundraising and improving facilities. It is one of the most active community groups in Sheffield; however, the active members are also not young being over 60 years. This group also has a well-established community network with local community groups such as the Richmond Community Centre, Richmond Rockets [4], Sheffield Health Walker and other communities in Richmond Ward. Interestingly, Sheffield Wednesday F.C. community coaching organises Richmond Rockets walking football club, which contributes to fundraising for Richmond Park.

Meersbrook Park Users Trust is one of the most active community groups in Sheffield. The Trust has 300 members (20 active) and is run by six committees. The types and extent of activities have contributed to improving the park, setting up new facilities using self-generated funding. They have challenged a range of funding opportunities (Table 5.4). This group constitutes one of the most well-organised community groups in the UK, received a 'Green Pennant Ward'[5] in 2009 and 2010. This group has also been working with local community groups such as Heeley City Farm, Bishop House, the Bowling Club, the After School Club and the Play Group. It is noted that this group in particular has contributed to children's education, for instance running an After School programme, toddler/nursery groups and regular education at the Walled Garden.

Friends of the Bolehills was recently established in 2011. Bolehills Conservation Group was actively involved in park management, but this group ceased on account of a lack of manpower and funding. Their activities have contributed to a better park, working on low level maintenance, fundraising and organising events. A regular meeting has been held every month with the park manager. The number of members has increased to 30 (10 active). This group has been involved in collaboration with local community groups such as Bowling Community Group, Wood craft and Crooks Social Club.

[4] Richmond Rockets FC walking football team which trains in Richmond Park.
[5] Green Pennants were awarded to volunteer and community run urban green spaces. The name has been changed to the Green Flag Community Award.

Figure 5.30 Sheffield green spaces and Friends groups in 2012. Original source adapted from Sheffield City Council



Id	Name	Key Site
1	Action for Stannington	Stannington Park
2	Beauchief Environment Group	Beauchief Gardens
3	Belshton Environment Group	Ochre Dyke
4	Busk Meadow Regeneration Group	Busk Meadow Park
5	Carbrook Ravine and Management Committee	Carbrook Ravine Nature Reserve
6	Cemetery Road Residents Association	Montague Street Open Space
7	Dore Village Green Society	Dore Village Green
8	Fishponds Action Group	Fishponds
9	Friends of Abbeyfield Park	Abbeyfield Park
10	Friends of Arbourthorne Pond	Arbourthorne Pond
11	Friends of Bar Park	Bar Park
12	Friends of Barbers Field	Barbers Field
13	Friends of Blacka Moor	Blacka Moor
14	Friends of Blake Street Nature Park	Blake Street Nature Park
15	Friends of Bolehills	Bolehill Recreation Ground
16	Friends of Bowden Housesteads	Bowden Housesteads Woods
17	Friends of Burngreave Cemetery and Chapel	Burngreave Cemetery
18	Friends of Chapeltown Park	Chapeltown Park
19	Friends of Charlton Brook	Charlton Brok
20	Friends of Chamock Recreation Ground	Chamock Rec
21	Friends of Chelsea Park	Chelsea Park
22	Friends of Cholera Monument and Claywood	Cholera Monument Grounds
23	Friends of Concord Park	Concord Park
24	Friends of Crookesmoor Parks	Crookes Park, Weston Park, Ponderosa
25	Friends of Devon Gardens	Devon Gardens
26	Friends of Don Fields	Don Fields Park/ Deepcar Playing Fields
27	Friends of Ecclesall Woods	Ecclesall Woods
28	Friends of Firth Park	Firth Park
29	Friends of Frecheville Pond and Park	Frecheville Pond
30	Friends of Gell Street Park	Gell Street Park
31	Friends of Gilfield Wood	Gilfield Wood
32	Friends of Glen Howe Park	Glen Howe Park
33	Friends of Graves Park	Graves Park
34	Friends of Green Oak Park	Green Oak Park
35	Friends of Greenhill Park	Greenhill Park
36	Friends of Greenhill Park	Greenhill Park
37	Friends of Heathlands Park	Heathlands
38	Friends of Herdings Park	Herdings Park
39	Friends of High Hazels Park	High Hazels Park
40	Friends of Hillsborough Park	Hillsborough Park
41	Friends of Hollinsend Recreation Ground	Hollinsend Rec
42	Friends of Lydgate Green	Lydgate Green
43	Friends of Lynwood Gardens	Lynwood Gardens
44	Friends of Manor Fields	Manor Fields/Pipworth Rec
45	Friends of Mather Community Park	Mather Community Park
46	Friends of Millhouses Park	Millhouses Park
47	Friends of Mount Pleasant Park	Mount Pleasant Park
48	Friends of Norfolk Heritage Park	Norfolk Heritage Park
49	Friends of Osgathorpe Park	Osgathorpe Park
50	Friends of Parkwood Springs	Parkwood Springs
51	Friends of Philmore Park	Philmore Park
52	Friends of Rainbow Park	Birley Spa Lane
53	Friends of Richmond Park	Richmond Park
54	Friends of Ruskin Park	Ruskin Park
55	Friends of Sheaf Valley Park	Sheaf Valley Park
56	Friends of Sheffield Manor Lodge	Manor Lodge Fields
57	Friends of Shiregreen Cemetery	Shiregreen Cemetery
58	Friends of Shirtcliffe Woods	Shirtcliffe Woods
59	Friends of the Botanical Gardens	Sheffield Botanical Gardens
60	Friends of Victoria Park	Victoria Park
61	Friends of Walkley Cemetery	Walkley Cemetery
62	Friends of Wards End Cemetery	Wards End Cemetery
63	Friends of Westwood Country Park	Westwood Country Park
64	Friends of Whinfell Quarry Gardens	Whinfell Quarry Gardens
65	Friends of Wincobank Hill	Wincobank
66	Friends of Wooden Park	Wooden Park/Tunwell Park
67	Friends of Woolley Wood Park	Woolley Woods
68	Gleadless Valley Wildlife Group	Rollestone Woods/Lees Hall Woods
69	Kettlebridge Action Group	Kettlebridge Doorstep Green
70	Lydgate Park Association	Lydgate Park
71	Meersbrook Park Users Trust	Meersbrook Park
72	Parkwood Wildlife Group	Parkwood Pond
73	Revitalising Ecclesfield Park & Pavilion	Ecclesfield Park
74	Rivelin Valley Conservation Group	Rivelin Valley
75	Sheffield General Cemetery Trust	General Cemetery
76	Shire Brook Valley Conservation Group	Shire Brook Valley Nature Reserve
77	Wadsley & Loxley Commoners	Wadsley and Loxley Common
78	Whirlow Brook Park Group	Whirlow Brook Park
79	Woodbank Cres Community Group	Woodbank Cres
80	Woodhouse Washlands Management Committee	Woodhouse Washlands Nature Reserve

Table 5.5 About community groups of study sites

Name	*Established*	*Number of members*	Type and extent of group activities	*Co-working local stakeholders*	*Other information*
Parson Cross Community Development Forum	1999	5 / 2 active	· Organising 15 activities · Managing venue	· LEAF allotment project · TARA forum · Parson Cross Healthy Walking Group	· Working for local residents for the quality of life at St Thomas More Community Centre and Church, 0.5 mile away from park
Friends of Manor Fields	1998	35 / 10 active	· Regular maintenance works · Fundraising · Organising events and festivals · Sharing ideas for better parks · Evaluating park standard e.g.) survey · Managing charity shop	· Local history group · MASKK · Manor Castle community group · Volunteering group · Manor allotment community	· Started as name of the Manor and Castle Development Trust in 1998 · Every 2-month regular meeting (Green Estate and other community groups attended) · 3 active members are young.
Friends of High Hazels	1988	30 / 10 active	· Regular maintenance works · Fundraising from Lottery, local charity, Sheffield Town Trust, Sheffield City Trust · Improving facilities e.g.) tennis court · Involving in Family development project	· Darnall Forum · Darnall Wellbeing · Infield Lane Allotment · Sheffield University volunteers	· All active members are over 70 years old. · Group chair is now Chair of Sheffield Green Spaces Forum. · Every month meeting
Friends of Richmond	2006	42 / 10 active	· Regular maintenance works · Fundraising · Improving facilities e.g.) tennis court, toilets · Organising events and festivals	· Richmond community centre · Richmond Rockets · Stradbroke community centre · Hollinsend park community · Sheffield Health Walker · Sheffield Wednesday football	· Most of active members are over 60 years old. · RMP has taken stewardship. · Every month regular meeting
Meersbrook Park Users Trust	1998	300 / 20 active	· Regular maintenance works · Improving facilities e.g.) playground, skateboard, football pitch and dog bin · Fundraising from walled garden, charity, Heeley City Farm · Managing the walled garden · Organising regular volunteer session	· Heeley City Farm · Bishop House · Bowling Club · Friends of Meersbrook (since 2014) · After school club · Play Group	· Every month meeting · Attempt at Green Flag Award
Friends of the Bolehills	2011	35 / 10 active	· Regular maintenance works · Fundraising from Public Lottery Fund · Bridge role between council and people · Providing ideas for better park · Organising events and festivals	· Bowling Community Group · Wood Craft · Crookes Social Club	· Every month meeting (Park manager and local residents attended)

5.4 Conclusion

This chapter has provided detailed descriptions of the characteristics of Sheffield and the six study sites. These details include the historic background to Sheffield parks and the study sites and an understanding of current park use. This research explored different characteristics of the study sites based on physical, socio-economic and park management contexts. Park management structures of the sites were investigated based on stakeholder involvement, in particular, community engagement was emphasised, considering its impact on park management, as outlined in the literature review. It should be noted that green spaces and parks in Sheffield were originally developed by magnates and philanthropists who led the donations to public parks for the public's use and the local authority's efforts as well as people's involvement. This research found that there are different characteristics of the study sites, indicating that the socio-economic contexts and community engagement vary.

The following chapter provides descriptive data underpinned by the results of questionnaires and interviews.

Chapter Six

Park Use and Perception of Current and Potential Park Management Practices

6.1 Introduction

This chapter describes three different stakeholders' perceptions obtained from the questionnaire and interview data. Questionnaire results show the characteristics of park use and perceptions of current and potential park management practices. In particular, the respondents of questionnaires provide primary data to determine how their perceptions are influenced by socio-economic characteristics. These analyses reflect the previous literature reviewed in Chapter Two and Three. The descriptive data provides background information to help understand the results from the analysis undertaken in Chapters: Seven and Eight.

The chapter uses the case and theme-based approach to qualitative data to analyse interview data from the six community groups, the study sites and six professional interviews, including a focus group interview. The data is summarised according to community groups' and professionals' perspectives to provide outlines of the differences and similarities between interviewees. The qualitative data also provides background information to support the analysis and understanding of the perceptions of the interviewees and the sample identified in Chapters: Seven and Eight.

6.2 Characteristics of the questionnaire participants

6.2.1 Park use

This section shows the characteristics of park use by the sample: the frequency of park visits by seasons, the reasons for park visits and companions on park visits.

In terms of the frequency of park visits (Appendix D.1), on average, park users visited their local park 1-2 days per month (38.2%) or week (26.2%). However, 19.9% of the respondents did not visit their park in winter, especially in High Hazels (31%). Some respondents visited the park frequently, 3-4 days or over 5 days per week (17% and 20%) in summer. This indicates that the sample tends to prefer visiting parks in summer. Indeed, in the case of Parson Cross, the

frequency (3-4 days per week) of visiting the park dropped significantly in winter (only 1.8%). Continuous analysis in terms of socio-economic contexts shows interesting arguments. Some studies (Wilson *et al.*, 2004; Moore *et al.*, 2008; Dahamnn *et al.*, 2010) have shown that park users in less deprived areas are more likely to visit parks than those in more deprived areas, while, Cohen *et al.*, 2013's research showed park users in more deprived areas visit parks more frequently. However, the statistical analysis in this research indicates that more park users visiting parks from middle deprived areas (i.e. IMD between 5 and 7) (X^2(32, 413)=52.83, P<0.05). Interestingly, subsequent analysis reveals findings in relation to demographic contexts that females and families are more likely to visit parks in winter than males (X^2(4, 413)=8.71, P<0.1). Household composition is correlated with park visits, indicating that families with children tend to visit parks in the summer more frequently than families without (X^2(8, 408)=16.47, P<0.05), but there is no significant difference in other seasons. However, significant difference is not found between park users according to other demographic variables such as age, disability or length of residence.

The different reasons people visited a park are described (Appendix D.2). The majority of respondents (55.4%) visited a park for 'Walking', 39.4% to let children play, which was particularly popular in Manor Fields (52.1%). A quarter of the respondents visited their park to enjoy nature and to walk the dog, which was popular in Meersbrook (40.3%) and Richmond (40%) respectively. Furthermore, larger proportions of the sample in Meersbrook (15.3%) and Parson Cross (15.8%) visited the park on a 'Journey to/from work'. In terms of socio-economic contexts, there is significant difference where the results are different from Cohen *et al.*, 2013's results that park users in living more poverty areas are much more likely to visit to meet people than those in lesser poverty areas. However, interesting results reveal that there are significant differences between users according to age (X^2(540, 413)=692.79, P<0.01) and household composition (X^2(210, 408)=272.08, P<0.01) where older users are more likely to visit for walking than young ages: park users between 35 and 44 is for children: park users between 45 and 64 are for dog walking. Such demographic difference tends to affect users' park purpose, for example, family with children have a tendency to visit park for children play, while family without children are for dog walking, enjoy nature and walking.

The results show accompanying the sample when going to a park. 42.1% of the respondents visited their park with other family members, followed by with children (35.3%) (Appendix D.3). Particularly in Manor Fields, half the respondents went to the park with other family members (51.4%) and with children (52.1%). Different result is found in High Hazels where higher proportions (40.8%) than other parks went to park alone. In comparison, the proportions of the sample going to the park alone and with dog(s) were 28.7% and 19.3% respectively.

6.2.2 Perceptions of park management responsibility

The responses are reported to the question about managing the respondents' park (Appendix D.4). Almost half of the sample (45.9%) recognised that the park was managed by the local authority, rising to almost 60% in Parson Cross. 16.4% of the respondents thought the park was managed by both the local authority and the local community rising to 26.4% and 25.3% in Meersbrook and Bolehills respectively, compared to 3.5% and 7% in Parson Cross and Manor Fields respectively. Almost all respondents were unaware of any involvement by other stakeholders such as 3rd-sector organisations and partnerships related to park management. Furthermore, a quarter of respondents (26.6%) responded 'Don't know'. However, an interesting finding is shown in relation with socio-economic difference that park users living in less deprived areas are more likely to be aware of community involvement in park management than those in more deprived areas ($X^2(104, 304)=174.43$, $P<0.01$).

The results describe the responses to the question of who should get involved in park management (Appendix D.5). 36.8% of the respondents answered that the parks should be managed by the local authority only, followed by 21.3% of the respondents favouring the local authority and community together. In Meersbrook and Bolehills, more respondents (31.7% and 27.7% respectively) than the average thought that park management should be the responsibility of the local authority and community together. A significant proportion of the respondents (14.2%) indicated that the local authority, community and users should be involved in park management. Significant proportions (12.5%) felt that that local authority, community, users and 3rd organisations should be involved in park management. Similarly, residents living in less deprived areas are more likely to recognise more community involvement in park management

than those in more deprived areas ($X^2(80, 414)=100.06$, $P<0.01$). This can link to the previous researches that socio-economic factors relevantly affect negative community activities (Estabrook *et al.,* 2003; Mitchell and Popham, 2008; Wilkerson *et al.,* 2018) and public participation (Ives *et al.,* 2017). This can be interpreted that people in more deprived areas are more likely to be aware of sharing responsibility to manage their parks involving in community than those in more deprived areas. In relation to disability, there is a statistically significant difference that disabled people are more likely to rely on local authority to manage parks than non-disabled ($X^2(10, 414)=22.201$, $P<0.05$).

Table 6.1 shows the perceptions of the sample regarding their willingness to get involved in park management. Almost 20% of respondents expressed willingness to get involved in park management. Interestingly 32.1% of respondents in Manor Fields reported willingness to get involved, more than for other sites, followed by Parson Cross (23.8%). Overall, a majority of the respondents (52.8%) did not want to get involved in park management. There is no significant difference between residents according to socio-economic characteristics, excluding that between the specific age groups: people aged between 35 and 54 are more willing to be involved in community groups rather than other age groups ($X^2(5, 506)=17.75$, $P<0.05$).

Table 6.1 Would you be willing to get involved in park management in your local community? (%)

	No	Yes	I don't know
Parson Cross	53.8	23.8	22.5
Manor Fields	32.1	32.1	35.9
High Hazels	54.5	18.2	27.3
Richmond	63.1	13.1	23.8
Meersbrook	56.1	14.6	29.3
Bolehills	55.3	18.1	26.6
Total	52.8	19.8	27.5

Table 6.2 shows how much time respondents would contribute to park management among those respondents who answered 'Yes' in Table 6.2. 12.6% of respondents would spend one day per month on park management. A smaller amount (4%) of respondents would allocate half a day per week to park management, 2.6% would commit to a day per week and 0.8% to 2-3 days

per week. In Manor Fields, a fifth of respondents (20.5%) stated they would contribute a day per month to park management.

Table 6.2 Would you contribute your time to park management? (%)

	A day per month	A half day Per week	A day Per week	2-3 days Per week
Parson Cross	11.3	3.8	2.5	2.5
Manor Fields	20.5	7.7	5.1	-
High Hazels	12.5	3.4	1.1	1.1
Richmond	8.3	2.4	3.6	1.2
Meersbrook	12.2	2.4	-	-
Bolehills	11.7	5.3	3.2	-
Total	12.6	4.2	2.6	0.8

The respondents were asked if they knew how to get involved in their local community in Table 6.3. The majority of respondents (58.3%) already knew about how to get involved, while a quarter of respondents (27.2%) did not have enough information about how to get involved in the local community.

Table 6.3 Do you know how to get involved in your local community for your park? (%)

	No	Maybe	Yes
Parson Cross	12.5	12.5	**75.0**
Manor Fields	32.0	12.0	56.0
High Hazels	27.8	22.2	50.0
Richmond	23.1	15.4	61.5
Meersbrook	**41.7**	16.7	41.7
Bolehills	26.3	10.5	63.2
Total	**27.2**	**14.6**	**58.3**

- Percentage of respondents answering 'Yes' to the question about being willing to get involved in the community for their park.

Table 6.4 shows why respondents would not get involved in the local community for park management. Almost 40% of respondents claimed to have insufficient time. Almost 25% of respondents thought park management was the responsibility of the council. 14% of the sample were not interested in getting involved. According to this result, perceptions of respondents (24.5%) represent that local authority mainly takes responsibility for park management.

Table 6.4 If you would not get involved in the local community, Why not? (%)

	Parson Cross	Manor Fields	High Hazels	Richmond	Meersbrook	Bolehills	Average
No time	41.3	61.5	37.0	25.5	50.0	34.0	39.6
Council responsibility	19.6	15.4	26.1	27.5	21.7	32.0	24.5
Non-user	17.4	3.8	4.3	21.6	4.3	6.0	10.2
Do not want to	10.9	11.5	15.2	9.8	19.6	16.0	14.0
Contribution in other ways	-	3.8	2.2	-	-	4.0	1.5
Other	10.9	3.8	15.2	15.7	4.3	8.0	10.2

6.2.3 Perceptions of current park management

This section provides the data assessing current park management from the users' perspectives. Table 6.5 shows that, overall, 20.1% of respondents assessed their park as 'well-managed' whilst 14.8% of respondents assessed their park as 'poorly managed'. Interestingly, 36.6% of Manor Fields respondents said that their park was 'well-managed' or 'Very-well managed' – much higher than for the other sites. In contrast, only 7% of respondents in High Hazels assessed their park as 'well-managed'. However, 33.3% in Parson Cross assessed their park as 'poorly managed', worse than Richmond (22%), followed by High Hazels (15.5%). Meersbrook and Bolehills following Manor Fields were assessed positively with 29.2% and 19.3% of 'Well-managed' respectively compared to other sites. However, most respondents (65.1%) answered 'Don't know'. Analysis of socio-economic characteristics shows that there is small negative correlation between IMD and perceived quality of maintenance (r=.126, P<0.01). This reflects previous research showing that living in deprived areas can be associated with negative perceptions of park management and maintenance (Crawford *et al.,* 2008; Weiss *et al.,* 2011). However, is not always the case that parks located in more deprived areas: Manor Fields Park was assessed highly in terms of maintenance (Table 6.5) indicating a high quality of park management.

Table 6.5 Overall, is this park well-maintained? (%)

	Very poorly-managed	Poorly-managed	Don't know	Well-managed	Very well-managed	Mean A*
Parson Cross	26.3	7.0	52.6	14.0	-	2.74
Manor Fields	9.0	-	48.7	35.2	1.4	3.28
High Hazels	11.3	4.2	77.5	7.0	-	2.87
Richmond	16.9	5.1	66.1	10.2	1.7	2.86
Meersbrook	5.6	-	65.3	26.4	2.8	3.26
Bolehills	7.2	1.2	72.3	16.9	2.4	3.12
Total	12.1	2.7	65.1	18.6	1.5	3.04

* 1-very poorly-managed and 5-very well-managed

Table 6.6 shows how respondents felt their parks had improved over the last 5–10 years. Overall, all parks have slightly improved. Respondents from Manor Fields in particular reported that this park had greatly improved. In contrast, 30.4% of the respondents in Parson Cross assessed that their park had worsened over the last 5-10 years. Around half the samples in High Hazels (50%), Meersbrook (50%) and Bolehills (55.4%) answered that the quality of their parks had stayed the same. The improvement of park management has an association with people's perceptions of the quality of park management where there is a medium correlation between recent improvement and park management (r=.473, P<0.01).

Table 6.6 Has the quality of your park improved over the last 5 - 10 years? (%)

	Much worse	Worsened	Stayed same	Improved	Greatly improved	Mean
Parson Cross	10.9	19.6	21.7	37.0	10.9	3.17
Manor Fields	1.7	-	6.8	39.0	52.5	4.41
High Hazels	1.6	14.1	50.0	32.8	1.6	3.19
Richmond	-	19.6	15.7	45.1	19.6	3.65
Meersbrook	-	5.0	50.0	31.7	13.3	3.53
Bolehills	-	6.2	55.4	29.2	9.2	3.42
Total	2.0	10.1	34.8	35.4	17.7	3.57

This interpretation suggests that socio-economic contexts, specifically the levels of deprivation, should be considered with park improvement to affect people's perceptions positively. Therefore, an understanding of socio-economic characteristics in relation to park improvement

can be key predominant factors for park management provision which is already supported by such previous studies (Wilkerson *et al.,* 2018; Pham *et al.,* 2012).

Table 6.7 shows how safe respondents felt in their park. On the whole, almost 30% of respondents (28.3%) felt 'safe' or 'very safe', while 7.3% of respondents felt 'unsafe' or 'very unsafe' in their park. 22.8% of respondents from Parson Cross felt 'unsafe' or 'very unsafe' in their park and just over 10% felt 'safe' or 'very safe' (the two highest perceptions of safety). Bolehills was the safest park based on 51% of 'Safe' or 'Very safe' in the study sites, followed by Meersbrook (36.1%). Interestingly, respondents (35.2%) in Manor Fields (IMD 1.31; most deprived) following Bolehills and Meersbrook felt 'safe' or 'very safe' compared to other sites e.g. Parson Cross (IMD 1.04), High Hazels (IMD 3.22) and Richmond (IMD 3.77) located in middle or most deprived areas. In Chapter Two, the relationship between socio-economic characteristics and safety was already emphasised where parks located in more deprived areas are perceived to more less safe than those in less deprived areas (Jones *et al.,* 2009; Leslie *et al.,* 2010; McCormack *et al.,* 2010; Cohen *et al.,* 2013). The results in this research concur with the previous findings: there is a positive correlation between IMD and safety (r=.252, P<0.01).

Table 6.7 Overall, how safe do you feel in this park? (%)

	Very unsafe	**Unsafe**	**Don't know**	**Safe**	**Very safe**	***Mean* A***
Parson Cross	7.0	15.8	66.7	8.8	1.8	2.82
Manor Fields	1.4	7.0	56.3	32.4	2.8	3.28
High Hazels	1.4	8.5	76.1	11.3	2.8	3.06
Richmond	5.1	-	72.9	22.0	-	3.12
Meersbrook	-	-	63.9	34.7	1.4	3.38
Bolehills	-	1.2	47.0	51.8	-	3.51
Total	2.2	5.1	63.0	28.3	1.5	3.22

* 1-very unsafe and 5-very safe

Fourteen indicators measured perceptions of maintenance in the respondents' park (Appendix D.5)[1]. The indicators recorded as 'very well-managed' were 'Local authority support' (*Mean*

[1]1-very poorly-managed and 5-very well-managed

3.92), followed by 'Wildlife and biodiversity' (*Mean* 3.60), 'Activities' (*Mean* 3.48) and 'Community notices' (*Mean* 3.41). However, in the case of the indicator 'Benches and seating' (*Mean* 2.94), the assessment was lower than other indicators (Total *Mean* 3.25). Respondents in Parson Cross (*Mean* 2.53) and Richmond (*Mean* 2.66) answered that benches and seating were insufficient in their park. Regarding indicators of 'Cleanliness', 'Graffiti' and 'Flowers maintenance', Parson Cross was perceived to be poorly managed compared to the other sites, assessed *Mean* 2.82, *Mean* 2.86 and *Mean* 2.75 respectively. In contrast, Meersbrook was a well-managed site in assessments of 'Cleanliness', 'Graffiti',' Benches' and 'Facilities'. For Flowers (*Mean* 3.36) and Trees maintenance (*Mean* 3.46), and organising activities (*Mean* 3.96), Bolehills performed park management better than other sites.

A number of measures assessing current park management were found to have significant associations with different socio-economic characteristics. These analyses reflect the previous literatures that socio-economic characteristics significantly affect people's perceptions of conditions of park management (Crawford *et al.,* 2008; McCormack *et al.,* 2010; Weiss *et al.,* 2011). Table 6.8 shows where this occurs.

Table 6.8 Evidence of an association between user characteristics and park indicators

	User characteristics and indicators (Evidence of an association)							
Indicators	**IMD**	**Gender**	**Age**	**Length of residence**	**Frequency of park visit**	**Dis-ability**	**House-hold type**	**Six parks**
Accessible park entrance	○	·	·	○	·	·	·	○
Cleanliness	○	·	·	·	·	·	·	○
Graffiti	○	·	·	·	·	·	·	○
Benches and seating	○	○	○	○	·	·	·	○
Footpaths	·	·	○	○	·	·	·	○
Facilities such as play, sport and other equipment	○	·	·	·	·	·	○	○
Plant maintenance (Flowers)	○	·	○	·	·	·	·	○
Plant maintenance (Trees)	○	○	○	○	·	·	·	○

	User characteristics and indicators (Evidence of an association)							
Indicators	**IMD**	**Gender**	**Age**	**Length of residence**	**Frequency of park visit**	**Dis-ability**	**House-hold type**	**Six parks**
Grass maintenance (Mowing)	◌	○	◌	·	·	·	·	·
Wildlife and biodiversity	◌	○	◌	·	·	·	·	○
Local authority support	◌	·	·	◌	·	○	·	◌
Community notices	◌	·	·	·	·	·	·	◌
Staff presence	◌	·	·	·	◌	·	·	○

· -No distinctions between groups found
◌ - evidence is found with a small effect size.
○ - evidence is found with a medium effect size.
● - evidence is found with a large effect size.

According to socio-economic characteristics, particularly the Indices of Multiple Deprivation, a number of features were found to have significant associations (Appendix D.6). The relationship between IMD and users' perceptions of current park management was investigated using Pearson correlation. A number of correlations between the variables were found. Significant associations were found between IMD and indicators measuring Cleanliness, Graffiti, Accessible park entrance, Benches & seating, Facilities, Plant maintenance (flowers, trees and grass), Wildlife & biodiversity, Activities, Community notices, Local authority support and Staff presence. These results are also supported by the previous studies, concurring that those respondents, who state that their park is currently well maintained, were more likely to live in less deprived areas: particularly in relation to vegetation (Parsons and Daniel, 2002), graffiti (Cohen *et al.*, 2013), cleanliness (Dempsey *et al.*, 2012; Ives and Kelly, 2016). While local authority support including staff presence is more frequently shown to occur in more deprived areas than less deprived areas (Cohen *et al.*, 2013), this research reveals that according to users' perceptions, people living in more deprived areas are less likely to recognise staff presence in their parks than those living in less deprived areas.

This research also examined a wider ranges of demographic contexts in which each indicator has significantly associations with demographic characteristics e.g.) gender, age, length of residence, frequency of park visit, disability and household composition.

An independent samples t-test shows that respondents' assessment of current park management differed according to **gender** and was found to be medium. In these samples, women are more likely than men to describe the seating & benches ($t(411) = -2.63$, $P<.01$), trees ($t(411) = -2.00$, $P<.01$) and grass ($t(411) = -2.20$, $P<.01$), and wildlife & biodiversity maintenance ($t(411) = -2.06$, $P<.01$) in their local park as well-managed. In previous research (McCormack *et al.,* 2010; Peschardt *et al.,* 2012; Cohen *et al.,* 2013) researchers found associations between perceptions of green spaces and gender. This research concurred with their claims but, importantly this research revealed that women have a stronger tendency than men to assess standards of their parks positively.

Evidence was found to suggest that perceptions of current park management had weak associations with **age.** A one-way ANOVA test shows that the actual differences were found to be small: the effect size (h^2) is between 0.03 and 0.05. Interestingly, according to post hoc tests (Appendix D.7), the differences occur between users over 65 years of age and other age groups. This indicates that older respondents were less likely than other age groups to describe Benches & seating and Footpaths, Flowers, Trees and Grass in their local park as well-managed. According to age, different perceptions of uses of green spaces demonstrated by such research (McCormack *et al.,* 2010; Peschardt *et al.,* 2012; Cohen *et al.,* 2013; Zhang *et al.,* 2015; Zhang *et al.,* 2017) were found, but this research determines that older generations are more likely to have negative perceptions of the condition of their parks.

According to length of residence, people's perceptions regarding park use vary in existing research (Beyer *et al.,* 2014; Zhang *et al.,* 2015; Zhang *et al.,* 2017). This research concurred with their findings. One-way ANOVA analyses show that there was a significant difference between respondents' perceptions of current park management according to **length of residence** (Appendix D.8). Interestingly, the perceptions of six indicators (Accessible park entrance, Benches and seating, Footpaths, Plant maintenance (Trees), Local authority support and Park improvement) significantly differ for responses from residents who have lived in the neighbourhood for 6-10 years and over 30 years. The analysis indicates that long-term residents (over 30 years) were less likely to assess current park management positively (in particular, accessible park entrance, benches & seating, footpaths, trees maintenance, local authority

support and park improvement) as well-managed than short-term residents (between 6 and 10 years). However, there was no significant difference between shorter-term (less than 5 years) and the other residents.

The frequency of park visits has affected users' perceptions in relation to uses of green spaces (Wilson *et al.,* 2004; Moore *et al.,* 2008; Dahmann *et al.,* 2010; Cohen *et al.,* 2013; Zhang *et al.,* 2015). The statistical tests show that based on the **frequency of park visits**, there was a significant difference in users' perceptions of current park management analysed by the one-way ANOVA test. One-way ANOVA analysis indicates that the users visiting +5 days a week were more likely to describe staff presence as poorly-managed than the other users: however, effect sizes were small ($F(4,408) = 3.561$, $P<.01$, $h^2=.033$).

The independent samples t-test shows that **disabled** respondents were less satisfied with local authority support than non-disabled ($t(411) = 2.617$, $P<.009$, $r^2=.16$). The magnitude of this difference is high. This is noted that the indicator of 'Local authority support' more importantly affects the disabled users, which is advocated by a disability rights. According to Price (2016), handicap groups should be considered against failure to access to parky where this accessibility-focused staff e.g.) park's facilities team takes responsibility.

A one-way ANOVA test indicates that there was little significant difference in perceptions of current park management, only facilities, between **households** with children and households without children ($F(2, 405)=5.852$, $P<.003$, $h^2=0.028$). This association was influenced by the household composition, as respondents living with children were less likely to score facilities as well-managed in parks than other respondents living without children. Previous research (Coolen and Meesters, 2012; Gaube and Remesch, 2013; Houlden *et al.*, 2017) supports this finding where differences occur according to household composition. Importantly, this research sample suggests that park assessment of facilities of parks are required to be well-managed for children.

One-way ANOVA tests (Appendix D.9) indicate that there was a significant difference in perceptions of current park management for all indicators except grass maintenance (Mowing), between users of the **six parks**. The result shows that users of Meersbrook, Bolehills and Manor

Fields were more likely to score as well-managed their parks than users in the other parks. Post hoc tests reveal these interpretations. It should be noted that the management of Meersbrook Park might benefit from its close proximity to the Parks and Countryside Department of Sheffield City Council which was (until recently) located in the park. Post hoc tests support this analysis showing that there was a significant difference between different park users on the indicator of staff presence. In the case of Bolehills, the location in a less deprived area seems to affect the scores of current park management. Park users at Manor Fields were more likely to score it as a well-managed park. This may be because Manor Fields is a relatively recently developed park. A one-way ANOVA test reveals that there was a significant difference between Manor Fields and the other parks.

Importantly, there was a significant relationship between the indicators of park management assessment which are Cleanliness ($P < 0.001$), Benches and seating ($P< 0.001$), Accessible park entrance ($P=0.007$), Grass maintenance ($P=0.023$) and Park improvement ($P< 0.001$). Multiple linear regression underlines the significance of indicators highlighted in the factor analysis (Table 6.9). For cleanliness, there was a 22% increase in the assessment of current park maintenance, benches and seating a 15% increase, accessible park entrance a 13% increase and park improvement a 10% increase. R= 0.752 R Square= 0.566 Adjusted R Square= 0.546. This clarifies that 54.6% of variance in all indicators is explained by the variables in this model. It can be explained that these four indicators (Cleanliness, Benches and seating, Accessible park entrance, Grass maintenance and Park improvement can be predominant factors affecting users' perceptions of park management assessment. To increase users' satisfaction, the indicators are essentially prioritised in park management process. This result supports the previous research that cleanliness significantly affects people's perceptions (Dempsey *et al.,* 2012; Ives and Kelly, 2016). However, along with the emphasis on cleanliness, this research reveals the importance of other indicators such as accessible park entrance, Benches and seating, facilities, grass maintenance and park improvement over the last ten years.

Table 6.9 Multiple Regression analysis in assessing current park management practices

Model	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
(Constant)	.126	.175		.723	.470		
Cleanliness	**.222**	.048	.225	4.618	**.000**	.558	1.793
Graffiti	.021	.032	.027	.657	.511	.788	1.269
Accessible park entrance	**.131**	.048	.125	2.708	**.007**	.623	1.605
Benches and seating	**.154**	.041	.183	3.760	**.000**	.554	1.804
Facilities such as play, sport and other equipment	**.081**	.035	.102	2.289	**.023**	.663	1.509
Footpaths	.023	.049	.024	.474	.636	.528	1.892
Plants Maintenance(Flowers)	.023	.037	.032	.626	.532	.491	2.039
Plants maintenance(Trees)	.036	.047	.045	.754	.452	.374	2.676
Grass Maintenance(mowing)	**.113**	.050	.116	2.278	**.023**	.505	1.980
Wildlife and biodiversity	-.044	.025	-.075	-1.795	.074	.751	1.332
Activities e.g.)events, festivals	.019	.028	.033	.698	.486	.599	1.671
Community notices	-.034	.026	-.061	-1.284	.200	.583	1.717
Local authority support	.027	.024	.053	1.128	.260	.600	1.667
Staff presence	.036	.019	.085	1.901	.058	.654	1.528
Park improvement over last 10 years	**.107**	.030	.151	3.598	**.000**	.747	1.339

R=.752 R^2=.566 Adjusted R^2=.546

6.2.4 Potential park management practices

These descriptive statistics above show the respondents' perceptions in relation to different park management practices. Overall, 41.7% of the respondents would like to see food growing practices in their park. 44.4% of the sample agreed that such practices could contribute to better park management. However, the majority of respondents (54%) will not get involved in this practice or attend food growing training. Respondents in Richmond were particularly uninterested in this practice (64%). In contrast, 30% of the Manor Fields respondents (compared to the average of 13.9%) would get involved in food growing and 33.3% of those respondents would be interested in attending food growing training, overall average 19.5%.

Different respondents' attitudes towards community food growing are described (Appendix D.10-11): such as growing herbs in spare spaces, inside and around parks. 43% of respondents would see growing herbs practised in their parks; a similar proportion (40.6%) considered that this practice could contribute to better park management. However, the majority of the respondents (53%) will not get involved in this practice. Interestingly again, in Manor Fields, 33.3% of the sample willing to become involved in this practice was much larger than the average (14.3%).

Table 6.10 shows how many residents currently get involved in food growing activities in a garden or allotment. 37.9% of respondents grew food in their gardens, while only 4.3% had an allotment. The majority of respondents (54%) were not interested in food growing in either a garden or allotment and only 3.8% of the sample did food growing in both. In Bolehills, a smaller proportion of the respondents (30.9%) than at other sites (average 37.9%) were involved in food growing only in their garden. In terms of socio-economic characteristics, there is statistically no significant difference between respondents, describing that the result can be explained that food growing activities in garden are preferred regardless of users' demographic characteristics. More analysis between socio-economic characteristics and potential park management practice in relation acceptability and feasibility will be shown in Chapter Eight.

Table 6.10 Have you been involved in food growing in your garden and/or allotment? (%)

	Garden	Allotment	Both	Neither
Parson Cross	41.3	5.0	6.3	47.5
Manor Fields	37.2	3.8	5.1	53.8
High Hazels	31.8	2.3	-	65.9
Richmond	42.9	2.4	-	54.8
Meersbrook	45.1	4.9	7.3	42.7
Bolehills	30.9	7.4	4.3	57.4
Total	37.9	4.3	3.8	54.0

There are different reasons why respondents have been involved in food growing or not (Appendix D.12). 39.5% of respondents were engaged in food growing in their garden because they have enough space in their gardens. A small proportion of respondents (11.2%) responded 'No time in allotment'. In particular, 27.8% of Manor Fields respondents answered 'No time in

allotment'. The minority responses 'Long waiting list', 'Don't know how to apply for an allotment', 'Have to pay for an allotment' and 'Unavailable garden' were 5.4%, 3.4%, 3.6% and 4.1% respectively. However, 32% of respondents (42.9% in Parson Cross) were not interested in food growing. This is reported in more detail in Nam and Dempsey (2018).

The result regarding the respondents' perceptions of structurally complex planting is represented (Appendix D.13). The majority of the respondents (55.5%) would see this practice as involving different layers and heights of plants. Particularly in Meersbrook (70.9%) and Manor Fields (70.7%), respondents would prefer this practice. This practice was reported to contribute to better park management by most respondents (48.8%). However, only 9.4% of the respondents would get involved in this practice. Interestingly, in Manor Fields, the proportions were larger than other parks with over 15.3% interested in getting involved.

The result varies in the perceptions of respondents about formal bedding plants (Appendix D.14). Overall, 55.9% and 50.5% of the participants responded positively 'Yes' to the questions 'Would you see these practices?' and 'Could this contribute to better park management?'. Respondents in High Hazels and Meersbrook (70.6% and 60% respectively) answered positively. 35.2% of Bolehills respondents answered that they would see this practice in their parks. However, on average, 62.3% of the participants did not want to get involved in this practice.

The result is reported, assessing the perceptions of 'Large meadow with wild flowers' in a respondent's park (Appendix D.15). Similar to the result for structurally complex planting, 53% of respondents would see this practice and 42.4% agree that this practice could contribute to better park management. Respondents in Manor Fields (67.1%) would see this practice more than other parks. On the other hand, 38.8% of the respondents in Richmond (compared to the average 25.7%) said that they would not see this practice in their park. Overall, only 11% of the respondents were interested in getting involved in this practice, however, for Manor Fields and Bolehills, 20.5% and 17.8% respectively would get involved.

Respondents' perceptions of 'less-frequently cut grass' in the park are shown (Appendix D.16). On the whole, 33.5% of respondents would like to see the grass in their parks cut less frequently.

Especially in Bolehills, 43.3% of respondents would like to see this practice. Respondents in Parson Cross (30.7%), High Hazels (27.1%) would not like to see this practice (sample average 45.9%). In contrast to other naturalistic landscape management practices, the practice of cutting the grass less frequently (20.4%) could contribute to better park management. Only 4.4% of respondents reported willingness to get involved in this practice. When asked about their preference between mown grass and less-frequently cut grass, most respondents (65.7%) would like to see mown grass rather than grass cut less frequently.

Table 6.11 reports the preference of respondents for urban park plantings. Overall, 38.9% of respondents tended to prefer 'Formal bedding plants' to other planting styles such as 'Meadow with wild flowers' (28.3%), 'Structural complexity' (27.1%) and 'Less-frequently cut grass' (5.7%). However, there were differences within the sample where, interestingly, 41% and 41.5% of the respondents in Manor Fields and Bolehills chose 'Meadow with wild flowers' as the most preferred planting style whilst only 16.7% and 19.1% of the respondents preferred 'Formal bedding plants'.

Table 6.11 The preferred practice among urban park plantings introduced (%)

	Structural complexity	**Formal bedding plants**	**Meadow with wild flowers**	**Less-frequently cut grass**
Parson Cross	27.5	52.5	17.5	2.5
Manor Fields	32.1	16.7	41.0	10.3
High Hazels	22.7	56.8	14.8	5.7
Richmond	20.2	51.2	22.6	6.0
Meersbrook	26.8	37.8	31.7	3.7
Bolehills	33.0	19.1	41.5	6.4
Total	27.1	38.9	28.3	5.7

Table 6.12 shows the perceptions of respondents about the least preferred urban park planting practices. On the whole, 69.4% of the respondents chose 'Less-frequently cut grass' as the least preferred practice. However, there is an interesting finding in Bolehills that the respondents reported different perceptions, with the large proportion of 35.1% giving 'Formal bedding plants' as their least preferred planting, against an average preference of 14.8% in the sites. On

the contrast, smaller proportion (48.9%) of the respondents in Bolehills chose 'Less frequently cut grass' as the least preferred planting than other sites (average 69.4%).

Table 6.12 The least preferred practice among urban park plantings (%)

	Structural complexity	Formal bedding plants	Meadow with wild flowers	Less-frequently cut grass
Parson Cross	7.5	2.5	12.5	77.5
Manor Fields	10.3	14.1	5.1	70.5
High Hazels	9.1	6.8	5.7	78.4
Richmond	3.6	10.7	7.1	78.6
Meersbrook	6.1	17.1	12.2	64.6
Bolehills	9.6	35.1	6.4	48.9
Total	7.7	14.8	8.1	69.4

The final set of questions measured the perceptions of respondents about income generation models in landscape management and their willingness to pay for park use (voluntary donation) (Table 6.13). Overall, 75.5% of respondents were unwilling to pay a voluntary donation. However, 20.8% of respondents would be willing to pay a voluntary donation up to £1, only 3.6% over £1. Interestingly, larger proportions of respondents in Manor Fields (25.6%) and Meersbrook (37.8%) than at other sites would be willing to pay a voluntary donation of up to £1.

Table 6.13 Would you be willing to pay for park-use by a voluntary donation per visit? (%)

	Zero	Up to £1	£2 - £4	£5 or over
Parson Cross	85.0	12.5	2.5	-
Manor Fields	62.8	**25.6**	7.7	3.8
High Hazels	81.8	15.9	2.3	-
Richmond	77.4	19.0	3.6	-
Meersbrook	61.0	**37.8**	1.2	-
Bolehills	84.0	14.9	1.1	-
Total	75.7	20.8	2.8	0.8

Table 6.14 reports the sample's willingness to pay for park use (Car parking per hour). On the whole, 70.2% of respondents agreed that car parking for park use should be free. However, 29% of the respondents would be willing to pay for car parking from 50p (20.6%) to £1 (8.5%).

Respondents in Meersbrook would be willing to pay for car parking 50p (25.6%) and £1 (15.9%), larger proportions than at other sites.

Table 6.14 Would you be willing to pay for park-use by a car parking charge per hour? (%)

	Zero	50p	£1	£2 or over
Parson Cross	78.8	12.5	8.8	-
Manor Fields	76.9	16.7	6.4	-
High Hazels	69.3	27.3	2.3	1.1
Richmond	69.0	21.4	9.5	-
Meersbrook	58.5	25.6	15.9	-
Bolehills	69.1	19.1	8.5	3.2
Total	70.2	20.6	8.5	0.8

Different results are manifested in the perceptions of respondents about if they would like to see three different facilities (a Kiosk, Café and Shop) in their park (Appendix D.17). The largest proportion of the respondents (76.7%) would like to see a café in their parks, followed by a kiosk (54.7%) and a shop (44.9%). The majority of respondents of High Hazels (84.9%) and Meersbrook (81.7%) would like to see a café in their parks. However, a quarter of the respondents (28.1%) answered that the shop is an unnecessary facility in a park.

Varying the preferences of respondents are reported which are about events/activities such as 'Fun day/Fayre', 'Music festival' and 'Circus' in their parks (Appendix D.18). The preferred event was 'Fun day/Fayre' (79.2%) with very large proportions in favour reported in Parson Cross (86.3%) and Manor Fields (90.9%) in particular. The second preferred event/activity is a 'Music festival' (59.5%), followed by a 'Circus' (34.1%). Fewer respondents (Fun day/Fayre 67.4%, Music festival 48.4% and Circus 22.8%) in Bolehills preferred these events/activities compared to other sites. In contrast, the respondents of Manor Fields had a higher preference for each of these events/activities than at other study sites.

The final set of indicators measuring the perceptions of the respondents on other income generation models: green space subscription, sponsorship, business taxes, new planning taxes and endowments are reported in Appendix D.19. Overall, around a third of the sample would like to see business taxes (31.5%), sponsorship (36.2%), endowments (37.3%) and new

planning taxes (37.7%), while green space subscription (20.7%) was less popular. However, the standard deviation of the results between the study sites is broad. For example, 39.4% of the respondents in Manor Fields would like to see green space subscription, compared to only 8.8% in Richmond. As a result, excepting the responses to green space subscription, the sample would consider these income generation models, but no more than 37% definitively stated that they would like to see such models.

6.3 Perceptions of community groups and professionals via interviews

6.3.1 Community group interviews

The data collected in the community group interviews describes how community groups and stakeholders got involved in their parks. Table 6.15 provides interview data about current park management from the community groups' perspectives.

Table 6.15 What are the problems from a management perspective in your park? (Interview question)

	Parson Cross	Manor Fields	High Hazels	Richmond	Meersbrook	Bolehills
A lack of funding	O	-	-	O	-	-
Anti-social behaviour/ Vandalism	O	-	-	O	-	-
A lack of members	O	-	O	O	O	-
More efforts for fundraising	O	-	-	-	-	-
Difficult to invite members	-	O	-	O	-	-
A lack of communication with SCC	-	-	O	-	-	O
A lack of support from SCC	-	-	-	O	-	-
Different perspectives between users and community groups	-	-	-	O	-	O
More intensive working	-	-	-	-	-	O
More SCC focus on city parks	-	-	O	-	-	-

	Parson Cross	Manor Fields	High Hazels	Richmond	Meersbrook	Bolehills
Declining park conditions	O	-	-	-	-	-
Difficult to obtain permission from SCC	-	-	-	O	-	-

O: Answers to questions from relevant interviewees
-: Not mentioned

The majority of interviewees stated that there was insufficient funding, that anti-social behaviour was a problem at night and that they needed more communication with the local authority. Meersbrook enjoyed good communications with Sheffield City Council possibly because the Parks and Countryside Department was located within Meersbrook Park. However, the Meersbrook group was worried that this close support would be lost when the department moved out from the park in 2016 (after the interview). In Richmond and Bolehills, the local people and the community group had different perceptions related to preference for long or overgrown grass. Other issues that arose were that the community groups consisted of old members (e.g. High Hazels), there were difficulties in encouraging new volunteers and there was a shortage of members in Parson Cross, High Hazels, Richmond and Meersbrook.

All interviewees mentioned the financial changes, for example, funding cuts and fundraising and the difficulty of fundraising. Community groups in Bolehills, Manor Fields and Richmond tried fundraising in different ways such as membership, events and targeting external funding bodies (e.g. the National Trust). Most community groups recognised that council staff had been reduced by funding cuts, causing a lack of support as well as decreasing numbers of community members/volunteers. On the whole, the results from community group interviews indicate that parks had been negatively affected, mainly by funding issues.

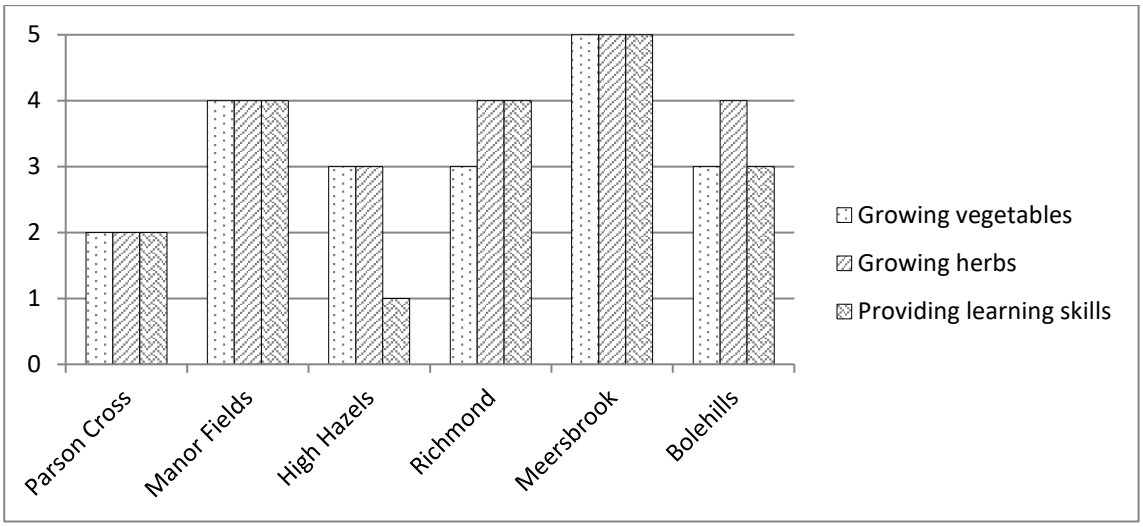
Table 6.16 What has changed in park management over the last 10 or 20 years in practice? (Interview Question)

	Parson Cross	Manor Fields	High Hazels	Richmond	Meersbrook	Bolehills
Financial changes negatively	O	O	O	O	O	O
More community groups getting involved	-	O	-	-	-	-
Decreasing volunteers/members	-	-	O	-	O	-
Decreasing support from SCC	-	-	O	O	-	O

More intensive working	-	-	-	-	-	O
Decreasing quality of parks	-	-	-	O	-	-
Improving quality of parks	-	O	-	-	-	-
New facilities set up from FG	-	-	-	O	-	-
Increasing people's 'ownership' of the park	-	O	-	-	-	-
More popular allotments	-	O	-	-	-	-
More self-fundraising	O	-	O	-	-	O
Increasing sharing of responsibility for park management	-	-	-	-	O	-
Increasing volunteers' value	-	O	-	-	-	-

The interviewees were asked about three potential park management practices: community food growing, urban park plantings and income generation models. These practices consist of specific activities or schemes. Figure 6.1 shows the results of community groups' perceptions of community food growing practices such as growing vegetables, growing herbs and providing learning skills.

Figure 6.1 The perceptions of community groups about community food growing



Adapted from mini questionnaires conducted during interviews based on 5-point scale: very low acceptability 1-point and very high acceptability 5-points.

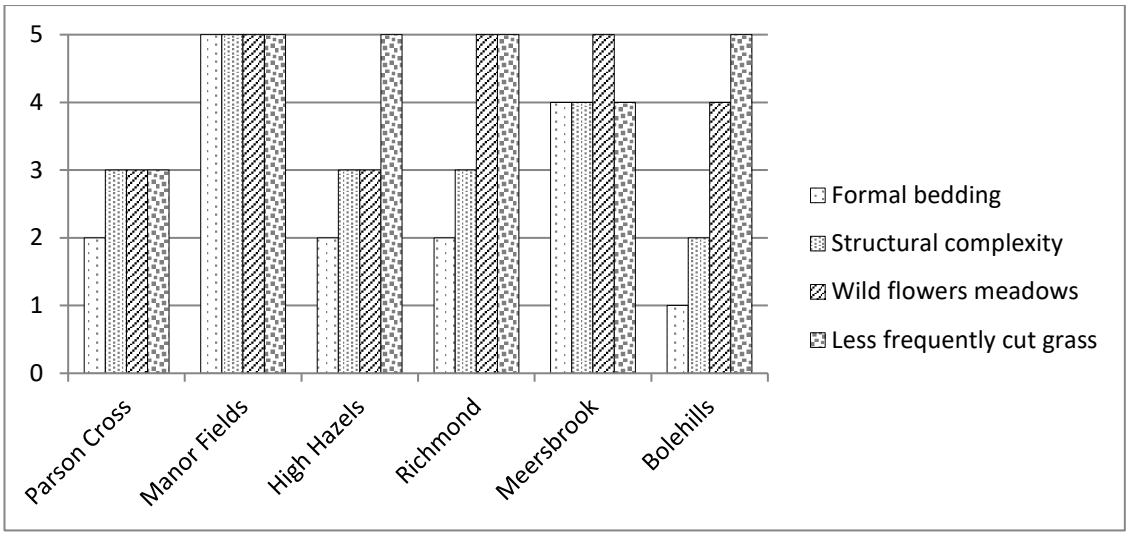
On the whole, each interviewee had different points of view. In Meersbrook and Manor Fields, community groups tended to welcome these practices to the parks. In contrast, the Parson Cross

community group seemed unlikely to accept these practices in the park. This is shown that the difference between two community groups is because of community groups' involvement.

In High Hazels and Bolehills, groups felt that community food growing practices were acceptable. However, all the groups mentioned barriers to accepting community food growing practices e.g.) stolen crops, the need for more community involvement and insufficient food growing spaces in allotments, calling into question the feasibility of CFG.

Figure 6.2 provides some indication as to how interviewees described their perceptions of plantings in their parks. Urban park plantings were categorised into four specific planting styles: species diversity, structural complexity, formal bedding and less-frequently cut grass. The community groups of four sites apart from Parson Cross tended to understand the necessity for both species diversity and less-frequently cut grass. However, overall tendencies meant other urban park plantings were unlikely to be accepted except by respondents in Manor Fields and Meersbrook.

Figure 6.2 The perceptions of community groups about urban park plantings

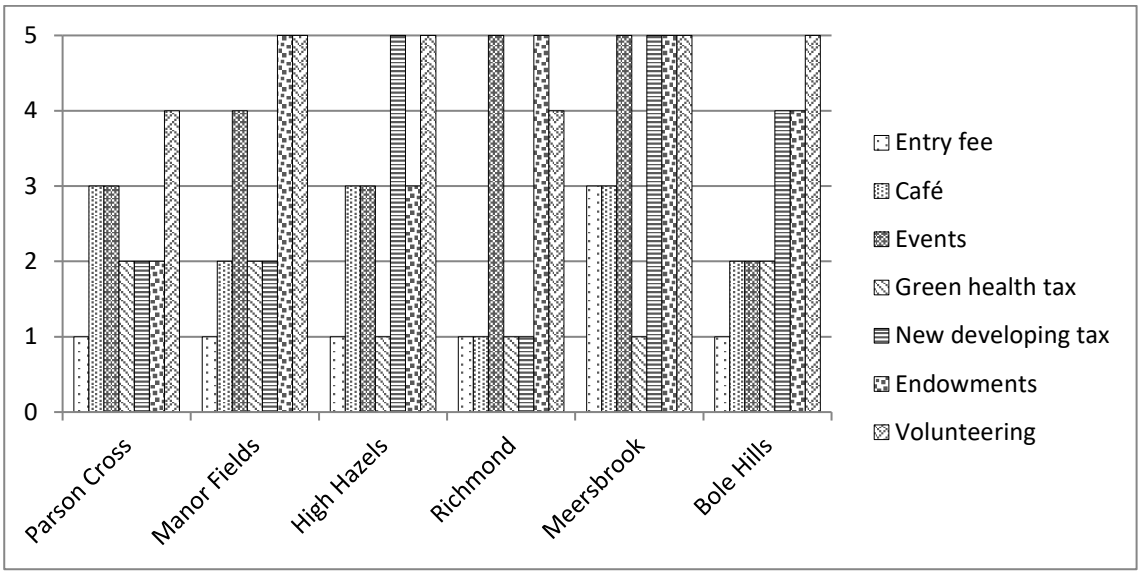


Adapted from mini questionnaires conducted during interviews based on 5-point scale: very low acceptability 1-point and very high acceptability 5-points.

The final indicators of potential park management practices measured the perception of community groups relate to income generation models including seven specific practices (Figure 6.3). The results indicate that all community groups would mostly welcome volunteering, followed by endowments and a new development tax. However, most community

groups stated that applying an entry fee is less likely to be an acceptable method of fundraising. In terms of events, some interviewees in Manor Fields, Richmond and Meersbrook tended to be highly in favour. Apart from Richmond, running a café was acceptable in the other parks. As an extra tax, a green health tax seemed to be unpopular from all community groups' perspective.

Figure 6.3 The perceptions of community groups about income generation models



Adapted from mini questionnaires conducted during interviews based on 5-point scale: very low acceptability 1-point and very high acceptability 5-points.

Table 6.17 provides the results of the perceptions of community groups when asked about their ideal park management in Sheffield. All community groups mentioned three key aspects: more people becoming involved in park management, more understanding of what is happening in their park and more funding for park management. Most community groups discussed a need for more active and younger members. Less-frequently mentioned statements related to the local authority in terms of more communication between community groups and SCC, and better health and safety covered by SCC.

Table 6.17 In an ideal world, how would Sheffield's parks be most appropriately managed? (Interview Question)

	Parson Cross	Manor Fields	High Hazels	Richmond	Meersbrook	Bolehills
More people getting involved	O	O	O	O	O	O
More active members	O	-	O	O	-	O

	Parson Cross	**Manor Fields**	**High Hazels**	**Richmond**	**Meersbrook**	**Bolehills**
More younger active members	-	-	O	O	O	-
Let people know about what is happening in a park	O	O	O	O	O	O
Covering health and safety by SCC	-	-	-	O	O	-
More interested in district parks	-	-	-	O	-	-
More park staff in park	O	-	-	O	-	-
Sharing responsibility	-	O	O	-	-	-
More funding	O	O	O	O	O	O
More communication with SCC	-	-	-	O	-	O
Fantastic workforce e.g. Green Estates	-	-	-	O	-	-
Developing external funding e.g. Green Flag Award	-	-	-	-	O	-

6.3.2 Professional interviews

This section starts by reporting on perceptions that professionals hold about community groups through individual interviews and a focus group interview. Table 6.18 shows the perspectives of professionals in relation to stakeholder involvement in park management. There is a diversity of statements from different points of view. Fundamentally, many stakeholders and not-for-profit-groups have become involved in park management such as Friends, volunteers, 3rd-sector organisations, trusts, the university and other local community groups working collaboratively with the local authority. They were described as being very helpful for park management, particularly their involvement in actual park maintenance and fundraising.

"There have been significant changes positively which are more stakeholders' involvement in park management, getting involving in actual maintenance of parks."- ProLA-Ms. According to one local authority interviewee, involvement of local stakeholders had expanded to include the

efforts for parks becoming self-sustaining, more participation in strategies for park planning and sharing ideas for maintenance skills and fundraising from SGSF[2].

"Stakeholders have strong involvement in the day-to-day work in sites. Many are involved in strategies for planning in sites. So, I think master planning, developing master plans and society are very strongly involved in how it will be developed [such as] play areas, additional equipment sites, additional planting schemes and inherent difficulty in that is very good, adding new features the sites [*sic.*]*."-ProLA-1.*

The interviewees discussed interesting park management structures, for example, self-autonomous structures and 3rd-sector organisations in financial changes to support park management. However, some interviewees mentioned negative aspects of stakeholder involvement including insufficient communication to deal with different expectations, unsatisfactory work, community groups having no interest in wider management responsibilities and a lack of dedicated members.

"They can be very effective in doing certain things. Running events and involving people and doing things they're particularly interested in. They can be very effective at raising funding and getting this built, getting things done, but perhaps not as effective because they haven't got the skills or they don't actually have interest in doing wider management."-ProSE.

Table 6.18 To what extent do you think stakeholder involvement is effective in park management? (Interview Question)

	ProSE	**ProLA-1**	**ProLA-2**	**ProAC-1**	**ProAC-2**	**ProLA-Ms**
Diverse stakeholders working collaboratively	O	-	-	-	-	-
Local authority working in community side	O	-	-	-	-	-
Self-autonomous/ sustaining park management	O	-	O	-	-	-
Engaging volunteering in every neighbourhood	O	-	-	-	-	-
University involvement as a key stakeholder	O	-	-	-	-	-
More stakeholder involvement	-	O	-	-	-	O
Broad involvement e.g.) strategies for planning in sites	-	O	-	-	-	-
Effective stakeholder involvement	-	O	-	O	-	-

[2] SGSF (Sheffield Green Spaces Forum): an umbrella group, not-for-profit organisation representing all Friends groups and green spaces community groups in the city

More active involvement in sites	-	O	-	-	-	-
Different expectations between stakeholders	-	-	O	-	-	-
Sharing ideas through SGSF	-	-	O	-	-	-
Different perceptions about green spaces according to stakeholders	-	-	O	O	-	-
Helpful volunteers	-	-	-	-	O	-
Requiring leadership skills	-	-	-	-	O	-
No interest in a wider management	-	-	-	O	-	-

ProSE: Social Enterprise, ProLA: Local Authority, ProAC-1: University Academic, ProAC-2: University Researcher and ProLA-Ms: Focus Group (Park managers)

Interviewees were asked what they thought about community groups' involvement in park management. Table 6.19 shows that from the professionals' perspectives, community groups were very welcome and their involvement was more effective for management. In addition, many community groups were struggling to do many activities relevant to park management from fundraising as a solution to budget cuts to actual maintenance, in spite of a lack of funding support from the local authority.

"There have been significant changes positively which are more stakeholders' involvement in park management. Some of the volunteering groups like friends groups started to work on small sections to improve parks. Friends group strategies were delivered in parks and some friends groups were getting involving [*sic.*] *in actual maintenance of parks."-ProLA-1.*

However, a professional from a 3rd-sector organisation also reported the difficulty of inviting community groups because they wanted reward.

"Rewards, I think it is critical and you need a base..... People want to be welcomed and valued, and they want to have nice social part of it …. They want to do fun things, they want to have choice and they want to do interesting things, not boring things."-ProSE.

Today, such community groups are trying to generate income, while fundraising is not popular for most community groups. Additionally, professional interviewees stated that there was a lack of active, dedicated or genuine members in community groups.

Table 6.19 To what extent do you think community groups' involvement is effective in park management? (Interview Question)

	ProSE	ProLA-1	ProLA-2	ProAC-1	ProAC-2	ProLA-Ms
Very welcome	O	-	-	O	-	-
More effective management with community groups' involvement	-	-	-	O	-	-
Difficult to invite	O	-	-	-	-	-
A few active members	-	O	O	O	-	-
Working at what they want	O	-	-	-	O	O
More Friends groups getting involved in actual maintenance	-	O	-	-	-	-
Struggling to generate income	-	-	-	O	-	-
Unpopular income generation in their work	-	-	-	O	-	-
Solution to budget cuts	-	-	-	O	-	-
Good communication with Friends groups, sharing ideas	-	-	O	-	-	-
Working unclearly / unproductively	-	-	-	-	-	O
Judging carefully what community groups can do	-	-	-	-	O	-
Different expectations between community groups and the local authority	O	-	O	-	-	O
More frustrated due to generating external funding	-	-	O	-	-	-

Significant changes have been emerging over the last 10 or 20 years in urban landscape management. The outcomes of interviews responding to these changes are listed in Table 6.20. The key changes are funding and budgets which have declined since around 2000, producing other significant changes. This indicates that financial changes had negatively affected the situation of park management, for example, decreasing the number of staff, creating more stress and pressure and trying competitive funding resources compulsively.

"High funding level compared to the 1990s has been cut since around 2000. Maintenance cost could be £1500 – £2000 per hectare [are now] down to £400 – £500 per hectare because of significant funding cuts."-ProLA-1.

Furthermore, the local authority had tried new structures of park management such as stewardship, partnership and other alternative ways related to achieving more cost-effective management. Additionally, community groups were involved in income-generating projects.

"*There was* [a] *budget of about £400, which you may compare to maybe a district park, probably requiring somewhere £80,000 to £200,000. So there was no budget at all. So when we started, we knew there was no money. So right from the very beginning, we had to think about how to use* [the] *park to generate income and how we used the landscape, how we might build stakeholder participation, so that management could be more cost-effective and how we might find different parts of funding to support it. So, the structure of the park, infrastructure of the park and the quality of the management has really kept pace with the money and the resources that we managed to bring in. But it is an ongoing problem."– ProSE.*

Table 6.20 What has changed in park management over the last 10 or 20 years? (Interview Question)

	ProSE	ProLA-1	ProLA-2	ProAC-1	ProAC-2	ProLA-Ms
Funding cuts	O	O	O	O	O	O
More income generation	O	O	-	O	O	O
Finding external funding	O	O	-	O	-	O
More stakeholder involvement e.g.) partnership and community groups	O	-	O	O	-	O
Cost-effective management	O	-	-	-	-	O
Decreasing staff numbers	-	O	O	-	-	O
More demand from community groups	-	-	O	-	-	-
More stress and pressure	-	-	-	-	O	-
Changing working systems	-	-	-	-	-	O
Changing responsibility	-	O	-	-	-	-
Changing role of community groups	-	-	O	-	-	-

Three management practices were explored for their potential in public parks: community food growing, urban park planting and income generation models. Table 6.21 shows interviewees' responses about community food growing in parks. There is a clear tendency for all professionals to reject community food growing as a management practice. This was due to perceptions of emerging problems or lack of necessity for example, food damaged by being stolen and anti-social behaviour, vandalism, no one looking after food, the skills required and the existence of very popular allotments.

"If we put food into some of our park's food growing areas, they would be damaged or they would be vandalized or people would steal the food. It's a different ... that's a very different thing but these allotments are very, very popular still."-ProLA-2.

Besides, there was some of low possibility in uncertain about consistency to manage sustainable maintenance.

"Community groups have a growing area. They do it for a couple of years, and they move on to the next interesting thing. The problem is sustaining the interest of whoever's going to be running it or involved with it over the time."-ProAC-1.

Table 6.21 Thinking about different potential management practices in parks (Community food growing - Interview Question)

	ProSE	ProLA-1	ProLA-2	ProAC-1	ProAC-2	ProLA-Ms
Allotment available across a city	O	-	O	O	-	-
Food stolen, damage and vandalism	-	-	O	O	O	-
A lack of people to look after	-	-	-	O	-	-
More co-ordination with council to monitor	-	-	-	-	O	-
Less consistency by community involvement	-	-	-	O	O	O
Sharing tools and greenhouse effectively	O	-	-	-	-	-
Demanding high skills	O	-	-	-	-	-

Table 6.22 shows the perceptions of naturalistic planting as a potential practice in parks. Most interviewees agreed that naturalistic plantings bring many ecological and multiple benefits. However, professionals reported potential difficulties in managing naturalistic plantings. This practice was reported as requiring highly demanding skills and maintenance work, underlining the premise of managing at the right time. Interviewees considered the decline of permanent staff in the local authority, which might make this practice unwelcome in park management. The example of the Urban Nature Park Project run by Sheffield City Council was discussed:

"Naturalist planting had started the UNP project which is managing areas of grass. So, we are planting trees in grass areas. We are leaving grass areas to grow, so we are not mowing it all the time ……. We've lost about ten staff through the UNP. We realised that it didn't work out particularly as it should have done, because of the savings. The savings didn't work as it didn't really happen and we learnt from that. We know realistically, the UNP doesn't necessarily save a lot of staff time [the programme has been delayed, rather the plan] [*sic.*]*."-ProLA-Ms.*

More interestingly, this project was not popular in people's preference. There was a lack of understanding of naturalistic plantings, especially leaving grass to grow long.

"The public don't like it in some areas. They used to say 'cut it, mow it, mow it down' but leaving it you do get some opposition in some areas by saying 'why leave it?'."-ProLA-Ms.

Table 6.22 Thinking about different potential management practices in parks (Urban park plantings - Interview Question)

	ProSE	**ProLA-1**	**ProLA-2**	**ProAC-1**	**ProAC-2**	**ProLA-Ms**
Difficult to manage / intensive work	O	O	O	-	-	-
Underlining management of low maintenance/ input	O	O	O	-	-	-
Spending a lot of money	-	-	O	O	-	-
Delivering multi benefits e.g.) biodiversity, wildlife	-	O	O	O	O	-
Reducing staff through naturalistic projects	-	-	-	-	-	O
Managing at the right time for effectiveness	O	-	-	-	-	-
Emphasising skills	O	-	-	-	-	-
Anecdotal people's perspectives about bedding plants	-	O	-	-	O	-
Huge range of naturalistic planting	-	-	O	-	O	-
Unpopular naturalistic project e.g.) UNP project in people's perspectives	-	-	O	-	-	O
Does not save management time	-	-	-	-	-	O

Table 6.23 reports professionals' perceptions related to income generation models as potential management practices. On the whole, charging money additionally to people was perceived to be very difficult, or unacceptable, because green spaces and parks are open spaces open to all, especially in terms of entry fee and car park charges. In spite of the perceived necessity of income generation to better manage parks, these extra charges to people could cause counter-productive outcomes.

"The park was designed to have a multi income stream ….. very difficult here, our main goal is people to use the space. So, it will be counterproductive, [if some additional charges are imposed on them]."-*ProSE.*

Therefore, trying to raise income requires many different approaches, for instance, business model, external funding and structural changes to the management system.

"Income generating, it's hard, and people don't always like it ….. A green space that is accessible and free means that anybody who is on [a] *low income, in a deprived area, can still use that space. We don't want to do things that would stop the people from feeling that they could use that green space."-ProLA-2.*

Table 6.23 Thinking about different potential management practices in parks (Income generation models- Interview Question)

	ProSE	**ProLA-1**	**ProLA-2**	**ProAC-1**	**ProAC-2**	**ProLA-Ms**
Essential income generation/ business models to manage parks	O	O	O	O	-	-
Funding resources by different means	O	O	-	-	-	-
Income generation from people unpopular	O	O	O	O	-	O
Limitations as parks are public spaces	-	O	O	-	-	-
People changing their mind on the value of green space	-	-	O	-	-	-
Income generation depends on different neighbourhoods	O	-	-	O	-	-
Difficult to apply for entry and car park charge	O	-	-	-	-	-
Emphasising structure of management rather than the amount of funding	-	-	-	-	O	-
More difficult to raise funding in district parks rather than city parks	-	-	-	O	-	-

Table 6.24 provides some indication as to how the socio-economic characteristics of areas have an influence on park management strategies and practices. According to some interviewees, there were more problems, especially around council estates, such as anti-social behaviour, fly tipping, vandalism and dog mess in the east of Sheffield than the southwest where there are more difficult sites from a maintenance point of view. Interviewees stated that maintenance problems tended to be happening in areas defined by their management structures rather than according to socio-economic deprivation. It was argued by some that funding or investment could affect the quality of parks, but is not necessarily related to deprivation. In the case of income generation, there was an assumption that people in the least deprived areas seem to be more willing to contribute to fundraising for park management.

Table 6.24 Are parks in different socio-economic areas managed according to different strategies and practices? (Interview Question)

Interviewees	Impact of deprivation on park management
ProSE	• Park management structure more important than socioeconomically deprived area. • Funding and investment affect the quality of parks.
ProLA-1	• More problems in east [more deprived] of Sheffield than southwest [less deprived]. • Having great pride in green space could result in fewer problems.
ProLA-2	• Accessible and free green spaces regardless of deprived areas.
ProAC-1	• The least deprived areas are more willing to spend money for parks. • Park management is necessarily related to deprivation.
ProLA-Ms	• Reaction to the local requirements. • The other challenges come from consultation and dealing with people. • More antisocial behaviour caused around council estates.

The professional interviewees were asked their opinions on park management in an ideal world in Table 6.25. There were some key themes that emerged in interviews. The first stressed the need for more active and genuine members getting involved in park management, sharing responsibility for park management and helping local authority and community groups. The second indicates park management in diverse ways with holistic approaches and applying a sustainable and long-term management scheme unaffected by political changes. Lastly, there were some changes demanded in people's perspectives, thinking of the pride and positive impacts of parks.

"First thing for me is to put the staff back in our park ….. Keeping an eye on social and anti-social behaviour. If pride of sites[*sic.*] *can be generated, people will go out and people will pick litter up like volunteers ….. every single green space should be managed to a high standard."- ProLA-Ms.*

Table 6.25 What is your opinion on park management in an ideal world? (Interview Question)

	ProSE	**ProLA-1**	**ProLA-2**	**ProAC-1**	**ProAC-2**	**ProLA-Ms**
Long-term / sustainable management	-	O	O	-	-	-
More active and genuine members getting involved	O	-	O	-	-	-
Managing park in diverse ways	O	-	-	O	-	-
Sharing responsibility for park management	-	-	O	-	-	O
Sharing parks for all	-	O	-	-	-	-
Increasing park pride/impact from people's thinking	-	O	-	O	-	-
Good facilities in the park	-	O	-	-	-	-

	ProSE	**ProLA-1**	**ProLA-2**	**ProAC-1**	**ProAC-2**	**ProLA-Ms**
High standard parks	-	-	O	-	-	-
More communication and better relationship with the public	-	-	-	-	O	-
More participation of community groups	-	-	-	O	-	-
More understanding about what is happening in the park	-	-	O	-	-	-
More (dedicated) staff working everywhere	-	-	-	-	-	O
Horticultural plantings with many species	-	-	-	-	-	O

6.4 Conclusion

This chapter presents the data measuring the perceptions of the respondents on park use patterns, current park assessment and potential landscape management practices. With reference to the household questionnaire, some of the characteristics of the sample are differently manifested based on indicators of deprivation. Such findings in this chapter concur with previous research, for instance, around the perceptions of quality of park management. Some indicators are significantly correlated, indicating that respondents living in more deprived areas are more likely to have negative perceptions of general maintenance including cleanliness, safety, graffiti and vegetation. However, findings here differ from results in previous research. For instance, in terms of the frequency of park use, users living in middle deprived areas are more likely to visit parks than those living in less and more deprived areas which differ from the previous research. However, there is a need to explore in more detail respondents' perceptions around potential park management practices in relation to acceptability and feasibility according to socio-economic characteristics. This will be discussed in Chapter Seven in depth.

The interviews findings indicate the perspectives in relation to management held by the community groups and the professionals. The perceptions of potential park management practices differ between interviewees. More analysis of the data must be undertaken to identify the different perceptions of stakeholders and for the preferences for potential park management

practices to be fully understood. To do this, the following chapters provide details of the analyses conducted across the sample. The findings presented relate both to the whole sample of the population who responded to the household questionnaire and the representative professionals and community groups who responded in the interviews.

Chapter Seven

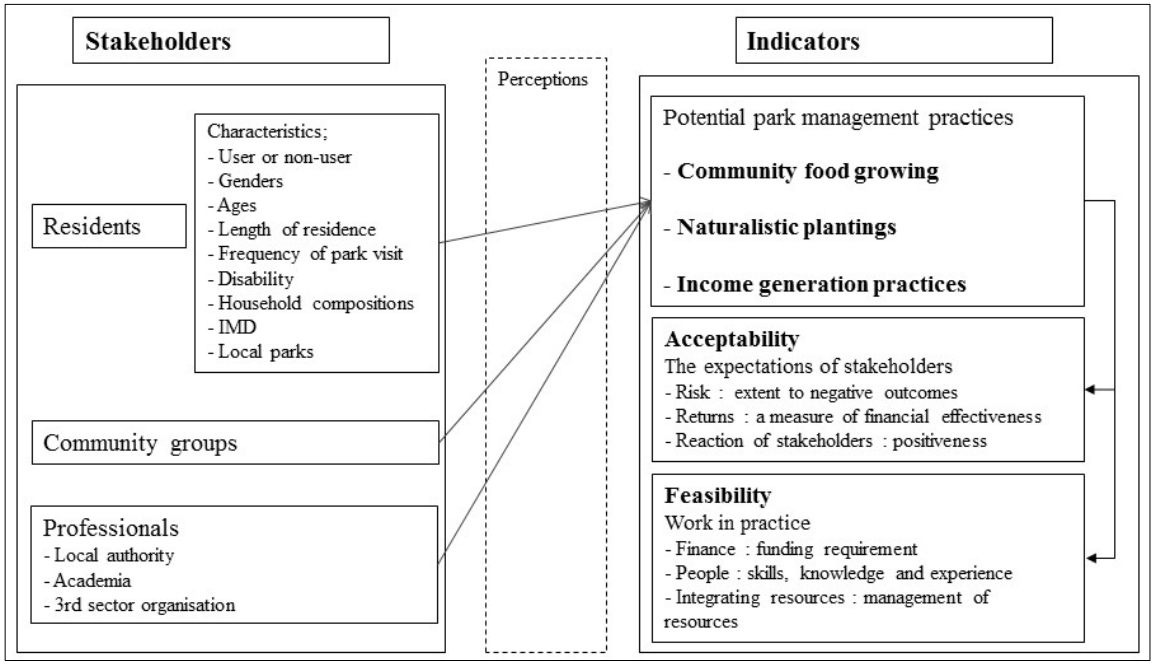
Assessing the acceptability and feasibility of potential park management practices

7.1 Introduction

The research objective to be achieved in this analysis stage of the research are:

• To investigate the acceptability and feasibility of three potential park management practices (community food growing, urban park plantings and income generation models) based on different stakeholders' (residents, community groups and professionals) perceptions.

Figure 7.1 Relationships examined in Chapter 7



Each section of this chapter discusses where evidence is found of a significant association between variables. Matrices showing the full analysis results are listed in Appendix E and are referred to where findings are not presented in this chapter. With regard to assessing acceptability and feasibility, findings based on questionnaires and interviews are analysed using primarily the concepts of acceptability and feasibility published by Johnson *et al.*, 2014 and other relevant concepts reviewed in Chapter 2.

7.2 Acceptability and feasibility of potential park management practices

7.2.1 Acceptability and feasibility of community food growing

Along with understanding the benefits of food growing-based practices (Barron, 2017) and cascading originated food growing campaign 'Dig for Victory' (Ginn, 2012), Chapter 2 has showed that there is some potential for community food growing to be undertaken in various spaces, e.g. in parks, rather than allotments which have long waiting lists. It is also important to consider the opportunities and interests of residents and volunteering groups (Kinnaird, 2012) and sharing responsibility for management practices (Certoma and Tornaghi, 2015), which are related to socio-economic characteristics and stakeholders' perceptions. This section shows the perceptions of residents, community groups and professionals of community food growing practice in parks.

7.2.1.1 Acceptability of community food growing

A number of tests to assess the acceptability of community food growing (CFG) were conducted to examine whether residents' preference for CFG was influenced by their socio-economic characteristics. As discussed in Chapter Two, socio-economic characteristics are claimed to be related to park management practices, influencing planning area-based initiatives (Carpenter, 2006; Dekker and Van Kempen, 2004), a higher frequency of crime (Wilson *et al.*, 2004; Leslie *et al.*, 2010) and unsecured safety (Jones *et al.*, 2009; Leslie *et al.*, 2010; Cohen *et al.*, 2013 and opportunity for park use (Wilson *et al.*, 2004; Moore *et al.*, 2008; Dahmann *et al.*, 2010). Also, demographic differences are noted as significant impacts on park use (See section 2.2.3). In this section testing acceptability of CFG in relation to socio-economic and demographic characteristics, analyses were based on the questionnaire responses to 'Could you see this (Community food growing) approach in your park?' and 'Could this practice (Community food growing) contribute to better park management?'.

Table 7.1 Acceptability of community food growing

	Community or Affiliation name	**More Acceptability of Community Food Growing**
Residents	Overall	↔ (41.7% of preferences & 44.4% of contribution to better PM
	Users & non-users	Users > non-users [S]
	Gender	¿
	Age	25-44 years > over 45 years [S]
	Length of residence	¿
	Frequency of park visit	¿
	Disability	¿
	Household compositions	¿
	IMD	¿
	Six parks	¿
Community groups	Parson Cross Development Community	↓
	Friends of Manor Fields	↑
	Friends of High Hazels	↔
	Friends of Richmond	↔
	Meersbrook Park Users Trust	↑
	Friends of Bole hills	↔
Professionals	Social Enterprise	↔
	Local authority / Deputy Head	¿
	Local authority / Community Partnership Manager	↓
	University academic	↓
	Landscape Research Associate	↓
	Sheffield City Council / 7 Sheffield Park Managers	↓

↓ - Negative acceptability / ↔ - Neutral acceptability / ↑ - Positive acceptability ¿ - No information, inconclusive or significant difference / [S] – Small, [M] –Medium and [L]- Large effect size

Based on residents' perceptions, this research verifies the popularity of food growing practices through allotments and gardening in which almost half of respondents would see CFG in parks. However, the empirical data did not glean any associations between socio-economic characteristics of perceptions of CFG. No significant difference was found according to residents' gender, length of residence, frequency of park visits, disability, household type or IMD. However, associations were found according to users & non-users and age groups.

According to Independent samples t-test analyses, users were more likely to agree that community food growing practice could contribute to better management than non-users

(t(506)=-3.41, P=.001, r^2=.20). No significant difference was found in the question 'Would you like to see community food growing?'. However, based on descriptive analysis, users (41.9%) tend to prefer this practice slightly more than do non-users (30.1%). Perceptions of how the extent to which CFG could contribute to better park management differ significantly between users and non-users, indicating that users were more likely to agree with the positive contribution of CFG to park management.

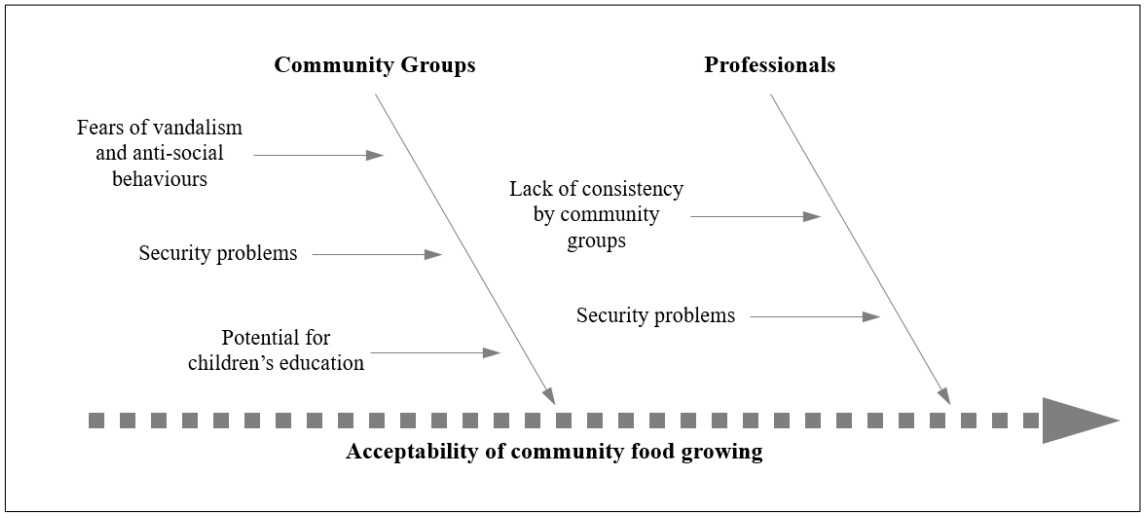
Significant associations were found between CFG and age groups. The perceived contribution of CFG to better park management differed significantly according to age (F(5, 447)=2.955, P=.012, h^2=.032). A post hoc test (P=0.025) shows that older generations (over 45 years) were less likely to accept the practice as a contribution to better park management than residents aged 25-44 years (Appendix E.1). These analyses indicate that the perceptions of particular users and ages group (25-44 years) estimate high potential of CFG in parks.

Analyses of the perceptions of **community groups** regarding the acceptability of CFG show that most groups were less likely to accept this practice (Figure 6.1), in particular Parson Cross. However, perceptions of respondents in two community groups - Meersbrook and Manor Fields parks - were different from those of the other community groups because they were more likely to accept this practice. Analyses of interview results support existing evidence with these perceptions. Vandalism and anti-social behaviour have long been discussed as issues in park management contexts (CABE Space, 2004; European Commission, 2010). These manifestations negatively affect the acceptability of CFG based on the perceptions of community groups.

For the majority of community groups, CFG was not easy to accept because of the potential security problems it raises in the parks. One community group stated that *"Food growing is [a] problem, a lot of foods are stolen. Local people pick up foods … We have got apple trees. Shocking condition (now)" - CoFoHH*. Another group stated, *"Sheffield is now very behind Community Food Growing projects such as incredible edible. Very behind. We have same problems. Tomatoes, some people [take and eat them]." - CoFoRM*. Similarly, one of the respondents mentioned uncertainty against vandalism: *"If they are interested in doing something like that absolutely, yeah. Again, it's how you protect that area while things are being grown because [it may be] vandalised. "- CoPCDC.* However, this research positively reflects the contribution of CFG to social cohesion (McMillan and Chavis, 1986; Golden, 2013) and children education (Welsh Government, 2012; DCLG, 2012a) where the perceptions of CFG in

Manor Fields and Meersbrook parks are more acceptable in an understanding of users' perceptions and different thinking e.g.) school students' involvement, stating that *"We can put some more in there. There was an idea of an edible hedge as well, which I've got plenty of plants to put in….. People are gradually discovering that…… People are picking up on what's available there. Apparently you've got growing food in the park."* - *CoFoMF* and *"We [community group] asked them [school children] to use [the] walled garden for food growing. They go 3 times a week now … This is very acceptable. Education also access to green spaces for children for local community [sic.] … This is very popular utilise potteries … So, I think this [will] increase pride in [the] area … City children necessarily learn skills [sic.] "- CoMBUT.* The acceptability of CFG differs according to the community groups, with some focusing on negative problems e.g.) mostly security problems, while others choose to focus on CFG as an opportunity as part of children's education.

Figure 7.2 Acceptability of community food growing in community groups' and professionals' perceptions



Professionals' comments on the acceptability of community food growing seemed to reflect the community groups' perceptions (Figure 7.2). Two consistent issues emerged in the analysis: security problems and uncertain interest of community groups in terms of consistent commitment.

There have been security problems such as stolen food and food damaged by vandalism. One local authority respondent stated that *"If we put food into some of our park's food growing areas, they would be damaged or they would be vandalized or people would steal the food"* -

ProLA-2. Similarly, another professional agreed that in most cases: *"The community food growing. It's an interesting one … It was tried on the Ponderosa … Those kind of apples get picked a bit"- ProAC-2.*

The other emerging theme related to how consistent commitment is in managing the practice. Professionals indicated uncertainty about how consistent community groups can be: *"Again it needs maintenance. Everyone thinks you can just put in a fruit tree or whatever else in that space, ….. a lot of these groups tend to think that they start off with a couple of people and start off with the intentions, but they don't follow it through. That is the danger" - ProLA-Ms*. One local authority park manager was more specific in stating that community groups tend to move to the next interesting thing. This consistency was also underlined by one of the academics: *"You need to just make sure that it's being done consistently, that's really important" - ProAC-2.* This issue regarding the sustainability of community activities has been discussed in such previous research (Dempsey *et al.*, 2015; Barron, 2017) and the professionals' interviews supports this existing empirical evidence, showing differences in perceptions between two different stakeholder groups.

7.3.1.2 Feasibility of community food growing

A number of tests to assess the feasibility of community food growing (CFG) were conducted to examine whether residents' preference for CFG was affected by their socio-economic characteristics. Furthermore, the findings from communities and professionals' interviews are also discussed here to explore the feasibility of community food growing in the six parks.

Table 7. 2 Feasibility of community food growing

	Community or Affiliation name	Feasibility of Community Food Growing
Residents	Overall	↓ (13.8% of involvement and 19.5% of attending training)
	Users & non-users	Users > non-users [L]
	Gender	Women > men [M]
	Age	under 65 years > over 65 years [M]
	Length of residence	Long (over 30 years) > Short (less than 3 years and 6-10 years) [M]
	Frequency of park visit	¿

	Community or Affiliation name	**Feasibility of Community Food Growing**
	Disability	¿
	Household compositions	Household with children > No children households [S]
	IMD	¿
	Six parks	Manor Fields > Richmond [S]
Community groups	Parson Cross Development Community	↓
	Friends of Manor Fields	↔
	Friends of High Hazels	↓
	Friends of Richmond	↓
	Meersbrook Park Users Trust	↔
	Friends of Bole hills	↓
Professionals	Social Enterprise	↔
	Local Authority / Deputy Head	¿
	Local Authority / Community Partnership Manager	↓
	University Academic	↓
	University Research Associate	↓
	Local Authority / 7 Park Managers	↓

↓ - Negative acceptability / ↔ - Neutral acceptability / ↑ - Positive acceptability ¿ - No information, inconclusive or significant difference / [S] – Small, [M] –Medium and [L]- Large effect size

Food growing-based practices in particular Dig for Victory have emphasised citizenship and their participation (Alexander, 2007). Such food growing projects and long-standing popularity for allotments are also related with people's participation (Crouch, 1989; Hawkins *et al.*, 2011; Speak *et al.*, 2015). Therefore, determining the perceptions of CFG among the sample and their socio-economic, demographic characteristics can help understand the extent of feasibility of CFG.

This research shows the perceptions of residents to get involved in CFG practice and their socio-economic characteristics. Overall, 13.8% of residents would get involved in CFG and the findings according to respondents' characteristics differ.

The results show that there was a significant difference between **non-users and users** in perceptions of community food growing practice when answering the questions 'Would you get involved in this practice?' ($t(506)=-6.55$, $P=.001$, $r^2=.32$), indicating that users were more likely to want to be involved in CFG. In addition, users were more likely to participate in food growing training than non-users ($t(506)=-4.29$, $P=.001$, $r^2=.23$).

Analysis using Independent samples t-test indicates that there were significant differences between **gender** in involvement in community food growing ($t(506)=-2.40$, $P=.017$, $r^2=.11$). Women were more likely to want to get involved in these practices than men.

Significant associations were found between CFG practice and **age** groups ($F(5, 461)=11.493$, $P=.000$, $h^2=.11$). A propensity to become involved in community food growing and training was significantly associated with responses from different age groups. *Post hoc* testing ($P<0.001$) shows that older generations (over 65 years) were less likely to get involved in the practice and training than the younger generations (Appendix E.2).

There was a significant difference between perceptions of respondents to the question 'Would you get involved in community food growing?' according to length of residence: medium size effect ($F(6, 460)=5.684$, $P=.000$, $h^2=.07$). One-way ANOVA shows that differences between long-term resident groups (over 30 years) and other short-term resident groups, particularly those living in the neighbourhood for less than 3 years and also between 6-10 years, in relation to attending CFG training. There was a significant propensity for shorter-term residents to report wanting to become involved in attending community food growing training than for long-term residents ($F(5, 465)=6.823$, $P=.000$, $h^2=.08$).

One-way ANOVA shows that the potential involvement in CFG practice was influenced by **household composition** ($F(2, 458)=4.656$, $P=.010$, $h^2=.19$). However, the size of the effect is small. Householders living with children were more likely to want to be involved in these practices than householders without children.

One-way ANOVA shows that there was a significant difference between residents of the **six parks** regarding involvement in community food growing practice: a small size effect ($F(5, 461)=3.861$, $P=.002$, $h^2=.040$). A significant difference was found between Richmond and Manor Fields, *post hoc* test: $P=0.005$. Respondents from Manor Fields were more likely to be involved in CFG practice than those from Richmond. This is also related to the associations between age and the extent of community involvement. Older people were less likely to want to get involved in community food growing practice ($r=-.316$, $P<0.001$): 33.3% of respondents in Manor Fields were over 55 years old, while 59.5% of respondents in Richmond were in this age group. In addition, this research acknowledges that the extent of existing community activity affects perceptions: 9.1% of Manor Fields respondents compared to only 2.4% at Richmond respondents were currently involved in park management.

These results show that people who are more likely to want to get involved in CFG are users, women, aged under 65 years old and from households with children. This likelihood was not affected by socio-economic characteristics. These findings support literature which examines influences on park use (Heynen et la., 2011): in particular, such specific factors e.g.) age, gender, length of residence (McComack *et al.,* 2010; Reis *et al.,* 2012; Lin *et al.,* 2014). While the findings in this research largely support the existing literature, there are exceptions to this. For instance, such literature emphasised the association between frequency of use and socio-economic deprivation (Wilson *et al.,* 2004; Moore *et al.,* 2008; Dehmann *et al.,* 2006). This research reveals no significant association between the variables in this sample, suggesting that it is equally feasible for CFG activities to be considered in parks in more deprived areas as in less deprived areas.. It is interesting to consider this findings in relation to similar food growing practice, where demand for allotments in Sheffield shows that there are longer waiting lists in less deprived areas than in more deprived areas (Sheffield City Council, 2017). These findings tentatively suggest that parks might provide a setting for food growing in areas of the city that is more accessible to them than allotments. However, given that this study was focused on six parks only, the findings in relation to socio-economic characteristics are inconclusive, given it was not possible to explore residents' perceptions of CFG more fully in a wider number of deprived areas of the city.

Analyses of the perceptions of **community groups** show that overall, community food growing was not perceived to be feasible in district parks. There are three crucial factors that negatively affect the feasibility of this practice. First is a lack of people to monitor community food growing sites. The issues of security and safety are often cited in relation to park management (Jones *et al.,* 2009; Francis *et al.,* 2012; Cohen *et al.,* 2013). In addition, the relationship between CFG, vandalism and anti-social behaviour issues in parks has already surfaced in the discussion of acceptability of CFG practice. Importantly this links to feasibility, in which there is an issue as to who can manage this practice and deal with these negative aspects. One community group respondent stated, *"It's how you protect that area while things are being grown because [of] vandalis[m], yes. Again, it's about how you protect that area" - CoPCCD.* One of the community groups discussed the difficulty of management at night: *"At night time when people are out and about, dog mess and stuff like that in parks, it's just, it's how you protect them". - CoPCCD.* Another respondent suggested that, as secured areas, allotments

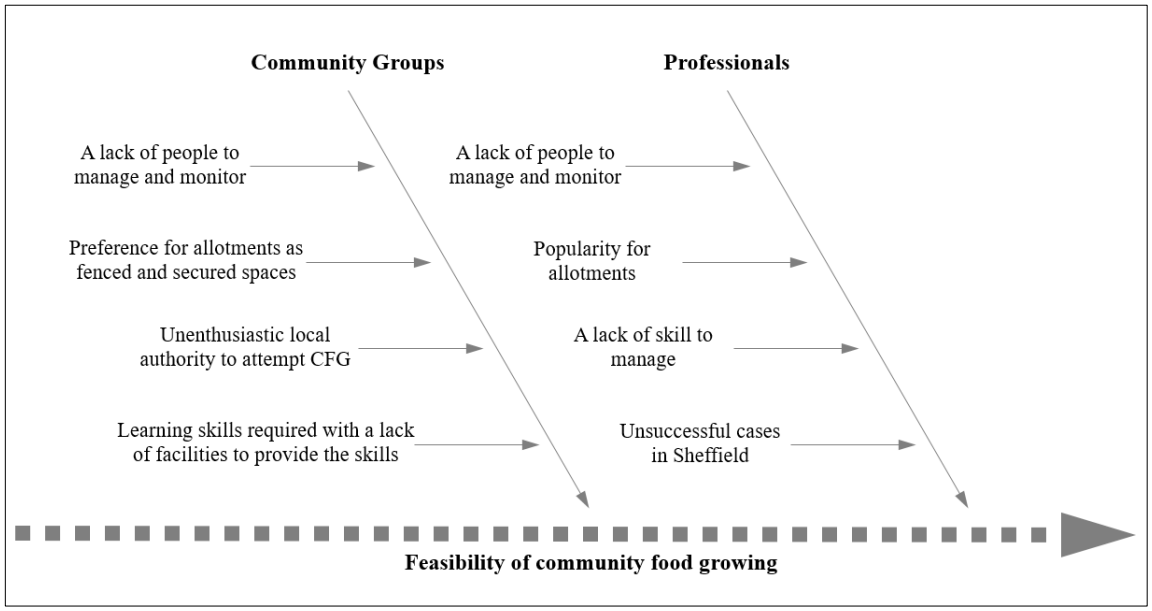
provide something that parks do not: *"They [Allotments]'ve got more security than I have on my site. It's just amazing…..That obviously makes them feel safe." - CoFoMF* and *"Whereas the allotments have got their own space, they're fenced off; in a park it would be difficult to do that". -CoPCCD.* This discussion around features of allotments emerged in the interviews and makes up the second factor affecting the feasibility of this practice. However, some interviewees explored different ideas for this practice to be more feasible in the park, including collaboration with allotments: *"Community food growing was one of the things we were pushing through here. Either with some linking up with the allotment association, or doing something on our own back … but there's been a cultural shift in the allotment"- CoFoMF.* Similarly, one of the community groups also suggested working in partnership with the allotment community: *"You may be looking at organizations such as LEAF (The LEAF Sheffield Allotments), which is an allotment project that's interested in green space outdoors. Maybe people could set up a project working in partnership with LEAF to do some improvements in the park and then maybe look at how they can link in with [the] community to get some activities and events up and running, so people [come] in and access the park" - CoPCDC.* This supports existing literature (Nam and Dempsey, 2018; Mathers *et al.*, 2015; Certoma and Tornaghi, 2015), which discusses governance and partnership in relation to community activities, these findings suggest that CFG can be conceptualised in park management contexts with partnership models that don't necessarily exist at the moment.

Learning behaviour (Clavin, 2011) and children's education (Wels Government, 2012; DCLG, 2012a) through food growing practices were also discussed in relation to district park settings. However, restrictions to feasibly achieving this were identified such as the lack of facilities for such practices in district parks. One community group identified difficulties around supporting learning skills in food growing and not having enough space to facilitate this:*"[Food growing] Learning skill is good. But, [there is] a lack of facilities to do this"-CoFoRM.* In addition, local authority is unenthusiastic about attempts of community food growing like Incredible Edible: *"Sheffield [local authority] is now very behind community food growing project e.g.) Incredible Edible." – CoFoRM.*

Interview analyses reveal that community food growing practice is of interest but, for most parks, this practice is perceived as having insurmountable security problems and a lack of feasible facilities for learning skills. However, the findings in this research concurred with the

existing evidence (e.g. Clavin, 2011) that governance based on community involvement has the potential to address this limitation through sharing facilities and collaborating learning activities. For instance, two sites, Manor Fields and Meersbrook, have collaborated with nearby allotments - Manor allotments and Heeley city farm respectively. The Meersbrook Park Users Trust has invited nearby school students to the Walled Garden in the park to take part in food growing and education sessions. Sharing experiences across those community groups in deprived areas who already collaborate with such food growing groups might be a way of addressing the perceptions of limited feasibility of CFG in their parks. This might involve community groups exploring different governance structures given that allotments are based on basic collaborative structures, to garner interest from the large numbers of people on allotment waiting lists, given allotments' existing popularity. Further, enhancing governance based on different partnerships in this case could lead to particularly active community involvement and potentially help reduce the perceived and actual security problems as highlighted in the literature (Francis *et al.*, 2012; Sense of Community Partner, 2004), which also reflects aims of local green space policy (Thompson, 2012).

Figure 7.3 Community groups' and professionals' perceptions of the feasibility of community food growing



Professionals' comments on the feasibility of community food growing were similar to the community groups' perceptions, with a number of obstacles discussed. Firstly, as the community groups discussed, professionals concurred that there is a lack of people to monitor

and look after the growing vegetation and food crops even though community groups are involved. In similar to community groups, professionals pointed to the existing popularity of allotments as secured areas.

Comments pointing to other obstacles were made by the interviewees. This is linked to funding cuts, particularly staff cuts, and the sustainability of community participants (Dempsey *et al.*, 2014b; Barron, 2017). It was felt that community group involvement alone was not feasible for this practice to be sustained: *"I think one of the things with some of these things is there might be high inputs later [sic.], so that's, even though you have community involvement, you may need … monitoring by council staff coordination" - ProAC-2. "They [foods] were never really looked after. Who is going to look after it?"- ProAC-2*. This statement implies that consistent commitment is important to managing the practice effectively.

A solution to these problems was discussed as allotments as the feasible alternative where people grow in their own secure spaces and also respond to peoples' demands as the role of local authority (De Magalhaes and Carmona, 2009; Mattijssen *et al.*, 2017). One academic stated, *"I think there's more space in some parks for more allotments. A lot of people do want their own little piece of land where they can grow, and it's secured"- ProAC-2*. Considering the popularity of allotments, the local authority has been planning to extend allotments rather than engaging in CFG: "*Allotments are very, very popular still and we are hoping to put more allotments around the city [especially] where there are fewer of them"-ProLA-2*. Other statements support the popularity of allotments, highlighting a lack of demand for CFG: *"Anyone obviously can have an allotment and if anyone comes and wants to grow over here, we probably will expand the space … if this was obviously a very dense housing area with no private gardens, it would be very likely that people coming and saying "could we have space" to incorporate community growing. The situation hasn't happened"- ProSE*. It is clear that the perceptions of professionals in particular local authority interviewees reflect current park management changes in practice and focus on delivering peoples' demands for increasing allotments rather than CFG.

7.3.2 Acceptability and feasibility of urban park plantings

7.3.2.1 Acceptability of urban park plantings

A number of tests were conducted to examine whether residents' preferences for urban park planting have any association with residents' characteristics. No significant differences were found between perceptions of residents in relation to gender, length of residence, disability and household type. These analyses were based on the questionnaire responses to 'Could you see this (urban park planting) approach in your park?' and 'Could this practice (urban park planting) contribute to better park management?'.

The findings based on analyses of communities and professionals' interviews are also discussed in relation to the acceptability of urban park plantings.

Table 7. 3 Acceptability of urban park planting

	Community or Affiliation name	**More Acceptability of urban park planting**			
		Structural complexity	**Formal bedding**	**Wild flowers meadow**	**Less-frequently cut grass**
Residents*	Overall	↔ (55.7% & 48.8%)	↔ (55.9% & 50.5%)	↔ (53% & 42.5)	↓ (33.5% & 20.4%)
	Users & non-users	.	Non-user > Users ^{M}	.	Users > Non-users ^{M}
	Gender	.	.	.	.
	Age	35–44 > over 55 ^{S}	.	Over 65 > 35-44 ^{S}	.
	Frequency of park visits	.	.	Regular > Irregular ^{S}	.
	Disability	.	.	.	.
	Household compositions	.	.	.	.
	IMD	.	Most deprived > Less deprived ^{S}	.	.
	Six parks	Bolehills and Manor Fields > High Hazels and Richmond ^{S}	Bolehills < the other parks ^{M}	Bolehills and Manor Fields > High Hazels and Richmond ^{S}	.
Community groups	Parson Cross Development Community	↔	↓	↔	↔
	Friends of Manor Fields	↑	↑	↑	↑
	Friends of High Hazels	↔	↓	↔	↑
	Friends of Richmond	↔	↓	↑	↑
	Meersbrook Park Users Trust	↑	↑	↑	↑

	Community or Affiliation name	More Acceptability of urban park planting			
		Structural complexity	Formal bedding	Wild flowers meadow	Less-frequently cut grass
	Friends of Bole hills	↓	↓	↑	↑
Professionals	Social Enterprise	↑	↔	↑	↑
	Local Authority / Deputy Head	↔	¿	↔	↑
	Local Authority / Community Partnership Manager	¿	↓	¿	↓
	University Academic	¿	↔	↔	↔
	Research Associate	¿	↔	↑	↑
	Local Authority / 7 Park Managers	¿	↔	↔	↓

↓ - Negative acceptability / ↔ - Neutral acceptability / ↑ - Positive acceptability ¿ - No information, inconclusive or significant difference / ^{S} – Small, ^{M} –Medium and ^{L}- Large effect size

Park management provision is in most parts focused on an understanding of park users and the general public (Ives and Kendal, 2014). In addition, some literature claims (Jim and Chen, 2006; Kurz and Lohr, 2010; Schoeder, 1987) that people's perceptions have associations with impacts of features of the planting types: in particular, as forms (Özgüner *et al.,* 2007), colour (Kaufman and Lohr, 2004; Kendal *et al.,* 2012a) and leaf texture (Williams and Cary, 2002). In addition, these perceptions are argued to be influenced by demographic characteristics such as age and gender (Hofmann *et al.,* 2012). This research concurs with the literature above that differences were found between respondents and that there are significant associations with age and also the socio-economic factor of neighbourhood deprivation (IMD). However, no association was found between perceptions and gender.

An independent-samples *t-test* shows that there was a significant difference between **users** and **non-users** in perceptions of urban park plantings on a number of indicators. Users were more likely than non-users to agree that structural complexity and large meadows with wildflowers could contribute to better park management. Regarding the preference of formal bedding plants, non-users were more likely to prefer formal bedding plants than users. Users were more likely to accept the lower maintenance practice of less-frequently cut grass than non-users. Non-users reported preferences for mown rather than less-frequently cut grass. A chi-square test indicates that there was a significant association between users and non-users in preference for the urban park plantings introduced above, χ^2 (3, 506)=14.64, P=0.002. Users and non-users both chose formal bedding plants as the most preferred urban park planting. Users had the following

preference for urban park plantings - formal bedding (35.1%), large meadows with wildflowers (29.3%) and structural complexity (29.3%) - compared to less-frequently cut grass (6.3%). This reflects the results of previous research which found that users prefer many flowers and short or medium height (Southon *et al.*, 2017), flowers dominate people's perceptions of vegetation (Hall and Dickson, 2011) and people preferred floral meadows (Hoyle *et al.*, 2017b). Non-users preferences were different as the majority of non-users (55.9%) preferred formal bedding plants, followed by large meadows with wild-flowers (23.7%) and structural complexity (17.2%).

Table 7.4 Evidence of an association according to users and non-users in urban park planting

Users & non-users associated with indicators	*df*	*t*	Sig(*P*)	Effect size (r^2)
Could structural complexity contribute to better park management?	443	-2.717	.008	.17
Could you see formal bedding plants in your park?	488	3.717	.000	.19
Could large meadows with wild flowers to better park management?	450	-2.194	.030	.14
Could you see less-frequently cut grass in your park?	484	-3.111	.002	.18

Significant findings, according to **age,** were found in the different perceptions of urban park plantings where respondents (over 65) preferred structurally complex planting and large meadows with wildflowers compared to other age groups, but the size of the difference was small. A one-way ANOVA test shows that there was a significant difference between age groups on the question 'Could structural complexity contribute to better park management?'. A *post hoc* test reveals that residents aged under 44 were more likely to think that structural complexity can contribute to better park management than age groups over 65 (Appendix E.3).

Further analysis shows the preference for urban park plantings according to age groups. A chi-square test, $\chi^2(15, 506)=33.255$, $P=0.004$, reveals that respondents between 25 and 44 preferred planting of structural complexity, but, as respondents get older, formal bedding plants were preferred. It can be suggested that the long history of formal bedding plants in parks has led to an expectation that people (particularly older people) will see them in parks, but recently (given funding cuts) their appearance in parks has declined (Woudstra and Fieldhouse, 2000). Less-frequently cut grass was not popular for all age groups.

Table 7.5 Evidence of an association according to age in urban park planting

Age associated with indicators	*df* *(between, within)*	*F*	Sig(*p*)	Effect size (h^2)
Could you see structural complexity in your park?	5, 477	3.426	.005	.034
Could structural complexity contribute to better park management?	5, 439	3.809	.002	.041
Could you see large meadows with wild flowers in your park?	5, 485	2.342	.041	.023

A one-way ANOVA test shows that there was a significant difference between **frequency of park visits** in the perceptions of urban park plantings, in particular, large meadows with wildflowers. Regular park visitors (at least 1-2days a month) were more likely than less regular visitors to accept this practice in their parks and see it contributing to better park management. This reflects the study by Hoyle et al. (2017) that perennial-wildflowers are often mentioned as an high-impact feature. However, in this sample, this impact is perceived differently, depending on the respondents' frequency of park visit, noting that more experience of wildflowers can give positive perceptions. This is argued to be, in part, influenced by past experience (Roovers *et al.*, 2002), explaining that frequent experience can deliver positive perceptions. The perceptions of less-frequently cut grass reflected an overall negative preference for all groups (Appendix E.4).

Table 7.6 Evidence of an association according to frequency of park visit in urban park planting

Frequency of park visit associated with indicators	*df* *(between, within)*	*F*	Sig(*p*)	Effect size (h^2)
Could you see large meadows with wild flowers in your park?	4, 398	2.717	.030	.026
Could large meadow with wild flowers contribute to better park management?	4, 370	2.635	.034	.027

There were significant associations between the **IMD** in a respondent's neighbourhood and their preference for urban park plantings. Pearson's correlation was carried out to look for relationships between variables - IMD and perceptions of urban park plantings. Respondents in more deprived areas had a stronger tendency to prefer formal bedding plants than did respondents living in less deprived areas (N=490, r=-.130, P=.004). This research in part supports the findings of Hall and Dickson (2011) that flowers are dominant factor affecting people's perceptions, but this sample shows that these perceptions can differ according to type of planting and deprivation.

Table 7.7 shows that there were significant differences depending on which of the **six parks** that respondents lived in their acceptability of urban park plantings. In the case of structural complexity, *post hoc* tests reveal that respondents near Meersbrook and Manor Fields were more likely to accept this planting than those near Richmond and High Hazels. However, interestingly, with regard to formal bedding plants, other *post hoc* tests show that respondents near Bolehills were less likely to see this planting than those near other parks. Respondents near Bolehills and Manor Fields had a greater tendency to prefer large meadows with wild flowers than those near High Hazels and Richmond.

Table 7.7 Evidence of an association according to six parks in urban park planting

Six parks associated with indicators	***df* *(between, within)***	***F***	**Sig(*p*)**	**Effect size (h^2)**
Could you see structural complexity in your park?	5, 477	4.666	.000	.047
Could you see formal bedding plants in your park?	5, 484	6.203	.000	.060
Could formal bedding plants contribute to better park management?	5, 451	2.962	.012	.032
Could you see large meadows with wild flowers in your park?	5, 485	5.782	.000	.056
Could large meadow with wild flowers contribute to better park management?	5, 446	2.536	.028	.028
Could you see less-frequently cut grass in your park?	5, 480	3.885	.002	.039
Could less-frequently cut grass contribute to better park management?	5, 436	3.701	.003	.041

The perceptions of **community groups** are often employed to understand residents' perceptions and experience of green spaces (Wilkerson *et al.*, 2018), hence community survey can help develop to determine people's perceptions. However, this research, on the other hand, revealed gaps between users and community groups. The interview findings showed that community groups considered practical issues rather than reflecting people's perceptions: in which the perceptions of planting types of community groups hold differing view from residents. Their perceptions are dependent on current park management crisis which are funding cut and it negative impacts. This is linked to pursuing low-maintained plantings.

Analysing perceptions of community groups regarding the acceptability of urban park planting shows that the preferred planting type was 'Less-frequently cut grass' closely followed by 'Wild flowers meadows' and the least preferred planting type was 'Formal bedding' (see Figure 6.2). The statements from community groups that they do not prefer formal bedding are explained by

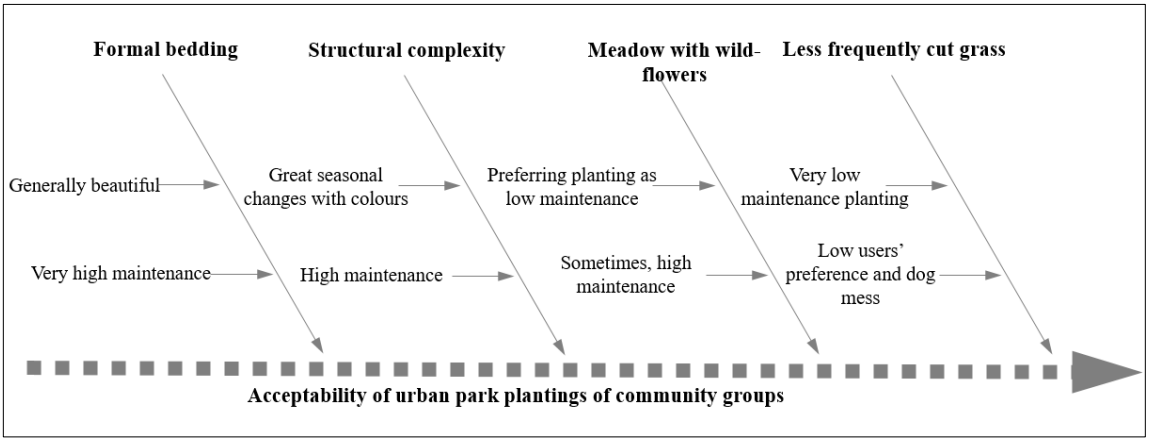
the extent of the maintenance involved. This reflects how formal bedding plants in general require high maintenance input (Brooker and Corder, 1985; Özgüner *et al.*, 2007).

Most community groups reported strong preferences for formal bedding plants in their parks (See Figure 6.2) but, from a management perspective, the level of acceptability was low because of the high maintenance. One of the community groups stated, *"I suppose a kind of more natural and minimum planting maintenance approach" - CoFoMF*. This links to declining formal bedding plantings, stating, *"We don't want bedding plants because this is very high maintenance... We don't touch bedding plants because [they require] very high maintenance" - CoFoRM and "lovely bedding planting … but, nobody's looking after it. It needs looking after. It needs somebody there to manage the park"- CoPCDC.*

Perceptions of one of the community groups indicate that, overall, plants requiring high maintenance are not preferred: *"Structure complexity is not allowed. They are high maintenance. Both groups, we like colour all year round. Seasonal changes, very often both types. We haven't got money to keep plants"-CoFoRM.*

The statements that community groups prefer low maintenance such as meadows and wild flowers supports findings that herbaceous and perennial flower plantings affect positive effect on aesthetic perceptions (Hoyle *et al.*, 2017b) and that less maintenance is required (Dunnett *et al.*, 2002), stating, *"We want wild flowers. Low maintenance…things with low maintenance. We have got wild flowers back of toilet [sic.]"-CoFoRM.* There were some differences in opinions about how low-maintenance the low-maintenance planting was in reality. *"Naturalistic plantings like meadows sometimes need high maintenance. It is costly. However, low maintenance meadows can be twice works a year [sic.]" - CoFoHH.* Less-frequently cut grass as low-maintenance planting is preferred but as such, problems are also found: *"Naturalistic planting is easier to maintain … Overgrown planting depends on areas. Naturalistic overgrown plants are fine like woodlands …… Manicured management planting or flower bedding require more work needed [sic.]" - CoFoBH, but "The problem is …dog mess, things like that. Many users are mind [don't like] long grasses and plants". - CoFoRM.*

Figure 7.4 Community groups' perceptions of urban park plantings in acceptability



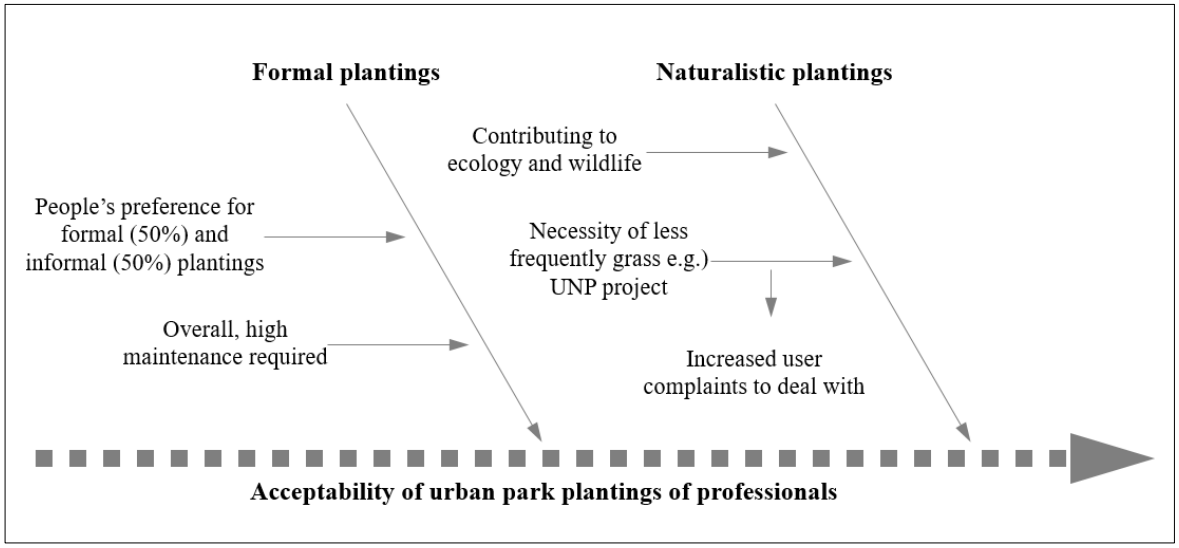
Citizens' and community groups' perceptions can help managers make decisions to prioritize management plan (TEEB, 2010). This research supports evidence of a gap between perceptions between residents and representative groups (Hofmann *et al.*, 2012) while the interviews with professionals' challenges evidence that professionals necessarily reflect users/ residents' perceptions (Forbes *et al.*, 1997; Hofmann *et al.*, 2012).

The perceptions of interviewed **professionals** also considered financial restrictions as mentioned in the literature that such differences which can influence land management decisions (Kendal, Williams, & Williams, 2012a) Analyses of the perceptions of professionals regarding the acceptability of urban park plantings revealed that obstacles to managing better parks are dominated by two factors: funding and users' perceptions. Professionals attempt strategies to manage parks in different ways. However, it can be seen that those strategies, in general, are based on the available funding.

Sharing information (Arnstein, 1969) and high quality information inputs (Reed *et al.*, 2008) can help understand citizens' demands. However, this research showed that local authority does not necessarily reflect residents' perceptions, certainly not those reported in the questionnaire.

In terms of formal bedding plants, it is reported that there is a dichotomy: *"Attractive bedding plants are bright and well-managed. However, it totally has anecdotal [sic.] result splitting people 50-50" - ProLA-1.* In contrast, one of the academics engaged in relevant research found that preferences of people vary according to their backgrounds: *"I think that people might like more formal planting in certain places, but I've got a lot of evidence to show that a lot of people like informal planting, and it depends a lot on their life experience and their education and their beliefs and values as well" - ProAC-2.*

Figure 7.5 Professionals' perceptions of the acceptability urban park planting



The financial crisis changed approaches to planting management (Dunnett *et al.*, 2002). In an age of austerity, local authority professionals, in particular, focus on attempting cost-effective planting such as the 'Urban Nature Park programme' to address current budget cuts. Fundamentally, UNP underlines wildlife and biodiversity benefits based on minimal mowing of grass: *"We can manage naturalistic sites from [an] urban nature park programme where we are attempting to bring great biodiversity to sites, promoting wildlife within interventions of types of species and high fertility soil" - ProLA-1*. Also, *"Naturalistic planting had started the UNP project which is managing areas of grass. So we are planting trees in grass areas. We are leaving grass areas to grow, so we are not mowing it all the time" - ProLA-Ms.* One of professionals cited the positive benefits of UNP: *"Then obviously the more naturalistic woodlands and having the grass to grow long. That is going to bring higher biodiversity benefits. If it's done well, designed well, it can look fantastic" ProAC-1*. This potentially meets the aims of ecological efficiency and species diversity (Dempsey, 2013) as well as minimising costs through less frequent grass cutting (Sheffield City Council, 2013).

However, there were perceived negative outcomes of UNP. Some professionals mentioned that UNP had not reduced management costs despite staff cuts: *"We've lost about ten staff through the UNP. We realised that it didn't work out particularly as well as it should have done because of the savings. It didn't work as it didn't really happen and we learnt from that. We know realistically, the UNP doesn't necessarily save a lot of staff time" - ProLA-Ms.* One academic

also described UNP as unsuccessful in saving costs: *"I don't think it necessarily reduces management costs as much as perhaps [the] council would like it" - ProAC-1.*

Reflecting the importance of people's perceptions are again emphasised (Forbes *et al.*, 1997; Hofmann *et al.*, 2012). In addition, there is still dependency on local authority that takes responsibility for maintaining public services (De Magalhaes and Carmona, 2009). Complaints have increased from some users about the low level of maintenance (in part through UNP): *"They (people) used to say, "cut it, mow it, mow it down" but leaving it ….. "why leave it?"…. . But they may be left out and then they will start saying "why are we left out?" when we start leaving it. This is the fear factor isn't it? They think because you aren't cutting something, you aren't cutting it because you haven't got the money, the budget to cut it. So they think they are going to get less service" - ProLA-Ms.*

Alternatives to addressing these difficulties were associated with responsibility for maintenance. Many people express their complaints about poorly-maintained areas where litter is found in the areas of long-grass. However, local authority interviewees expressed that the responsibility for park management must be shared with the public: *"We've had in some parks where we've let the grass grow longer. We have had users of the park ringing us up and saying, "There's loads of dog poo in the long grass." They think we'll [go back] and clean it up. For a lot of the public it's always somebody else's responsibility and now we are having to say [that] you have to do this. You have to take responsibility for your park and green space. You have to help us. You can't just leave it to the council anymore. The public have got a journey to go on to understand what their part could be". -ProLA-2.* This reflects claims discussed in the literature, for instance, around the need for public participation (Freeman, 1984; Ives *et al.*, 2017), social learning (Blackstock *et al.*, 2007) and sharing responsibility (De Magalhaes and Carmona, 2009; Dempsey and Burton, 2012).

7.3.2.2 Feasibility of urban park plantings

Interesting findings show that feasibility of urban park plantings differentiate, based on associations between different types of plantings and residents' perceptions according to socio-economic characteristics. Drivers of changes in park management contexts in particular revolve

around funding and budget cuts and their continued negative impacts e.g.) staff cuts have affected community and professionals' perceptions of urban park plantings.

A number of tests to examine the feasibility of urban park plantings were conducted to examine whether residents' perceptions of involvement in urban park planting have any association with residents' characteristics such as users & non-users, gender, age, disability, length of residence, frequency of park visits, household type, IMD and six parks (Table 7.8). These associations reflect participants' perceptions of the feasibility of urban park plantings. According to statistical analyses, except for disability, all indicators have significant associations. These analyses were based on the questionnaire responses to 'Would you get involved in this practice in your park?'. Furthermore, the findings from the community and professionals' interviews will later show their perceptions of the feasibility of urban park planting.

Table 7.8 Feasibility of urban park planting

		Greater Feasibility of urban park planting			
	Community or Affiliation name	**Structural complexity**	**Formal bedding**	**Wild flowers meadow**	**Less-frequently cut grass**
Residents*	Overall	↓ (9.4%)	↓ (9.8%)	↓ (11.0%)	↓ (4.4%)
	Users & non-users	.L	Non-user > Users M	.L	Users > Non-users M
	Gender	.S	.M	.	.
	Age	Less than 65 > over 65M	Less than 65 > over 65 M	Less than 65 > over 65 M	. S
	Length of residence	.S	.S	.S	Less than 3 > over 3S
	Frequency of park visit	.S	.S	Regular > IrregularS	.S
	Disability	.	.	.	.
	Household compositions	.S	.S	.S	.
	IMD	.	Most deprived > Less deprived S	.	.
	Six parks	.	.	Manor Fields > High Hazels and Richmond S	Manor Fields > High Hazels and Richmond S
Community groups	Parson Cross Development Community	↔	↓	↔	↔
	Friends of Manor Fields	↑	↑	↑	↑
	Friends of High Hazels	↔	↓	↔	↑
	Friends of Richmond	↔	↓	↑	↑
	Meersbrook Park Users Trust	↑	↑	↑	↑

	Community or Affiliation name	Greater Feasibility of urban park planting			
		Structural complexity	Formal bedding	Wild flowers meadow	Less-frequently cut grass
	Friends of Bole hills	↓	↓	↑	↑
Professionals	Social Enterprise	↑	↔	↑	↑
	Local Authority / Deputy Head	↔	↔	↑	↑
	Local Authority / Community Partnership Manager	¿	↓	¿	↓
	University Academic	↓	↓	↔	↔
	Research Associate	¿	↓	↑	↑
	Local Authority / 7 Park Managers	↓	↓	↓	↓

↓ - Negative acceptability / ↔ - Neutral acceptability / ↑ - Positive acceptability ¿ - No information, inconclusive or significant difference / ^{S} – Small, ^{M} –Medium and ^{L}- Large effect size

An Independent-samples *t-test* shows that there was a significant difference between **users** and **non-users** in perceptions of urban park plantings (Table 7.9). Significantly, different perceptions were found in almost all indicators. In particular, regarding involvement in urban park plantings, the magnitude of the differences was very large in the involvement of structural complexity, formal bedding, large meadows with wild flowers and less-frequently cut grass. These analyses show that users were more likely to be involved in these practices than non-users.

Table 7.9 Evidence of an association between users and non-users and urban park planting

Users & non-users associated with indicators	*df*	*t*	Sig(*p*)	Effect size (r^2)
Could you get involved in structural complexity?	465	-6.185	.001	.17
Could you get involved formal bedding plants?	467	-5.414	.001	.26
Could you get involved in large meadows with wild flowers?	471	-5.225	.001	.14
Could you get involved in less-frequently cut grass?	474	-3.289	.001	.15

Independent samples t-test indicates significant differences between **gender** in the propensity to be involved in urban park planting (Table 7.10). Analyses found a significant difference in the extent of involvement of structural complexity and formal bedding plants. It is clear that a propensity to become involved in the park management practices was significantly associated with gender: women were more likely to get involved in these practices than men.

Table 7.10 Evidence of an association between gender and urban park planting

Gender associated with indicators	*df*	*t*	Sig(*p*)	Effect size (r^2)
Could you get involved in structural complexity?	465	-2.075	.039	.09
Could you get involved in formal bedding plants?	467	-2.538	.012	.11

Between **age** groups, meaningful differences were found in the different perceptions of urban park plantings where respondents (over 65 years old) preferred plantings with structural complexity and large meadows with wild flowers than did other age groups, but the size of the difference is small (Table 7.11). However, in accordance with involvement regarding four different types of urban park planting practices, the difference between age groups can be described as medium. This indicates that older people were less likely to participate in urban park planting practices. These findings do not reflect the current age range of community groups within the study sites. Most members of community groups consist of people over 70 years old, particularly in High Hazels Park.

Table 7.11 Evidence of an association according to age with urban park planting

Age associated with indicators	*df (between, within)*	*F*	Sig(*p*)	Effect size (h^2)
Could you get involved in structural complexity?	5, 461	6.106	.001	.062
Could you get involved formal bedding plants?	5, 463	7.057	.001	.070
Could you get involved in large meadows with wild flowers?	5, 467	6.760	.001	.067
Could you get involved less-frequently cut grass?	5, 470	4.656	.001	.047

One-way ANOVA analysis shows the variations in the propensity to be involved in urban park plantings in relation to the **length of residence** (Table 7.12). Short-term residents (less than 3 years) were more likely to become involved in urban park planting practices than long-term residents (over 30 years): For propensity to be involved in planting of structural complexity, residents living in the neighbourhood for over 30 years are less likely to participate than those living here from 6-15 years. However, the size of the effect is small.

A Chi-square test indicates that there was a difference between residents based on their length of residence in terms of preference for urban park plantings, χ^2 (15, 506)=33.25, *P=0*.004. The significant difference was found between respondents whose length of residence was over 30 years and residents of fewer than 30 years in preference for urban park plantings. For less-

frequently cut grass, not all residents regardless of their length of residence prefer this practice. 60% of residents for over 30 years tend to prefer formal bedding plants, while residents of fewer than 30 years tend to prefer structural complexity and large meadows with wild flowers to formal bedding plants. Similar findings emerged in the analyses based on age groups. Correlation analyses show there was a strong, positive correlation between age of respondents and length of residence, r=-.672, n=506, P<.001.

It is clear that there was a significant propensity for short-term residents of fewer than 10 years to report wanting to become involved in the potential park management practices. Long-term residents were less likely to have a tendency to be involved in park management practices.

Table 7.12 Evidence of an association according to length of residence with urban park planting

Length of residence associated with indicators	*df (between, within)*	*F*	Sig(*p*)	Effect size (h^2)
Could you get involved in structural complexity?	6, 460	2.902	.009	.036
Could you get involved in formal bedding plants?	6, 462	3.092	.006	.038
Could you get involved in large meadows with wild flowers?	6, 466	2.417	.026	.030
Could you get involved in less-frequently cut grass?	6, 469	2.568	.019	.031

A one-way ANOVA test shows that there was a significant difference between **frequency of park visits** and the perceptions of urban park plantings regarding respondents' willingness to get involved in this practice (Table 7.13). The difference produced two clear groups: those who never visited the park or visited less than 1-2 days a month and those visiting the park at least 1-2 days a month. Respondents who visited the park regularly, but excluding those who visited daily or more, were more likely to report wanting to be involved in practices involving structural complexity and large meadows with flowers than respondents who never visited the park. It is clear that regular visitors (at least once a week) were more likely to want to be involved in maintenance of 'structural complexity' and 'large meadows with wildflowers'.

Table 7.13 Evidence of an association between frequency of park visit and urban park planting

Frequency of park visit associated with indicators	*df (between, within)*	*F*	Sig(*p*)	Effect size (h^2)
Could you get involved in structural complexity?	4, 375	3.265	.012	.033
Could you get involved in less-frequently cut grass?	4, 380	3.938	.004	.039

People's reported desire to be involved in urban park plantings was associated with their **household composition**: structural complexity, formal bedding and large meadows with wild flowers, except less-frequently cut grass where there was statistically no significant difference (Table 7.14). The findings show that householders with children are more likely to get involved in these practices than householders without. However, the sizes of effects were all small.

Table 7.14 Evidence of an association between household composition and urban park planting

Household composition associated with indicators	*df (between, within)*	*F*	Sig(*p*)	Effect size (h^2)
Could you get involved in structural complexity?	2, 459	6.801	.001	.028
Could you get involved in formal bedding plants?	2, 461	5.617	.004	.023
Could you get involved in large meadows with wild flowers?	2, 464	4.842	.008	.020

There were significant associations between **IMD** in respondents' neighbourhoods and their preference for urban park plantings. Pearson's correlation was used to explore relationships between the variables 'IMD' and 'perceptions of urban park plantings'. Respondents in less deprived areas had a stronger tendency to be involved in the practice of formal bedding plants than respondents living in more deprived areas (r=-.116, P=.012).

A one-way ANOVA test shows that there was a significant difference between respondents' willingness to get involved in managing large meadows with wild flowers and less-frequently cut grass according to which of the **six parks** respondents lived near (Table 7.15). In particular, *post hoc* tests reveal that respondents near Manor Fields were more likely to be involved in both large meadows with wild flowers and less-frequently cut grass than those near High Hazels and Richmond.

Table 7.15 Evidence of an association according to six parks with urban park planting

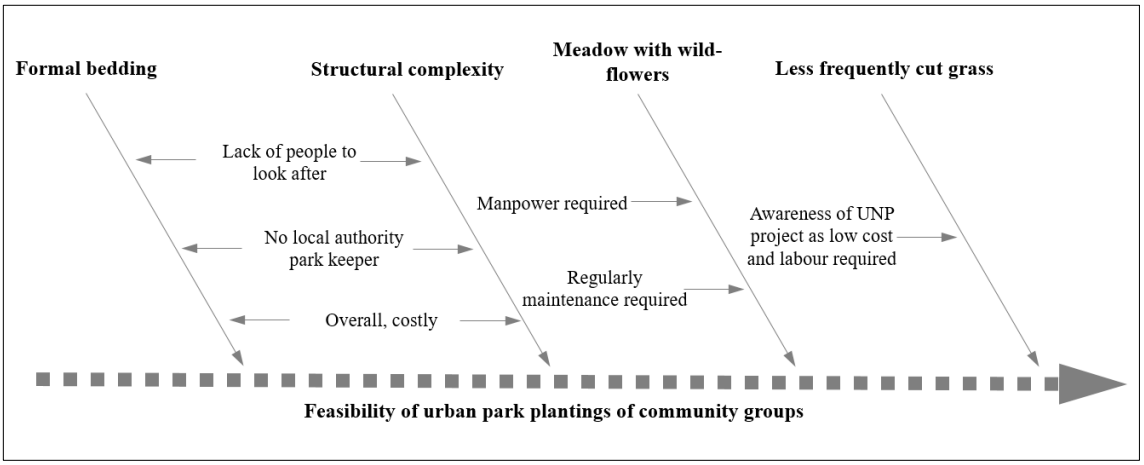
Six parks associated with indicators	*df (between, within)*	*F*	Sig(*p*)	Effect size (h^2)
Could you get involved in large meadows with wild flowers?	5, 467	3.639	.003	.038
Could you get involved in less-frequently cut grass?	5, 470	3.424	.005	.035

Analyses of the perceptions of **community groups**, in terms of the feasibility of urban park plantings, reveal that the perceptions largely relate to funding and manpower. These findings show that financial shortage affects a lack of labour as mentioned in the literature (Jones, 2000;

The Urban Parks Forum, 2001). Further, interesting findings were found that these impacts affect community groups who get involvement in park management. It is clearly viewed that the perceptions of community groups are considered the extent of maintenance of plantings.

Formal bedding and structural complexity were less likely to be preferred to meadows with wildflowers and less-frequently cut grass. As a supporting statement, one community group stated, "*There's definitely been a change in terms of emphasis, in terms of park management, because of the financial situation that local councils have found themselves in, there's been a massive retreat, hasn't there, from the old official way of cutting the grass, putting signs up saying "Keep off the grass", and formal planting too.*" - *CoFoMF.*

Figure 7.6 Community groups' perceptions of the feasibility of urban park plantings



In relation to structural complexity, community groups prefer the types of plantings that have seasonal changes with a variety of colours. However, the structural complexity is not feasible or acceptable, considering management contexts, because they need high maintenance requiring necessary cost and labour: "*Structure complexity is not allowed. They are high maintenance. We like colour all year round. Seasonal changes very often both types. [sic.] We haven't got money to keep plants*" - *CoFoRM.*

Alternatively, community groups seek low maintenance plantings although they prefer a variety of species involving structural complexity: "*We love structural complexity but, we are looking at lower maintenance, like meadows*" - *CoMBUT.* Wildflower meadows were preferred to structural complexity in terms of feasibility of management, cost and labour: "*We want wild flowers. Everything with low maintenance. We have got wild flowers back of toilet ….. I want*

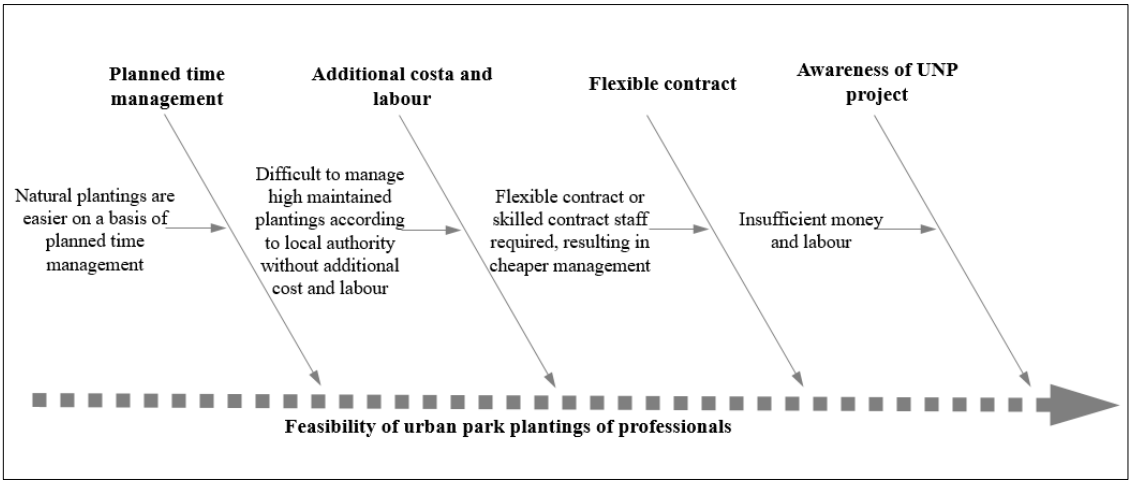
wild flowers front of that. Back of toilet is just concrete, soil on top. We planted seeds last year."- CoFoRM. It is proposed in the literature that reducing maintenance costs can be achieved through naturalistic plantings including meadow with wildflowers instead of bedding flowers (Dunnett and Kingsbury (2004). However, others insist that meadows often require a lot of costs and labours (Lickorish *et al.*, 1997) and this sentiment was shared by interviewees in this research. Some community groups stated that *"Naturalistic planting ….. Meadows sometimes need high maintenance. It is costly" - CoFoHH* and *"But, still regarding meadows, sometimes, more maintenance [than] people think. It depends on manpower [sic.]"- CoFoRM.* This finding indicates that naturalistic plantings are not perceived to guarantee low costs as Kendle and Forbes (1997) claimed.

The emphasis on community involvement was found through the perceptions of community groups. However, there have been important keys that young generation needs to more involved in park management (Scottish Executive, 2006; Groundwork, 2017). This pointed to issues emerged through such community groups. Manor Fields community group was positive about the feasibility of all types of plantings. Many community groups highlighted one of the big obstacles - ageing members: *"Volunteers are Monday and Friday about 20 volunteers. But, they [older volunteers] have to do a lot of gardening. Yes, it is quite high maintenance" - CoMBUT* and *"Most members of friends groups are very old aged. How to care for parks [in the] next 10 years? [We] hope, new people come in"- CoFoHH.*

Professionals' statements regarding the feasibility of urban park plantings, reflect Hoyle et al. (2017b) statements that professionals' perceptions are varied, and the interviews showed similar perceptions to those held by community groups in underlining the extent of maintenance. Overall, they were less likely to prefer plantings requiring high maintenance such as formal bedding and structurally complex plantings. The professionals also concurred with the perceived value of bedding plants that have attractive colours and people's positive perceptions. This already was described in such previous research (Özgüner and Kendle, 2006; Özgüner *et al.*, 2007). In contrast, the interviewees highlighted how managing bedding plants requires a lot of money and intensive labour. As a result, the majority of professional respondents agreed that it is easier to maintain naturalistic plantings than bedding plants, which reflects the perspectives of community groups. *"When money is good and there's lots of money around, parks tend to be*

quite often very formal, don't they? The grass is mown. The flowerbeds are planted. Everything looks beautiful. That's very labour intensive and it costs a lot of money" - ProLA-2.

Figure 7.7 Professionals' perceptions of the feasibility of different urban park planting



The outcome regarding the extent of management between bedding and naturalistic plants is still arguable for the difference of money and labour input but, the majority of professionals agree that bedding plants require more money and labour than naturalistic planting*: "for example, in the central park in Luton, Wardown Park, which was an Edwardian park, it was managed very intensively with bedding plants, formal bedding plants, like, it's a Victorian-style …… the formal planting, like bedding plants, needs [higher] maintenance than the naturalistic planting"-ProAC-2.*

The involvement of local people in planting may help make long grass become more feasible in their parks: people's involvement can help a greater understanding (van Dam *et al.*, 2015). *"Perhaps people get people involved in the planting themselves. There's lots of things [park management practices] you can do, I think, to make it more acceptable" - ProLA-Ms.* It is clear that as Beierle (2002) states, users' participation contributes to cost-effectiveness, in part through involvement in decision-making (which could, potentially, lead to fewer complaints around UNP that the local authority highlighted – discussed earlier). Frequency of mowing has been associated with maintenance cost in green spaces (Hoyle *et al.*, 2017b). In addition, for people who are involved in planting maintenance, the perceptions of plantings from users affect the extent of their involvement: *"In the heads of the community, often that can be seen as neglect, as [if it is] not being looked after. Because there's a perception in the park that's*

always having its grass mowed to about an inch, that if you let it grow longer, that means it's neglected. It doesn't look nice" - ProLA-2. As a solution to the planting maintenance, financial resources are again underlined: *"The problem is that consultation and careful design takes time, and it takes money, and it takes resources. The council doesn't have that. Unless they've got some money as part of the capital to do all that up front, that costs money. They're making a cost saving" - ProLA-Ms.*

Again, the regeneration of Manor Fields Park in Sheffield is an example where having sufficient funding to provide unique management structures can make naturalistic types of planting more feasible, saving money: *"Personally, it is much easier to manage naturalistic landscapes, much easier, but you have to know how to do it. It is all about [doing the] right thing at the right time. If you do that, it is much cheaper and much easier". -ProSE.*

Management and maintenance skills are crucial for effective park management (Lickorish *et al*. 1997; Oudolf and Kingsbury, 2005, p.150). In this research, flexible contract systems with the council can address the problems of deskilling staff that contracting out parks management can bring (Dempsey *et al.*, 2016): *"The council [in] particular finds it very difficult, because they have a contract management system, which is very rigid and very deskilled and that is where they really struggle. We have something [that is the] very opposite, we have [a] very flexible contract system and very skilled contract staff system and it becomes much cheaper" - ProSE.* It is therefore argued that a different approach to management can make a better park at a cheaper cost: *"It is skilled, it is a different knowledge set, it is something we actually have and lots of park managers don't have" - ProSE.* This reflects Oudolf and Kingsbury' claims (2005) that more consideration in relation to effective management through skilled managers is required. In addition, this interpretation can support Hoyle et al.'s (2017b) claims that managers' personal background and knowledge can often affect provision and choice of plantings.

7.3.3 Acceptability and feasibility of income generation practices

7.3.3.1 Acceptability of income generation practices

Local authority efforts to find financial resources have evolved through different ways including increased reliance users (Mell, 2017). Residents are in general have a lack of awareness of the implications of the 2008 financial crisis (Defra, 2011). However, this research shows that even though people may not recognise the financial crisis and needs for income generation practices, they are willing to contribute to fundraising for parks. According to the literature, there is low acceptability of income generation practices based on residents' perceptions: for example, negative acceptability of user fees and charges (Sickle and Eagles, 1998) are described as old ideas and rarely convincing (Layton-Jones, 2016) and will lead to limited park use (Walls, 2013). However, the perceptions of residents in this research provide counter evidence that they are willing to contribute to generate funding through additional charges and users' fees (see Table 6.13-14). In addition, revenue creation such as café, kiosk, shops, events and festivals within parks can be acceptable according to the results of perceptions of residents (See Appendix D.17-18).

A number of tests attempted to assess whether residents' preference for income generation practices has any association with socio-economic characteristics. There were significant associations found, according to users & non-users, gender, age, length of residence, frequency of park visits, household composition, tenure, IMD and six parks. There was no significant difference with regard to disability.

Table 7.16 Acceptability of income generation practices

	Community or Affiliation name	**More acceptability of income generation**			
		Willingness to pay	**Concessions (café and kiosk)**	**Events and commercial activities**	**Extended funding**
Residents	Overall	↓ (Zero over 70%)	↑(Café) and ↔ (shops & Kiosks)	↑(Fun-day) and ↔ (Festivals & Circuses)	↓ (less than 38% in all)
	Users & non-users	.	Users>Non-users (Shops)	.	.
	Gender	.	Women > men (café)	Women > men	.
	Age	.	.	Less than 55 > over 55 (Circuses & festivals)	Less than 55 > over 55 (Subscriptions)

	Length of residence	·	·	Less than 10 > over 30	Less than 10 > over 30 (Subscriptions)
	Frequency of park visits	·	Regular > irregular (Shops)	Regular > irregular (Festivals)	·
	Disability	·	·	·	·
	Household compositions	·	With children > Without (Kiosk)	With children > Without (Festivals & Circuses)	·
	IMD	Less deprived > Most	Most deprived > Less	Most deprived > Less	Most deprived > Less
	Six parks	Bolehills and Meersbrook > Manor Fields and Parson Cross	High Hazels > other parks	Manor Fields and Parson Cross > Bolehills	Manor Fields and Parson Cross > Bolehills
Community groups	Parson Cross Development Community	↓	↔	↔	↔
	Friends of Manor Fields	↓	↔	↑	↑
	Friends of High Hazels	↓	↔	↑	↑
	Friends of Richmond	↓	↓	↑	↑
	Meersbrook Park Users Trust	↔	↔	↑	↑
	Friends of Bole hills	↓	↔	↔	↑
Professionals	Social Enterprise	↓	¿	↑	↑
	Local Authority / Deputy Head	↓	↔	↔	↑
	Local Authority / Community Partnership Manager	↓	¿	↔	↑
	University Academic	↓	¿	¿	¿
	Research Associate	↓	¿	¿	¿
	Local Authority / 7 Park Managers	↓	↔	↔	↑

↓ - Negative acceptability / ↔ - Neutral acceptability / ↑ - Positive acceptability ¿ - No information, inconclusive or significant difference / ^{S} – Small, ^{M} –Medium and ^{L}- Large effect size

[*] Based on chai-squared and correlation analysis

An independent samples *t-test* was conducted to compare the perceptions of **users** and **non-users** ($t(486)=3.045$, $P=.003$, $r^2=.16$). In most cases, there was no significant difference between users and non-users in preferences for income generation practices. However, non-users were more likely to accept seeing shops in parks than were users.

Analyses were conducted to determine if there were significant differences between **genders** in their preferences for income generation practices (Appendix E.5). An independent samples *t-test* showed that differences between males and females in the perceptions of income generation

practices such as kiosks, cafés, fun-days and fayres, festivals and circuses indicating that women have a stronger tendency to accept these practices in parks than do men.

According to **age**, one-way ANOVA with *post hoc* tests (Appendix E.6-8) indicates a statistically significant difference between acceptance of festivals, circuses and green space subscription (Appendix E.9). These analyses indicate that there were significant differences between age groups in their preference for these income generation practices. The over 65s have a tendency to accept these three practices more than other age groups.

There was a significant difference between respondents according to their **length of residence** and income generation practices, for example, fun-day & fayre, festivals, circuses and green space subscription. Similarly, subsequent analysis and *post hoc* tests, found significant associations with length of residence: long-term residents (over 30 years) were less likely to accept festivals, circuses and green space subscriptions than short-term residents (less than 10 years) to generate income (Appendix E.10-13).

Table 7.17 Evidence of an association according to length of residence with income generation practices

Length of residence associated with indicators	*df (between, within)*	*F*	Sig(*p*)	Effect size (h^2)
Fun-day & fayre	6, 493	2.328	.032	.027
Festivals	6, 494	3.645	.001	.042
Circuses	6, 483	4.865	.001	.056
Green space subscription	6, 457	6.696	.001	.080

Subsequent analyses show, in relation to **frequency of park visits**, that there were significant differences in attitudes towards income generation practices, only festivals were accepted by regular visitors (at least once a week) to their local park ($F(4, 403)=4.808$, $P=.001$, $h^2=.047$).

Evidence was found to suggest that household composition has an association with kiosks and circuses as income generation practices (Table 7.18). There was a significant difference between households with children, who would like to see kiosks and festivals in parks, and household without children, who were less likely to welcome them.

Table 7.18 Evidence of an association between household composition and income generation practices

Household compositions associated with indicators	*df (between, within)*	*F*	Sig(*p*)	Effect size (h^2)
Kiosks	2, 474	4.006	.019	.016
Festivals	2, 492	7.617	.001	.030
Circuses	2, 481	8.530	.001	.034

Table 7.19 shows that there were significant differences between residents' perceptions of income generation practices according to the type of **tenure**. An independent samples *t-test* revealed that residents owning their own house were more likely to pay for tennis courts and football pitches than those who rented. For festivals, circuses and green spaces subscription, renting respondents were more likely to prefer these practices than were homeowners.

Table 7.19 Evidence of an association according to tenure with income generation practices

Tenure associated with indicators	*df*	*t*	Sig(*p*)	Effect size (r^2)
Tennis courts	504	2.837	.005	.148
Football pitches	504	3.005	.003	.142
Festivals	499	-2.869	.004	.141
Circuses	488	-4.229	.000	.215
Green space subscription	462	-2.621	.009	.139

For most income generation practices, there were significant associations with **IMD** (Table 7.20). Respondents residing in less deprived areas were more likely to pay for tennis courts and football pitches. However, respondents living in more-deprived areas had a stronger tendency to prefer income generation practices such as Kiosks, Shops, Fun-days & Fayres, Festivals, Circuses, Green space subscription and Sponsorship than respondents living in less-deprived areas.

Table 7.20 Evidence of an association according to IMD with income generation practices

IMD associated with indicators	*r*	Sig(*p*)
Tennis courts	.201	.001
Football pitches	.160	.001
Kiosks	-.130	.004

Shops	-.162	.001
Fun-days & Fayres	-.180	.001
Festivals	-.131	.003
Circuses	-.249	.001
Green space subscription	-.132	.004
Sponsorship	-.201	.001

One-way ANOVA analysis found that according to which of the **six parks** residents lived near, there were significant differences between their perceptions of income generation practices. In terms of voluntary donation, respondents living near two of the parks, Meersbrook and Manor Fields, were more likely to donate additional pay than respondents living near to other parks, in particular Bolehills and Parson Cross.

However, *post hoc* tests show that there were differences between the respondents of two parks (Bolehills and Meersbrook) and another two parks (Manor Fields and Parson Cross) in the perceptions of paying extra for tennis courts and football pitches: The residents living near former parks were more likely than the latter to accept them.

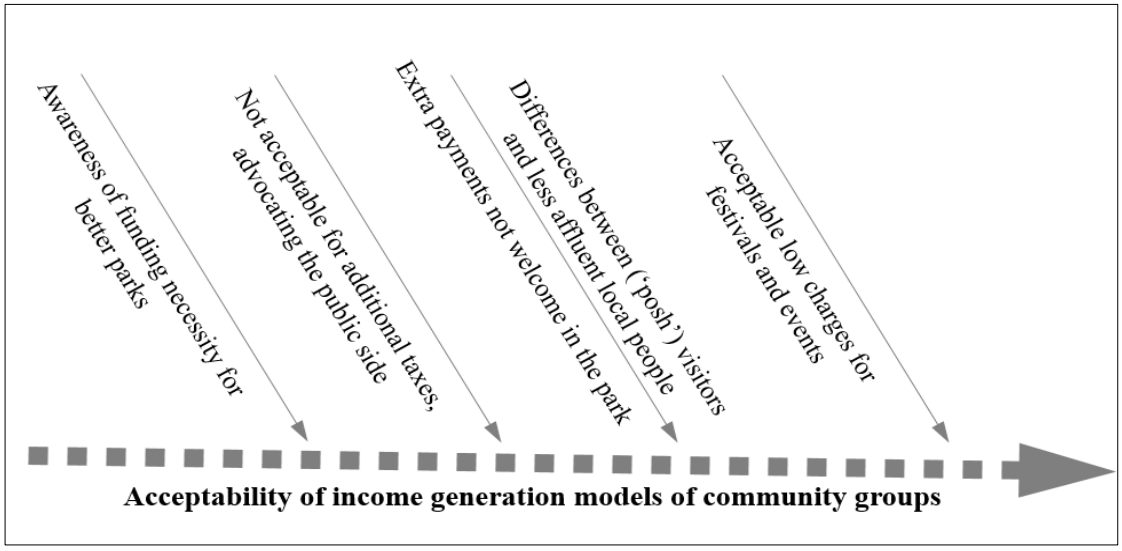
Further analysis found significant differences according to the perceptions of different park users of income generation practices such as kiosks and shops. As shown in the chapter Six, (See section 6.2.4), respondents near High Hazels (61.9% and 64.7%) would like to see kiosks and shops in the park more than the residents around the other parks, in particular Bolehills (37.8% and 26.7%).

Respondents near to Manor Fields and Parson Cross were more likely to tend to see fun-days & fayres, festivals and circuses than respondents living near Bolehills. Similarly, an association was found in preference for green space subscription and sponsorship where respondents near to Manor Fields and Parson Cross were more likely to prefer these practices than respondents from near Bolehills (Appendix E.14).

Analyses of **community groups'** interviews reveal that they were less likely to accept income generation practices, in particular regarding additional taxes. However, the acceptability of the practices differs, depending on whether the practices proposed would be mandatory or not.

Most community groups would not accept entry fees and car park charges because the park is managed by public resources through taxation and should be used by the public for free.

Figure 7.8 Community groups' perceptions of the acceptability of income generation practices



With respect to park management, there was low acceptability of the application of additional taxes. Many local people were negative thinking about additional taxes regardless of their income. Community groups, in general, were more likely to concur with respondents than with the local authority or government: *"Again, coming back to the locality, I think in terms of a flat-rate tax like that would be prohibitive, and that's not something that I would advocate" - CoFoMF*. This shows that imposing additional pay on the residents in public-owned green spaces are difficult, concurring with Walls (2014) and Layton-Jones (2016). In contrast, one of respondents stated that a levy on local residents living around green spaces would be acceptable because green space gives them potential health, economic, environmental and other benefits.

However, there were limitations to generating funds based on their perceptions. In relation to a café in the park, the community groups stated that many local people are not able to afford park cafes. This supports Layton-Jones's statement (2016) that these practices can be successful in financially affordable areas: *"The café prices have gone up, so the local people can't afford a cup of tea because it's two pound ten. It's linked to the posh people now. Now it's not for local people" - CoFoMF*. Additionally, having a café or restaurant in a park may lead to a sense of exclusion among those who cannot afford to eat there.

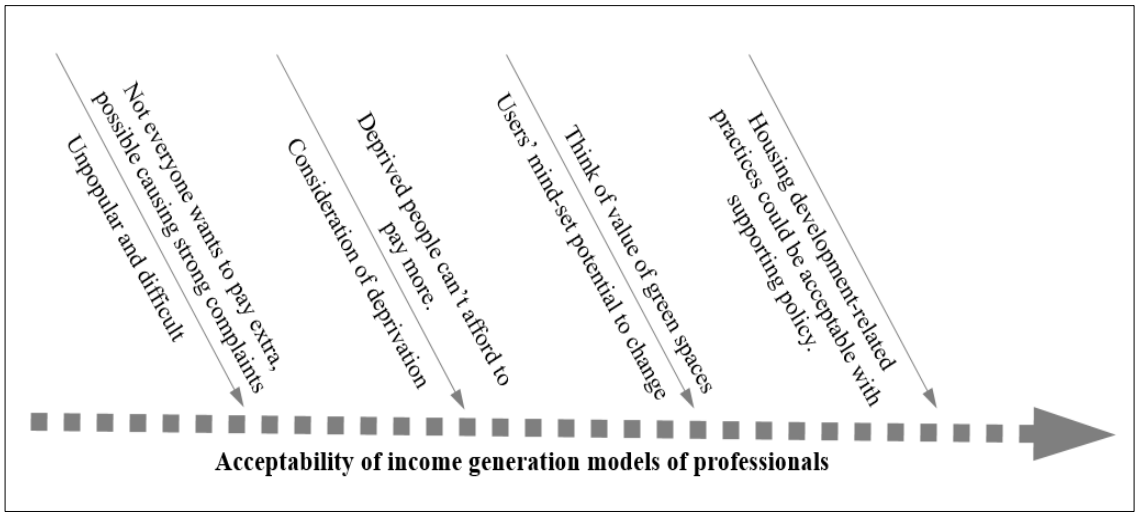
Fee-paying events are being more widely held in public parks (Layton-Jones, 2016), which can involve community groups (CABE, 2010). Reflecting these practices, most community groups were likely to accept events: *"Events are very high [acceptable], but it costs. We are in process to find out money [for events]….. to fund for parks."- CoFoRM,* where many people come to

parks as an affordable pleasure: *"We had really local events. so we don't have any big outside events. We open the garden for the public. We ask maybe £1 for [an] event last week 600 people came to the walled garden. On Sunday, we have music and children activities. We raised £200 for the walled garden. so, that mains pay for the walled garden for the year with that money."- CoMBUT and "We do charge for some events ..... but we're always careful about the income bracket that we're working within. It's minimal. The festival, the play and the bouncy castle, it was 50p a go. They took their cut. It's not so much the cost, it's going to be the quantity of people coming through, and we're attracting more and more people in the park" - CoFoMF.* In this way, along with considering users' capacity to spend, low charges for events were deemed to be acceptable and can be helpful for fundraising.

Analyses of **professionals'** interviews show the acceptability of income generation practices. The analyses indicate the difficulties for professionals to accept most income generation practices because of differences in people's willingness to pay, which can depend on where they live and a perception that people fail to understand that park management is currently under threat. The literature reviewed (e.g. Heritage Lottery Fund, 2014) shows that usage of park facilities such as car parks, sports pitches and grounds will be increasing, while, in contrast, residents' responses here show that fewer than 30% of the respondents would be willing to pay an entry fee and car park charge (Table 6.13-14). Reflecting the local context, the acceptability of paying for entry and car park charges was not accepted by professionals because the park was seen as a public area belonging to the public in Sheffield. Even though the local authority has to consider how to maximise income for green spaces, they are acutely aware of parks being public open spaces: *"In Sheffield obviously, but one big thing about green space is that it belongs to everybody…..because they are open to everybody" - ProLA-2 and "If you could charge for entry that funded them. If we could charge for entry, we can collect £1, every visitor walks through the gate and [They] pay for management gardens. But it is public open space. So, it is difficult. I think that is [the] limitation."- ProLA-1*. These statements concur with Walls's (2013) claim that charging additional pay can be lead to limits in park use. In addition, this research found that additional charges are associated with the contexts of deprivation. Sickle and Eagles (1998) argue that this can be possible but only in limited areas. The 3rd-sector organisation interviewee mentioned similar perceptions underlining aspects of deprivation: "*Very difficult here* (Manor Fields Park*), [but] in other parts of the city, it would be absolutely fine. Here, our*

main goal is for people to use the space. So, it will be counterproductive to actually make them charged [sic.]" - ProSE. It is clearly found that users living in less deprived areas seem to find car park charges unacceptable: *"What happens at Millhouses Park which is a wealthy area of Sheffield, is that most people now just park on the road instead, which is quite upsetting" - ProLA-2.* In terms of a café in the park, there are limitations in the perceptions of professionals based on deprivation: *"Cafés and restaurants are good income generators. But, again, the problem over here is that it's such a marginal income, people have got no disposable income. So, we do know that it will be very difficult to make additional bits of money in poor neighbourhoods" - ProSE.*

Figure 7.9 Professionals' perceptions of the acceptability of income generation practices



Subsequent analyses of the professionals' interviews found that extra taxes were also not perceived to be acceptable because people (users) already pay council tax. However, perceptions of additional taxes related to housing differ, depending on deprivation: *"….. lots of expensive housing where people are happy can afford to give extra [and] just become better and better, and [there are] deprived areas like Parson Cross where people can't afford the extra £5 or don't pay council tax" - ProAC-1.* In addition, some people living in rich areas near parks complain, saying *"Why should we pay an extra tax?"- ProAC-1.* This is logically understandable based on how the local authority taxes people: *"The council tax is a different balance, different levels depending on your house where you live. The people [whose] houses are quite expensive anyway because they [live] near a park are probably paying more than people who are living in more deprived areas of the city" - ProAC-1.* However, income

generation practices such as based on private developments including housing development has been proposed in such literature (Crompton, 2001, 2007). These have contributed to helping the evolution of park management over time (Layton-Jones, 2016). These claims are reflected in the interview. Such income generation regarding housing development could be acceptable, with interviewees mentioning that *"If you have a park next to your house then the property price will increase. It will just go into the council and then they will get benefit from that. They will have to reinforce it. And then the money will go directly into that park….. It will be interesting to do."-ProMs*. Further, policy instruments such as the Community Infrastructure Levy (previously Section 106) will help support new income from new development (ODPM, 2005; Drayson, 2014): *"We are also investigating as a new housing is built. Section 106 will become a new form of taxation on developers again historically that money has always been used to put in new facilities."- ProSE*.

7.3.3.2 Feasibility of income generation practices

The feasibility of income generation practices for residents is dependent on the acceptability of the practices outlined in the previous section. Residents significantly associate the acceptability and feasibility of practices such as community food growing and urban park plantings. Correlation analysis indicates that there are small or medium positive associations between acceptability and feasibility in previous different park management practices, community food growing and urban park plantings (Table 7.21).

Table 7.21 Associations between acceptability and feasibility for two park management practices.

Associations between indicators	*N*	*r*	Sig(*p*)
Community food growing	447	.409	.000
Urban park planting (Structural complexity)	451	.197	.000
Urban park planting (Formal bedding)	485	.151	.000
Urban park planting (Large meadow with wild flowers)	462	.251	.000
Urban park planting (Less-frequently cut grass)	461	.334	.000

It is therefore assumed that the feasibility of income generation practices may have a positive relationship with acceptability of income generation practices.

Analyses of interviews with community groups and professionals found evidence that income generation practices were perceived as feasible. There are claims that community participation has been increased in park management (Mattijssen *et al.,* 2017a; Mathers *et al.,* 2015). Interviews with community groups reflect these findings and show expanded involvement of community groups in attracting funding for parks. Community groups interviewed suggest that feasible fundraising should be based on voluntary engagement, particularly involving collaboration with other community groups.

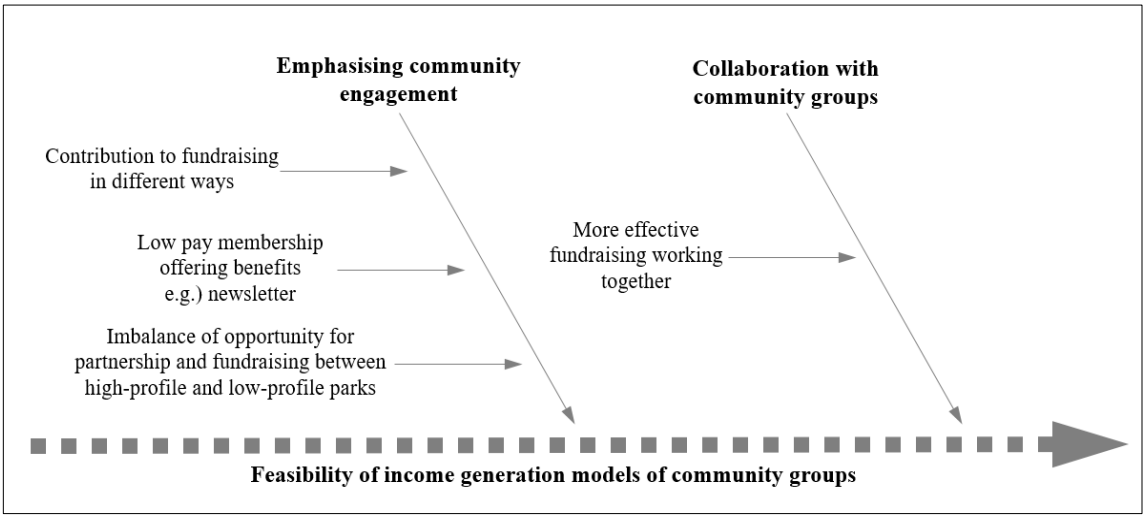
Along with emphasis on community involvement, the contribution of community groups to income generation is demonstrated in the literature (ONS, 2014; CLGC, 2016; HLF, 2016). Some community groups stated, *"Volunteers are extremely important to us, but funding is always going to be our biggest worry …. The ideal world would be extra funding, it would be volunteer time…[sic.] to be honest" - CoPCDC.* Volunteering can contribute to developing park facility management as in the case of the study sites: *"How to win award funding successfully. How we did it. I think because the Friends groups (Friends of Meersbrook) was funding for [a] tennis court"- CoMBUT.* It is noted that the community group actively attempts to invite more community members, stating, *"We struggle to recruit people to do work. We tried to promote more asking for volunteers on Facebook. We have [an] AGM, have invited many people. The AGM may be more help because we are trying to [raise] money for [a] new toilet [and a] new kitchen in the walled garden, which will be a lot of work to raise money" - CoMBUT.*

Partnerships are also increasingly underlined in park management contexts (Dempsey *et al.,* 2012; Mathers *et al.,* 2015; Dempsey *et al.,* 2015). This research supports the existing evidence and found the partnership between community groups. Some community groups have effective strategies to fundraise in collaboration with other community groups. Some groups mentioned that *"We can engage some groups because the other groups want to do it - funding together. I just need workers. Some groups want to share. Community centre is very good. We would be funded. They will be involved in Sheffield health worker. They come down to help pound... It I have events here. I can count on 8 to 10 people coming to help. It is wonderful and get involved [sic.]" - CoFoRM.*

The role of local authority as well as partnerships or collaborations with community groups is examined in existing studies (e.g. Mathers *et al.,* 2011; Azadi *et al.,* 2010) as important interrelationships to enhance effective park management as well as maximise the advantage of

effective public space management (De Magalhaes and Carmona, 2009). One community group concurred with this, mentioning their partnership with the local authority and working with other community groups: *"The thing is combination of Park and Countryside Department maintaining really well, and community group together. This is same with Heeley City Farm, walled garden. We can [be] in business in Heeley City Farm with Friends groups [sic.]" - CoMBUT.*

Figure 7.10 Community groups' perceptions of the feasibility of income generation practices



Community engagement can contribute to fundraising in a different way. One community group noted, *"It is membership. There are some parks I've seen that use membership. They have people sign up, you know, to pay £10 a year, and then they get a newsletter, and get invited to meetings and groups and things" - CoFoMF*. This way has been carried out in cities such as Cardiff where community groups are strongly involved in fundraised (Cardiff city council, 2018).

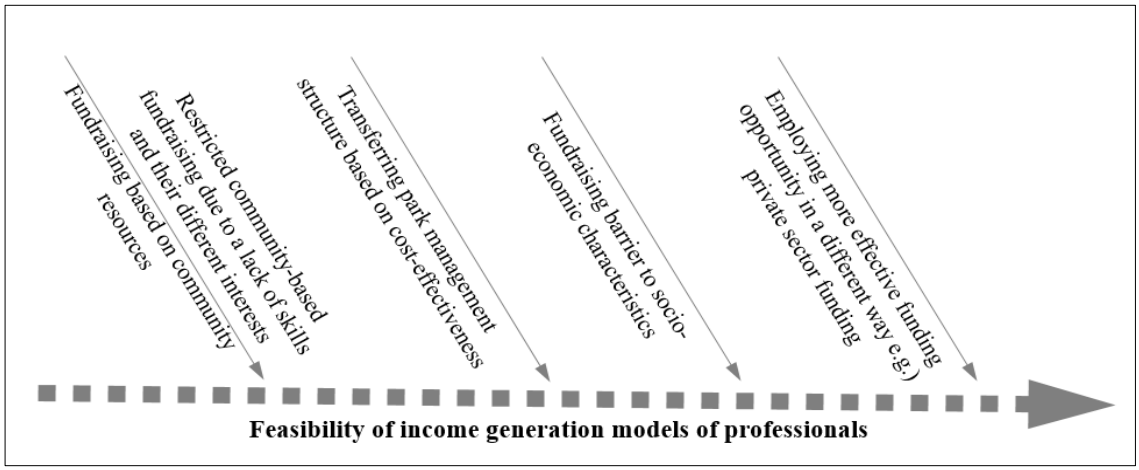
An imbalanced opportunity between low and high profile parks in park management contexts has emerged (Sickle and Eagles, 1998; Layton and Jones, 2016). This research reveals that the disparity of opportunity for volunteering and fundraising resources has manifested itself in Sheffield. This can be linked to negative community activities (Estabrook *et al.,* 2003; Mitchell and Popham, 2008; Wilkerson *et al.,* 2018) and public participation (Ives *et al.,* 2017).

One community group complained the imbalance of opportunity for fundraising and co-working between high-profile parks (city parks) and lower-profile parks (district and local

parks): *"We need people, even students, [to] sign up. Many students work at Millhouses and Botanical Gardens* (both city parks in Sheffield). *They* (Botanical Gardens) *have got city garden and own budget, everything. Sheaf valley has lots of funding because Sheffield University is co-working. But we don't have funding and opportunity[sic.]. That is part of [the] problem" - CoFoRM.*

Interviews with **Professionals** reveal their perceptions of the feasibility of income generation practices. These analyses found two predominant factors: community resources and park management structure.

Figure 7.11 Professionals' perceptions of the feasibility of income generation practices



The results of interviews reflected findings in the literature (e.g. NAO, 2006) that community groups in practice contribute to a wide range of park management including fundraising.

Community engagement contributes to fundraising for park management in Sheffield, indicating that *"There were lots of initiatives about engaging communities. Again funded an initiative about engaging communities to be involved in that park's management. Friends groups evolved and community groups involved" -ProAC-1*.

In addition, interviews also demonstrate findings in existing literature (e.g. DCLG, 2011; Dempsey *et al.*, 2016b) that responsibility for park management is being transferred from local authority to community groups. One professional insisted that the community can produce more funding on behalf of the local authority, stating *"We [local authority] have to say to our friend's groups that we can only support them to bring in external money if they can find the money to support the project afterwards for 5 years."- ProLA-2* and *"There was a bit more money around, the council worked very closely with friends groups to raise funds for parks. That was*

great. The council can't get the money, but the friends group can. They worked together" - ProAC-1. However, it is also discussed that the effectiveness of community groups is restricted to fundraising on account of their skills and different interests.

This reflects findings in the literature (e.g. Carmona and De Mahalhaes, 2006; Luyet *et al.,* 2012) that the contribution of community groups to park management can be limited. One professional stated:*"They can be very effective at raising funding and getting this built, getting things done, but perhaps not as effective because they haven't got the skills or they don't actually have [an] interest in doing wider management..…… Community groups [are] part of the solution to the budget cut problems, but it's only part of the story" - ProAC-1*.

This reflects the claim of Hjortso *et al.,* 2006 that practical tasks of community groups can be done within the boundary of regular maintenance. Another local authority mentioned that *"They're [community groups] getting more and more frustrated at the moment because they can't find the external funding…..They can help us in contribute is to get involved in the practical maintenance side. Litter picking, maybe planting flower beds, tree planting, just general maintenance."- ProLA-2*. Therefore, a focus on well-trained and developed community workers as discussed by Chan and Miller (2010) and Wilson and Leach (2011) can address these issues.

In contrast, it is argued by other professionals that community engagement is still the objective for fundraising effectively on the basis of developing community resources: *"If it's been developed as a community resource for many years, then people are much more likely to contribute to that. I think the income generation model needs to be looked at" - ProAC-2*. To overcome this limitation to generating income by community engagement, some interviewees suggested transferring the park management structure based on cost-effectiveness, stating, *"How effective they are. It's about the structure, the management structure of the Park's Department."- ProAC-2.* As another interviewee says: *"Management could be more cost effective and how we might find different parts of funding to support it. So, the structure of the park, [the] infrastructure of the park and the quality of the management has really kept pace with the money, the resources that we managed to bring in. But it is an ongoing problem. So, that is on the finances" -ProSE.*

As another aspect affecting fundraising, socio-economic contexts were mentioned in relation to self-sustainability management, stating, *"There's a real problem with the income generation*

model because [groups in] some parts [of the city] are able to raise funding. Millhouses probably could be self-sustaining, the café and the boating and events and all that kind of thing. Car parking charges. Whereas other parks like at Parson Cross or even Manor Fields would lose out" - ProAC-1. On the other hand, such fundraising opportunities based on development funds (Crompton, 2007; Layton-Jones, 2016) or involvement of private sectors (Marinetto, 2003) can potentially support park management. One interviewee stated, *"What we would like to see largely is the development funds from that being used to act as revenue source, basically putting into a bank account and to be helped to support." -ProSE*. This could be an effective funding model between the local authority and the private sector where, for example, developers develop a site near a park which positively affects the property price (i.e. it will increase). In this way, developers should pay more money to the council who can generate the benefit (for the community) from a development fundraising model.

7.4 Conclusion

This chapter has presented evidence of the acceptability and feasibility of three current and future park management practices according to different stakeholders: community food growing, different types of urban park planting and income generation practices. The findings indicate that there were significant associations between different residents based on their socio-economic characteristics and these park management practices. Interview analyses (community groups and professionals) identify differences in the acceptability and feasibility of park management practices. The core aspects affecting the perceptions were dependent on the extent of maintenance as a basis for funding and manpower needs. According to subsequent interview analyses, such practices faced various barriers such as a lack of people to carry out management tasks and inconsistent support by the community as well as the difficulties of self-sustaining income generation in different socio-economic areas. The predominating key terms 'funding' and 'community engagement' were underlined as central to enhancing acceptability and feasibility underpinned by the community and professionals' interviews. In order to address such barriers and provide a fuller discussion of the implications of the wide range of findings, recommendations for effective park management are the subject of Chapter 8.

Chapter Eight

Understanding the changes in park management and making recommendations for effective park management in Sheffield

8.1 Introduction

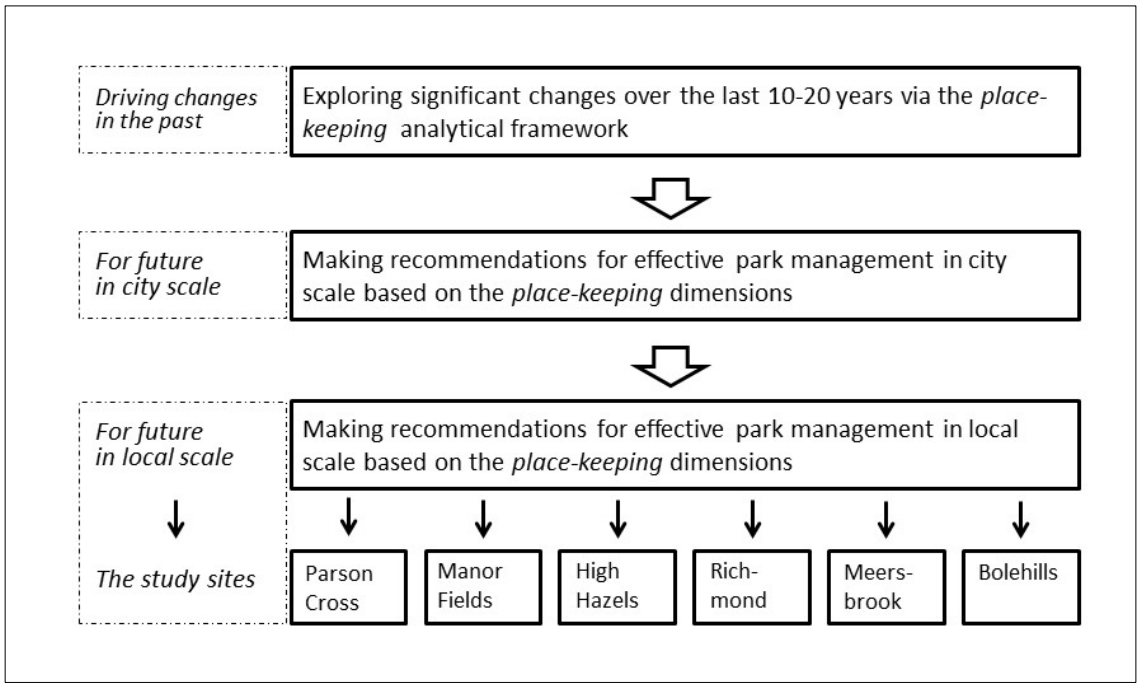
The objectives of the analysis stage of this research project are:

• To understand and assess the significant changes in park management over the last 10-20 years

• To make recommendations for effective park management at city and the study sites

This chapter the final research aim listed above, which was achieved through the analysis of interviews with park management professionals and by updating existing literature and evidence around this topic. A 'framework and theme-based' approach was used to analyse qualitative data, as discussed in the methodology chapter. The analysis was based on the Place-keeping Analytical Framework (PAF), used to understand the changes in park management and determine the impact of the six place-keeping dimensions: (1) governance, (2) policy, (3) evaluation, (4) funding, (5) partnership and (6) maintenance on park management. The final step is to use the findings from this analysis to make and support recommendations for effective park management at city scale. The findings discussed in this chapter will also contribute to support recommendations made for park management at the study sites.

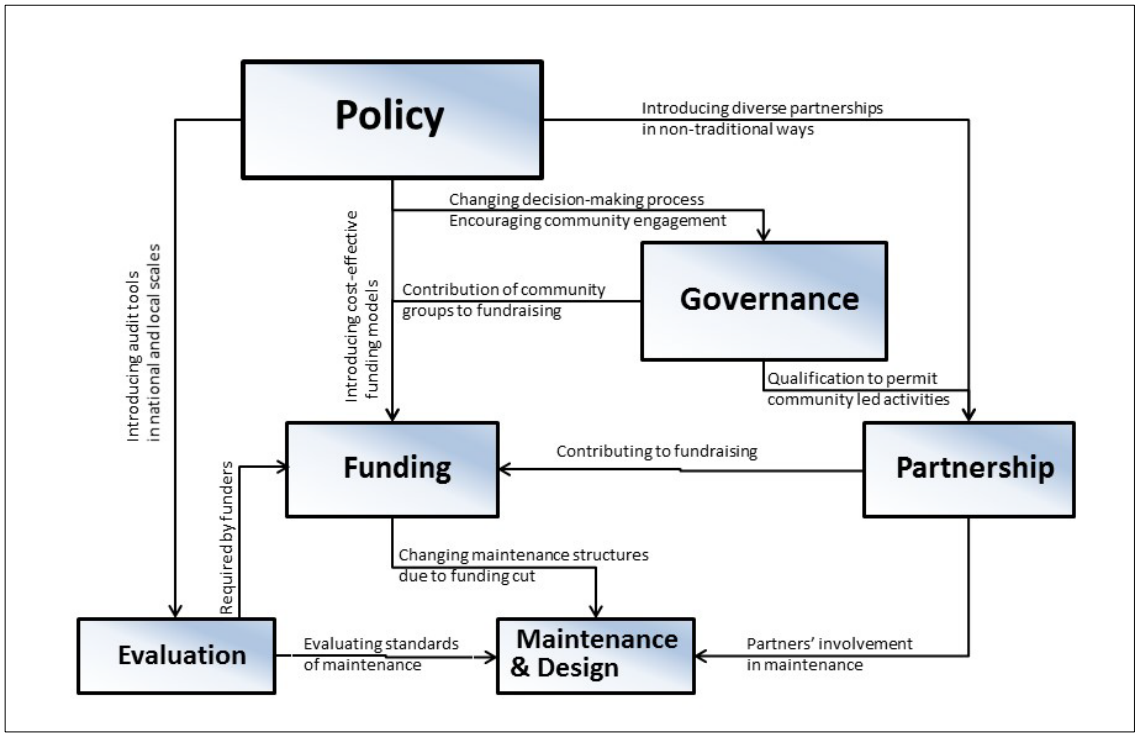
Figure 8.1 The structure of Chapter Eight



8.2 Understanding significant changes in park management based on the Place-keeping Analytical Framework

As outlined in the literature review, current central and local government have introduced a wide range of policies and strategies that have affected the structure of park management. In brief, these schemes have brought about changes to the decision-making process; have led to a decline in funding; introduced partnerships; revalued park standards, and emphasised the importance of low-maintenance in park management. According to the Public Assessment (Urban Park Forum, 2001) and the recent government report on 'Public parks' (CLGC, 2017) following the Public Parks Inquiry, the quality of parks has been declining. Dempsey and Burton (2012) insisted that a lack of understanding of long-term management has contributed to the progressive damage of public spaces. However, there is a gap in knowledge between the theories espoused to understand effective long-term management (e.g. place-keeping) and what happens in practice. The literature review highlighted how, in theory, place-keeping gives the different dimensions of partnership, governance, policy, evaluation, design/maintenance and funding equivalent importance and weight (Dempsey *et al.*, 2014). However, this research challenges this by identifying different degrees of impact for each dimension when considering the context of district park management in Sheffield. To begin to examine this, the main interview question put to Sheffield park management professionals was: 'What has changed in park management over the last 10 to 20 years?'. In short, the analysis of data reveals that there is a hierarchy in the relevance and value of each place-keeping dimension and that policy has a predominant impact over the other dimensions (Figure 8.2). The rest of the discussion also outlines how the interrelationships between place-keeping dimensions permits a full understanding of the complexity of the answer to the question, which in turn allows for a set of recommendations based on a holistic understanding of that complexity.

Figure 8.2 Applying a hierarchy of place-keeping dimensions in six of Sheffield's district parks



The development of central government policy has influenced the change of park management at local scale. After launching the Local Government Act (1988) and PPG 17 (1991) with the New Labour government, Sheffield City Council adopted the Sheffield Parks Regeneration Strategy (SPRS) in 1993, which reflected the aims of central government. SPRS aimed to influence the future management and planning of such green spaces in Sheffield city (SCC, 1993), where aspects of general local policy would affect other, more specific policies at the local scale, producing different policy aimed at this local scale rather than a direct top-down effect from central to local government. This created management plans and recommendations focusing on voluntary sector involvement, investment proposals and monitoring use and appreciation (SCC 1997, 1999 and 2007).

Since then, The Sheffield's Green and Open Space Strategy (2010) had its root in the Sheffield Unitary Development Plan (1998), and the Sheffield Development Framework Core Strategy (2009) have introduced new or have expanded upon aspects of previous strategies. After the Localism Act (2011) that was introduced by the Conservative government, a new agenda was proposed with the intent upon delivering aspects of local policy to Sheffield's neighbourhood parks. As Figure 8.2 shows, this brought about different focuses compared to the past, for

instance, formalised involvement of other community, voluntary, 3rd sector organisations; it was no longer just the local authority who was responsible for parks management.

8.2.1 Policy context and governance

Most of the policy contexts and strategies introduced to reform park management in this research have the fundamental aim of encouraging community engagement. The place-keeping dimension '**governance**' acknowledges the deep relationship between governance and its stakeholders (Dempsey and Burton, 2012): in of particular community engagement (Bovaird, 2004; Delago and Strand, 2010; Mattijssen *et al.*, 2017). In this research, this focus has promoted and supported autonomy in the management of public spaces at the local scale, in which as mentioned by Butler, (2016) communities are encouraged to contribute actively in the decision-making process and to get more involved all round. Such changes have been observed and described in the questionnaire surveys with residents as well as the interviews with community groups and professionals, supporting the existing evidence that park management is in a transitional phase and moving towards a more community-oriented approach (e.g. Alcock, 2012; Macmillan, 2013; see Appendix D.5 showing findings of the questionnaire asking 'Who should be involved in the management of this park?').

As found in this research, many green spaces and parks in Sheffield already have community groups involved in the maintenance or management of these even before SPRS in 1993. With respect to the six study sites, most community groups were established around the late 1990s, (and earlier in the case of High Hazels at 1988), while the Friends of Bolehills was established in 2011, later than the other groups (Table 5.5).

Such guidelines for the management of public green spaces had often underlined the importance of stakeholder engagement e.g. through the Localism Act 2011 (DCLG, 2011), in particular of community groups in park management through The Sustainable Communities Act 2007 update report (DCLG, 2013). Since 1993, however, community groups have become much more involved; one professional was quoted as saying: *"Volunteers were not allowed to work on local authority sites with your agreement. That changed in 1993. So, volunteer groups like 'friend groups' started work on small sections."* - *ProLA-1*. In the early 2000s, community

groups called 'Friends of' were becoming actively engaged in many aspects of park management and maintenance. The same professional mentioned that *"[The] 'friends groups' strategy was delivering in park [management] and … some friends groups were getting involved in direct maintenance. With slight change in Sheffield over the last 10 years, groups are becoming more active."- ProLA-1*.

Such evidence, of the involvement of friends groups in parks management in 2000s, is found in community interviews, stating: *"I found an old newspaper cutting in my archives of an advert calling for volunteers for the park, and that was in 2002."- CoFoMF*.

Many community groups reported that they are now a decisive part in the decision-making process for park development and management and engage with the local authority through regular community meetings. This demonstrates that community groups have been increasingly involved in decision-making (Sheffield City Council, 2009; Dunnett *et al.*, 2002) which is part is a change in the process of decision-making from top-down towards bottom-up (van Dam *et al.*, 2015). A member of local authority stated: *"I think the stakeholders and the friends group, especially, have become more involved with the park maintenance. You know, they do now have an input. We go to friends and meet teams monthly and bimonthly."-ProLA-Ms*. It is expected, in fact, that more autonomy in the decision-making process may be given to community groups or local residents. This transition affects the attitude of the local authority, in that they are making efforts to invite more people in the management: *"They [local authorities] invite a number of stakeholder groups to contribute and it grew out and it genuinely is our 'friends group'. It is autonomous, it has local residents on it and they manage themselves, but it required a bit of push."-ProSE*. However, this research concurs with findings in previous studies (e.g. De Magalhães and Carmona, 2009; Heritage Lottery Fund, 2014) that decision-making processes are still heavily dependent on the local authority. One interviewee stated that *"we have applied for license for events, Parks and Countryside Department provides those parks licenses. We want to be provided with license. It is extremely unfair. Some parks are allowed to do things but we are not allowed. We don't feel support[ed]. Everything is like such [a] battle."- CoFoRM*.

In addition, this research found that community engagement in park management faced some difficulties, as seen from the local authority's perspective: *"It is welcomed, but it is very difficult to get it [community engagement]."-ProSE* and *"Taking paid jobs are still inherent in people's*

mind-set. That is a barrier. The wider community can be vociferous in opposition to change in the park, but they don't actively do anything."-ProLA-1. In other cases, pressure on fundraising led by community groups can cause negative impact on their activities: *"We've got all these wonderful facilities that now we're thinking how are we going to actually keep them all running…… They [Friends of groups] are getting more and more frustrated at the moment because they can't find the external funding."-ProLA-2.* This concurs with existing literature (e.g. Dempsey *et al.,* 2014) which highlights how a focus on *place-making* can be better understood and funded than long-term management, or *place-keeping,* activities.

Nevertheless, it is obvious that to change the current paradigm of park management in a period of austerity, based on policy contexts and governance, local authorities will increasingly need to seek community engagement and support. Sharing or transferring the decision-making powers to the community may thus continue on the basis of localism which is closely linked to available funding as the next section shows.

8.2.2 Policy context and funding

The longstanding changes to park management funding are associated with national policies especially Compulsory Competitive Tendering (CCT) which brough negative effects on park management (Jones, 2000; Barber, 2005, p.30-31; Carmona and De Magalhães, 2006; Layton-Jones, 2016) which will be discussed in the following paragraphs.

The reduction in funding is a highly significant issue and regarded as one of the main reasons behind the decline in the standards of green space management and maintenance (Jones, 2000; Barber, 2005, p.30-31). This has widespread agreement in the literature review and will be discussed from a more practical point of view in this section. Most of the participants interviewed have mentioned the severe impacts of budget and funding cuts (Box 8.1).

Box 8.1 Statements regarding budget cuts in Sheffield

"The local authorities have massive budget cuts. They're struggling to know how to deal with parks."-ProAC-1.
"[The] budget is being reduced where we used to get a designated team in certain areas who would be used to visit that site on a weekly basis."-ProLA-Ms.
"There was budget of about £400, which you may compare to maybe a district park, probably

requiring somewhere £80,000 to £200,000. So there was no budget at all."-ProSE.
"I think around the 1980s, there was a big decline in investment in parks and green spaces…..We've gone from sort of like that on the level to dipping down in a lot of poor quality green spaces."-ProLA-2.

As discussed in the literature, the Conservative government between 1979 and 1997 attempted to diminish the scale of public sector services, especially after introducing the Local Government Act in 1992 (HMSO, 1992). A core feature of this policy was the establishment of Compulsory Competitive Tendering (CCT). As outlined in the literature review, CCT introduced competition in the delivery of public sector services and transformed the structure of park management. It aimed to do this through the employment of contractors to maintain high standards in parks (Dempsey *et al.*, 2016). This agenda suggested a more cost-effective management, utilising external funding, and implementing a park investment programme. CCT constituted a pivotal development in the context of park management, affecting funding and other crucial aspects derived from financial changes. However, the present research has found that CCT indeed negatively influenced park management at local level (Box 8.2).

Box 8.2 The statements on compulsory competitive tendering schemes in Sheffield

*"**Compulsory tendering schemes** influenced park management… the high funding level compared [to the] 1990s has been cut since around 2000. Maintenance costs could be £1500 - 2000 pounds per hectare to down [to] £400-500 per hectare because of significant funding cuts."-ProLA-1.*
*"I suppose budgets started to be reduced. Also something called **compulsory competitive tendering** came in from the government which meant that parks management didn't necessarily have to happen 'in house' anymore. You had to bid. As a way of cost saving, parks management [was] carried out the cheapest way possible. Councils were required to put out their parks management tender. I think they were able to bid if they wanted it themselves, but it went to the cheapest person."- ProAC-1.*
"If the council of Sheffield was to employ a company to do all the [maintenance] in the parks, instead of doing it within the Sheffield parks department, it means that they have to…..communicate things to them very well. They have to communicate how often they want it mowed, they have to communicate the specifications, and if they don't inform them well enough, they will have less control, if it's an external contractor."-ProLA-2.
*"Because some of the work for some local authorities was **bid** on by contractors, there's not as much flexibility in actually being able to manage in a different way because their budgets are tied up with someone else doing the work."-ProAC-1.*

In the attempt to maintain parks at high standards, CCT had negative implications (Dempsey *et al.*, 2016b). Repercussions of this were felt in Sheffield in terms of staff reductions and, in

particular, of reducing staff working on the ground on sites: *"Obviously there's fewer people on the ground, but it's also the pressure on the middle management that's the problem."-ProAC-2*. Furthermore, this situation also caused a declining level in staff qualification: "*Funding cut caused decreasing number of staff in parks. In Sheffield the numbers also went down and it affected dropping staff level."-ProLA-1*. This research shows interesting findings that the legacy of CCT seemed to affect community involvement in park management: one community group stated that *"[after CCT] Financial problems were when we started 2007-2008. Global went to economic crisis..slash…grant money from government was really reduced. Council had a lot less money to spend…[and so] invited community groups" - CoFoHH.*

8.2.3 Policy context and partnership

As mentioned in Chapter 2, numerous national policies and strategies regarding green spaces and parks after the 1980s have highlighted partnerships that have enabled the effective management of parks under threat of budget and funding cuts (Government Act, 1988; PPG17, 1991; Sheffield Park Regeneration, 1993; New Labour Manifesto, 1997; The Urban White Paper, 1999; The Local Government White Paper, 2006; CLGC, 2016). This study has also found that such partnerships have evolved in distinctive ways.

Ever since the launch of CCT in the early 1980s, local authorities have had to seek out external contractors to bid for, if not to undertake the work in various public sector services. However, by the 1990s a more holistic approach to partnerships was introduced by local government regarding park management. In Sheffield, both the Sheffield Park Regeneration (1993) policy and the Community Partnership Strategy (1997) emphasised the importance and the development of partnerships within the local community as well as in expanded sectors: *"The collective management with partnerships… you'd have the council. You'd have the Friends. You'd have other groups of interest come together and say this is what we want from our park. It's based around management as a holistic approach to management"- ProAC-1*. With Sheffield's Countryside Strategy introduced in 1999, this kind of partnership was expanded by co-working between the local authority, the private sector and community voluntary organisations. More recently, it has been observed that partnerships tend to form complex and

innovative collaborations with various sectors, for instance within the city council, this has included the housing development department, and parks: *"There is an income stream that we are now exploring, which has come out of course of the partnership project, is called housing revenue account, all of these houses are managed by the councils and generate rent."- ProSE.* Along with development of partnership and community involvement in park management, extended partnership for instance non-profit organisation within third sectors was emerged, which supports empirical evidence elsewhere (Parry *et al.*, 2011; Alcock, 2012; Macmillan, 2013): *"You have an opportunity to bring in other funding. It may be Sheffield parks trust is where people might be willing to give money to it. Like a membership organisation. There may be a different type of management model which is more of a partnership across the city in terms of the trust rather than just being the council,"-ProAC-1*.

It is clear that these partnerships may expand beyond engaging simply with local authority and will extend to diverse sectors, driving park management in a non-traditional way compared to the more conventional approach used in the past, in which central or local government would generally take the lead. More research is required to explore the nature of such expansion of partnerships in the future.

8.2.4 Policy context, funding and maintenance

The driving changes to park management and maintenance can be found around the core feature of policy context. This research found that there were significant changes, which are budget cuts underpinned by policy context, in an association between policy context and maintenance.

Budget and funding cuts negatively affect the number of ground staffs and their time (The Urban Parks Forum, 2001; Randrup *et al.*, 2017). Based on findings in this research, one way in which budget cuts affect park management is through the changes to structures of staff working practices. This statement is supported by professional's statement: *"Budget is the big thing. What happened is, that the budget is being reduced where we used to get a designated team in certain areas who would use to visit that site on a weekly basis. Its management might just be reactive now sometimes, especially during the winter months where they might not need much*

maintenance, but some might just be grass cutting, sometimes it's just reactive now rather than a programmed approach. And that cuts the budget really. And I think also twenty years ago a lot of the park department had a permanent team there and that is the difference of the last ten, fifteen years as we gradually moved to more mobile teams."-Pro-Ms. Community groups interviewees concurred that changes to budget cuts delivered negative impact on park use: *"Nobody's looking after it. It needs looking after. It needs somebody there to manage the park. We used to have park keepers when we were little. We had park keepers or ground, they'd be in the park all day. Just making sure children were safe, enjoying stuff, playing safely, no graffiti, being looked after. Again, there's no money there to pay the park keepers anymore."- CoPCDC.*

Through echoed analysis, associations were found between maintenance and another dimension of place-keeping in relation to community engagement and partnerships affected by policy context. Evidence of how maintenance is influenced by the governance and partnership approach to policy is found in the present study (Box 8.3).

Box 8.3 The statement supporting relationships between community involvement-related policy context and maintenance

"Some of volunteering groups like 'friends groups' started to work on small sections to improve parks. 'Friends group' strategies were delivering in parks and some 'Friends groups' were getting involving in ***actual maintenance of parks****. The 'Friends groups' around [the] city is becoming more active, trying to get involved in park maintenance."-ProLA-1.*
"They can help us contribute [by getting] involved in ***the practical maintenance*** *side. A little picking, maybe planting flower beds, tree planting, just* ***general maintenance****."-ProLA-2.*
"Stakeholders and the 'friends group', especially, have become more involved with the kind of steady decline, if you would, like with ***the maintenance****. You know, they do now have an input."-ProLA-Ms.*

These statements reveal that communities represent a "partner" that is getting progressively more involved in park maintenance and that certain aspects of maintenance now tend to rely on community engagement. However, it is found that a lack of local authority support by funding and staff cuts affected negatively quality of maintenance and communication between community groups and local authority negatively: *""… this morning [the] tractor cut [some] grass, but not all the area….. They didn't cut this area [pointing to area of park]…… We told what is happening in [the] park to [the] Head of parks [at the council], but this is not delivered. Communication is very hard. That is our problem."- CoFoRM.*

It is noted in the Sheffield context that Sheffield City Council requires maintenance costs to be covered for a 5 year period if friends/ community groups raise money for changes in park (e.g. for new playground equipment). This local policy context and the cascading aspects from national policy on governance and partnership therefore have a significant impact on changes to park maintenance.

8.2.5 Policy context and evaluation

The goal of achieving certain standards for green spaces emerged in policy context and strategies since the beginning of the 1980s (Jones, 2000; Barber, 2005). The decline in the quality of green spaces was being recognised and targets were put in place to support the improvement of the quality and standards of green spaces and parks at central and local government level.

"Evaluation is an assessment based on the systematic collection and analysis of data, whether quantitative or qualitative, in order to aid decision-making." (Smith et al., 2014, p.151).

To evaluate the quality green spaces at national level, central government introduced the national green spaces audit tool called Green Flag Award (GFA) in 1996 (Greenhalgh *et al.*, 2006). Central government has implemented GFA in Regulation 17 of The Urban White Paper (2000): *"[It is a] comprehensive programme to improve the quality of parks, play areas and open spaces, including the introduction of a new Green Flag Awards scheme to encourage and recognise excellence"*. In practice, GFA is often used to evaluate the park management process, of which one professional comments that: *"One thing is to have a management plan and to assess [that] this (GFA) generates series [of] ambitions of the task. One thing is to annually find out how far we got close [to] the number of the next stage. That [GFA] is a very valuable tool." -ProSE.* However, GFA is limited when applied to large (city) scale parks, on account of the complicated and professional resources required: *"…the amount of resource that it takes to get to Green Flag takes up now too much resource for us"-ProLA-2* and *"…..things like in the Green Flag are obviously the professional is a professional. So, it is the professional park managers who then assess those ones."-ProSE.*

An evaluation scheme was eventually developed for local contexts. In Sheffield, policies like the Green Flag Award were seen as a strong message coming from central government regarding the evaluation of parks and were soon transferred to local policy, such as with the introduction of the Sheffield Unitary Development Plan in 1998, the Sheffield City Strategy (revised, 2007) and Sheffield's Green and Open Spaces Strategy in 2009. At the local scale, the city of Sheffield now carries out park evaluation by implementing an independent park assessment tool called 'Sheffield Standard'. Sheffield Standard was introduced as a simplified standard to effectively assess Sheffield's green spaces: *"What we have done locally is to introduce Sheffield Standard, which is a certain level of standard … the idea is that Sheffield Standard will be applied over the years to all our sites, to bring them up to a minimum standard."-ProLA-2.*

In addition, Sheffield Standard permits the evaluation of green spaces by both communities and the local authority. This process is compared with GFA: *"Some say that it would help out 'cause of the Sheffield standard. In such, that it is … of the green flag. There is a Sheffield standard. Some of the stakeholders and the 'friend groups' assess that with ourselves."-ProLA-Ms.*

Evaluation as an assessment tool is essential for gauging the current state and problems of parks that have caused the declining standards at both national and local level. It is obvious that policy at national level has been intent in evaluating parks through the use of national audit tools such as the Green Flag Award. Further, more suitable audit tools developed for parks at local level might be more effective and feasible in the long run. However, importantly, as Dempsey and Burton (2012) claimed that evaluation has some constraints such as costs and time. This research found a similar statement: *"The problem is consultation…..evaluation. it takes time, and it takes money, and it takes resources. The council doesn't have that, all of that." - ProAC-1* and *"[regarding Sheffield Standard] Resources dictate that we [local authority] just can't carry on the same way….. We realise that perhaps we can't sustain that."*, suggesting that to complete evaluation at local level, communities may be able to help contribute to resources in this way.

8.2.6 Coordinating the place-keeping interrelationships

The present research study found that policy takes the lead before the other dimensions of place-keeping (Dempsey and Burton, 2012). As the preceding discussion has already show, individual dimensions do not operate in isolation, indicating that that there are interrelationships within the dimensions and are influenced by one another in a hierarchical way. This section discusses some specific interrelationships in more detail with reference to the findings.

Existing evidence shows strong interrelationships between **governance** and **partnership** which have evolved as part of the community engagement process (e.g. Mathers *et al.,* 2015). Governance underlining community engagement is regarded as the decision-making process of working with the community or other partners and permitting the realisation of community programmes, events and activities. *"We agree with them [community groups] in writing what they are going to do, how they're going to do it, what training they need, and we will meet with them and assess them to make sure they've got all the equipment and that they're capable of carrying out these tasks [prerequisite to organise events or other activities]."-ProLA-2.*

In addition, the local authority has helped improve communication between local authority and community groups through opportunities such as forming the Sheffield Green Spaces Forum as a direct response to 'Friends groups' wanting to get involved to be helped. It can be seen that local authority working with community groups on park management is also a response to austerity. One of the professionals stated that: *"We've produced things called stewardship or partnership agreements……They [community groups]'ve gone from bringing money to have things created, to just doing some very basic maintenance. That's been a big change."-ProLA-2.*

Another interrelationship is the one between **governance** and **funding** and both parties carry an equal weight in importance. Encouraging stakeholder engagement emphasised by governance contributes to fundraising in different ways, which means that funding opportunities for park management are essential and involve community participation (Box 8.4).

Box 8.4 The statement of relationship between governance and funding

*"So right from the very beginning, we had to think about how to use the park to **generate income** and we used the landscape, how we might build stakeholder participation."-ProSE.* *"What's happened is there has been **a lot of money available** for 'Friends of' groups. We've had a lot of 'Friends of' groups that have brought in money because they wanted to invest in*

place making. They wanted café and car parks and toilets and playgrounds."-ProLA-2.
"We have had 50% of our project cut in parks in countryside. We had to say to our 'friends groups' that we can only support them to bring in ***external money****."-ProLA-2*
"A lot of capital input went into parks. There were lots of initiatives about engaging communities. Again ***funded an initiative*** *about engaging communities to be involved in that parks management. 'Friends groups' were evolved and community groups involved."-ProAC-1.*

It is found that even though the place-keeping dimensions interact with each other as 'coordinating dimensions' (Dempsey *et al.*, 2014), the analysis conducted in this research shows that, for the case of management of district parks in Sheffield, the policy dimension is placed at centre, delivering its impacts on the other dimensions, and their subsequent interrelationships.

8.3 Making recommendations for effective park management at the city scale

This section outlines the key recommendations which are underpinned by the overall research findings from the perceptions of residents, community groups and professionals. The findings provide a range of recommendations presented within place-keeping analytical framework. The recommendations can be applied for the study sites in common, and for Sheffield's district parks as a whole. The recommendations for better park management of each study site will be revealed in the next section 8.4.

8.3.1 Policy contexts: focus on a statutory provision and community-based fundraising

8.3.1.1 Sharing benefits and the challenges of parks' non-statutory status

As outlined in the literature review, the change and transfer of responsibility for park management has clearly led to the overall decline in park quality. This is underpinned by local authorities not having a statutory provision to provide and maintain parks or ring-fenced funding to pay for it (Conway, 1996, p.39; Barber, 2005, p.29: Weightman, 2013). At the time

of this study, local authorities were still largely responsible for park management. However, interviews from this study suggested that a statutory provision could help to increase budget for park management. Local authority interview indicated that: *"We should make our green spaces a statutory provision. If we became a statutory provision by the government, central government, then we would be more protected, but we're not. Our green space can be taken away because as money goes down in councils, there is less money for the non-statutory departments. That should be something that we're all campaigning for, to make parks and green spaces a statutory provision."-ProLA-2.*

It is underlined in local authority interviews that parks and green spaces should be managed by a statutory provision because this can offer numerous benefits for people and biodiversity: *"It should be central government that says green spaces are so important for exercise, for well-being, for biodiversity, for everything. Take children out in outdoors classrooms, everything. Green space versus a school, park versus social services, care for the elderly, there's only so much money. Yet, in an ideal world, it should be a statutory provision, but I don't think that will happen. It would be good."-ProLA-2.*

A statutory provision can have a positive impact on green space management in connection with people's health (Talbot, 2001; Weightman, 2013). The Public Health Act of 1875 indicated that green spaces help people's health and impose the duties on urban authority leading to the legacy of many parks in the UK's cities (Parliament of the UK, 1875). As outlined in the literature review, numerous studies show that green spaces and parks contributed positively to people's health and wellbeing. Local authority interviews also identified the positive association between health and green spaces, stating *"The link to health is fundamental. We need to look down more in how green space is funded because it is part of health."- ProLA-1*. It is suggested that such departments of a statutory provision such as the National Health Service, should be involved in expanding financial contribution to park management. Local authority respondent mentioned: *"[An] ideal park is [an] NHS funded park. Everything else, all the recreations are consequence of health…NHS funds should fund parks with proper construction of sports facilities and general recreational space."-ProLA-1*. For instance, Public Health Grants programme gives funds to local authority to use for green spaces and parks (DCLG, 2013)[1].

[1] Public health grants to local authorities from 2013 to 2016: Department of Health, part of local authority circulars, specific and general revenue and capital grants, 2014 to 2015 and 2015 to 2016, and Local service budgets for 2015 to 2016

8.3.1.2 Understanding opportunities for community-based fundraising

Given the importance of policy found in this research, understanding, reviewing and updating previous policies and strategies is an important recommendation to prioritise. Policy manifestations such as Local Government Act 1988 (Sheffield City Council, 1988), Sustainability Communities Fund (Big Lottery Fund, 2004) and Localism Act, 2011 (DCLG, 2011) indicate that most responsibility for green spaces management have been transferring from central to local government and further to local communities. Along with increasing community involvement, more opportunities for fundraising led by communities have been given to communities (see Table. 3.4). For instance, the Sheffield' Green and Open Space Strategy at city scale and Community Infrastructure Levy at national scale can represent fundamental frameworks on which to provide ideas for funding schemes and managing parks. Furthermore, as there was some willingness to pay on the part of users, district park stakeholders should explore newly emerging funding opportunities which involve the private sector: while the Park Improvement District (PID, Nesta-funded) pilot was not taken up in London, there may be adaptations of the model that can be enacted elsewhere. Keeping track of what policy changes mean for community groups and district parks governance and management is important: groups such as the Sheffield Green Space Forum could have an increasingly important part to play as local authorities continue to struggle with budget cuts. Sharing knowledge in such fora and ensuring that information is passed on in a timely fashion (and before the (forced or otherwise) departure of council staff) will be crucial for park management partnerships to operate effectively to apply for funding.

8.3.2 The future of governance: how to involve young volunteers in community groups

Along with active community participation, the positive effects of engaging younger generations in volunteering has been underlined to contribute to effective green space management in long-term (Leventhal and Brooks-Gunn, 2000; Big Lottery Fund, 2008; Lenzi *et al.*, 2012).

"Who cares for park. Most members of friends groups are very elderly. How to care for parks next 10 years? …getting older, Members are over 70 years old."- CoFoHH. "We want younger people to get involved. We don't know how to engage with them to do it [park management]." - CoFoRM.

Many of the community groups interviewed in this research have older members, pointing to a need for more people, and particularly young people, to get involved in park management. However, this is a difficulty for community groups interviewed here who do not have the capacity or knowledge of how to engage younger members. However, in discussions of feasible recommendations, different solutions were proposed, such as university involvement, a volunteering manager and inviting young people from other community groups.

The city's universities constitute key stakeholders, and can contribute to park management in different ways. Professionals stated that *"The key stakeholder we have in management is actually the university landscape department. That is probably the key, the only organisation we work with any interest whatsoever in the management."- ProSE* and *"If they [community groups] want us to evaluate how they're doing and make suggestions, I think we're happy to do that, the university leading." - ProAC-1*. In particular, the university is suggested as a useful place to find young volunteers. Sheffield University students already has been involved in park management in some of the district parks: *"We get a couple of volunteers now. they are university volunteers coming on 10th July working at century garden." - CoFoHH*. Other groups of university students regularly contribute to park maintenance. One community group stated: *"We can get younger people involved. Younger people e.g.) university football team, get involved in. they come on every Monday. It is just one hour. They are fantastic." - CoFoRM*.

However, it is noted that engaging local young people to parks is a different matter: *"It is very difficult to get [young] people involved in the local park." - ProLA-2*. Such solutions were found in this research that a volunteer manager could help encourage more young people to get involved in parks. One professional interviewee stated that: *"we have a full-time volunteering manager and we have just changed the management structure of this park. We now have a young lady, who would also come to friends meetings…her job is to build volunteer and practical participation. So, she is now bringing [in] different groups."-ProSE*. To do this, dedicated members of friends groups and staff are emphasised: *"They [Manor Fields] have a*

dedicated member of staff to support them [Friends group].”-ProLA-2 and *“This friend group [Manor Fields] is genuine, wanting to do something. Which is very good.”-ProSE*.

In addition to inviting young people to volunteer in parks, one professional provides a solution through approaching potential young volunteers from other types of groups, stating *“They [young people] may join a different type of group….. It may be more around sports and active recreating in a park. Parks run that sort of go on across Sheffield. That seems to be very popular with a great big age range. It may be building activities around and building that involvement around activities like that which appeal to a broader population.”-ProAC-1*. Furthermore, appealing to active and young people to volunteer in their local parks should take priority, by means of both online and offline advertisements. The findings of this research show that 42.2% of respondents in the younger spectrum (under 34 years of age) answered that they would be willing to be involved in park management. The present study also revealed that 19.2% of the respondents did not know how to get involved in their local community for park management. The younger generations may need a more complex means of promotion in order to encourage their voluntary involvement with their local parks.

A relevant example is the ongoing campaign by Groundwork Youth, #GiveUsSpace, for example, uses social media as a way of promoting active engagement of youth with their local parks and could represent an effective model. In addition, these campaigns could be further promoted on the notice boards of the study sites with QR codes. This might encourage young people to join community groups through the use of technology and the social media, but further research would be needed to see if that would encourage Sheffield’s younger residents.

8.3.3 Funding and changing mindsets? Paying a small charge to community groups

In spite of the necessity of funding, the previous research pointed to some barriers to fundraising for park management, namely that people are aware of the fact that public green spaces and parks belong to everyone, making fundraising by public sectors difficult to apply (Sickle and Eagles, 1998; Walls, 2013; Layton-Jones, 2016). Professionals, in particular those working for the local authority, tended to agree with this observation: *“One thing that comes to mind, we don't do that in Sheffield obviously but one big thing about green space is that it*

belongs to everybody. Just because you live around it doesn't mean that it's your park. Because they are open to everybody, you could go across the city and use every park. The thing that would worry me about introducing the public levy is that the public would see it's their park."- ProLA-2.

Along with an increase of community involvement and its positive impacts on fundraising (Bristol Parks Forum, 2002; HLF, 2015; Nesta programmes of 2016 and 2018), the present research suggests that voluntary donations and other innovative income generation practices led by community groups could be useful alternatives to fundraising and other obligatory income generation practices. As it would be in a strategic position between the public and local authority, community-led income generation practices may minimise counterproductive outcomes that otherwise might lead to resentment towards a public levy for publicly-owned land. *"It [additional fundraising] is very difficult here, in other parts of the city, absolutely fine. Here, our main goal is to get people to use the space. So, it will be counterproductive to actually charge them. Most people actually just walk into the site, we got a tiny car park, we never considered car parking, just because it will be counterproductive"- ProSE.*

However, Table 8.1 shows that questionnaire respondents were willing to pay voluntary donations for entry and car parking charges. It is calculated in a basis of results of resident questionnaires in which 20.8% (£1), 2.8% (£2) and 0.8% (£5) of the respondents would like to be willingness to pay for voluntary donation per visit. This results in generating voluntary income £0.30 per visitor. It is clear that voluntary income generation could generate ring-fenced funding for each park without counter-productive effects from compulsory levy on public spaces.

Table 8.1 Potential fundraising opportunities from charges to users

	Parson Cross	Manor Fields	High-Hazles	Rich-mond	Meers-brook	Bolehills	**Average***
Voluntary donation for entry per visitor	£0.18	£0.60	£0.21	£0.26	£0.40	£0.17	£0.30
Car parking charge per parking	£0.15	£0.15	£0.18	£0.20	£0.30	£0.24	£0.20

* Calculations are based on the results of questionnaires in Table 6.13 and 6.14, for instance, in case of voluntary donation, (20.8% X £1) + (2.8% X £2) + (0.8% X £5) = £30.4 per 100 so, £0.30 per person, based on Question: "Would you be willing to pay for park use?"

Table 8.2 shows that community-led income generation practices, such as fun-days and festivals, can potentially generate a lot of funding. These practices would not involve the local

authority, which would only require the community groups organising them to ask permission. According to the results of resident questionnaires, 79.2% of the respondents would like to see the fun-day/ fayre. This results in generating income average £2.38 per visit. The amounts reported apply only to entry fees, excluding lease or other potential income.

Results from this study and examination of other parks in Sheffield, such as Weston Park in which a fee has recently been introduced for the use of tennis courts, support the concept of charging additional fees for the use of park facilities, as a means for fundraising. Voluntary donations and additional charges for park facilities are potentially effective fundraising practices, mitigating users' complaints and financial pressure.

Table 8.2 Potential fundraising from fun-day and festivals organised by community groups

		Parson Cross	Manor Fields	High-Hazles	Rich-mond	Meers-brook	Bolehills	**Average**
Fun-day	Entry fees	£2.58	£2.73	£2.37	£2.31	£2.28	£2.01	£2.38
Festivals	Entry fees	£3.25	£3.95	£2.45	£2.85	£3.10	£2.40	£3.00

Calculations based on the results of questionnaires in Table 5.38. £3 in fun-day and £5 in festivals per person, for instance, in case of fun-day, 79.2% X £3 = £23.8 per 100 visitors, £2.38 per visitor.

This also supports the perceptions of local authority that the local authority needs to rely fundamentally on a stable, long-term funding scheme, such as revenue funding (in the absence of council tax funding): *"There is not [a scheme that is] very good at long-term funding for [the] future. It is still quite easy to get capital investment to sites for new play area, new building and something like that. Longer-term change would be needed in sites [that] are revenue-funded by day-to-day funding rather than [by] capital funding."-ProLA-1*.

A final recommendation in this topic would be to explore the subscription fee to registered park as part of a park membership scheme, such as the one employed by the Wildlife Trust and Heeley People's Park[2] in Sheffield. This fundraising model was presented to the Sheffield Green Space Forum inaugural meeting in 2017, when a representative of Heeley Development Trust reported that up to 20% of the management budget was covered by the existing subscription model (see https://heeleypeoplespark.co.uk/). This research supports this evidence

[2] Heeley People's Park is the largest community run park in the country. It's not paid for or managed by the council, but by local residents and businesses. Heeley People's Park belongs to the community, paid for and owned by local people and businesses since 1996.

with 20.7% of respondents reporting that they would pay a subscription for access to green spaces, suggesting that there is potential for this model to be explored in further research.

8.3.4 Partnership

In the study, strong partnerships are presented as sharing the responsibility among the different partners for park maintenance and management. The ideal park management may pursue active stakeholders' engagement: *"They [local authority] thought it was desirable to have [a] 'friend group' and they invited a number of stakeholder groups to contribute to person and it grew out and it genuinely is our 'friend group'. It is autonomous, it has local residence on it and they managed themselves but, it required a bit of push. What it wasn't [was] a protest group. A lot of big friend groups come from big protest groups, complaining about something. This 'friend group' is genuine, wanting to do something. Which is very good… There is [a] much stronger feeling that they genuinely do a lot of good and they are genuinely needed."- ProSE.*

An extended partnership needs to take into consideration peoples' concerns, demands, and share knowledge and skills about park management (Burton and Mathers, 2014). Such is the case for the city Forums such as the 'Sheffield Green Spaces Forum' and 'Birmingham Open Spaces Forum', which provide a regular meeting place for the sharing of information and knowledge in park maintenance, across a city.

8.3.4.1 Sharing responsibility for park management

A partnership operates within the agreement that the partners share responsibility for park management and maintenance (Barnes *et al.*, 2008; Burton and Mathers, 2014). The responsibility is extended from central/local government to community and is ultimately extended to users if the funding situation should remain unchanged. As described in the literature review, responsibility for park management had been passed from central to local government after spending budgets to manage green spaces and parks had been reduced. However, the current situation sees park management facing further funding and budget cuts

and therefore needs to seek other funding resources from users as well as better understand the users' perceptions of shared responsibility.

The concept of shared responsibility has changed, albeit in limited ways, through the actions of interest groups: *"Responsibilities have changed in a minor way. That is exception rather than the rule. Lots of interest groups tend to be still at the pressure group stage. A number of parks actually have [an] actively volunteering programme. However, they used to turn up on basic day, not regularly and compulsorily. These seem to be encompassing programmes. Positively, 'friends groups' are usually actively involved in the management mind set. There are probably many good case studies about how groups can be very strongly involved."-ProLA-1*. Analysis underpinned by resident questionnaires reveals that sharing responsibility for park management is a little shifted in which resident perceptions on responsibility has been changed from 45.9% to 36.8% in only local authority, while the perceptions on sharing responsibility with local authority and community or including users has increased. More positive analysis is that approximately 20% of questionnaire respondents would be willing to get involved in park management through community groups.

It is noted that changing perceptions are being instigated because of funding changes and possible budgetary modifications. One professional stated that *"Their [local authority] budget will be removed from them and possibly give to organisation like us [partners] or to friends groups. That's their fear is that their money will be taken away and given somewhere else for someone to be used in different ways."-ProSE*. This delivers to community groups in their practices, stating *"Friends group comes up [with] more funding. It is changed quite a bit. It is going to be changed more."- CoFoBH*. However, it is ascertained that contribution of community groups can be restricted in fundraising. One local authority stated that *"They [community groups] 're getting more and more frustrated at the moment because they can't find the external funding."-ProLA-2*. Instead, their scope of works can be in a boundary of general maintenance: *"They [community groups] can help us in contribute is to get involved in the practical maintenance side. Litter picking, maybe planting flower beds, tree planting, just general maintenance."-ProLA-2*.

Nevertheless, this research finds that the involvement of community groups has been contributing to park management in at least regular maintenance for considerable time. Changes of budget stream in local government budget cuts (Heritage Lottery Fund, 2016) and moving to

supporting to community groups, encouraging and inviting community groups to parks is already happening (Dempsey *et al.,* 2016b) and may be an inevitable part of the future park management contexts across the country. More importantly, this research provides positive messages that sharing responsibility for park management can have positively effects. This analysis highlights that professionals' perceive that responsibility by the local authority will be reduced in the future, with community and user groups taking progressively more responsibility for park management.

People need to be informed of what was happening in their local parks: *"I think that's when 'friends groups' and users started to notice a big decline in the quality of management as well."-ProAC-1*. This is clear from the analysis of the participants' responses that extending shared responsibility for park management can only be a positive development. The importance of park users' perceptions and a deeper understanding of shared park management should not be underestimated. Therefore, the local authority as a potential facilitator and the community groups together need to appeal to people to get them to be more involved in park management, but this must be based on a good better understanding of what already goes on in their own park. This points to a need for the place-keeping framework to extent to include communication in its conceptualisation of effective long-term management – and further research to examine how this might happen in practice. This is linked to sharing ideas and knowledge which is discussed next.

8.3.4.2 Sharing ideas and knowledge in encouraging membership and park alliance

Sharing ideas and knowledge in the concept of partnership claimed by Dempsey and Burton (2012) is often mentioned in relation to long-term management. These claims within the local context form an essential part of long-term management. However, as has already been stated in the literature, and in this chapter, there is an emerging importance of forums linking communities with other stakeholders (CABE, 2004; National Federation of Parks and Green Spaces, 2017), by providing opportunities for stakeholders to share ideas.

In Sheffield, the Sheffield Green Spaces Forum (SGSF) has been run by community groups of green spaces in Sheffield and was developed by Sheffield City Council (Parks and Countryside Department) with the support of the University of Sheffield (Department of Landscape) (Figure

8.3). Formed in 2015, as mentioned in previous section, the aims of this forum is to bring together groups, share ideas and resources, and work together to forge effective partnerships across the city.

Figure 8.3 A regular Sheffield Green Spaces Forum meeting convened at The University of Sheffield

Photo taken by author.

The forum provides a regular (bi-monthly) opportunity for networking between stakeholders, namely the community groups – representing parks, community gardens, allotments, river corridors and other green spaces – and the local authority and the University: "*The Sheffield Green Spaces Forum. It's [an] absolutely…very good opportunity for communication between the local authority and their community groups…., strongly recommend that forum in other cities."-ProAC-1*.

One of the professionals interviewed clarified that SGSF will become self-sustaining through enhanced communication between community groups and the Parks and Countryside Department Service of the local authority, stating that "*the forum, the idea is that groups have got to become more self-sustaining and the idea of the forum is that the forum will help each other. The 'Friends groups' who join the forum will then provide this support and expertise."-ProLA-2.*

Interestingly, the University is also involved in this forum as a facilitator but not as an active decision-maker - only committee members have decision-making power, under the members' agreement. An academic respondent involved in the SGSF mentioned that *"We were acting as facilitators. That was always our role. We weren't leading it. We weren't deciding exactly what they did. We were facilitating it. Now they have a committee. Really it's up to them….. We can go on because we just did it from a research aspect. It seems like a good thing."-ProAC-1.*

However, there are difficulties related to SGSF that need to be resolved in order to be effective and sustainable in the future. Firstly, there are not enough committee members; it is difficult to find volunteers to sit on the management committee and to replace committee members. For instance, two committee positions, the Vice-Secretary and Treasurer, of SGSF are currently vacant due to different reasons (pregnancy and death) but there is little interest from members to stand in. Issues of replacement and succession are ongoing problems for volunteer groups (Mathers *et al.*, 2015). Secondly, there are a few members, approximately 20 attendees in average, but most do not attend regularly. Lastly, sharing knowledge and ideas may have limitations within the boundary of Sheffield and there is a need for more communication with other Forums (e.g. across Yorkshire, and the north of England), as well as with SGSF's representative national umbrella organisation, the National Federation of Parks and Green Spaces. (NFPGS): *"What benefit are they going to bring to more groups and for wider Sheffield green spaces rather than just being a small group of people like a friends group who are just focused on what they want to focus on."- ProAC-1.*

To address these challenges, recommendations need to encourage community groups to more actively attend the SGSF and other Forum meetings: for example, revitalisation of forum groups by the local authority, with a supporting team and alliance memberships at local and national level. A membership programme with a small joining fee could encourage more community groups to join these forums through regular attendance and an up-to-date e-mailing system. Furthermore, promoting a local to national alliance could be the foundation for the merging of community groups or relevant stakeholders across the UK. Central and local government should not be overlooked: national alliances such as the NFPGS and the Parks Alliance promote national park alliance with the support of the central government to encourage them, but it is currently not clear how that support is manifested. There is clearly potential for coordination nationally through NFPGS and the Parks Alliance which could potentially produce effective

outcomes in sharing knowledge and organising a strong alliance in the parks sector – with stakeholders from the public, private community and voluntary sectors, representing practice and academia. Such a national partnership could have a great impact, as it could constitute the voice of all community groups, giving them the possibility to communicate their demands to local and central government and encourage a greater involvement by the community groups in park management.

Sharing ideas and information can help improve the effectiveness of activities organised by community groups. Community groups perform different activities, from regular maintenance to fundraising in the context of contemporary park management. In particular, organising events and festivals by community groups have contributed to fundraising for park management. However, at times such events and festivals in (sometimes neighbouring) parks take place in similar periods, which may cause a dispersal of park users. Providing spaces for sharing ideas and knowledge between the community groups and the local authority may help prevent such overlapping of events, minimise economic loss and mean more regular events are going on in parks for (new) users.

Additionally, increasing the park alliance between community groups through the Forums such as SGSF as previously emphasised could help make groups to be more productive and efficient, perhaps by pooling resources or tools across parks in a local area. It is underlined that a range of different stakeholders attend the SGSF meetings, including local authority's Parks and Countryside Department to deliver information and communicate with community groups. This means that the SGSF provides valuable opportunity for delivering newly emerging information – one such example has been reduced cost indemnity insurance that SGSF members and regular attendess can source through the local authority. Outcomes of the SGSF also connect to health and safety issues. This issue will be discussed at the next section.

8.3.5 Maintenance: integrated park insurance including risk assessment on parks

New parks in the future may be designed for low maintenance, with limited options for park facilities and equipment, due to ongoing funding shortages. This raises issues around health and safety. Damaged equipment, particularly in play areas of parks, can be damaged and neglected

due to budget cuts because the local authority is responsible for repairs and maintenance. However, neglected equipment is still used in the park, representing a threat to children. Safety by lack of repairs and maintenance has been a big issue. A park where there is zero-accident probability or where damaged equipment is immediately repaired represents the ideal play area for children (Ball *et al.*, 2012). Unfortunately, however, such a park is difficult to put into practice due to the lack of budget and staff to deal with the issues (CABE Space, 2006b; HLF, 2016).

A parks insurance policy introduced by large insurance companies such as Aon Ltd, which has insured over 6000 local councils, can allay fears of unsafety and worries over damaged equipment present in parks. Such a parks insurance can cover injured volunteers doing maintenance and enhancement work and damaged equipment. Park or community managers are responsible for liaison with the insurance companies.

In Sheffield, Parks and Countryside Department of Sheffield city council has announced called 'Parks/SGSF Insurance Scheme' available to community groups through Sheffield Green Spaces Forum since 2016 with financial support to join the insurance (Box 8.5).

Box 8.5 Parks/SGSF Insurance Scheme

- 20 units will be available in the first offer round for Parks & Countryside Department managed land.
- Approximately £80 per year.
- If successful it could include Allotments/ Education land in the future.
- 4/6 forum meetings attendance and membership sign up will be expected for those groups signing up. Failure to do this will mean not being able to take up any offers next year.
- Contact SCC Partnership manager for info first and she will them liaise with SGSF.

Adapted from AGM & General Meeting of Sheffield Green Spaces Forum in 2016

However, as outlined above, availability of the insurance scheme is restricted for only active members of SGSF to incentivise involvement. For widespread availability, it is hoped that more community groups will get involved in SGSF and therefore the insurance scheme will be able to access.

The integrated park insurance covers injured volunteers and damaged equipment, as well as carrying out risk assessments. Local authorities are fundamentally responsible for carrying out risk assessments on their parks. However, the current budget may not allow enough staff to carry out risk assessment effectively in the future. Delayed repairs could cause the exposure of

children and workers to potential health and safety hazards in the park. The park insurance policy, however, deals with compensations for repairs and injuries, as well as with the risk assessments, which should lessen burden of responsibilities by local authorities. This scheme could also encourage community groups to get involved in maintenance without needing to fear for risks. Users, in particular children and parents, will therefore be able to enjoy playing in parks that are within the regular health and safety norms. The integrated park insurance across community groups could potentially turn out to be a long-term efficient alternative to individual park management insurance: an example of collective action in a period of economic austerity.

8.3.6 Evaluation: an independent park evaluation tool for local parks on the basis of the Green Flag Award (GFA)

As outlined in the literature review, *evaluation* is needed to monitor and assess parks for economic, social and environmental benefits. Evaluation can be based on regular surveys seeking public use, satisfaction and attitudes. Furthermore, such evaluations can help at developing staff skills, challenging existing practices and raising standards. There are many existing awards, competitions and measurements of standards of parks and green spaces in the context of evaluation in the place-keeping framework.

The ideal park management should be based on the analysis of interviews where 'high park standards' is the aim, regardless of the park type: *"In an ideal world, every single green space should be managed to a high standard… There should just be parks, no matter where they are across the city."-ProLA-2.* To be a high standard park, facilities and resources in the park are indispensable. One professional has stated that *"most parks would want a cafe and a playground and what have you. Yes, in an ideal world. It would be great to have them all to a very high standard, beyond Sheffield standard, to have flower beds and fountains… We could go on forever, putting in playgrounds and car parks so that everybody had a playground, a fountain, and a car park."- ProLA-2.*

In order to get closer to the ideal standards of parks, criteria for a reliable tool for evaluating park standards need to be identified.

As the literature review showed, the Green Flag Award (GFA) is a well-used, high standard national set of criteria (National Audit Office, 2006; MHCLG, 2012; Ellicott, 2016). The GFA has shown to be a reliable evaluation tool for parks. In this research, two parks, Manor Fields and Meersbrook, which have secured the GFA, showed higher positive users' perceptions of the parks' maintenance, as described in section 8.2.5 – although statistically this cannot be supported – more research would need to be conducted on a wider range of GFA and non-GFA parks. As with most professional evaluation tools, a top score in the GFA demands the use of a significant resources and high standards in parks and green spaces (Interview-ProLA-2). The GFA top score exemplifies the potential for an ideal park standard and management. The GFA measures park standards using very specific criteria on the day of the assessment (Interview-ProLA-1). It is clear that GFA is a very reliable evaluation tool at national standard, but limitations have been identified when applying it at local scale: for example, it is not feasible for all parks in a city to be GFA winning, particularly in the context of austerity when resources and capacity are limited.

A move by Sheffield City Council to implement a benchmark and minimum standard of quality across all green spaces in the city was to create a locally independent evaluation tool called 'Sheffield Standard'. The Local authority is required to monitor all publicly-accessible green spaces in the city and ensure that they were managed to a citywide agreed standard, which the council based on the Green Flag Award standard. The fundamental concept of the Sheffield Standard is deeply linked to the Green Flag Award: *"Our resources now will need to be put towards keeping those Green Flags rather than trying to get more because we realise that perhaps we can't sustain that."- ProLA-2*. It is therefore difficult for community groups to assess their parks with criteria of to apply for Green Flag Award. The Sheffield Standard was introduced as a minimum standard to assess Sheffield green spaces: *"What we have done locally is to introduce Sheffield Standard which is a certain level of standard that others would have told you more about this, but the idea is that Sheffield Standard will be applied to over the years all our sites to bring them up to a minimum standard." -ProLA-2.* The duty could be enforced through self-assessments by community groups and local authority, annual reviews of parks by local authorities, and local authorities' annual audits.

The Green Flag Award has some weaknesses compared to the Sheffield Standard, mainly related to who can be involved in the judgement process. The GFA processes are evaluated by a

trained assessor, whereas the Sheffield Standard carries out their evaluation with the help of communities and local authority: *"Some say that it would help out cause of the Sheffield standard. In such, that it is … of the Green Flag. There is a Sheffield standard. Some of the stakeholders and the friend groups assess that with by ourselves, so some do."- ProLA-Ms.*

It is noted that as mentioned in previous sections, the city's universities represent a valuable stakeholder in park management contexts. Involving the universities could potentially contribute to implementing Sheffield park evaluations based on research and skills of academics and volunteering experience of students. Evaluation process and tools for green spaces have the measures of keeping park standards from declining further but this is dependent on the funding which is available, and jeopardised if funding reduces (HLF, 2016). These evaluation tools, which are made available for any stakeholder, even without professional background, will help evaluate park standards in practice, but do require resources in terms of time and cost.

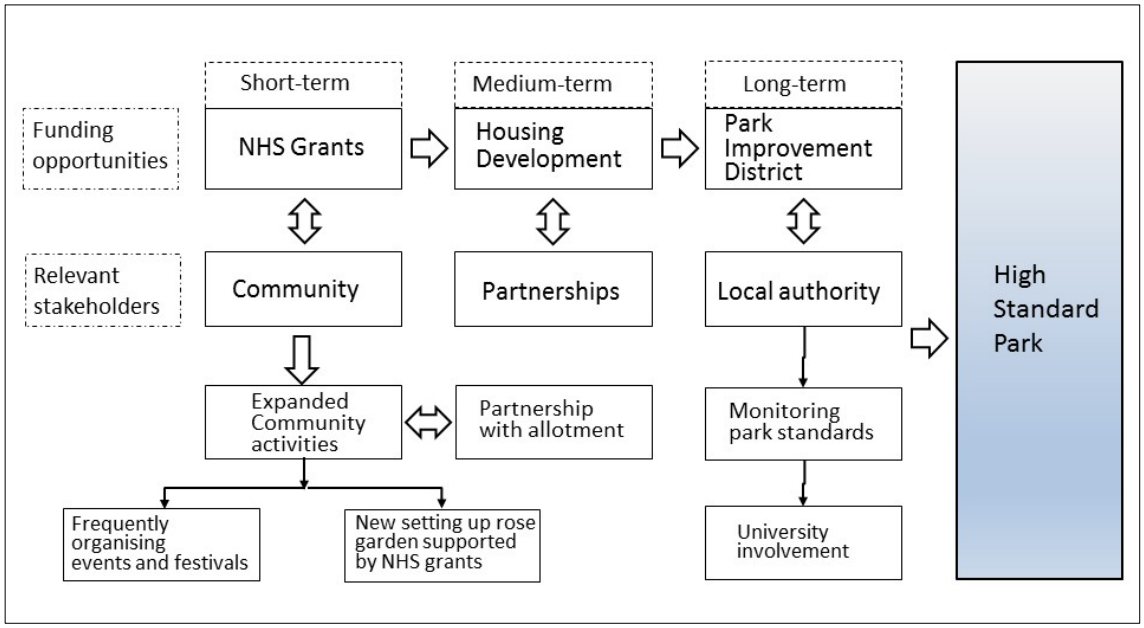
8.4 Making recommendations for effective park management of the study sites in local scale

As outlined in section 8.3, the research findings can help shape recommendations for effective park management in the context of the city as well as in relation to the national level as a whole. The findings reflect the extended recommendations discussed above. These recommendations are adapted for each park, based on the Place-keeping Analytical Framework (PAF), which delineates the place-keeping dimensions. The recommendations are therefore made for each site where the dimensions and place-keeping interrelationships therein were considered to need improvement or further development.

8.4.1 Making recommendations for Parson Cross Park

As found in this research, Parson Cross Park does not meet the proper park standards, based on the finding of this research as observed by users of the park. It means that the park standards required a definite improvement on the basis of the place-keeping dimensions (Figure 8.4).

Figure 8.4 Making recommendations for Parson Cross Park



Given its proximity to the the Northern General Hospital (one of the city's major hospitals), one could take forward one of the interviewees' ideas and propose the idea of an NHS-funded park, underpinned by recreation, housing development to help with park improvement: *"[An] ideal park is [an] NHS funded park. Everything else, all the recreations are consequence of health.…… NHS funds should fund parks with proper construction of sports facilities and general recreational space."-ProLA-1*.

In line with an understanding of place-keeping from this research, this would firstly require a better understanding of the relevant policies and related funding streams such as NHS Grants which adapt increasing National Health Service funding to a greater extent in deprived areas in England compared with more affluent areas (Barr and Whitehead, 2014). The focus on housing development could facilitate park improvements to be funded through Community Infrastructure Levy. Funding streams have been applied to Parson Cross Park (as highlighted in

Chapter 5) so it is important to have a strategy to help minimise oversights and mistakes due to 'trial and error' of the past, and to learn from past practice and poor implementation. This strategy could help provide a great opportunity for supporting funding and other resources.

In terms of implementation, collaboration with the local community group could help complete a wide range of maintenance work in the park. According to this research, 23.8% of residents around Parson Cross Park responded that they would be willing to get involved in the park management. This percentage was higher than average (19.8%), which indicates a pool of potential community group members. With respect to funding, some opportunities for fundraising, such as with Health Grants (which aims to improve the health of vulnerable communities located in most deprived areas), could provide funding resources.

Organising events and festivals by new community volunteers in this park could contribute to fundraising more than for other study sites, because according to this research 86.3% of respondents (larger than average, 79.2%) have said that they would like to see 'fun-days' and 'fayres'. It is recommended that continuing community development should be in partnership with Parson Cross Family Garden allotment community. Collaboration with the Family Garden allotment community could amplify improvement of park standards through co-working regular park maintenance such as litter picking. This research concurs with the literature (Dempsey *et al.*, 2012; Ives and Kelly, 2016) which emphasises cleanliness as a very important factor in sustaining maintenance standards (Table 6.9) and such park management practices for example community food growing.

Figure 8.5 Rose garden in Parson Cross Park (1993 left and 2015 right)

Source from Sheffield City Council's Archives and Local Studies Library (left) and author (right)

Sheffield Park Regeneration Strategy, 1993 suggested that the Rose Garden in Parson Cross Park should be improved by involvement of community groups, which would have required a management plan with extensive design. However, this has not been carried out. Based on users' perceptions in this research that they would like to see formal bedding planting more than the other study sites, regenerating rose garden with formal bedding plantings could be a focus of design by community groups involved in Parson Cross Park.

Lastly, the evaluation of the park should be carried out regularly with the Sheffield Standard and perhaps even by applying for the Green Flag Award with the help of the partnership between local authority, community and educational institutions such as the University of Sheffield and Sheffield Hallam University, as well as local schools and colleges.

It is clear that the implementation of the suggestions improving Parson Cross Park will need a sustained and holistic approach, which will require the better understanding of policy and the increased involvement of the community to contribute to long-term improvements in the park.

8.4.2 Making recommendations for Manor Fields Park

Manor Fields Park is currently considered to be a successfully regenerated park which achieves effective place-keeping (Dempsey *et al.,* 2014). It is managed by a 3rd sector enterprise company called 'Green Estate Ltd'. This research has revealed that Manor Fields is a self-sustaining park and has seen a drastic improvement from abandoned and disused site to functioning park, thanks to significant initial funding and a subsequent innovative park management scheme which deals successfully with socio-economic issues and engages stakeholders effectively.

Manor Fields Park should therefore share and deliver its 'success story' to other parks, but being mindful of its specific context, so care is needed to transfer lessons from MFP, where possible professional and community stakeholders could work with other groups across the city and the country.

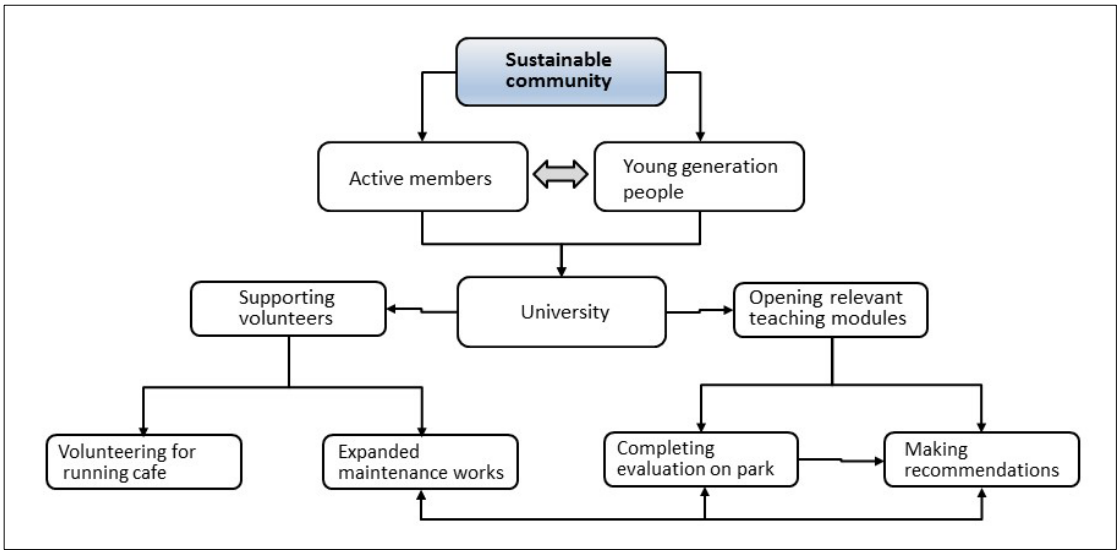
In addition, by securing the Green Flag Award, Manor Fields Park could represent the model park to showcase ideal park management and the steps that should be taken to ensure in the maintenance of high park standards in the long-term, especially in a period of economic

austerity and despite being located in a deprived area. According to CABE Space (2007), MFP is cited as a case study of best practice building Successful and Sustainable Neighbourhoods.
In this way, learning from Manor Fields could help other groups address challenges for more improving parks in different ways, finding out innovative park management structure based on effective funding models, plantings, human resource management, training and skills development, events organisation and other ideas.

8.4.3 Making recommendations for High Hazels Park

The activities carried out by the local community group 'Friends of High Hazels' have been contributing to the park's management since 1998. Based on the results of the community group interview, the active members, who have accumulated experience, knowledge and skills in its management, have been struggling to improve park management, especially when it comes to fundraising and regular maintenance.
A significant problem is the age of most of its community group members: "*The majority of members are over sixty years old.*" - *CoFoHH*. Reflecting the literature underlining young people and community groups' perceptions, therefore, the recommendation for the park is to encourage younger active members to continue the long-standing maintenance works.
"*We get a couple of volunteers now: they are university volunteers coming on 10th July, working at century garden.*" - *CoFoHH*.
The research findings also lead to a recommendation that the park collaborates with the city's universities (particularly the University of Sheffield) to help increase the involvement of younf volunteers, which has the potential to improve the already well-balanced structure of the community group and promote the park through its academic network and social media (Figure 8.6). This research indicates that involving the University in the shared responsibility of park management is potentially very useful, as the academic environment can put the parks in contact with young people with knowledge and skills.

Figure 8.6 Effective collaboration with the university in High Hazels Park



In fact, High Hazels Park already has a standing relationship with some academics at the Department of Landscape in the University of Sheffield. Some core course modules, which were based on Sheffield parks, have contributed to new ideas and knowledge that can be applied to the study sites. For instance, as mentioned in the previous section on Parson Cross Park, completing the park standard evaluation with the Sheffield Standard or the Green Flag Award for High Hazels will clearly represent a positive approach to the improvement of the park.

Additionally, through relevant courses at the two universities (as well as local colleges) could help motivate more students to get involved in park management and planning in different ways, such as with research projects and volunteering. The involvement of the University in shared responsibility and knowledge in park management is therefore recommended for helping to improve High Hazels Park, which in turn informs students and the public of what is happening in the park.

There are other issues emerging from the research which the local authority should lead on. According to this research, users of High Hazels would like to see formal bedding plantings, café and shops, as well as improved footpaths. Figure 8.7 shows the current state of the formal garden in High Hazels Park. However, there are no formal bedding plants here and, based on users' perceptions, 70.6% of respondents (higher than average compared to the other sites) would like to see formal bedding plants. As formal plantings need high maintenance, however, this type of planting scheme cannot be implemented at the moment.

Figure 8.7 Formal garden in High Hazels Parks

Photo taken by author

A compromise could come in the form of a formal garden, in which formal bedding that is perceived to be more attractive to users and potentially also the general public in this area, could attract the collaboration of community groups. However, considering that residents (40%) would also like to see meadow with wildflowers, it is recommended that as low maintenance this type of plantings supported by Green Estate Ltd could be presented in other parts of this park.

Bases on the residents' perception of the need for a café and potentially shops, a partnership with the café in the High Hazels House could also potentially contribute to their satisfaction and fundraisings. The House is used as the clubhouse by Tinsley Park Golf Course, so some form of new partnership would have to be investigated in terms of the governance arrangements to permit non-golfers to use the

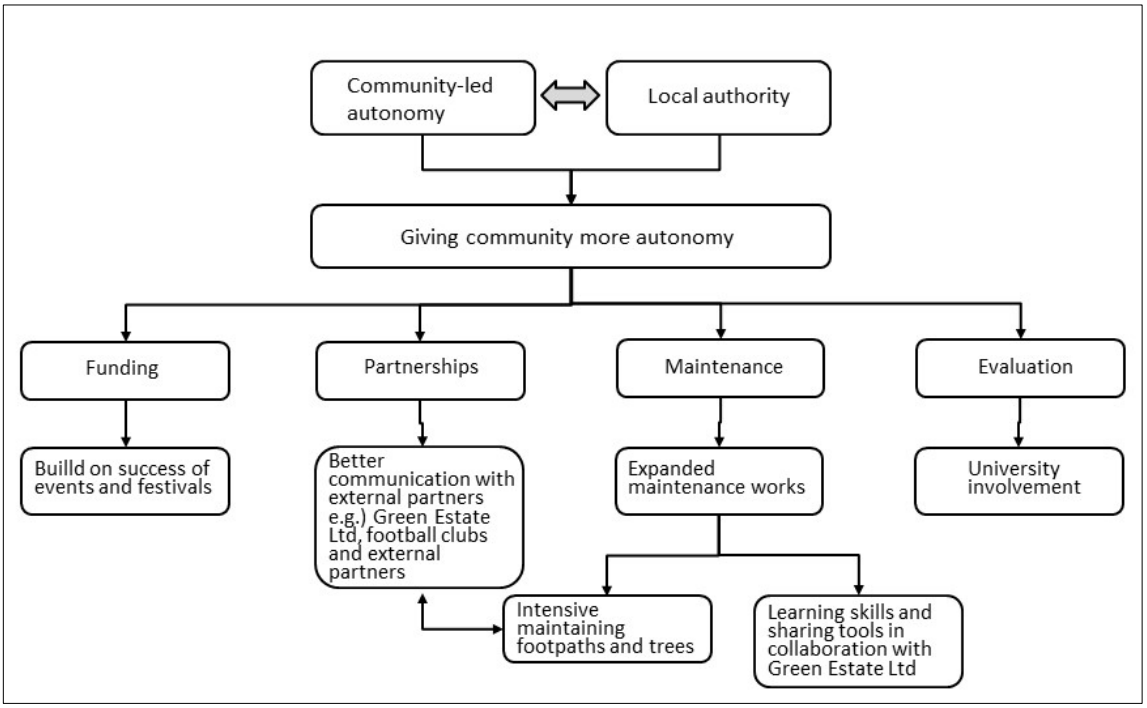
8.4.4 Making recommendations for Richmond Park

As outlined in Chapter 5, Richmond Park has an active community group, with members providing a wide range of maintenance work at voluntary basis in a more independent way compared to the other study sites. These passionate volunteers have contributed to Richmond's high park standards, despite a reported lack of support from the local authority. The community groups sometimes complain of delays in permissions which are required from the local authority to organise events or even to acquire maintenance equipment: "*They [Green Estate Ltd] help*

put events on having license permission from [the council] Parks and Countryside [and have] permission to do it. We hope to do it." – CoFoRM.

Considering their high levels of motivation as well as their resources in terms of time, capacity and contribution, handing decision-making over to the community group may result in better outcomes overall for this park. This research study therefore recommends that the park should be given more autonomy in making decisions during specific times of the year and should acquire park management practices involve fundraising, such as organising events, festivals and football clubs, as well as for maintenance equipment. Giving Richmond park more autonomy to community groups like 'Friends of Richmond Park' will contribute to more active fundraising, partnerships, maintenance and an improved evaluation of the park (Figure 8.8).

Figure 8.8 Diagram of funding model for Richmond Park



With respect to fundraising, organising more frequent events and festivals could be an effective way to generate revenue. In addition, the establishment of a football club programme that charges for joining fees, along with current University football team: "*University football team gets involved in. They come on every Monday. It is just one hour." – CoFoRM,* as well as Sheffield Wednesday and Sheffield United Football Club, could also be an opportunity to generate income, potentially through contributions to a long-term endowment for the park

which is dedicated to freely accessible and good quality, sports-related activity for local children and teenagers.

Maintenance collaboration with external contractors such as Kier and Amey could contribute to tree maintenance and the implementation and maintenance of benches & seating arrangements. In fact, these sectors in Richmond received the lowest scores among the study sites (Appendix D.5).

The sharing of skills as well as maintenance equipment from collaboration with Green Estate Ltd: "*Green Estate has got manpower and machines and [they] can do everything….. Manor Field parks are managed by Green Estate. Completely different because they have got fantastic workforces. They can do all."-CoFoRM,* and the network via SGSF will promote higher park standards.

With regards to the evaluation of its park management, the Sheffield Standard and/or the Green Flag Award should be regularly completed by community groups in collaboration with university to verify the development of increased standards of park management and thereby assessed and deemed effective or not by the various stakeholders (e.g., local authority, community groups, academics).

8.4.5 Making recommendations for Meersbrook Park

Meersbrook Park constitutes a well-managed green space in terms of park management standards, based on the research findings and the GFA. In order to sustain park management for current and future high park standards, the recommendation for its improved management is to install a mobile café, collaborate with other community groups such as the 'Friends of Meersbrook' and secure the GFA.

According to this research, a large number of respondents (81.7%) in Meersbrook Park would like to see a café in the park, a response that was larger than average for the study sites overall (76.7%). Despite being located in the middle of a deprived area, the northern part of the park is less so, and running a café could be an opportunity for increasing park users' satisfaction and for fundraising. Alternatives could be either running a temporary, mobile café or a permanent café in the historic Meersbrook Hall building which was occupied by the local authority's Parks

and Countryside Department (P&CD) since 1954. It is recommended that the community group works running café or other services with Heeley Development Trust because as of 2017 (after the completion of this research data collection process), this has been suggested and is being developed by Heeley Development Trust, based on current collaboration with Heeley Development Trust: *"We set up together with Heeley development. We are working together with them trying to raise money." – CoMBUT.*

Figure 8.9 Previous Parks and Countryside Services Department building in Meersbrook Park

Photo taken by author

As to the implementation of partnerships within the park, the representative community group 'Meersbrook Park Users Trust' has contributed to park maintenance and management. Since 2014, another community group named 'Friends of Meersbrook Park' was created as a volunteering group. This research recommends that the two groups should maintain good communication so that collaboration can be more effective: *"When they first came Friends groups was good link to us. The thing is a combination of Park [and countryside] Department maintaining really well, and community group together."- CoMBUT.*

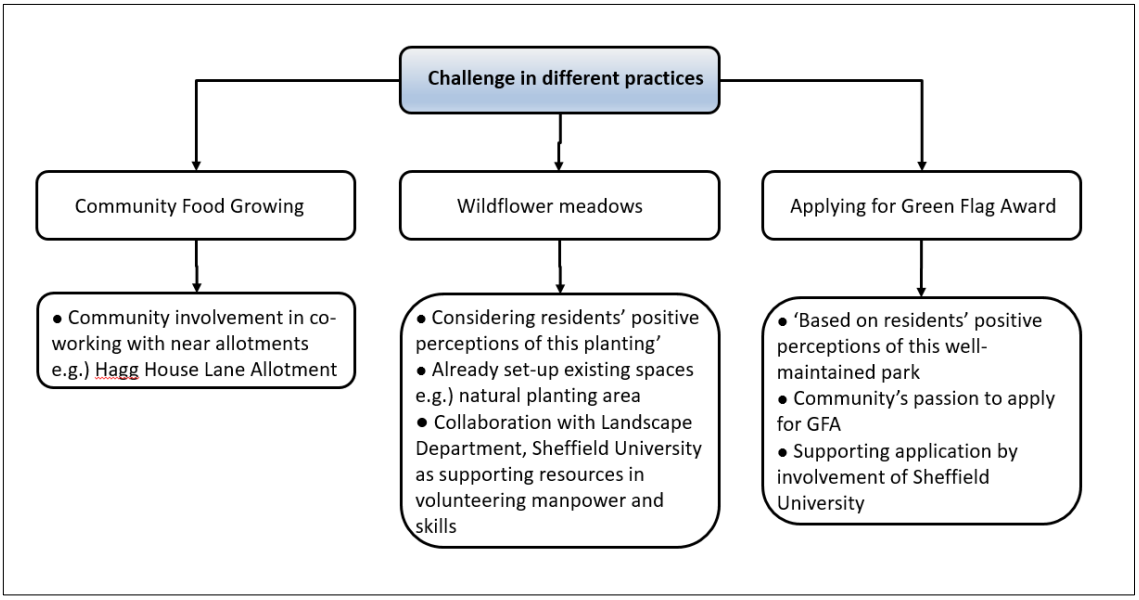
Another recommendation is securing the Green Flag Award, which will demonstrate that park is well-managed and continues to maintain high park standards. Support from the P&CD, however, has not continued after 2016 since they moved out of Meersbrook Hall, but with additional resources provided by the new community group (e.g. from the café) the park could strive to be awarded the GFA again. These suggestions for Meersbrook Park highlight the importance of community empowerment as a way of improving park management at a practical level, through harnessing funding and strengthening partnerships between existing community groups.

8.4.6 Making recommendations for Bolehills Park

Bolehills is located in a less deprived area than the other parks. Users generally respect the park and its facilities, and less vandalism and anti-social behaviours have been reported. This research makes recommendations for Bolehills Park which relate to community food growing, planting wildflowers and applying for the Green Flag Award.

As claimed in existing literature (Chapter 2), socio-economic characteristics in deprived areas can negatively affect people's perceptions and green space management. On the other hand, this research shows that socio-economic characteristics of a neighbourhood can encourage relevant stakeholders in the local park to challenge different management practices. According to this research, perceptions of community groups and professionals on community food growing were not positive, on account of potential anti-social behaviour. However, 36.7% of respondents in Bolehills Park would like to see community food growing practices in the park. Furthermore, the community food growing project 'Incredible Edible Todmoden' has currently been evaluated as successful and the model has been replicated in different cities. Considering the labour and skills as well as encouraging community activities needed for community food growing, partnerships with nearby allotments such as the Hagg House Community Allotment, which is located just 10 minutes from Bolehills Park and has an active group of community members, could potentially help out with the practicalities.

Figure 8.10 Diagram of the recommendations for Bolehills Park



Another interesting finding was that respondents in the Bolehills Park area preferred meadow with wildflowers to the other planting types. Most respondents for the other parks preferred formal bedding plants to the wildflower meadow (Table 6.11). Planting wildflowers in current meadow areas in the southern part of the park (Figure 8.11) could improve the perceptions of its users (Hoyle *et al.*, 2017c).

Figure 8.11 Potential site of meadow with wild flowers in Bolehills Park

Photo by author

Another challenge is the application of the Green Flag Award (GFA). Based on the data analysis, Bolehills Park was evaluated by users as having high park standards, meeting the criteria for the GFA. Nevertheless, Bolehills has not applied for GFA on account of some reasons which could be a lack of capacity and knowledge. Based on these concerns around the GFA, involvement by the University could be proposed to help Bolehills apply for the GFA. This could help contribute to sustaining the high standards of the park.

Table 8.3 Making recommendations for park management of the study sites

	Policy	Governance	Funding	Partnership	Maintenance	Evaluation
All	· Understand update policy contexts e.g.) Sheffield's Green and Open Space Strategy, and Community Infrastructure Levy · Further update policy can be delivered to community groups via Sheffield Green Spaces Forum.	· Encourage community groups getting involved in PM, inviting young people · Increase active member	· Challenge voluntary donation e.g.) entry fees · Charge use of facilities · Park membership	· Join SGSF membership and park alliance · Share organisation of events to avoid overlapped others	· Sign in park insurance	· Apply for Sheffield Standard · Complete Risk assessment
Parson Cross		· Set up community groups · Sheffield football teams · The Universities	· Housing development · Apply for Health grants · Organise events frequently	· Twinning park · Collaborate with LEAF allotment · University collaboration · Collaborate with Sheffield football teams	· Regenerate rose garden · Flower maintenance extending bedding plants · Litter picking primarily	· Collaboration with University to apply for GFA
Manor Fields		· The Universities · Green Estate Ltd	· Organise events frequently	· Share successful structure of park management	· Share tools to other parks and deliver skills	· Secure Green Flag Award
High Hazels		· The Universities	· High Hazels House e.g.) café, shops	· Partnership with High Hazels House e.g.) café, shops	· Develop footpaths · More formal bedding plants · Wear uniform to show staff presence	· Collaboration with University to apply for GFA
Richmond		· Sheffield football teams · The Universities	· Organise football club in partnership with Sheffield Wednesday	· Share tools with learning skills · Collaborate with Sheffield football teams	· Manageable formal bedding plants · Develop benches and seating · Develop tree maintenance	· Collaboration with University to apply for GFA
Meersbrook		· Friends of Meersbrook · Heeley City Farm	· Challenge mobile café · Charge car park in cooperation with residents e.g.) Permit holder zone	· Collaborate with Friends of Meersbrook sharing works	· Develop communication with P&C Department	· Secure Green Flag Award
Bolehills		· Sheffield football teams	· Impose green space levy on residents around	· Partnership with allotment e.g.) Hagg House and Walkley Bank Plantation Allotments · Challenge community food growing · University collaboration	· Plant low-maintained wild flowers	· Collaboration with University to apply for GFA

* Target for parks communities in deprived areas

8.5 Conclusion

The research findings presented in this chapter illustrate that there have been a number of significant changes in the context of park management over the last 10-20 years. The findings can be understood by the analytical framework of place-keeping, significantly correlated with the place-keeping dimensions. Based on the Place-keeping Analytical Framework (PAF), this research reveals that understandings of place-keeping here in these district parks must consider policy as the dominating dimension, given its significant associations with the other dimensions. Further qualitative and quantitative analyses have produced findings that were used to make recommendations for effective park management at city scale and the study sites – these are summarised in Table 8.3. At city level, the recommendations were proposed with in mind the ideal park management, which was described by professionals in interviews. These recommendations chime with a recent report called 'Public Park: Seventh Report of Session 2016–17', published by the Communities and Local Government Committee in 2017 after the Public Parks Inquiry. Suggestions were put forward to improve park management in the six study sites based on the findings of this research and characteristics of the sites. It was clearly viewed that the driving factors in the changes that have occurred in park management over the last 10-20 years are usefully understood through the place-keeping dimensions: Policy, Governance, Funding, Partnership, Maintenance and Evaluation. Recommendations for improving park management holistically both at city and local scale should therefore require the analysis and application of the PAF and its place-keeping dimensions.

Chapter Nine

Conclusion

9.1 Introduction

There is widespread agreement, as shown in the literature review (Chapter 2), about the benefits of green spaces and parks. Understanding these benefits motivate how we manage and maintain proper conditions in these places. However, the practice of park management has been adversely affected by funding cuts in the UK since post-war in the 1940s, during the 1970s-1980s and now since 2010. This research focuses on the situation in 2015 in Sheffield with the aim of understanding stakeholders' perceptions of current and future park management practices. The objectives of this research are:

• To explore features of urban park management and practices in relation to policy contexts and stakeholder involvement in the UK.
• To assess the acceptability and feasibility of park management practices according to different stakeholders in different socio-economic contexts in Sheffield.
• To make recommendations for effective park management at Sheffield city scale and the study sites.

To date, the involvement of stakeholders, in particular, community groups called 'Friends of …', has been emphasised in the park management context. Further, driving changes in park management practices tend to follow the features of innovative park management underlining low-maintenance planting **(**Hitchmough and Dunnett, 2008, p.2; Oudolf and Kingsbury, 2013, p.78) for instance, planting changes from formal bedding to low-maintenance plantings such as naturalistic plantings (Hitchmough and Woodstra, 1999), income-generating programme (DTLR, 2002 and ODPM, 2002-3, CABE, 2006, NESTA, 2013, Policy Exchange, 2014 and Historic England, 2016) and community-led food growing activities (ACRE, 2012; Kinnaird, 2012; Welsh Government, 2012; DCLG, 2012a; Warhurst and Dobson, 2015; Nam and Dempsey, 2018). The policy contexts explored in this research support changes in park management practices, particularly those which involve more stakeholders beyond the local authority. However, we know less about the perceptions held by residents, community groups and professionals of the acceptability and feasibility of different park management practices. Hence, the significance of this thesis is its investigation of the acceptability and feasibility of a range of park management practices according to key stakeholders. To achieve this, this

research provides empirical evidence through quantitative and qualitative methods of data collection derived from different characteristics of the study sites which are applied using the place-keeping analytical framework. Additionally, the findings contribute to making recommendations for better park management in the sites studied as well as urban parks in Sheffield and other cities more generally. This chapter begins with the implications of the key findings based on the research aims. The following sections outline the contribution to knowledge and the limitations of the research. Finally, this chapter suggests the scope for further study and notes concluding remarks.

9.2 Implications of the findings

The findings in this research relate to park management practices in a range of district parks in Sheffield. They are relevant to an understanding of park management contexts and to various stakeholders' perceptions of current and potential park management practices - focusing on residents (and their socio-economic characteristics), community groups and professionals. The implications are explored based on theoretical data and empirical evidence tested by quantitative and qualitative methods. These implications reflect how park management contexts have changed over time and, importantly, through policy, and what newly-emerging park management contexts were found in this research. These findings therefore reveal the extent of acceptability and feasibility of potential park management practices. Further, their perceptions led to making recommendations for better park management which have emerged from the analysis of findings through the place-keeping analytical framework.

9.2.1 Features of urban park management in the UK

In this research, the review of the academic literature on a wide range of landscape management and policy contexts has provided an understanding of the features of urban park management contexts and stakeholders' involvement in the UK.

The definition or concept of landscape management widely underlined actions such as development, planning and maintenance (Jedicke, 1996; Randrup and Persson, 2009; Jansson and Lindgren, 2012) as well as expanded actions e.g.) safeguarding (Jedicke, 1996) marketing and environmental education (Randrup and Persson, 2009). However, this study found that budgets and funding cuts for park management affected the concepts of park management, where the importance of funding has frequently been stressed, based on long-term process. In addition, these negative manifestations called on stakeholders to more get involved in park management in which this emergence is evaluated by what is acceptable, who decides in forms of governance and partnership (De Magalhães and Carmona, 2009). In this study, recent meanings and concepts of park management have been suggested to address declining quality and funding of green spaces and parks in a wider range of interrelated dimensions and long-term process.

Underpinned by theories such as the 'Broken Window Syndrome' which demonstrates the negative impacts on landscape management of poor maintenance and lack of care (Wilson and Kelling, 1982), well-managed spaces have been an important issue in park management contexts, producing a number of benefits for people such as providing places for regular exercise, access to nature and for children's development (CABE Space, 2009a), improving physical and mental health (CABE Space, 2004) by encouraging people to walk more, play sport (CABE Space, 2003) and reducing mental and physical health inequalities (Ward Thompson *et al.*,2013: Mitchell *et al.*, 2015) as well as contributing well-being (CABE Space, 2009). Conversely, poorly managed landscapes have negative impacts on people' perceptions (Wilson and Kelling, 1982: European Commission, 2010) which can lead to a loss of green space quality (Perkins, 2010: Burton *et al.*, 2014). To develop the quality of urban parks, this study proposed that recent concepts of well-managed landscape coincided with long-term management (Dempsey and Burton, 2012). Place-keeping was applied to the research as a holistic approach to long-term management encompassing six dimensions in a range of spaces. The literature review found that the concepts of place-keeping and its dimensions were well-placed to provide an understanding of park management contexts. This led to the use of the analytical framework of place-keeping which led to recommendations being made for effective park management.

In policy ideology for public services between Conservative (1979-1997) and the Coalition (2010-2015), this study revealed significant differences in funding and budget supporting statutory and non-statutory services: Non-statutory services were more likely to rely on volunteering, charitable donations or seek alternative funding such as bidding for government or European funds or lottery grants funding (Weightman, 2013). It can be interpreted that non-statutory public services were intentionally exposed to more competitive conditions. This emerging paradigm of 'competition' manifested the reform of responsibility for public services. For example, localism or decentralisation has long been a policy driver in the principle of sharing or transferring responsibility for public services from local authorities in a response to financial austerity. This was the case that duty on public services was extended to local government along with the enlargement of CCT (Dempsey *et al.,* 2016b). At the same time, roles of communities and their responsibility were increasingly enlarged. It is clearly shown that involving significant transfers of responsibility from central to local and community emerged in relation to financial austerity. Overall contextualisation of policy changes considering financial austerity has involved partnership and governance as a manifestation of stronger localism.

Prior to the New Labour Government (1997 to 2010), particularly from the 1980s to 1990s, the decline in the standard of green spaces and parks came to the fore after policy changes e.g.) Compulsory Competitive Tendering (CCT). The New Labour Government identified the deterioration in green spaces and parks and addressed this by commissioning initiatives such as the Urban White Paper (1999) and Public Parks Assessment (2001) and associated funding streams. These initiatives revealed the evidence of decline in parks quality, the causes of which were discussed by Barber (2005) where CCT was again pointed out as a significant cause (Dempsey *et al.,* 2016b). Reports led to promoting awareness of already declined green spaces and parks and policy reports and guidance (e.g. published by CABE Space) underlining the need for encouraging communities to get involved in green spaces and park management. New Labour policy pursued principles of equality in the decision-making process and opportunity for funding between stakeholders, via bottom-up changes through partnership (Pollitt and Bouckaert, 2000). However, inequality may be hiding behind key manifestos of the New Labour, where only a few of statutory services can be ring-fenced in the commitments. On the other hand, non-statutory services such as cultural heritage, green space service and libraries were exposed to the threat of a lack of resources.

This point cascaded to the next government - the 'Conservative-Liberal Democrat Coalition Government' - with its 'Big Society' agenda. Revenue expenditure on services began to decline from 2010-2011, in particular, revenue expenditure for employees and running expenses continued to decline to date. Community engagement continued to be stressed in government policy contexts. Noticeable factors included more autonomy being transferred to local authority and community groups from central government on the basis of shared duty for the green space and park management. However, the Coalition Government differed from the previous government in that it is inequality between central, local and local citizens in responsibility, explaining that the burden was transferred from central to local, third sector and citizens. Importantly, the form of local citizens was characterised in third sector as a whole range of informal community groups, voluntary organisations and social enterprises (Macmillan, 2013) as well-trained and developed community workers (Chan and Miller, 2010) and activities (Wilson and Leach, 2011). Hence, balance concerning power for some public services has been handed over to third sectors. It is clearly understood that there has been a need to address the profound financial crisis in the context of park management in collaboration with third sectors.

The policy contexts of central government led, in particular, to declining local government budgets and encouraging communities to get involved in park management. Budget and funding cuts have been found since 2009/2010 (revenue expenditure), with 35% and 28% decreases in total revenue and running expenses between 2010/2011 and 2011/2012 in Sheffield (DCLG, 2009 to 2016). The activities of 'friends groups' in the six study sites show how 'shared duty' happened in Sheffield. Sheffield's green and open spaces strategy published in 2009b aimed to reflect the policy context of central government e.g.) emphasising localism, encouraging community engagement and increasing funding opportunities at the time of preparation (pre-2009). However, post-2008 austerity measures and subsequent funding cuts have meant that the strategy is not being implemented as planned.

The literature review determined that a range of stakeholders including professionals, communities and users/residents were increasingly involved in decision-making processes, playing roles in park management as managers, volunteers and users. Stakeholder participation contributes to effective decision-making processes. However, negative issues were also found such as difficulties in collaboration, the increased cost of the decision-making process and the time-consuming nature of the changes as well as less conviction about long-term continuity of

participation (Dempsey *et al.,* 2014b) and gap in perceptions between users and professionals (Hofmann *et al.,* 2012). Nevertheless, stakeholders' participation is argued to contribute to provision of park management in different ways: an understanding of community perceptions through survey (Wilkerson *et al.,* 2018) and practical tasks of community groups (Hjortsø *et al.,* 2006) in particular their economic worth (CLGC, 2016; HLF, 2016) as well as contributions of users to funding management (Perkins, 2010; Rosol, 2010), environmental and social benefits (Mattijssen *et al.,* 2017a). This view that stakeholders' involvement can maximise the effectiveness of park management was one of the starting points of the research, which was examined through the empirical evidence collected in six study sites in Sheffield.

9.2.2 Understanding current park management and park uses of residents

Awareness of the declining quality of urban green spaces and parks promoted policies to assess the standards of green spaces, including parks. In particular, the Public Parks Assessment undertaken by the Urban Parks Forum (2001) was the time when the declining quality of parks compared to after the Victorian era was recognised and the benefits of green spaces re-emphasised. That study revealed that 86.4% of local authorities identified poor park conditions (Barber, 2005, p. 28). More recently, 87% (HLF, 2014) and 95% (HLF, 2016) of park managers anticipate that the parks will continue to decline, deducing that the quality of parks will be able to continue to decline. However, there was little evidence of examining residents' perceptions of the conditions of their parks. This research provides empirical evidence that the users' perceptions vary, depending on the different levels of socio-economic factors including deprivation.

The term 'deprivation' is consistently cited in a range of research, in particular in social science. The level of deprivation constitutes the extent of political achievement (DCLG, 2009a). According to Combera *et al.,* 2008, different social groups are found with a variety of socio-economic characteristics. Green spaces and parks in deprived areas affect users' negative expectations (Jones *et al.,* 2009) and fewer physical activities (Kristensen *et al.,* 2006; Macintyre *et al.,* 2008; Kavanagh *et al.,* 2005). The level of maintenance required is related to

the type and characteristics of the space as well as its users and the social, economic and environmental context (Dempsey and Burton, 2012).

Underlying socio-economic characteristics were found to have significant associations between socio-economic factors and users' perceptions in this research. In terms of the tendency of park visits, previous studies (Wilson *et al.*, 2004; Moore *et al.*, 2008; Dahamnn *et al.*, 2010) claimed that park users in less deprived areas are more likely to visit parks than those in more deprived areas, while, Cohen *et al.*, 2013's research showed park users in more deprived areas are more likely to visit parks. This study shows interesting findings that users living in middle deprived areas visited parks more frequently than those other users. However, analysis of findings alongside demographic indicators shows that park users in this sample are more likely to be female and from households with children. Further analysis examined these indicators in relation to users' perceptions and assessments of their park conditions. Audit tools with specific indicators to assess conditions of park maintenance and management have been introduced in policy contexts and guidance for park management as well as in national or local standards. Such indicators measuring the standards of park management have been researched in a range of literature. However, this literature did not demonstrate the different impacts of each indicator, giving equivalent value to each indicator. While, such claims showed in previous research that socio-economic factors affect people's perceptions of park management and maintenance (Crawford *et al.*, 2008; Weiss *et al.*, 2011) in particular socio-demographic characteristics such as gender (McCormack *et al.*, 2010; Peschardt *et al.*, 2012; Cohen *et al.*, 2013), age (McCormack *et al.*, 2010; Peschardt *et al.*, 2012; Cohen *et al.*, 2013; Zhang *et al.*, 2015; Zhang *et al.*, 2017), length of residence (Beyer *et al.*, 2014; Zhang *et al.*, 2015; Zhang *et al.*, 2017) and household composition (Coolen and Meesters, 2012; Gaube and Remesch, 2013; Houlden *et al.*, 2017) as well as psychological perceptions such as sense of safety (Jones *et al.*, 2009; Leslie *et al.*, 2010; McCormack *et al.*, 2010; Cohen *et al.*, 2013). This study concurred with these claims that socio-economic factors such as gender, age, length of residence and household composition have a significant impact on residents' perceptions of park conditions. In addition to these, respondents living in less-deprived areas were more likely to state that their park is well-maintained.

This study reveals that such indicators can also affect residents' perceptions of park management, for instance, cleanliness concurring with existing literature (Dempsey and Burton,

2011) emphasising an association between a place's condition and cleanliness as a fundamental norm of maintenance (Welch, 1991; Barber, 2005; Ives and Kelly, 2016). Regression tests conducted here show that cleanliness constituted the dominant aspect of park management assessment. However, this study shows that other indicators also affected users' perceptions including benches & seating, accessible park entrances and grass maintenance, meaning that park management/ maintenance is required to concentrate on these features. The findings can offer practical guidance as to how to manage parks effectively to secure park users' satisfaction.

9.2.3 Perceptions of community food growing (CFG)

The popularity of community food-growing-related practices and such successful projects as 'Incredible Edible' has been on the increase since the turn of the 21st century. CFG is based on the premise that locally-based groups of people cultivate land together (Mind, 2013; ACRE, 2012; Kinnaird, 2012). There is a long-standing practice of food growing in English cities, which is manifested in ongoing urban food growing initiatives such as 'Feed Leeds' (Kinnaird, 2012) and the London Food Link (Sustain, 2013) among others. To promote CFG practices, support from funding programmes such as 'the Big Lottery Fund' has encouraged people and community groups to get involved (Kirwan *et al.*, 2013).

A significant manifestation of local authority involvement in CFG relates to allotments which have a long history in England going back to the Enclosure Acts of the 18th-19th centuries which delineated small plots of tenanted land for small-scale food cultivation (Boulton, 2017). Today, allotments continue to be popular in the UK with an average of 4 people waiting for every 100 plots (DCLG, 2012c). This research investigated how this popularity might be transferred to park settings in terms of testing the acceptability and feasibility of CFG in the district park setting. This research found that CFG was considered acceptable for half of respondents who would like to see CFG in their parks. In particular, users under 44 years were more likely to accept CFG than non-users and older generations (over 45 years). However, the feasibility of CFG was not high since only 13.8% of residents would like to get involved in CFG, with users, women, people under 65-years-of-age and households with children being more likely to get involved in CFG practices.

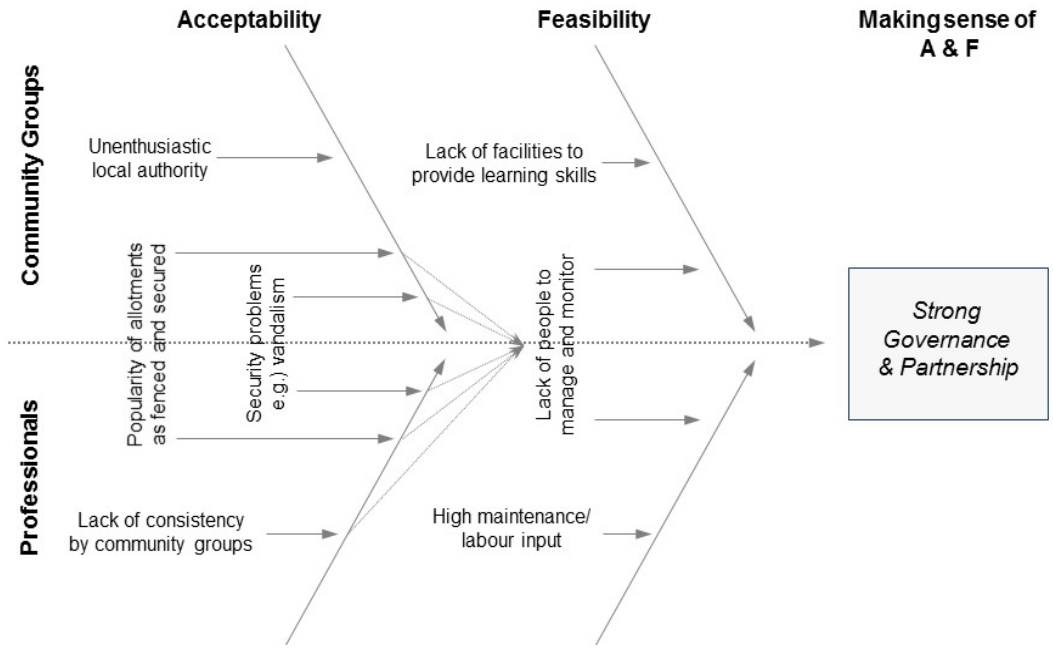
CFG is defined as a community coming together to do activities in growing spaces (Community Council for Berkshire, 2013) and the cultivation of land by groups (Sustain, 2014a; Sustain, 2014b). However, when this research asked community groups for their perceptions of CFG, the findings revealed the low acceptability and feasibility of CFG in park settings. Security problems, such as vandalism and anti-social behaviour, motivated this low acceptability. In addition, such barriers as a lack of people to manage and monitor, people's strong preference for allotments and an unenthusiastic local authority resulted in this low feasibility for attempting CFG. However, there were different perceptions among some community groups; community groups at Manor Fields and Meersbrook Parks provided further alternatives suggesting that CFG could be possible in successful collaboration on the basis of partnership between parks and nearby allotments.

Professionals held perceptions similar to those of community groups with their tendency to reject CFG in the park on account of security problems and a lack of consistent involvement by community groups. Thus, CFG is perceived by professionals as an unnecessary practice in parks in part due to the popularity of allotments, meaning overall, its feasibility was considered by this group to be low. In addition to this, a perceived lack of people to manage as well as unsuccessful examples in Sheffield influenced their perceptions of low feasibility.

This research supports the stakeholders' negative perceptions of CFG in acceptability and feasibility. However, it is possible to suggest alternatives that might bring the popularity of allotments to park settings. Further study is therefore required to determine the possible implications of these findings.

This research determines two profound issues in the findings which lead to further discussion (Figure 9.1). Firstly, the perceptions of the general public clarified a tendency to support CFG activities in their parks. This is variably presented as a perception to understand acceptability as a proper management practice in their parks, or activities they want to get involved in directly. Secondly, the way where CFG has been managed and approached in the past may not be appropriate if it is adapted in their parks in the future. A general acknowledgement is noted that the local authority is severely hindered in its capacity in order to continue its current landscape management duties, which never mind adapt new approaches in the guise of CFG. It is clearly showed that the findings challenge the streams of park management that were widespread at the time of this study. The inter-related issues are unpicked in next sections.

Figure 9.1 Framing perceptions of community food growing of community groups and professionals



9.2.3.1 Community food growing in Sheffield's parks: varying levels of acceptability and feasibility

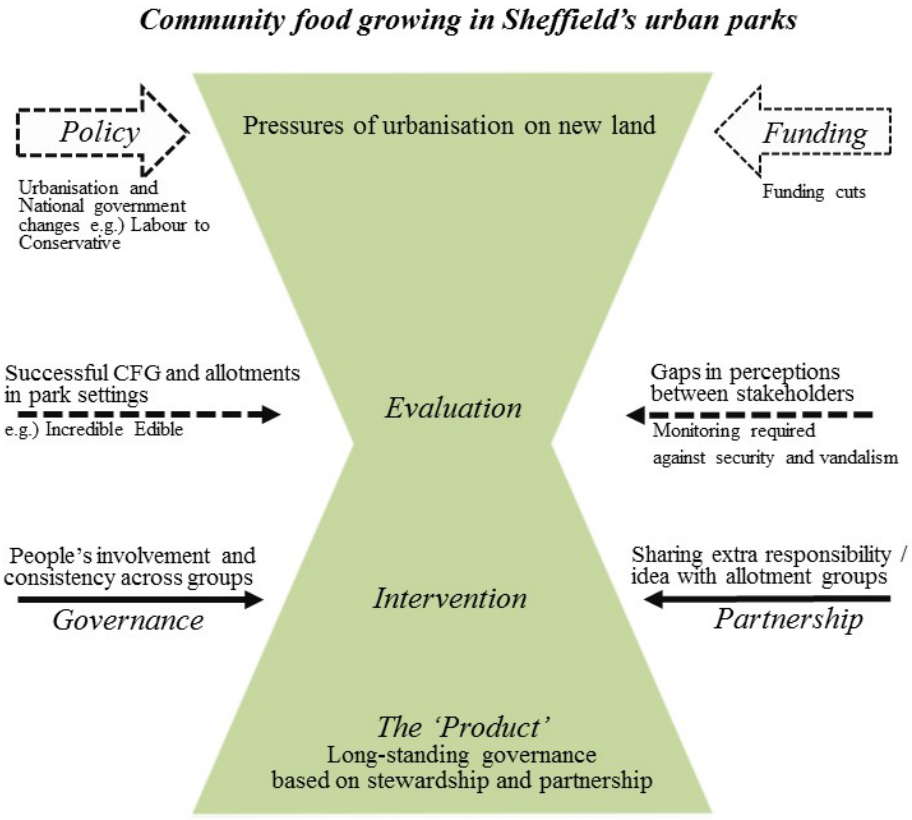
A large proportion of questionnaire respondents showed interest in seeing CFG practices in their parks and the findings showed that respondents who could see CFG practice in their park were more likely to concur that CFG practice could contribute to better park management and more likely to would get involved in CFG activities. There were remarkable differences which have already been revealed – e.g. around younger questionnaire respondents (25-44 years) being more likely to accept CFG practice in their parks than older (45 years+) respondents. This could be because they have often been exposed to a wider range of landscape management practices and designs, including Incredible Edible, which have been applied in different settings (non-park) (Warhurst and Dobson, 2014). Furthermore, it is clear that ideas of stewardship, care for the environment and sustainability are much more widespread today than in the past, which is partly reflected in the changes of education programme in the UK, as well as increased media coverage on environmental issues, together with improvements in access to a wider range of managed landscapes (Fisher *et al.*, 2015; Permaculture Research Institute, 2017). Therefore, one might venture that some of the community groups (older (65+) active members) favour a more

traditional approach to park management which does not include CFG activities. However, this is, not the case in all of the parks meaning that it is worth conducting closer examination of the findings concerning about Manor Fields Park. This sub-sample of respondents showed the highest levels of acceptability of CFG among the whole sample, as well as interest in getting involved in CFG which was importantly higher than respondents around all the other parks. Manor Fields Park differentiates in management structures which is not managed by prevalent and 'traditional' practices that one finds in most other parks in the UK. It has aims around sustainable drainage to help alleviate flooding and naturalistic rather than formal planting and active community involvement. From the findings, it can therefore be argued that it is not surprising that CFG, as a non-traditional management practice in parks, might be more popular with this subset of respondents. Scores for acceptability and feasibility were also relatively high for Parson Cross and Meersbrook Parks stakeholders. While these are more traditionally managed parks, Meersbrook has close links to a local social enterprise while both parks, like Manor Fields, have allotments in close proximity. These links to the allotments are not just physical but extend to informal stakeholder partnerships with allotment groups suggesting that future CFG activity might constitute expansion of allotment or an extension of CFG activities involving the allotment groups within the park setting.

The popularity of allotments which was discussed by community groups could help address the concerns they shared with professionals around security, anti-social behaviour and vandalism. Increasing a presence in the park of people involved in park management could minimise these issues, harking back to the 'parkie' who has long been lost in British parks (Layton-Jones, 2016).

Providing CFG activities in the park could also potentially address the professionals' concerns around a lack of people available to manage and monitor. However, this latter issue is a wider one of governance, partnership and resources which would need addressing at the local authority level. Figure 9.2 conceptualises CFG in the Sheffield context, according to the analysis of findings according to the place-keeping analytical framework and is discussed next.

Figure 9.2 Conceptualising CFG management in Sheffield within and beyond a place-keeping framework



9.2.3.2 Challenging the status quo of who is, and who should be, managing urban parks?

Examining the perceptions of professionals and community groups raises interesting questions around the existing governance structures. There seems to be a widely held assumption that the local authority – as the land-owner of public spaces – is the appropriate urban parks manager. With the widespread austerity measures influencing responses to the questions, it is again perhaps unsurprising that there was a lack of enthusiasm among local authority parks managers about CFG practice given the extra responsibility and monitoring that would require. Professionals underlined a need for additional resources, and they were not convinced that there could be consistency of community groups to take on – and sustain – CFG management. The involvement of allotment groups through land management in parks could help address these issues, given the sustaining governance structures that exist across Sheffield and country (e.g. supported by the Sheffield and District Allotments Federation and the National Allotments

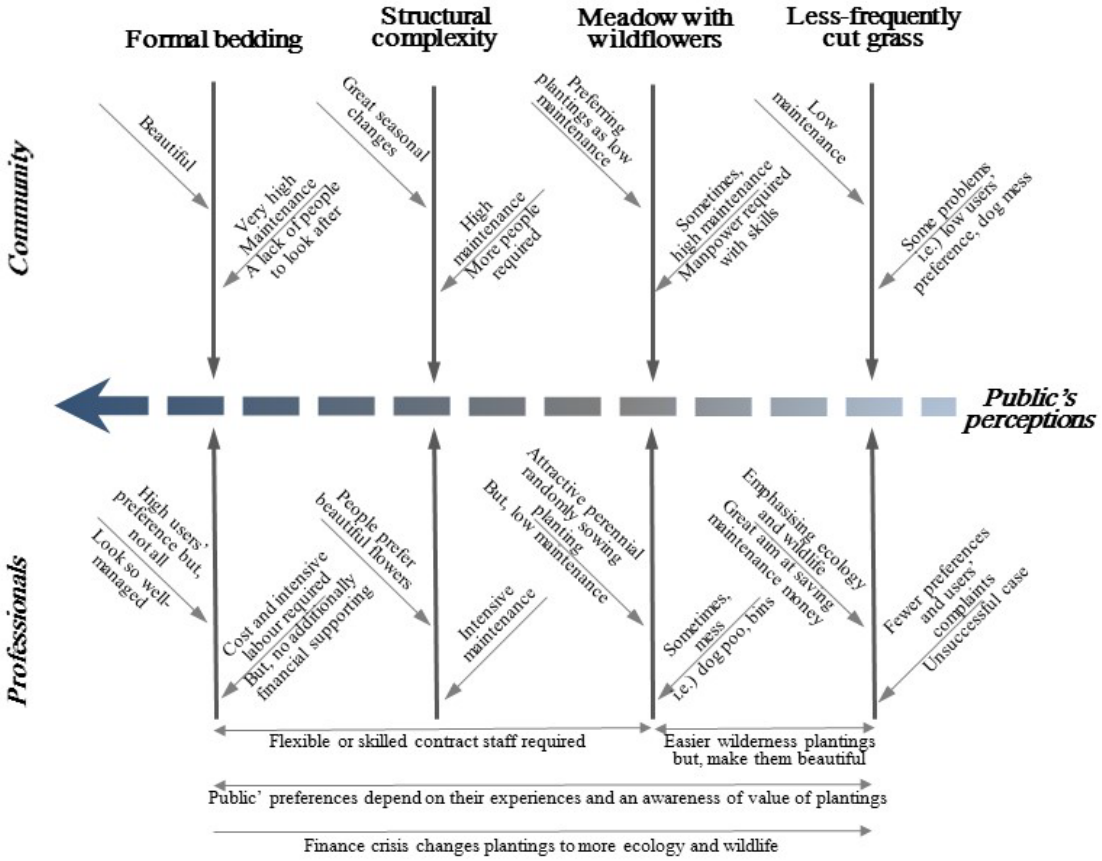
Society Ltd). While the allotment management structure is traditionally based on householders renting the space mostly from the local authority or partly private lands, there are some allotment groups in Sheffield aiming to attract groups of people, rather than individuals, which might be a related model to extend CFG practice into parks. There would therefore have to be a balance between the park as a public good for all users and private allotment space which tends to be fenced off e.g.) with hedges, to provide a boundary and protection against vandalism and anti-social behaviour. If a programme of CFG/ allotment development were to take place in parks, given the findings of different levels of acceptability and feasibility in relation to different parks, it would be understandable to lead with those in which acceptability and feasibility were higher. Interestingly though, and after this research was completed, the Friends of Richmond Park – which scored low on acceptability and feasibility – recently created a community garden within the park (and also planted ten fruit trees on site). Based on the Incredible Edible ethos (Warhurst and Dobson, 2014) they have constructed raised beds at the edge of the park which are overlooked by nearby housing, and the vegetables produced will be available for people in the community to freely take. Follow-up discussions with the group highlight initial wariness by locals to take on the CFG management. It will be interesting to review how the new management practice is sustained in the park.

9.2.4 Perceptions of urban park plantings

Increasingly, both formal bedding and naturalistic plantings can be found in urban parks. Formal bedding plantings have the longer history, going back to featuring in private gardens since Roman Britain (1st century AD) (Shoemaker, 2001). In the 1870s, formal bedding appeared in UK parks (Woudstra and Fieldhouse, 2000) making a positive impression on users (Özgüner and Kendle, 2006). However, the use of formal bedding has been declining since the 1980s, coinciding with the time when Compulsory Competitive Tendering (CCT) was launched. CCT stimulated park management changes in which low-maintenance practices were emphasised due to cuts to budgets (Dempsey *et al.*, 2016b). Such funding and budgets are still under threat. This study investigated stakeholders' perceptions of four different plantings in urban parks. Overall, the types of plantings adapted in the parks affected by financial changes

have shifted from formal bedding to more naturalistic plantings, demonstrating that the changes in plantings were influenced by cost, labour and the extent of management (Dunnett and Hitchmough, 2004). The perceptions of residents sampled here varied but in general, they preferred formal bedding plants, followed by structural complexity and meadow with wild flowers than less-frequently cut grass, as discussed in the findings chapters.

Figure 9.3 Framing perceptions of community groups and professionals



This finding supports the notions that formal bedding plants were in general more preferred over naturalistic planting (Özgüner and Kendle, 2006), wildflower meadows (Southon *et al.*, 2017; Hoyle *et al.*, 2017b) and mown grass (Harris *et al.*, 2017). Perceptions between residents differed according to socio-economic characteristics. This finding supports previous research that socio-economic characteristics affect people's perceptions of space regarding psychological and physical implications (Kavanagh *et al.*, 2005; Kristensen *et al.*, 2006; Macintyre *et al.*, 2008; Jones *et al.*, 2009). The findings in this study support this in relation to the public's perceptions of plantings in urban parks. Non-users are more likely to accept formal bedding planting than

users. Age groups (over 65) and users frequently visiting park have propensity to accept meadows with wild flowers more than other age groups and those less frequently visiting park users. Interestingly, residents living in more deprived areas are more likely to accept formal bedding planting than those living in less deprived areas.

Figure 9.3 summarises the findings examining perceptions of community groups which showed that they were aware of practical management issues, around cost and lack of labour in current or recent park management contexts. Low-maintenance plantings such as meadow with wildflowers and less-frequently cut grass were more acceptable for community and professional groups when considering park management which was not reflected in the residents' perceptions. To what extent residents' perceptions reported in the questionnaire would inform those of community groups and professionals was outside the scope of this research and could contribute to a greater understanding and help inform the latter' approaches to involving more stakeholders.

This study supports previous claims that financial cuts in park maintenance affect lower acceptance of green spaces practices (Tyrvainen and Vaananen, 1998), links professionals' perceptions of plantings in urban parks, in which their perceptions differently manifested, largely based on budget and funding cuts (Dempsey *et al.,* 2016b). All professionals had a tendency not to accept structural complexity, formal bedding and flower meadows due to intensive maintenance. However, the interviews gleaned differences between local authority and non-local authority respondents particularly the 3rd sector social enterprise when examining their perceptions of the plantings. Non-local authority respondents would accept meadow with wildflowers and less-frequently cut grass, while local authority respondents were less likely to accept less-frequently cut grass following an unsuccessful implemented project which resulted in negative effects, including failure to save cost, staff cuts and increasing user complaints.

As a result, there were different perceptions of urban park plantings between residents, community groups and professionals, indicating that acceptability and feasibility of urban park plantings differ between residents according to socio-economic characteristics and a lack of funding and labour in an era of austerity. This negatively affects the perceptions of community groups and professionals.

However, there is a question that overall findings in this study shed light on previous notions that people's perceptions of vegetation have impacts on management process in decision-

making (Kendal *et al.*, 2012) and planning, designing and maintaining green spaces (Harris *et al.*, 2017). However, there are unresolved issues about how to solve the gaps in perceptions between stakeholders. The next section in 9.2.3.1 will summarise these based on a place-keeping framework.

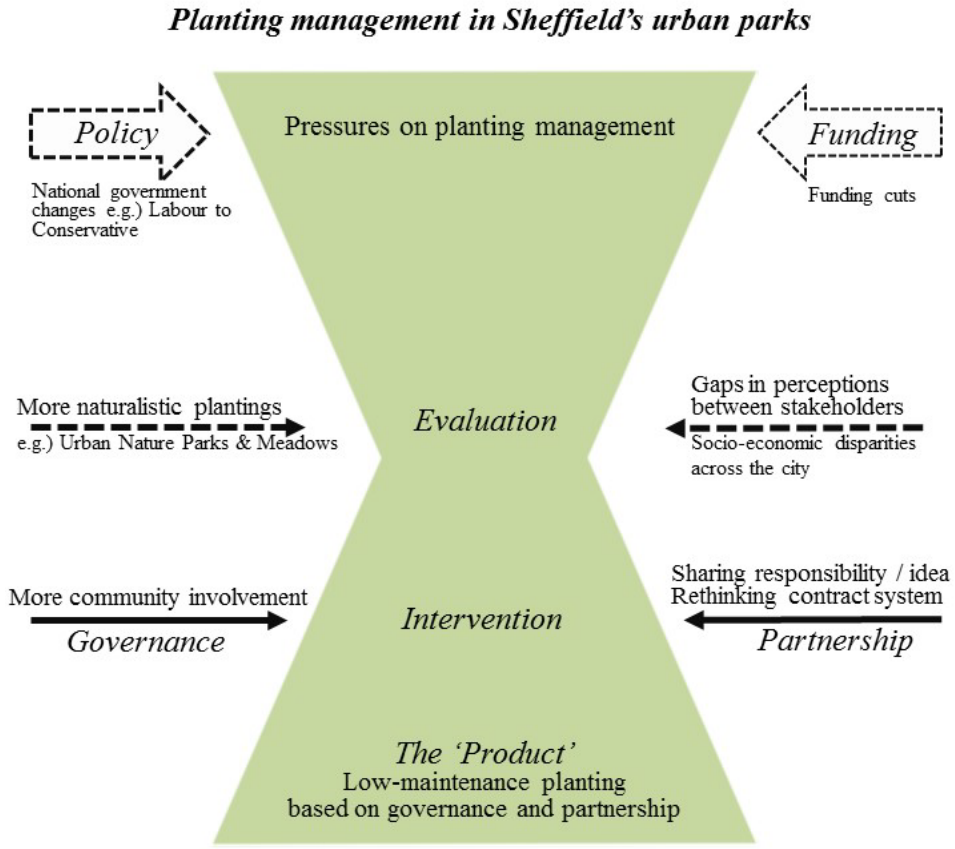
9.2.4.1 Conceptualising planting management in Sheffield within and beyond a place-keeping framework

It is not always cases that public, community and professionals differ in their perceptions of plantings in urban parks. Again, the changes of policy contexts directly and negatively affected funding and its impact on park management results in different perceptions of stakeholders, in particular, between community groups/ professionals and residents, in which there is a further question how the gaps between the stakeholders can be addressed in developing planting management. Some clues emerge in this study, tied to financial impacts i.e. maintenance costs and labour. To unravel this question, this study evolves the place-keeping analytical framework to conceptualise planting management in Sheffield's parks (Figure 9.4).

Perceptions held by community groups and professionals were affected by current phenomena around negative impacts of policy and funding. However, this study revealed that governance through involvement of more stakeholders and partnership through sharing responsibility and ideas can lead to suggestive of intervention to address gaps in perceptions and crisis of park management. Furthermore, pressures of park management derived from impacts of policy and funding on low-maintenance of plantings will dilute with interventions of meanings of governance and partnerships.

It can be argued from these findings that the focus for future policy and practice should be on assessing these perceptions along with the feasibility of people's involvement in covering intensive maintenance work in parks. In addition, structure of park management in particular contract system may be rethought, based on considering interrelationships between stakeholders and their involvement.

Figure 9.4 Conceptualising plantings management in Sheffield within and beyond a place-keeping framework



The resources that professionals refer to need not be wholly financial nor directed to the land-owning local authority, which is where a challenge to the status quo might be required. As discussed above, other stakeholders have been engaged to manage parks, and this is becoming more prevalent in response to austerity measures in the UK (e.g. Heritage Lottery Fund, 2014; Dempsey *et al.*, 2016b). There could be some changes to the governance arrangements where decision-making tends to lie with the local authority in consultation (and some partnership) with community groups (Mathers *et al.*, 2015) These might form stewardship agreements which the local authority already has in place with some Friends groups across the city, or to formalise partnerships with the aim of sharing management responsibilities. This points to a wider issue of who should manage parks: according to the NFPGS (Sharp and Royal, 2018, p.1), "the landowner needs to have the responsibility for good maintenance and this then gives the community groups the support they need to bring in the added value to the site". If this is followed, it may be necessary for land ownership to change hands away from local authorities if

they are limited as landowners to provide this 'good' level of maintenance. It was outside the scope of the research to ask participants if they would be willing to take on the ownership of parks, but it can be inferred from the stakeholder responses that – at the time of this study – there was a widespread assumption that the local authority should own public parks. In this way, it may be initially more acceptable to approach non-governmental stakeholders to explore the potential contribution they could make to park management. This may involve partnerships led by those with land management capacity and also include education stakeholders, given the findings that the links with learning skills are in demand but not currently provided. This could extend to partnerships involving the city's universities, colleges and local schools where relevant. There are already many examples of, e.g. tree planting activities involving schools, but to a lesser extent do these activities extend to ongoing and sustained management activity in the parks.

9.2.5 Perceptions of income generation models

Generating funding for parks is an essential part of contemporary park management in an era of austerity. It is discussed in the literature that funding for public parks has been reduced (Urban Park Forum, 2001; Drayson, 2014) and will continue to be so for at least the next three years (HLF, 2016). At the same time as recognising funding cuts and their negative impact on the declining conditions of urban parks, income generation models have been explored and developed in the UK (CABEspace, 2006; NESTA, 2013; Layton-Jones, 2016). These publications have explored a range of income generation models derived from different sources such as users, community groups and other external income-generating models. De Magalhães and Carmona (2009) provide a framework of different management models in relation to financial necessity which are centred around users, local government and the private sector. However, based on an understanding of stakeholders' perceptions, there is little existing evidence examining to what extent income-generating models introduced are acceptable and feasible according to different stakeholders. This research bridges that gap in knowledge.

Paying for attractions via entry fees or events is contrary to traditional UK culture in which public parks are free (CABE Space, 2006), meaning that public park services were ultimately

reliance on local authorities (Anon, 2015), underpinned by the legacy of the welfare state. Similar sentiments are expressed by community groups and professionals interviewed here who consider urban parks to be public areas, open to all regardless of people's circumstances. Conflict can occur from different perceptions such as when access to public parks is restricted because special events are taking take place (Layton-Jones, 2016). This research in part supports these claims, finding that over 70% of residents would not like to make additional payments for park entry. While this strength of sentiment is not the case across individual parks, it is worth noting that residents living in more deprived areas were less likely to accept entry fees than those living in less deprived areas, while 30% of this latter group (from less deprived areas) were willing to pay entry fees. This finding supports Wall's claim (2013) that some users are willing to pay for park entry, which can play an important role in raising funds.

For other events, such as fayres and fun-days, paying for an attraction is largely acceptable to residents; indeed, about 80% of residents would like to see such events in parks, however, there is difference between affluent and poorer residents. Respondents in deprived areas were more likely to accept paying for a range of events such as fayres & fun-days, festivals and circuses than those who live in less deprived areas. As a result, this research revealed that the level of deprivation has both positive and negative associations for park management practices and income generation models. This research therefore suggests that current and future park management practices should reflect the associations between deprivation and residents' perceptions locally.

Community groups had generally positive perceptions of events and commercial activities in parks, reporting a tendency to accept these activities. Funding from business opportunities such as cafés and restaurants in the park can be a source of fundraising for park management (CABE Space, 2006). Large or high-profile parks (e.g. Endcliffe and Millhouses parks in Sheffield) have successfully managed cafés for some time. The findings reflect people's demand that cafes and restaurants should be seen in their parks. It is noted that 76.7% of all respondents would like to see cafes in their parks. However, it is often only the case that these schemes are in general successful in high profile parks (Layton-Jones, 2016). This idea resonated with community groups and professionals who did not accept cafés because of: a lack of people to manage them, the unaffordability of their prices for local people and the differences between affluent visitors and local people.

It is highlighted that community groups' perceptions of the feasibility of income generation practices are underpinned by community engagement and collaboration with other communities for effective fundraising. However, it is indicated that the perceived imbalance of opportunities for community engagement between high-profile and low-profile parks was problematic.

Overall, professionals' perceptions of the feasibility of income generation practices tend to rely on community engagement to support effective income generation. However, limitations were mentioned: community groups need more skills and interest in generating income so that the structure of park management can be both cost-effective and self-sustaining.

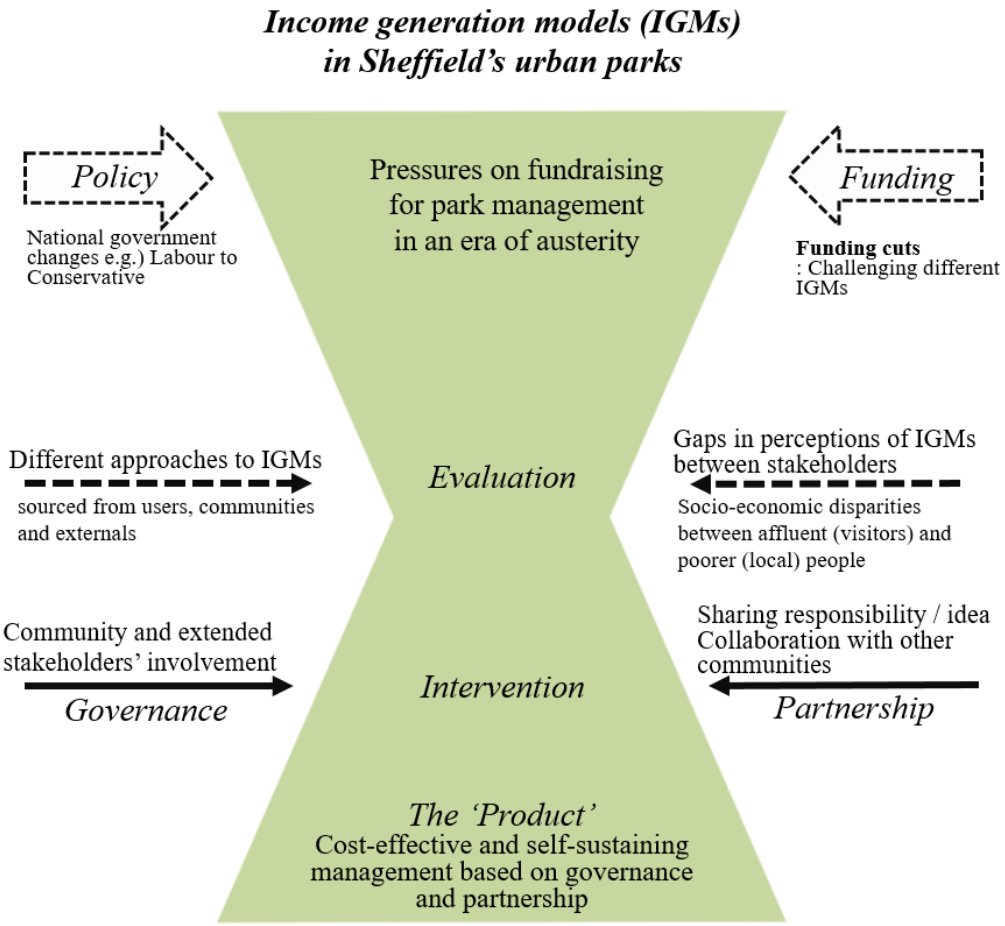
9.2.5.1 Conceptualising income generation models in Sheffield within and beyond a place-keeping framework

Within a context of continuing austerity, policy manifestations in relation to national government changes have affected funding arrangements negatively, resulting in funding cuts and underlining approaches to different income generation models for park management. These changes have led to different stakeholders' engagement to raise money. This study tested the perceptions of income generation models of different stakeholders, showing that the perceptions varied according to different stakeholders and residents based on socio-economic characteristics. However, there is still a question about how we minimise the gaps between parks in more and less deprived parts of the city to maximise funding for parks. To address the question, the place-keeping analytical frameworks provides a way of conceptualising income generation models in Sheffield's district parks.

Governance in place-keeping describes the relationship between the range of stakeholders in the decision-making (Dempsey and Burton, 2012). The concept of governance pursues strong focus on community engagement (Bovaird, 2004; Delago and Strand, 2010) and participatory governance (Murdoch and Abram, 1988). Recent research conducted examines citizen engagement and continuity in connection to place-keeping norms (Mattijssen *et al.,* 2017) where the extended principle constitutes a set of processes to fulfil legitimate roles by stakeholders (De Magalhães and Carmona, 2009). This interpretation captures self-sustainability which the Policy Arrangement Approach framework (PAA) (Arts and Leroy, 2006) is recently

employed to scrutinise relevant aspects of green self-governance practices (Mattijssen *et al.*, 2018).

Figure 9.5. Conceptualising income generation models in Sheffield within and beyond a place-keeping framework



Overall conceptualisation between policy change, financial austerity, responsibility (partnership) and governance has shown in an era of stronger community involvement. Findings from this study demonstrate how the concept of partnership of place-keeping underlines sharing ideas: with respect to community led events and festivals, the sharing of ideas can help maximise fundraising against overlapped events and festivals in different places where many people could be visiting different parks (which they might not normally do). Therefore, this study recommends the sharing of ideas in arenas such as the Sheffield Green Spaces Forum.

However, it must be borne in mind that, in relation to parks, income generation models tend to ultimately rely on local authorities (Anon, 2015). The findings in this study concur with this

claim in part, but finds that some examples of income generation such as events and festivals not only can benefit from high levels of community engagement, but often, rely on it. However, local authorities' different approaches to a range of income generation models plays a significant role, in particular subsequent austerity. The ensuing austerity measures and growing pressure on Sheffield's local authority mean it is increasingly unable to manage the land it owns for a wider range of income generation practices. Since this research was carried out, the responses to ongoing austerity measures on park stewardship and management have included income generating activities such as charging for car parking and the leasing of all tennis courts in Sheffield parks to a national organisation (Parks Tennis) which operates an online system of hourly charging for the use of gated and locked courts. These types of income generation were rejected at the time of the interviews, but the context of austerity has changed since this time and the local authority has been forced to consider the adoption of a wider range of income generating activities in parks. There is therefore scope to explore further how 'successful' the involvement of non-governmental stakeholders in the management of part of Sheffield's parks is perceived to be when one assesses this alongside the long-term impacts in relation to cost-savings to the local authority (e.g. will parks charging users to play tennis have an adverse effect on the take-up of tennis in the city?).

Contemporary park management should therefore be considered as a structure which can aim at cost effectiveness and self-sustainability within the context of austerity based on sharing ideas and practice through strong partnerships.

9.2.6 Driving changes in park management contexts and the place-keeping analytical framework

Understanding park management through a lens of place-keeping and its dimensions can help contribute to developing strategies of long-term management and addressing the declining condition of public spaces (Dempsey and Burton, 2012). This research has attempted to understand how changes are driven in the context of park management in Sheffield by conceptualising the interrelationships between identified place-keeping dimensions for the city's district parks. The findings disclose that, in relation to Sheffield's district parks, there is a

hierarchy within the place-keeping analytical framework, in which national and local policy plays the most predominant part, indicating that the *policy* dimension of place-keeping produces 'ripples' that affect the other dimensions. Place-keeping applied in this research brings all dimensions to bear on an understanding of the changes of park management. This section on the implications of the research findings therefore evolves the place-keeping analytical framework.

The place-keeping *governance* dimension accentuates the deep relationship between governance and engagement of community groups (Bovaird, 2004; Delago and Strand, 2010; Mattijssen *et al.,* 2017) getting involved in the decision-making process (Dempsey and Burton, 2012; Mathers *et al.,* 2015; Dempsey *et al.,* 2016). Such commentators claim that more autonomy can be given to communities for their wider activities (Butler, 2016). The research findings support this claim, finding that most community groups in the study sites were a decisive part in the decision-making process of park development and management and engaged with the local authority through regular community meetings. This reflects van Dam *et al.,* 2015's claim that the process of decision-making in many parts of public services has been changed from top-down to bottom-up. However, it is highlighted that even though community groups are increasingly involved in the decision-making process, park management provision is still dependent on the local authority, indicating that the decision-making of community groups is restricted to within the boundary of their general activities such as regular maintenance and occasionally organising events.

The literature has shown that *funding* cuts and related policy contexts have contributed to the declining condition of park management. This research concurs that the reduction in funding is a very significant issue and is the primary reason behind the decline in the standards of park maintenance. In particular, it is highlighted that the impact of *policy*, such as Compulsory Competitive Tendering, has had a strong impact on changes in park management structures (Jones, 2000; Barber, 2005, p.30-31; Carmona and De Magalhães, 2006; Layton-Jones, 2016) which have negatively influenced park management at the local level (Dempsey *et al.,* 2016). However, this research found that encouraging stakeholder engagement emphasised by the place-keeping concept of governance may contribute to fundraising in different ways particularly community involvement in fundraising and contributing to labour.

The *partnership* approach in place-keeping underlines an association of two or more partners based on sharing responsibility for the long-term management of a place (Dempsey and Burton, 2012; Burton and Mathers, 2014; Mathers *et al.,* 2015). In response to this focus, such policy contexts emphasise the partnership approach to effective park management. The findings of this research reflect the claims that relevant partners in Sheffield parks have associations with a range of partners. However, this research found that a more holistic approach to partnerships was introduced by local government regarding park management in the 1990s. It can be seen that partnerships have a tendency to be changed and expanded in complex and innovative collaborations with various sectors, in particular third sectors (Parry *et al.,* 2011; Alcock, 2012; Macmillan, 2013), and the private sector in relation to income generation. These partnerships will continue to develop with associated governance structures as different approaches to addressing challenges in park management emerge.

Maintenance constitutes the regular activities required to ensure the 'fitness for purpose' of a place (Welch, 1991; Barber, 2005) and relates to the standard and cleanliness of a place based on the process of long-term management (Dempsey and Burton, 2012). As mentioned above, approaches of policy contexts to park management has resulted in reforms to the structure of park management, in particular, to staff working practices, changing their time and the number of staffs. Budget and funding cuts has reduced the number of ground staff, their time (The Urban Parks Forum, 2001; Randrup *et al.,* 2017) and the nature of maintenance activities, which is dominated by litter clearance. To address these negative changes for park use experience, the findings of this research show that the park management approach to regular maintenance tends to rely on the participation of community groups, indicating that the local authority has developed them as a direct response to community groups such as 'Friends groups', wanting to get involved to help. However, there are greater issues around the loss of skills which emerged in the research findings which require further study over a longer period of time, which was outside the scope of this research.

Since Public Park Assessment, 2001, the focus has been on the *evaluation* of green spaces and parks, emphasising national audit tools such as the Green Flag Award. Place-keeping evaluation underlies the aim of delivering the benefits of parks efficiently and effectively within limited resources (Dempsey and Burton, 2012). The findings of this research support the claim that

evaluating urban parks is an essential requirement in Sheffield. However, it is noted that, as a national audit tool, the effectiveness of the GFA is limited due to its complex standards and the high assessment requirements that require expert judges. The newly-introduced local audit tool - the 'Sheffield Standard' - can cover these weaknesses in the GFA, however the Sheffield Standard is about establishing a benchmark for green space quality rather than being an aspirational evaluation for award-winning green spaces. In the context of austerity when resources are severely limited, evaluation is often not prioritised and valuable information about the state of play in a city's parks can be lost. Using local stakeholders such as community groups, as well as the public in the rise of citizen science, may be considered alternatives.

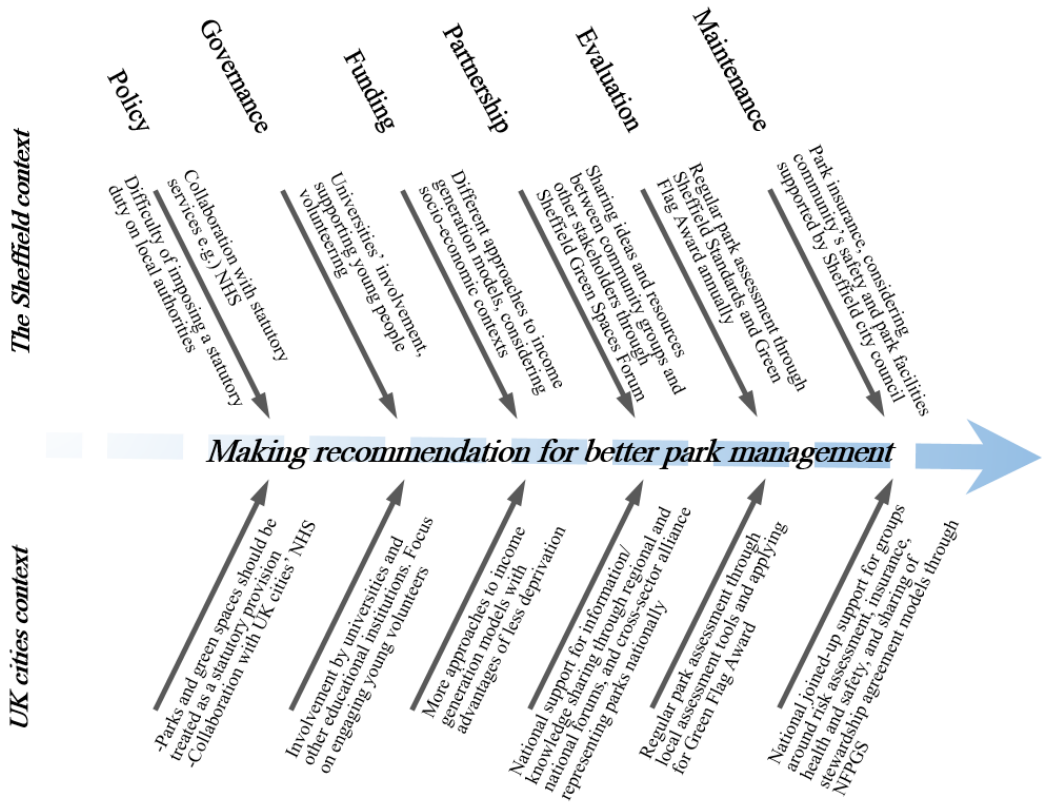
9.2.7 Recommendations for better park management

This research can offer recommendations for better park management based on the findings at the city and local scales within the place-keeping analytical framework. It has been shown that the changes of park management and such park management practices can be explained by the concept of place-keeping dimensions and that the recommendations can therefore be developed using the place-keeping dimensions. Furthermore, potential recommendations for UK cities' parks can be explained in the frame in place-keeping dimensions.

However, there is an important caveat to note in relation to the applicability of the recommendations which apply to the data collected in 2015. There have been important changes to park management practices in Sheffield which were not anticipated by professionals, particularly around income generation. Charging for hiring sports facilities has been introduced in nine parks in Sheffield: High Hazels as one of the study sites has charged since late 2016 (without consultation with the Friends group). Overall car park charges have been applied or increased for park users in Sheffield parks since 2017. This research could not reflect these changes, marking an unavoidable limitation of cross-sectional research.

"[An] ideal park is [an] NHS funded park. Everything else, all the recreations are consequence of health.…… NHS funds should fund parks with proper construction of sports facilities and general recreational space."-ProLA-1.

Figure 9.6 Making recommendations for Sheffield' parks and UK cities' parks



The impact of policy can affect the scale of budget support and funding for park services given that statutory provision requires that services such as education and health should be allocated stable budgets. In contrast, park and green space management services have non-statutory status with unstable budget allocations that have resulted in the decline in green spaces and parks (Barber, 2005, p. 29). The findings, underpinned by local authority interviews, support the claim that parks and green spaces should be treated as a statutory provision because this can offer numerous benefits for people and biodiversity. This claim is increasingly supported by numerous UK local authorities: 'The strongest terms for there to be a statutory duty on local authorities to provide and maintain public parks. Indeed, more than 320,000 people have signed a petition calling for such a statutory duty to be imposed' - CLG, 2017. However, this research found a low expectation that park management will become a statutory provision. It is suggested that those services with a statutory provision should be asked to get involved in park management. For example, the National Health Service, which relates to people's health, should be involved in expanding the financial contribution to park management. This could also apply for other UK cities where different cities operate their health services under statutory duties. In

the current austerity context, there will be other sectors vying for this type of financial contribution, but nevertheless, the conceptual understanding of healthy green spaces is gaining more traction in policy and practice. There is more competition from other sectors e.g.) culture and arts, but the links between health and green space are becoming better understood.

Place-keeping governance emphasises community engagement in park management decision making. There is a need, based on the interview findings with community and professional groups, for young people to become involved in park management. It is noted that universities and other educational institutions can be useful in helping to garner interest in park management. In this study, the role, of universities was considered to be important for Sheffield urban park management in particular in connections between communities and local authority as well as through the Sheffield Green Spaces Forum. These finding can apply to other UK cities which all have a wide range of educational institutions as well as universities. However, it was not possible in this research to provide effective recommendations about how young people's involvement in park management might be promoted. However, along with more active involvement of university, one route might resemble a recent volunteering project focused on young people, such as Groundwork's 'Young people volunteer on social action project'1 which could be a stimulus for further research.

The findings regarding contributions to acceptable and feasible funding in this research reveal that voluntary donations and other innovative income generation practices led by community groups could be useful alternatives to fundraising and other obligatory income generation practices. A number of income generation models have been discussed in relation to fundraising for better parks and green spaces (CABE space, 2006; Nesta, 2013; Layton-Jones, 2016). This research provides new findings focusing on the perceptions of stakeholders - such as residents, community groups and professionals - of income generation models. It is noted that professionals do not support additional charges such as entry fees and car park charges given that parks are public areas and open to all. However, the findings of this research revealed that between 25-30% of residents were willing to pay entry fees and car park charges. However, residents have different perceptions according to their socio-economic characteristics,

[1] This group of young volunteers working 30 hours usually in the school holiday has chosen to help improve habitat, green spaces and others aspects of the urban environment.

suggesting that the promotion of income generation models, could be based on smaller contributions in deprived areas in collaboration or active involvement with/of community groups. This indicates that the organisation of such events makes co-working with community groups essential to reflect the perceptions of the high percentage of residents (79.2%) that would like to see more events in their parks. While most community groups would like to get involved in organising such events, there was less enthusiasm about other income generation models, such as a café, in their parks (despite high demand from residents). The perceptions of community groups and professionals were that the acceptability and feasibility of running a café is low considering users' relative deprivation or users' low spending power and a lack of people to manage such facilities. However, in terms of association between income generation models and socio-economic contexts, the recommendations are more feasible and efficient for other UK cities. Sheffield as ranked less than 10% of IMD is one of most deprived city in the UK (DCLG, 2015), meaning that other cities ranked over 90% of IMD which are less deprived cities than Sheffield can have more advantages to apply for income generation models. Therefore, this study makes recommendation for better park management of UK cities which are more active approaches to income generation models. As this is already happening across the country, more research is needed to explore the implications of income generation in parks and its perceived effects on park usage and financial contribution to park management more widely.

Place-keeping partnership underlines sharing responsibility and ideas (Dempsey and Burton, 2012). The research provides empirical findings as to how many residents would like to get involved in sharing responsibility for park management. Given that the case of Sheffield may have similarities to other cities, these findings can help shed light on future park management through sharing responsibility and sharing ideas among stakeholders. This research found that the opportunities for sharing ideas across the city were provided by the network of green space groups, the 'Sheffield Green Spaces Forum'. This research encourages membership and park alliances that can represent community groups helping them to acquire ideas, knowledge and information through community, professional, academic and local authority members. For UK cities, this study makes recommendations that cities follow the example of established green spaces forum such as those in Birmingham, Brighton & Hove, Leeds, London and other cities. Based on local green spaces forums, UK cities can be sharing their information with other cities through park alliance or forum at national scale e.g.) National Federation of Parks and Green

Spaces. However, this needs resourcing at the national level, raising questions about where the funding might come from. It is also unclear how younger volunteers can be engaged in parks management: again, ongoing projects such as Groundwork's 'Young people volunteer on social action project' may be able to shed light on successful ways of recruiting and retaining volunteers.

A number of existing audit tools can evaluate the quality of green spaces and parks. Such award schemes represent good practice in maintaining and managing public space (Barber, 2005). However, measuring the condition of parks is a complicated and difficult concept (Burton and Rymsa-Fitschen, 2008). There are fundamental recommendations whereby the local authority is required to monitor all publicly-accessible green spaces in the city and ensure that they are managed to an agreed citywide standard based on the Green Flag Award. However, this research points out the shortcomings of the Green Flag Award such as the requirement for expert judges and the use of complicated indicators. Therefore, employing a local audit tool such as the Sheffield Standard underpinned by GFA can address the shortcomings of GFA and could be more feasible when considering local park management circumstances. Moreover, managing parks could be more effectively linked to monitoring park conditions. For other UK cities, this study makes recommendations that each city should design park assessment tool locally or employ well-designed tool from other cities with similar park management contexts. This could be examined in more research to explore how different cities evaluate their parks and how these evaluations differ across the country. Such policy contexts and place-keeping theory stress the engagement of community groups to manage and maintain parks properly. A newly emerging issue regarding park maintenance was found in this research. Park insurance introduced and spread by Sheffield Green Spaces Forum aims to provide community groups with accident cover. This research, however, makes the further recommendation that taking the precaution of employing the integrated park insurance to completely insure community groups and undertaking a park risk assessment would be prudent. This study makes recommendations for other UK cities that information of park insurance needs to be considered by local authority delivering and encouraging community groups and other park management stakeholders. It is anticipated that this will potentially turn out to be an efficient alternative for park management in a period of economic austerity.

9.3 Contribution to knowledge

It is discussed in theory, policy contexts and practices that green spaces and parks have positive social, environmental and ecological effects including on people's health and well-being. However, in the UK we are now operating in an era of austerity. This indicates that resources to manage green spaces and parks, in particular financial resources such as funding and budgets, are extremely restricted which was the case in Sheffield. Such research such as that commissioned by CABE Space in the early 2000s explored income generation practices in relation to public parks, but were not able to provide empirical evidence. In general, previous research did not reflect on the financially depleted circumstances of park management. This research attempts to address this gap in knowledge by providing evidence through the identification of specific features which are meaningful, acceptable and feasible as park management practices.

It is argued in a range of theory and policy contexts that encouraging a range of stakeholders, particularly community groups to be involved, in park management practices are beneficial. However, existing empirical research into park management contexts does not consider different stakeholders' perceptions of such park management practices. To address the gap in knowledge, the multi-method approach employed in this research generates new knowledge concerning a number of differences and associations between the perceptions of residents, community groups and professionals in relation to a range of park management practices.

Contributing to theoretical debates on associations between residents' perceptions of park management practices according to socio-economic characteristics, this research also provides findings which highlight significant differences. These will be summarised in the following section. The findings contribute to providing new knowledge which can effectively deliver an understanding of their different perceptions of park management practices.

Based on the findings, this research provides recommendations for better park management at city and local scales, extending scale to UK cities in the frameworks of place-keeping. This study has applied the concepts and dimensions of the place-keeping to district parks for the first time within and beyond place-keeping frameworks in relation to specific potential park

management practices. This differs from previous theory which only provides descriptive findings relying on literature reviews or case studies. In this way, this research makes detailed and practical recommendations that are acceptable and feasible based on empirical evidence.

Overall, this research has contributed valuable knowledge to further our existing understanding of park management practices. It is hoped that this will provide the foundation for further research focused on the city of Sheffield and further cities across the UK in the future.

9.4 Limitations of the research

Although this research has achieved its aims, there were some unavoidable limitations which are discussed below. The implications of these are discussed alongside the scope for further research that they inevitably lead to.

9.4.1 Generalisations of empirical data

A number of findings presented in Chapters Six, Seven and Eight are significant but there are several limitations in interpreting them. This research was conducted in a small number of study sites and with only a sample of respondents who completed questionnaires and interviews, and generalisations were made on this basis. A larger number of participants in the questionnaire and interviews would undoubtedly have increased the ability of the researcher to generalise. The completed interviews did not necessarily reflect the wide variety of stakeholders related to park management. For instance, the researcher did not contact all groups involved in park management in and around Sheffield such as the Sheffield Wildlife, Trust and other NGO groups. It was outside the scope of this research to interview local businesses about the potential contribution they might make to the costs of managing parks. This was because the study sites did not have many businesses surrounding the parks. Finally, there were some community groups who were not interviewed in this research, including bowling clubs and other specific interest groups who use the parks regularly (e.g. football/ rugby clubs). Given that these groups

are for the most part not involved in parks management, it was outside the scope and remit of this research to interview representatives from such groups. This potentially weakens some of the findings and indicates scope for further research to examine a wider range of the study sites and participants.

9.4.2 Limited park management practices

A number of park management practices have been introduced in the UK and worldwide. On account of the time available to conduct a PhD, it was only possible in this study to examine a limited number of potential parks management practices. This research focused on community food growing, urban park plantings and income generation models because they were considered to reflected recent interests and demands on park management practice in the UK. These relate to, current park management contexts under severe financial constraints and the policy emphasis on community involvement and stakeholder interest.

For these reasons, the pursuit of low-cost interventions was followed in the selection of plantings and different approaches to income generation models, while community food growing was selected because of the extensive community involvement required. Further research could examine other park management practices, and other policy contexts to explore ways in which green spaces can continue providing social, environmental and health benefits.

9.4.3 Limited research scales: city and local scale

This research explored a range of policy contexts and interpretations of policy around the country at the national and city scales. However, the research was limited to examining park management at two scales: city and local. This was also because of the PhD time limitation and the wide range of local characteristics under scrutiny. While this research provided recommendations for better park management that can be applied to the city and local contexts in Sheffield, more research would be needed to examine the contexts in other cities, which would have strengthened the research. However, the analyses conducted exploring the

implications of socio-demographic characteristics and park management governance structures which has application beyond Sheffield to other towns and cities around the UK which operate within the same wider national policy context.

9.5 Scope for further research

There is considerable scope for extending and developing this research. Section 9.4 pointed out some of the limitations of this research which provide potential opportunities for future research. In addition to this, further research could extend this research developing those issues which this research did not deal with in depth.

To address the insufficient generalisations of empirical data, this research could be extended to include a greater number of study sites and stakeholders linked with various features of the sample in order to investigate more fully their associations with park management contexts and any gaps in perceptions between stakeholders.

To address the limited approach to park management practices, further research could explore a range of park management practices based on considering their interest and importance, for instance flood alleviation. This practice is adopted in the Manor Fields Park study site but this research could not deal with this aspect as it was outside the scope of the research. In addition, considering the significant historical record in which severe flooding has frequently happened over the last 10-20 years (2000, 2007, 2009 and 2012 in Sheffield) the acceptability and feasibility of effective flooding alleviation practices should be examined in relation to park settings.

To address the limited research scales, further research could be extended to the national scale investigating national park management contexts, looking into the perceptions of stakeholders on the national scale to cover the gap in the scale and develop a wider contribution. Also, further research could compare cities and the different management approaches adopted e.g. the Trust model in Newcastle which could see Newcastle's parks and green spaces remain the

property of the city council but transfer day-to-day responsibility for funding, managing and maintaining them to a new charitable trust whose sole purpose is to manage the parks.

To address the updating in response to recent issues, further research could explore and reflect up-to-date changes to contribute to park management practices effectively and how the perceptions of stakeholders have responded to the park management practices which have been introduced since 2015. For instance, when it comes to charging for tennis courts in some Sheffield parks since 2016, the optimal charge could form part of an examination of the effect of charging for tennis, and people's willingness to pay.

In addition to these opportunities for further research based on the limitations of this research outlined in Section 9.4, there are topics which this research did not approach in depth that could be within the scope for further research.

To develop how the popularity of allotments might be delivered to park settings, this is based on the findings of this research that most stakeholders, in particular community groups and professionals, were less likely to accept community food growing in parks even though a similar practice 'the allotment' is greatly popular with long waiting lists in urban areas. Further research could focus on analysing the characteristics of allotments and addressing the barriers found in this research such as security and anti-social behaviour in park settings.

To develop successful park regeneration carried out by a 3rd sector/enterprise company, further research could examine the structures of successful cases to question why this innovative structure of park management has been employed only in limited parks in the UK. The findings derived from the further research could contribute to providing solutions for more innovative park management.

To develop more involvement of young people in park management, this research recommended university students as a potential resource. However, university students only spend 3 or so years at university, so there's also a need to target younger residents for long-term sustainable involvement. Discovering how young people's involvement in park management can be promoted could be within the scope for further research in a range of cities to explore the different, local approaches that could be taken.

9.6 Concluding remarks

There is a lot of supporting evidence that green spaces contribute to people's health and well-being. However, the benefits can generally be delivered in good conditions of green spaces. Since the late 1990s, along with funding cuts and such policy changes such as CCT have caused loss of green space quality including urban parks. Accordingly, recently emerging norms of park management have been focused on addressing the decline of standards of urban parks based on approaches to a wider range of interrelated dimensions of policy, governance, partnerships, funding, evaluation and maintenance in the context of a long-term process. In relation to this, this research applied place-keeping frameworks as a holistic approach to long-term management to understand park management contexts. The frameworks led to recommendations for better park management.

Based on driver changes of policy contexts, this study found that the roles of communities and their responsibility were increasingly enlarged. It is clearly shown that involving significant transfers of responsibility from central to local and community emerged in relation with financial austerity. Overall contextualisation of policy changes considering financial austerity has involved partnership and governance of non-governmental stakeholders. Through previous UK governments, the New Labour and the Coalition, this manifestation has been mostly derived from financial deficiency and inequality between statutory and non-statutory public services, explaining that as park management service is non-statutory service funding and budget have been cut more seriously than statutory services. This emergence in policy contexts invited more stakeholders who can get involved in park management, resulting in this involvement could contribute to the effectiveness of park management against financial crisis.

Another emerging terms 'urbanisation' and its' pressure on new lands approached to urban parks to connect people to green spaces for health. Along with current park management contexts based on under constraints of finance, emphasis on community involvement and people's interest, the pursuit of low-cost interventions in relation to plantings and different approaches to income generation models in an era of austerity, such potential park management practices such as community food growing, urban park plantings and income generation models were chosen to test their acceptability and feasibility in park settings based on an understanding

of stakeholders' perceptions because these relate to a base on keeping minimum quality standards of parks to permit green spaces to continue providing social, environmental and health benefits. In addition, importantly according to people's perceptions of park management contexts, the association between the perceptions and socio-economic characteristics was examined to reflect on the future provision of park management.

This research concurred with previous literature that socio-demographic factors and park use patterns significantly affected people's perceptions of green spaces: in this research, the factors were related to residents' perceptions of current park management and frequency of park visit. Interestingly, this research revealed that cleanliness was the most substantial factor among varying indicators. Further, other factors were also found, for instance, benches & seating, accessible park entrances and grass maintenance, affecting their perceptions. This outcome could be adduced to suggest management priorities in better parks.

The acceptability and feasibility of potential park management practices tested by this research were greatly concerned with residents' perceptions. Importantly there were different perceptions of potential park management practices between stakeholders, i.e. residents, community groups and professionals. The differences provided sources to determine the acceptability and feasibility of the practices.

The popularity of community food-growing-related practices and such successful projects as 'Incredible Edible' has been on the increase since the turn of the 21st century. However, this research found that security problems, such as vandalism and anti-social behaviour, motivated this low acceptability. In addition, such barriers as a lack of people to manage and monitor, people's strong preference for allotments and an unenthusiastic local authority resulted in this low feasibility for attempting CFG. These links to the allotments are not just physical but extend to informal stakeholder partnerships with allotment groups suggesting that future CFG activity might constitute allotment expansion or an extension of CFG activities run by the allotment groups within the parks. Providing CFG activities in the park could also potentially address the professionals' concerns around a lack of people available to manage and monitor. However, this latter issue is a wider one of governance, partnership and resources which would need addressing at the local authority level. If a programme of CFG/ allotment development were to take place in parks, given the findings of different levels of acceptability and feasibility in

relation to different parks, it would make sense to lead with those where acceptability and feasibility were higher.

Along with policy changes such as CCT and funding cut, urban park plantings have been stimulated changes to low maintenance plantings for instance from formal bedding to naturalistic plantings, reflecting around cost and lack of labour in current or recent park management contexts. Some conclusive remarks were found that the perceptions of stakeholders in general differentiated that residents' perceptions were associated with socio-economic characteristics and community and professionals' perceptions were related to practical issues regarding impacts of a lack of resources. Perceptions found in community groups and professionals were affected by current phenomenon around negative impacts of policy and funding, linking professionals' perceptions of plantings in urban parks, in which their perceptions differently manifested that they were more likely to accept low maintenance plantings. However, findings provided key texts to address these gaps in perceptions, which are involvement and more people particularly community and sharing responsibility for park management raised. Interestingly, it takes into account place-keeping frameworks, clarifying that the gaps derived from inevitably profound impacts of negative policy and funding issues on park management can be intervened by the concepts of governance and partnership in place-keeping frameworks. This could extend to partnerships involving the city's universities, colleges and local schools where relevant. There are already many examples, e.g. tree planting activities involving schools, but to a lesser extent do these activities extend to ongoing and sustained parks management. In the context of this study, plants or vegetation have affected people' perceptions and contributed positively to people's health and well-being.

The insecurity of funding for public parks continues to be an ongoing concern in contemporary park management in an era of austerity. This research found that stakeholders such as residents and community groups could contribute to generating income in parks. In the case of residents, they were willing to pay for park uses such as voluntary entry fees, facility charges and hire. Community groups already contribute to raising money through organising events & festivals and could be involved more in such events. However, professionals' perceptions in particular local authority were based on the dominant ideology that park are public spaces, and in opposition to income generation. The identified barriers to commercial income generation such

as café and restaurants, in relation to differents level of deprivation: indicating the need for activities that are locally relevant and affordable. In this way, stakeholders involved in contemporary park management should consider how cost-effectiveness and self-sustainability based on governance and partnerships can be achieved.

Understanding current park management plays significant roles to make recommendations for better park management in the frameworks of place-keeping. This research found that there was a hierarchy in the relevance and value of each place-keeping dimension where policy has a predominant impact over the other dimensions.

Policy as most profound impacts on park management in the current austerity context, affects the other dimensions of place-keeping discussed in 8.2. However, the other dimensions also play significant contribution to dealing with overall park management.

With respect to governance of place-keeping, even though community groups are increasingly involved in the decision-making process, park management provision is still dependent on the local authority, indicating that the decision-making of community groups is restricted to within the boundary of their general activities such as regular maintenance and occasionally organising events.

Partnerships need to be changed and expanded in complex and innovative collaborations with various sectors, in particular, third sectors. In addition, the opportunities for sharing ideas across the city were provided by the network of green space groups, a city forum. This research encourages membership and park alliance that local community groups join such forums to acquire ideas, knowledge and information through community, university and local authority members.

Employing a local audit tool such as the Sheffield Standard underpinned by GFA can address the shortcomings of GFA and could be more feasible when considering local park management circumstances. For other UK cities, this study recommends that each city needs to design park assessment tool locally or employ a well-designed tool from other cities which are similar park management contexts.

This study makes recommendations for Sheffield and other UK cities that information on park insurance needs to be considered by local authority delivering and encouraging community

groups and other park management stakeholders. It is anticipated that this will potentially turn out to be an efficient alternative for park management in a period of economic austerity.

Overall, in light of the current financial climate of austerity and the findings which show that the local authority is currently limited in how well they can manage parks, the findings highlight the potential for a change in governance arrangements. This could mean the local authority stepping back from acting as land-owner-manager to develop partnerships with non-governmental groups/ organisations in relation to specific parts of the park (not unlike bowling clubs) which could be developed and formalised e.g. through stewardship agreements. The findings (from MFP) show that the introduction of alternative land management practices can potentially lead to higher levels of acceptability which are correlated with a greater propensity for residents to want to get involved. More research would, however, be needed to explore to what extent this manifests itself as, for example, increased (and younger) Friends group membership. This also relates to the finding that respondents with families were more likely to want to get involved in potential park management practices, which would dramatically change the average demographics of Friends Groups from the current over-representation of white female over 60s, thereby helping with long-term success in volunteer-led groups (Mathers *et al.*, 2014). The formalised involvement of other groups and organisations can help provide a more sustained presence in the park, which could address some of the issues raised by community groups and professionals around anti-social behaviour, vandalism and security problems which might ensue with the introduction of new park management practices. Therefore, it would be useful in future research to extend the range of interest groups that are represented in studies around urban landscape management practices to deepen further our understanding of existing and potential governance structures that operate both within parks and parks across a city.

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Appendices

Appendix A

Demographical data of the sample

Appendix A.1 Gender of the sample and Census respondents by study site (%)

	Male	Female
Parson Cross sample	38.8	61.3
Parson Cross Census	48.0	52.0
Manor Fields sample	29.5	70.5
Manor Fields Census	51.4	48.6
High Hazels sample	40.9	59.1
High Hazels Census	50.1	49.9
Richmond sample	42.9	57.1
Richmond Census	48.2	51.8
Meersbrook sample	34.1	65.9
Meersbrook Census	49.0	51.0
Bolehills sample	43.6	56.4
Bolehills Census	50.8	49.2
Total sample	38.5	61.5
Total Census	49.6	50.4

Appendix A.2 Age of the sample and Census respondents by study site (%)

	16-24	25-34	35-44	45-54	55-64	Over 65
Parson Cross sample	5	17.5	7.5	18.8	23.8	27.5
Parson Cross Census	12.2	12.5	13.0	12.6	10.0	14.8
Manor Fields sample	6.4	29.5	20.5	10.3	15.4	17.9
Manor Fields Census	16.0	16.7	14.1	11.0	8.5	12.5
High Hazels sample	1.1	15.9	19.3	9.1	14.8	39.8
High Hazels Census	12.3	15.8	14.1	10.0	8.4	13.7
Richmond sample	3.6	8.3	9.5	19.0	25.0	34.5
Richmond Census	11.1	11.0	15.1	13.7	11.9	18.8
Meersbrook sample	2.4	13.4	19.5	20.7	25.6	18.3
Meersbrook Census	12.2	16.3	15.5	13.0	9.3	14.3
Bolehills sample	7.4	17.0	12.8	20.2	24.5	18.1
Bolehills Census	22.4	20.5	12.2	10.5	8.4	12.5
Total sample	4.3	16.8	14.8	16.4	21.5	26.1
Total Census	14.4	15.5	14.0	11.8	9.4	14.4

Appendix A.3 Disabled respondents in the sample and Census respondents by study site (%)

	Disabled	Not Disabled
Parson Cross sample	33.8	66.3
Parson Cross Census	23.7	76.3
Manor Fields sample	15.4	84.6
Manor Fields Census	22.1	77.9
High Hazels sample	12.5	87.5
High Hazels Census	19.9	80.1
Richmond sample	13.1	86.9
Richmond Census	22.8	77.2
Meersbrook sample	6.1	93.9
Meersbrook Census	20.0	80.0

	Disabled	Not Disabled
Bolehills sample	3.2	96.8
Bolehills Census	17.3	82.7
Total sample	13.6	86.4
Total Census	21.0	79.0

Appendix A.4 Household composition of the sample and Census respondents by study site (%)

	Family without children	Family with children*	By myself	With a partner	With a friend
Parson Cross sample	11.3	37.5	26.3	25.0	0
Parson Cross Census	10.4	60.1(48.6) **	13.4	3.2	-
Manor Fields sample	17.9	50.0	11.5	20.5	0
Manor Fields Census	10.9	52.2(41.3)	14.8	4.2	-
High Hazels sample	14.8	31.8	25.0	27.3	1.1
High Hazels Census	14.0	40.5(32.1)	29.2	4.6	-
Richmond sample	15.5	38.1	21.4	25.0	0
Richmond Census	17.5	37.0(26.7)	32.2	5.3	-
Meersbrook sample	13.4	41.5	17.1	25.6	2.4
Meersbrook Census	15.6	33.4(25.2)	37.5	7.4	-
Bolehills sample	20.2	26.6	17.0	33.0	3.2
Bolehills Census	18.2	23.9(17.9)	40.5	9.3	-
Total sample	15.6	37.2	19.8	26.3	1.2
Total Census	14.4	41.2(32.0)	27.9	5.6	-

* Family with children includes both dependent and non-dependent children. ** The proportion excludes non-dependent children.

Appendix A.5 Household size (including under 16) of the sample and Census respondents by study site (%)

	1	2	3	4	5	6	Over 6
Parson Cross sample	23.8	41.3	13.8	15.0	1.3	2.5	2.6
Parson Cross Census	32.6	30.0	15.7	12.1	5.5	2.7	1.4
Manor Fields sample	11.5	42.3	21.8	15.4	5.1	3.8	0
Manor Fields Census	34.7	29.6	15.7	11.6	5.4	2.2	0.8
High Hazels sample	25.0	43.2	10.2	13.6	3.4	4.5	0
High Hazels Census	29.2	30.0	14.4	11.8	6.9	5.1	2.6
Richmond sample	21.4	41.7	21.4	11.9	2.4	1.2	0
Richmond Census	32.2	35.0	15.3	12.8	3.4	1.1	0.1
Meersbrook sample	17.1	43.9	17.1	19.3	3.7	0	0
Meersbrook Census	37.5	30.9	14.9	10.6	4.3	1.3	0.5
Bolehills sample	17.0	56.4	11.7	11.7	2.1	1.1	0
Bolehills Census	40.5	32.6	13.1	8.4	3.3	1.5	0.5
Total sample	19.4	45.1	15.8	14.2	3.0	2.2	0.4
Total Census	34.5	31.4	14.9	11.2	4.8	2.3	1.0

Appendix A.6 Occupation of the sample and Census respondents by study site (%)

	Employed	Self-employed	Unemployed	Retired	Looking after family	Full time student	Long term sick	Other
Parson Cross sample	45.0	2.5	8.8	30.0	2.5	2.5	8.8	0
Parson Cross Census	45.3	5.7	6.6	24.6	5.0	0.8	8.2	4.0
Manor Fields sample	51.3	2.6	3.8	19.2	19.2	1.3	1.3	1.3
Manor Fields Census	46.6	5.9	5.8	21.7	3.8	1.6	8.8	2.7
High Hazels sample	39.8	6.8	2.3	40.9	6.8	0	2.3	1.1
High Hazels Census	46.7	10.5	5.0	24.4	3.1	0.9	5.3	2.7
Richmond sample	47.6	2.4	2.4	38.1	1.2	2.4	4.8	1.2
Richmond Census	51.5	7.7	3.4	28.2	2.1	0.4	4.7	1.5
Meersbrook sample	54.9	8.5	1.2	29.3	2.4	1.2	2.4	0
Meersbrook Census	53.1	8.3	5.2	21.5	2.7	0.8	5.3	1.7
Bolehills sample	58.5	5.3	0	23.4	2.1	9.6	0	1.1
Bolehills Census	50.3	6.8	3.7	20.6	1.4	6.1	5.8	2.1
Total sample	49.6	4.7	3.0	30.2	5.5	3.0	3.2	0.8
Total Census	49.0	7.5	5.0	23.5	3.0	1.8	6.4	2.5

Appendix A.8 Tenure of the sample and Census respondents by study site (%)

	Own outright	Pay part rent mortgage	Rent from public sector	Rent from private sector
Parson Cross sample	45.0	2.5	41.3	11.3
Parson Cross Census	16.3	23.7	51.3	7.5
Manor Fields sample	52.6	3.8	26.9	16.7
Manor Fields Census	12.6	18.9	50.2	15.2
High Hazels sample	79.5	0	12.5	8.0
High Hazels Census	26.4	30.2	26.5	15.1
Richmond sample	86.9	0	8.3	4.8
Richmond Census	27.4	36.0	27.0	8.7
Meersbrook sample	87.8	1.2	2.4	8.5
Meersbrook Census	20.8	31.4	32.2	14.8
Bolehills sample	78.7	2.1	4.3	14.9
Bolehills Census	20.3	25.2	28.9	24.1
Total sample	72.3	1.6	15.4	10.7
Total Census	20.6	27.6	36.0	14.2

Appendix A.9 Length of residence of the sample and Census respondents by study site (%)

	Less than 3	3-5	6-10	11-15	16-20	21-25	Over 25
Parson Cross sample	13.8	13.7	10.0	17.5	12.5	7.5	25.0
Manor Fields sample	19.2	20.5	21.8	11.6	3.8	5.2	17.9
High Hazels sample	6.8	11.4	17.0	11.4	11.4	11.3	30.7
Richmond sample	7.1	8.4	10.7	14.3	13.1	8.3	38.1
Meersbrook sample	11.0	17.0	22.0	9.8	8.5	7.3	24.4
Bolehills sample	21.3	17.0	14.9	5.3	7.5	11.7	22.3
Total sample	13.2	14.7	16.0	11.4	9.5	8.7	26.5

Appendix A.10 Are you involved in your local community? (%)

	Involvement			No involvement
	In the community indirectly*	In the park directly	Not specify	
Parson Cross sample	1.3	2.5	1.3	95.0
Manor Fields sample	3.8	9.0	3.8	82.1
High Hazels sample	8.0	1.1	1.1	89.8
Richmond sample	7.1	2.4	1.2	89.3
Meersbrook sample	15.9	3.7	2.4	78.0
Bolehills sample	13.8	3.2	1.1	81.9
Total sample	8.5	3.6	1.8	86.2

Appendix A.11 IMD of the sample and Census respondents by study site (%)

	LSOA Code	IMD
Parson Cross sample		1.04
Parson Cross Census	E01033277, E01008060, E01008061, E01008123, E01007946, E01008122, E01008118, E01008116, E01008117 and E01008119	1
	E01008053	2
Manor Fields sample		1.31
Manor Fields Census	E01008012, E01008011, E01008013, E01008098, E01008097, E01008015 and E01008018,	1
	E01008095 and E01007881	2
High Hazels sample		3.22
High Hazels Census	E01007902 and E01007906	1
	E01008014	2
	E01007907	3
	E01007909	5
	E01007908	6
Richmond sample		3.77
Richmond Census	E01008008	1
	E01007967, E01033279 and E01008010	2
	E01007963, E01007966 and E01008004	3
	E01007838	6
	E01007999	7
Meersbrook sample		6.01
Meersbrook Census	E01007976	2
	E01007980, E01008045, E01008042 and E01007978	5
	E01007981 and E01008046	6
	E01007985	7
	E01007983	8
	E01007984	9
Bolehills sample		8.01
Bolehills Census	E01008154, E01008151 and E01008152	6
	E01008074, E01008159 and E01008156	9
Total sample Total Census		4.01

*The Index of Multiple Deprivation ranks every small area in England from 1 (most deprived area) to 10 (least deprived area).

Appendix B

Household Questionnaire Survey

Code: HH-DC-__112015

Questionnaire
Residents' Perceptions on High Hazels Park

Dear Householder

I am carrying out a PhD project about local residents' perceptions of their local park. This PhD project aims to ***understand people's perceptions of current and future park management in urban parks***.

Your house is located within a selected sample area. Your responses to these questions will be highly valued and are vitally important for the project. I would very much appreciate your time and effort in filling out this questionnaire.

I would like to invite you or your spouse/partner to complete this questionnaire. This will only take a short amount of your time, and your answer will be kept strictly confidential, private and anonymous. If you are unhappy answering any questions, please leave them blank.

Thank you in advance for your help.

Please use ticks to answer the questions

In case of any queries about this questionnaire, please contact Jinvo Nam on jnam1@sheffield.ac.uk or Supervisor Dr. Nicola Dempsey on N.Dempsey@sheffield.ac.uk
You can also visit the University of Sheffield, Landscape Department at:
http://www.sheffield.ac.uk/landscape

This questionnaire will be collected by **two times visits**.
First visit : **Sunday 22nd Nov** (Between 11:30 and 12:30)
Second visit : **Tuesday 24th Nov** (Between 11:30 and 12:30)
Please leave this questionnaire under **FRONT DOOR** like pitures.

or

Thank you for your help!!

Part A : About High Hazels Park

General information on park use

A1. How often do you visit this park? Please tick. (*If never, please Go to **B1***)

	Never	1-2 days a month	1-2 days a week	3-4 days a week	+ 5 days A week
Spring/Autumn					
Summer					
Winter					

A2. What is the main reason for your visit? (*Tick all that apply*)

☐ Walking ☐ Running/ Exercise ☐ Enjoy nature ☐ Take short break ☐ Dog walking

☐ Journey to/from work/school ☐ Let children play ☐ Meet friends or families ☐ Attend events

☐ Other, please specify _____.

A3. Do you generally visit alone or with others?

☐ Alone ☐ With other family members ☐ With children ☐ With friends ☐ With dog(s)

A4. How long does it take to walk to the park from your home?

☐ less than 5 minutes ☐ 5-10 minutes ☐ 10-20 minutes ☐ 20-30 minutes ☐ 30 minutes +

A5. Is this the nearest park to your house?

☐ Yes ☐ No, please specify the nearest park name _____.

A6. How do you normally reach this park?

☐ Walking ☐ Car ☐ Public transport ☐ Cycle ☐ Other, please specify _____.

A7. Who manages this park? (*Tick all that apply*)

☐ Local authority/council ☐ Community/ Friends or volunteering group ☐ 3rd sector organisation

☐ Management partnership (e.g. amey and Kier) ☐ Other, please specify _____.

☐ Don't know

A8. Overall, how safe do you feel in this park?

☐ Very safe ☐ Fairly safe ☐ Unsafe ☐ Very unsafe ☐ Don't know

About park management

A9. Overall, is this park well-maintained?

☐ Very well-maintained ☐ Well-maintained ☐ Not very well-maintained ☐ Poorly maintained

☐ Don't know

A10. Please assess High Hazels park's management.

	Very well-managed	Well-managed	Poor-managed	Very poor-managed	Don't know
Cleanliness (fly-tipping and litter					
Graffiti					
Accessible park entrance(s)					
Benches and seating					
Facilities such as play, sport and other equipment					
Footpaths					
Plants maintenance (e.g. flowers)					
Plants maintenance (e.g. trees)					
Grass maintenance (e.g. mowing)					
Wildlife and biodiversity maintenance					
Activities (e.g. events, festivals etc)					
Community notices					
Local authority support					
Staff presence (e.g. park staffs, police etc)					

A11. Has the quality of this park improved over the last 5 - 10 years?

☐ Greatly improved ☐ Improved ☐ Stayed same ☐ Worsened ☐ Much worse ☐ Don't know

Part B : Different potential management practices

I am now going to ask you to look at different ways that parks could be managed in the future. I am asking these as **hypothetical questions** - this is not currently happening in your park. I am interested in your perceptions and attitudes as a user/local resident.

Community Food Growing is the use of land by anyone in community to grow food.

Growing fruits and vegetables (e.g. planters, spare spaces and orchards)

Look at the photos above	Yes	Maybe	No	Don't know
B1. Would you see all/any of the above approaches in your park?				
B2. Could this practice contribute to better park management?				
B3. Would you get involved in this practice?				
B4. Would you attend food growing training (if provided)?				

Growing herbs (e.g. spare spaces, inside and around park)

Look at the photos above	Yes	Maybe	No	Don't know
B5. Would you see all/any of the above approaches in your park?				
B6. Could this practice contribute to better park management?				
B7. Would you get involved in this practice?				

B8. Have you been involved in food growing in your garden or/and allotment?

☐ Garden, go to **B9** ☐ Allotment, go to **B10** ☐ Both, go to **B10** ☐ Neither, go to **B9**

B9. Why have you been involved in food growing in your garden or neither? (*Tick all that apply*)

☐ No time in allotment ☐ No allotment available near house ☐ Long waiting list for allotment

☐ I don't know how to apply for allotment ☐ Have to pay for allotment ☐ Space available in my garden

☐ I don't have a garden ☐ No interest in food growing ☐ Other, please specify, _____.

Naturalistic Planting

1. STRUCTURAL COMPLEXITY with different layers and heights of plants

Look at the photos above	Yes	Maybe	No	Don't know
B10. Would you see all/any of the above approaches in your park?				
B11. Could this practice contribute to better park management?				
B12. Would you get involved in this practice?				

2. FORMAL BEDDING PLANTS

Look at the photos above	Yes	Maybe	No	Don't know
B13. Would you see all/any of the above approaches in your park?				
B14. Could this practice contribute to better park management?				
B15. Would you get involved in this practice?				

3. LARGE MEADOWS with WILD FLOWERS

Look at the photos above	Yes	Maybe	No	Don't know
B16. Would you see all/any of the above approaches in your park?				
B17. Could this practice contribute to better park management?				
B18. Would you get involved in this practice?				

4. LESS FREQUENTLY CUT GRASS

Look at the photos above	Yes	Maybe	No	Don't know
B19. Would you see all/any of the above approaches in your park?				
B20. Could this practice contribute to better park management?				
B21. Would you get involved in this practice?				
B22. Would you like to see **Mown grass** (frequently cut grass) more than **Less frequently cut grass**?				

B.23 Please rank these **4 main approaches** (shown in the pictures above) in order of preference with **1 as most preferred** and **4 least preferred**.

- Structural complexity ---------- ( )
- Formal bedding plants ---------- ( )
- Large meadows with wild flowers ---------- ( )
- Less frequently cut grass ---------- ( )

I am now going to ask you to look at other ways that parks could be managed in the future. I am asking these as **hypothetical questions** - this is not currently happening in your park. I am interested in your perceptions and attitudes as a user/local resident.

Income Generation Models

B24. Would you be willing to pay for park use?	
Voluntary donation (per visit)	☐ Zero, ☐ up to £1, ☐ £2-£4, ☐ £5 or over
Car parking (per hour)	☐ Zero, ☐ 50p, ☐ £1, ☐ £2 or over
Tennis (per hour)	☐ Zero, ☐ £1, ☐ £2-£3, ☐ £4-£5, ☐ over £5
Football 11- a - side (per hour)	☐ Zero, ☐ up to £5, ☐ £6 - £10, ☐ £11 - £15, ☐ £16 - £20, ☐ £21 - £25, ☐ over £25

Concessions (café and kiosk) : The park makes income from the lease of shop units, along with revenue from the kiosk, café and any hiring.

B25. Would you like to see these facilities in this park?	Yes	Maybe	No	Don't know
Kiosk				
Café				
Shop				

Events or commercial activities : The park fundraises the organisations of events, including festivals, markets and so on.				
B26. Would you like to see more of these events/ activities in this park?	Yes	Maybe	No	Don't know
Fun day/ Fayre or market				
Music festival				
Circus				

B27. Would you like to see any of following in this park?	Yes	Maybe	No	Don't know
1. Green space subscription for local residents to make a voluntary financial contribution to the park's management.				
2. Sponsorship : local businesses advertise in popular places around the park.				
3. Business tax : a tax paid by anyone who operates a business within the local park area.				
4. New planning or development taxes : Developers of new homes are required to pay a tariff for each home built to be used for park management.				
5. Endowments : when a large sum of money pays for the park to generate income while keeping some invested over time.				

Part C : Who Cares for Your Park?

C1. Who **should** be involved in the management of this park? (*tick all that apply*)

☐ Local authority/council ☐ Community, Friends or volunteering groups ☐ Local users

☐ 3rd sector organisation such as Green Estate

C2. Would you be willing to get involved in park management in your local community (e.g. social enterprise, 3rd sector organisation, Friends or voluntary groups?

☐ Yes, go to **C3** ☐ No, go to **C5** ☐ Don't know, go to **D1**

C3. If Yes, would you contribute your time?

☐ A day a month ☐ A half day per week ☐ a day per week ☐ 2 - 3 days per week

☐ Over 3 days per week

C4. Do you know how to get involved in your local community for your park?

☐ Yes, I know ☐ Maybe ☐ No, I don't know

---------- Go to the next page **D1**

C5. If No, Why not?

☐ No time ☐ It's the council responsibility ☐ I don't use the park ☐ I don't want to get involved

☐ I would prefer to contribute in other ways e.g.) membership, donation etc

☐ Other, please specify _____.

Part D : About You

D1. Gender : ☐ Male, ☐ Female

D2. Age

☐ Under 17 ☐ 18 – 24 ☐ 25 – 29 ☐ 30 – 34 ☐ 35 – 39 ☐ 40 – 44 ☐ 45 – 49

☐ 50 – 54 ☐ 55 – 59 ☐ 60 – 64 ☐ 65 – 69 ☐ 70 – 74 ☐ Over 74

D3. Postcode : _____ (e.g. S10 2TN)

D4. Do you consider yourself to be disabled? ☐ Yes, ☐ No

D5. Household composition

☐ Family without children ☐ Family with children ☐ By myself ☐ With a partner ☐ With friend(s)

D6. How many people live in your household? _____.

D7. How many of these are under 16? _____.

D8. Which of the following best describes your economic status?

☐ Employed (full or part-time) ☐ Self-employed ☐ Unemployed ☐ Retired ☐ Looking after family

☐ Full-time student at college or university ☐ Long-term sick ☐ Other, please specify _____.

D9. Do you (or other household member) own or rent your home?

☐ Own outright/ Own with a mortgage or loan

☐ Pay part rent part mortgage (shared ownership)

☐ Rent from public sector (e.g. council, housing association, registered social landlord)

☐ Rent from the private sector

D10. How long have you lived in your current home? _____ years

D11. Are you involved in your local community?

☐ No, ☐ Yes, please specify how _____.

Any information you supply will be used exclusively for the purposes of this research and will not be passed to others or used for any other purpose. All information will be published in aggregated form so that individuals cannot be identified. The data will be held securely for collection.

This research has received ethical approval from the Department of Landscape Ethics Committee, The University of Sheffield.

Thank you!

Appendix C

Interview Questions:
Professionals and focus group and Community groups

C.1 Interview Questions: Professionals and focus group

Understanding Stakeholders of Their Perceptions of Current and Future Landscape Management Scenarios

PhD Researcher Jinvo Nam / Department of Landscape

The University Of Sheffield.

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1. *Landscape management practices in the UK context of urban parks*

• What has changed in park management over the last 10, 20 years? For example, budget and funding cut, its problems for park management and changes of responsibilities over time in practice.

• Are there any potential barriers changing responsibility has been changed?

2. *Stakeholder involvement in landscape management practices and strategies*

• To what extent do you think stakeholder involvement is effective in parks management? Overall, is this very welcomed? Does this lead to better results in practice?

• As decision-makers, how do users, community or friends groups, practitioners and other stakeholder groups influence parks management?

• Are friends or community groups in each park very active?

3. *Feasibility and acceptability of landscape management practices according to different stakeholders*

• What are the essential criteria to assess parks management?

• Who assesses? How do you think about park management assessed by many stakeholders from users to professionals?

Thinking about different potential management practices in parks
e.g.) Community food growing / Naturalistic plating / Income-generating or innovative practices / Flood alleviation plan / Other practices. Please specify

• How would you define naturalistic planting? Expand for the other practices?

• What are in more detail social/economic/ecological advantages and disadvantages of each practice in areas of deprivation?

• Is there any relationship between perceptions of each practice in most and less deprived areas?

• Which practices or combination of different practices would you recommend in practice? Do you think users would accept this?

• Some spaces will be shared with stakeholder's participations. Are there any expected problems?

• Where? What species? What % of land?

4. *Other recommendation*

• What is your opinion on alternative management in district parks and in ideal world? How would manage your park differently? And how acceptable would this be to residents and users? Why?

C.2 Interview Questions: Community groups

Understanding Stakeholders of Their Perceptions of Current and Future Landscape Management Scenarios

PhD Researcher Jinvo Nam / Department of Landscape

The University Of Sheffield.

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0. *Background*

• When did the Friends Group become a formal group?
• How many Friends does the group have?
• How many members of Friends groups in your park are active regularly?
• What kind of things do the active members do?
• What is the main role of the Friends Group in your park?
• How does the Friends group contribute to park management?
• How does the Friends group communicate with park managers or other supervisors?
• Do you have a good relationship with the park manager? Why / Why not?
• What are the problems from a management perspective in your park if any?
• In an ideal world, how many active members would you Friend Group have?

1. *Landscape management practices in the UK context of urban parks*

• What has changed in park management over the last 10, 20 years over time in practice?
e.g.) budget and funding cut, its problems for park management and changes of responsibilities, quality of park, stakeholder involvement and others
• How has this affected what Friends Group does?

2. *Stakeholder involvement in landscape management practices and strategies*

• As decision-makers, how do users, community or friends groups, practitioners and other stakeholder groups influence parks management?
• To what extent do you think stakeholder involvement is effective in parks management? Overall, is this welcomed? Why and why not? Does this lead to better results in practice?
• Are friends or community groups in parks across of whole of Sheffield very active? Why do you think this?
• Are any potential barriers to getting involved or being active in park management?
• Some spaces will be shared between stakeholders. Are there any expected problems?

3. *I am now going to ask you about quality of parks*

• What are the essential criteria to assess the quality of parks?
• Who assesses? And who do you think should assess this? E.g.) users, friends groups, park managers or officers.

4. Thinking about different potential management practices in parks

e.g.) Community food growing / Naturalistic plating / Income-generation / Other practices

I am going to ask you about some hypothetical questions. This is not about making any changes to your park.

We are interested in your perceptions and attitudes in different ways of managing parks.

• Which practices or combination of different practices would you recommend in practice? Do you think users would accept this?

• How would these practices be managed to be successful in the long term? Are they compatible?

4. *Other recommendation*

• In an ideal world, how would Sheffield's parks be most appropriately managed? And how acceptable would this be to residents and users? Why?

• Are there any other points you would like to raise?

Appendix D

Descriptive Analyses

Appendix D.1 Frequency of visit by seasons (%)

		Never	1-2 days a month	1-2 days a week	3-4 days a week	+5 days a week
Parson Cross	Spring/Autumn	3.5	33.3	38.6	8.8	15.8
	Summer	-	28.1	36.8	14.0	21.1
	Winter	17.5	42.1	26.3	1.8	12.3
Manor Fields	Spring/Autumn	2.8	26.8	38.0	25.4	7.0
	Summer	-	21.1	35.2	29.6	14.1
	Winter	22.5	29.6	29.6	12.7	5.6
High Hazels	Spring/Autumn	7.0	46.5	28.2	9.9	8.5
	Summer	-	43.7	22.5	18.3	15.5
	Winter	31.0	40.8	15.5	7.0	5.6
Richmond	Spring/Autumn	5.1	42.4	20.3	18.6	13.6
	Summer	-	39.0	22.0	22.0	16.9
	Winter	23.7	39.0	18.6	6.8	11.9
Meersbrook	Spring/Autumn	1.4	44.4	30.6	8.3	15.3
	Summer	-	36.1	31.9	13.9	18.1
	Winter	6.9	43.1	27.8	6.9	15.3
Bolehills	Spring/Autumn	3.6	48.2	19.3	10.8	18.1
	Summer	3.6	38.6	19.3	20.5	18.1
	Winter	18.1	41.0	16.9	7.2	16.9
Total	Spring/Autumn	3.9	40.7	28.8	13.6	13.1
	Summer	0.7	34.6	27.6	19.9	17.2
	Winter	19.9	39.2	22.3	7.3	11.4

Appendix D.2 The reasons for park visits (%)[*]

	Parson Cross	Manor Fields	High Hazels	Richmond	Meersbrook	Bolehills	Average
Walking	45.6	59.2	64.3	48.3	61.1	51.8	55.4
Running/Exercise	8.8	12.7	15.5	8.3	15.3	22.9	14.5
Enjoy nature	12.3	26.8	18.3	18.3	40.3	31.3	25.4
Take short brake	12.3	25.4	12.7	13.3	19.4	30.1	19.6
Dog walking	31.6	18.3	12.7	40.0	25.0	26.5	25.1
Journey to/from work	15.8	8.5	5.6	3.3	15.3	6.0	8.9
Let children play	31.6	52.1	40.8	40.0	40.3	31.3	39.4
Meet friends/families	7.0	8.5	7.0	11.7	16.7	8.4	9.9
Attend events	7.0	14.0	11.3	13.3	15.3	2.4	10.4
Other	1.8	-	2.8	1.7	-	2.4	1.4

[*] A multiple-choice question: Totals add up to more than 100%.

Appendix D.3 Companions on a park visit (%)*

	Alone	Other family members	Children	Friends	Dog(s)
Parson Cross	24.6	33.3	36.8	3.5	26.3
Manor Fields	11.3	51.4	52.1	14.1	23.9
High Hazels	40.8	47.9	32.4	14.1	9.9
Richmond	23.3	45.0	35.0	11.7	25.0
Meersbrook	33.3	44.4	33.3	9.7	13.9
Bolehills	36.1	31.3	24.1	18.1	19.3
Total	28.7	42.1	35.3	12.3	19.3

*A multiple-choice question: Totals add up to more than 100%.

Appendix D.4 Who manages your park? (%)

	Parson Cross	Manor Fields	High Hazels	Richmond	Meersbrook	Bolehills	Average
LA only	59.6	39.4	47.9	38.3	48.6	43.4	45.9
LA & CM	3.5	7.0	14.1	18.3	26.4	25.3	16.4
LA & 3rdS	-	9.9	-	-	-	-	1.7
LA & MP	-	4.2	1.4	-	-	1.2	1.2
LA, CM & 3rdS	3.5	4.2	-	1.7	1.2	1.2	1.2
LA, CM & MP	-	-	-	3.3	2.8	-	1.7
LA, CM, 3rdS & MP	-	-	-	-	-	1.2	0.2
CM only	1.8	4.2	7.0	8.3	4.2	-	4.1
MP only	-	-	1.4	-	-	-	0.2
Other	-	2.8	1.4	-	-	-	0.7
Don't know	31.6	28.2	26.8	30.0	16.7	27.7	26.6

LA=Local Authority, CM=Community, 3rdS=3rd-sector and MP=Management Partnership

Appendix D.5 Who should be involved in the management of this park? (%)

	Parson Cross	Manor Fields	High Hazels	Richmond	Meersbrook	Bolehills	Average
LA only	48.8	34.6	46.6	39.3	20.7	30.9	36.8
LA & CM	8.8	14.1	20.5	23.8	31.7	27.7	21.3
LA & US	5.0	1.3	1.1	3.6	2.4	3.2	2.8
LA & 3rdS	5.0	3.8	4.5	3.6	-	-	2.8
LA, CM & US	12.5	6.4	10.2	15.5	25.6	14.9	14.2
LA, CM & 3rdS	2.5	7.7	6.8	2.4	4.9	1.1	4.2
CM & US	1.3	-	-	-	-	-	0.2
CM & 3rdS	-	2.6	-	1.2	-	-	0.6

	Parson Cross	Manor Fields	High Hazels	Richmond	Meersbrook	Bolehills	Aver age
LA, Cm, US & 3rdS	8.8	15.4	8.0	10.7	14.6	17.0	12.5
CM, US & 3rdS	-	2.6	-	-	-	1.1	0.6
CM only	5.0	5.1	2.3	-	-	2.1	2.4
US only	2.5	-	-	-	-	-	0.4
3rdS only	-	6.4	-	-	-	2.1	1.4

LA=Local Authority, CM=Community, US=Users, 3rdS=3rd-sector and MP=Management Partnership

Appendix D.5 Assess your park management (*Mean*)

	Parson Cross	Manor Fields	High Hazels	Richmond	Meersbrook	Bolehills	*Mean*
Cleanliness	2.82	3.27	2.89	3.00	3.36	3.23	3.11
Graffiti	2.86	3.24	3.01	3.22	3.42	3.41	3.21
Accessible park entrance(s)	3.04	3.51	3.17	3.03	3.50	3.40	3.29
Benches and seating	2.53	3.11	2.82	2.66	3.31	3.06	2.94
Facilities	3.14	3.10	2.96	2.86	3.53	3.46	3.19
Footpaths	3.05	3.44	2.99	2.83	3.32	3.12	3.14
Flowers maintenance	2.75	3.17	2.90	3.00	3.31	3.36	3.10
Trees maintenance	3.00	3.21	2.92	2.86	3.44	3.46	3.17
Grass maintenance	3.12	3.25	3.04	3.07	3.38	3.22	3.19
Wildlife and biodiversity	3.54	3.42	3.58	3.17	3.89	3.84	3.60
Activities (events, festivals)	3.21	3.28	3.41	3.00	3.81	3.96	3.48
Community notices	3.40	3.25	3.25	3.00	3.63	3.78	3.41
Local authority support	4.02	3.66	3.69	3.61	4.17	4.29	3.92
Staff presence	2.81	3.11	2.52	2.76	3.67	3.43	3.08
Total	3.09	3.29	3.08	3.01	3.55	3.50	3.25

Appendix D.6 Evidence of an association according to IMD

IMD associated with indicators	*N*	*r*	Sig(*p*)
Cleanliness	413	.148	.002
Graffiti	413	.172	.000
Accessible park entrance	413	.130	.008
Benches and seating	413	.222	.000
Facilities (play, sport and other equipment)	413	.204	.000
Plant maintenance (Flowers)	413	.168	.001
Plant maintenance (Trees)	413	.213	.000
Grass maintenance (Mowing)	413	.108	.028

IMD associated with indicators	*N*	*r*	Sig(*p*)
Wildlife and biodiversity	413	.156	.001
Activities e.g. events and festivals	413	.223	.000
Community notices	413	.123	.012
Local authority support	413	.154	.002
Staff presence	413	.181	.000

Appendix D.7 Evidence of an association according to age in assessing current park management practices

Age associated with indicators	*df (between, within)*	*F*	Sig(*p*)	Effect size (h^2)[1]
Benches and seating	5, 407	2.721	.020	.032
Footpaths	5, 407	4.110	.001	.048
Plant maintenance (Flowers)	5, 407	2.429	.035	.028
Plant maintenance (Trees)	5, 407	3.583	.003	.042
Grass maintenance (Mowing)	5, 407	2.569	.026	.030

Appendix D.8 Evidence of an association according to length of residence in assessing current park management practices

Length of residence associated with indicators	*df (between, within)*	*F*	Sig(*p*)	Effect size (h^2)
Accessible park entrance	6, 406	2.616	.017	.037
Benches and seating	6, 406	2.227	.040	.031
Footpaths	6, 406	3.160	.005	.044
Plant maintenance (Trees)	6, 406	2.445	.025	.034
Local authority support	6, 406	3.328	.003	.046
Park improvement over the last 10 years	6, 406	2.166	.046	.037

Appendix D.9 Evidence of an association according to six different parks in assessing current park management practices

Length of residence associated with indicators	*df (between, within)*	*F*	Sig(*p*)	Effect size (h^2)
Cleanliness	5, 407	6.774	.000	.077
Graffiti	5, 407	4.323	.001	.050
Accessible park entrance	5, 407	7.831	.000	.088
Benches and seating	5, 407	9.494	.000	.104
Facilities (play, sport and other equipment)	5, 407	6.744	.000	.077
Footpaths	5, 407	7.316	.000	.082
Plant maintenance (Flowers)	5, 407	4.336	.001	.050

[1] Effect size: Eta squared (h^2) = SS_{effect} / SS_{total}: 0.01 is classified as a small effect, 0.06 as a medium effect and 0.14 as a large effect (Pallant, 2001).

Length of residence associated with indicators	*df (between, within)*	*F*	Sig(*p*)	Effect size (h^2)
Plant maintenance (Trees)	5, 407	6.725	.000	.076
Wildlife and biodiversity	5, 407	3.656	.003	.043
Activities e.g. events and festivals	5, 407	7.212	.000	.081
Community notices	5, 407	3.645	.003	.043
Local authority support	5, 407	3.267	.004	.042
Staff presence	5, 407	5.412	.000	.062

Appendix D.10 Growing food and vegetables (e.g. planters, spare spaces and orchards) (%)

		Parson Cross	Manor Fields	High Hazels	Rich-mond	Meers-brook	Bole-hills	Total
Would you see these practices in your park?	*No*	19.5	14.5	28.9	24.4	12.8	26.7	21.4
	Maybe	37.7	40.8	30.1	41.0	35.9	36.7	36.9
	Yes	42.9	44.7	41.0	34.6	51.3	36.7	41.7
Could this contribute to better Park management?	*No*	13.7	8.2	13.3	13.9	10.4	16.5	12.8
	Maybe	38.4	50.7	36.1	41.7	44.8	45.9	42.8
	Yes	47.9	41.1	50.6	44.4	44.8	37.6	44.4
Would you get involved in this practice?	*No*	53.9	38.6	56.3	64.0	49.3	59.3	54.0
	Maybe	32.9	31.4	33.8	29.3	40.0	26.4	32.1
	Yes	13.2	30.0	10.0	6.7	10.7	10.7	13.9
Would you attend food growing training?	*No*	58.1	39.1	50.6	54.5	50.0	59.3	52.3
	Maybe	24.3	27.5	36.1	31.2	30.8	19.8	28.2
	Yes	17.6	33.3	13.3	14.3	19.2	20.9	19.5

Appendix D.11 Growing herbs in spare spaces, inside and around park (%)

		Parson Cross	Manor Fields	High Hazels	Rich-mond	Meers-brook	Bole-hills	Total
Would you see these practices in your park?	*No*	19.7	14.7	26.2	23.7	14.6	24.2	20.7
	Maybe	40.8	34.7	32.1	34.2	35.4	40.7	36.4
	Yes	39.5	50.7	41.7	42.1	50.0	35.2	43.0
Could this contribute to better Park management?	*No*	11.3	6.9	12.5	15.1	7.0	16.0	11.6
	Maybe	45.1	48.6	43.8	42.5	53.5	53.1	47.8
	Yes	43.7	44.4	43.8	42.5	39.4	30.9	40.6
Would you get involved in this practice?	*No*	57.7	39.1	52.4	55.0	52.6	59.1	53.0
	Maybe	33.8	27.5	39.3	35.0	35.9	25.0	32.8
	Yes	8.5	33.3	8.3	10.0	11.5	15.9	14.3

Appendix D.12 Why have you been involved in food growing in your garden or not? (%)

	Parson Cross	Manor Fields	High Hazels	Richmond	Meersbrook	Bolehills	Average
No time in allotment	7.1	27.8	4.7	11.0	4.1	13.3	11.2
No allotment available near my house	8.6	4.2	4.7	6.1	1.4	4.8	4.9
Long waiting lists for an allotment	1.4	8.3	3.5	3.7	6.8	8.4	5.4
Don't know how to apply for an allotment	5.7	4.2	4.7	2.4	1.4	2.4	3.4
Have to pay for an allotment	1.4	9.7	4.7	2.4	1.4	2.4	3.6
Space available in my garden	40.0	40.3	30.2	43.9	45.2	38.6	39.5
I don't have a garden	1.4	6.9	2.3	-	2.7	10.8	4.1
No interest in food growing	42.9	25.0	29.1	28.0	32.9	34.9	32.0
Other	2.9	9.7	25.6	17.1	21.9	10.8	15.0

-Multiple choices: Totals add up to more than 100%.

Appendix D.13 Structural complexity with different layers and heights of plants (%)

		Parson Cross	Manor Fields	High Hazels	Rich mond	Meers brook	Bole hills	Average
Would you see these practices in your park?	*No*	15.8	10.7	23.8	20.0	6.3	16.9	15.7
	Maybe	32.9	18.7	29.8	35.0	22.8	31.5	28.6
	Yes	51.3	70.7	46.4	45.0	70.9	51.7	55.7
Could this contribute to better Park management?	*No*	6.8	4.1	10.3	11.4	7.4	8.4	8.1
	Maybe	45.2	38.4	42.3	42.9	44.1	45.8	43.1
	Yes	47.9	57.5	47.4	45.7	48.5	45.8	48.8
Would you get involved in this practice?	*No*	61.6	48.6	62.0	66.2	59.0	71.6	61.9
	Maybe	27.4	36.1	31.6	23.4	35.9	19.3	28.7
	Yes	11.0	15.3	6.3	10.4	5.1	9.1	9.4

Appendix D.14 Formal bedding plants (%)

		Parson Cross	Manor Fields	High Hazels	Rich mond	Meers brook	Bole hills	Average
Would you see these practices in your park?	*No*	12.7	14.9	14.1	23.5	11.3	36.3	19.2
	Maybe	30.4	28.4	15.3	18.5	28.8	28.6	24.9
	Yes	57.0	56.8	70.6	58.0	60.0	35.2	55.9
Could this contribute to better Park management?	*No*	6.6	12.5	3.8	9.5	5.6	20.0	9.8
	Maybe	38.2	43.1	37.2	32.4	48.6	38.8	39.6
	Yes	55.3	44.4	59.0	58.1	45.8	41.2	50.5
Would you get involved in this practice?	*No*	58.9	50.0	58.2	65.8	62.8	75.0	62.3
	Maybe	32.9	33.3	34.2	24.1	30.8	14.8	27.9
	Yes	8.2	16.7	7.6	10.1	6.4	10.2	9.8

Appendix D.15 Large meadows with wild flowers (%)

		Parson Cross	Manor Fields	High Hazels	Rich mond	Meers brook	Bole hills	Average
Would you see these practices in your park?	*No*	29.5	13.2	34.1	38.8	23.5	15.4	25.7
	Maybe	23.1	19.7	25.9	20.0	19.8	19.8	21.4
	Yes	47.4	67.1	40.0	41.3	56.8	64.8	53.0
Could this contribute to better Park management?	*No*	21.3	13.3	25.3	29.7	13.2	12.3	19.2
	Maybe	37.3	37.3	45.6	28.4	41.2	39.5	38.3
	Yes	41.3	49.3	29.1	41.9	45.6	48.1	42.5
Would you get involved in this practice?	*No*	63.5	46.6	70.0	72.5	60.5	64.4	63.2
	Maybe	29.7	32.9	26.3	20.0	30.3	17.8	25.8
	Yes	6.8	20.5	3.8	7.5	9.2	17.8	11.0

Appendix D.16 Less-frequently cut grass (%)

		Parson Cross	Manor Fields	High Hazels	Rich-mond	Meers-brook	Bole-hills	Average
Would you see these practices in your park?	*No*	56.0	32.9	57.6	53.8	42.5	33.3	45.9
	Maybe	13.3	23.7	15.3	21.3	26.3	23.3	20.6
	Yes	30.7	43.4	27.1	25.0	31.3	43.3	33.5
Could this contribute to better Park management?	*No*	55.7	32.0	63.5	54.8	53.0	35.7	48.6
	Maybe	22.9	37.3	24.3	24.7	27.3	46.4	31.0
	Yes	21.4	30.7	12.2	20.5	19.7	17.9	20.4
Would you get involved in this practice?	*No*	78.7	68.1	82.6	87.5	85.7	85.4	81.7
	Maybe	18.7	18.8	17.4	10.0	11.7	7.9	13.9
	Yes	2.7	13.0	-	2.5	2.6	6.7	4.4
Would you like to see mown grass more than less-frequently cut grass?	*No*	6.6	17.3	25.9	18.2	18.3	26.2	19.0
	Maybe	11.8	21.3	14.8	9.1	18.3	16.7	15.3
	Yes	81.6	61.3	59.3	72.7	63.4	57.1	65.7

Appendix D.17 Would you like to see these facilities in your park? (%)

		Parson Cross	Manor Fields	High Hazels	Rich-mond	Meers-brook	Bole-hills	Average
Kiosk	*No*	11.8	20.3	9.5	15.9	16.9	25.6	16.8
	Maybe	27.6	20.3	28.6	29.3	27.3	36.7	28.6
	Yes	60.5	59.5	61.9	54.9	55.8	37.8	54.7
Café	*No*	7.6	10.5	3.5	6.0	6.1	14.3	8.0
	Maybe	21.5	11.8	11.6	16.7	12.2	17.6	15.3
	Yes	70.9	77.6	84.9	77.4	81.7	68.1	76.7
Shop	*No*	19.5	27.4	15.3	26.2	38	41.1	28.1
	Maybe	28.6	26.0	20.0	33.3	21.5	32.2	27.0
	Yes	51.9	46.6	64.7	40.5	40.5	26.7	44.9

Appendix D.18 Would you like to see these events/activities in your park? (%)

		Parson Cross	Manor Fields	High Hazels	Rich-mond	Meers-brook	Bole-hills	Average
Fun day/Fayre	*No*	2.5	1.3	2.3	4.8	3.7	7.6	3.8
	Maybe	11.3	7.8	18.6	17.9	19.8	25.0	17.0
	Yes	86.3	90.9	79.1	77.4	76.5	67.4	79.2
Music festival	*No*	17.5	5.3	28.7	21.4	13.6	29.0.	19.8
	Maybe	17.5	15.8	21.8	21.4	24.7	22.6	20.8
	Yes	65.0	78.9	49.4	57.1	61.7	48.4	59.5
Circus	*No*	30.8	31.6	36.6	61.0	56.3	66.3	47.8
	Maybe	20.5	15.8	26.8	15.9	20.0	10.9	18.2
	Yes	48.7	52.6	36.6	23.2	23.8	22.8	34.1

Appendix D.19 Would you like to see these income generation models in your park? (%)

		Parson Cross	Manor Fields	High Hazels	Rich-mond	Meers-brook	Bole-hills	Average
Green space subscription	*No*	45.2	23.9	44	52.5	42.1	52.8	44.0
	Maybe	21.9	36.6	42.7	38.8	43.4	29.2	35.3
	Yes	32.9	39.4	13.3	8.8	14.5	18.0	20.7
Sponsorship	*No*	18.4	14.9	28.8	28.2	32.5	42.2	28.0
	Maybe	28.9	41.9	42.5	35.9	37.5	28.9	35.8
	Yes	52.6	43.2	28.8	35.9	30.0	28.9	36.2
Business taxes	*No*	24.3	20.3	27.4	45.7	38.4	36.7	32.2
	Maybe	32.4	50.7	37	34.3	32.9	31.6	36.3
	Yes	43.2	29.0	35.6	20.0	28.8	31.6	31.5
New planning taxes	*No*	21.5	19.7	35.9	36.4	31.3	34.9	30.1
	Maybe	29.2	40.9	37.5	21.2	35.9	28.9	32.1
	Yes	49.2	39.4	26.6	42.4	32.8	36.1	37.7
Endowments	*No*	11.9	7.8	10.7	25.9	11.5	19.2	14.4
	Maybe	35.6	53.1	60.7	38.9	60.7	41.1	48.2
	Yes	52.5	52.5	28.6	35.2	27.9	39.7	37.3

Appendix E

Supplementary Analyses

Appendix E.1 One-way ANOVA (Age and Could CFG contribute to better park management?)

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Could CFG contribute to better park management?	.457	5	447	.808

Anova

		Sum of Squares	df	Mean Square	F	Sig.
Could CFG contribute to better park management?	Between Groups	6.842	5	1.368	2.955	.012
	Within Groups	207.017	447	.463		
	Total	213.859	452			

Post Hoc Tests

Dependent Variable				Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Could CFG contribute to better park management ?	Tukey HSD	Under 24	25-34	-.176	.167	.900	-.65	.30
			35-44	-.165	.169	.925	-.65	.32
			45-54	-.039	.168	1.000	-.52	.44
			55-64	-.030	.164	1.000	-.50	.44
			over 65	.154	.162	.932	-.31	.62
		25-34	Under 24	.176	.167	.900	-.30	.65
			35-44	.011	.112	1.000	-.31	.33
			45-54	.137	.110	.816	-.18	.45
			55-64	.146	.104	.726	-.15	.44
			over 65	.330*	.100	.013	.04	.62
		35-44	Under 24	.165	.169	.925	-.32	.65
			25-34	-.011	.112	1.000	-.33	.31
			45-54	.126	.113	.874	-.20	.45
			55-64	.135	.107	.805	-.17	.44
			over 65	.319*	.103	.025	.02	.61
		45-54	Under 24	.039	.168	1.000	-.44	.52
			25-34	-.137	.110	.816	-.45	.18
			35-44	-.126	.113	.874	-.45	.20
			55-64	.009	.106	1.000	-.29	.31
			over 65	.193	.102	.405	-.10	.48
		55-64	Under 24	.030	.164	1.000	-.44	.50
			25-34	-.146	.104	.726	-.44	.15
			35-44	-.135	.107	.805	-.44	.17
			45-54	-.009	.106	1.000	-.31	.29
			over 65	.184	.095	.374	-.09	.45
		over 65	Under 24	-.154	.162	.932	-.62	.31
			25-34	-.330*	.100	.013	-.62	-.04
			35-44	-.319*	.103	.025	-.61	-.02
			45-54	-.193	.102	.405	-.48	.10
			55-64	-.184	.095	.374	-.45	.09

Size effect- Eta squared (h^2) = SS_{effect} / SS_{total} = 0.032= a small effect

Appendix E.2 One-way ANOVA (Age and Would you get involved in CFG?)

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Would you get involved in CFG?	8.800	5	461	.000

Anova

		Sum of Squares	df	Mean Square	F	Sig.
Would you get involved in CFG?	Between Groups	26.835	5	5.367	11.493	.000
	Within Groups	215.285	461	.467		
	Total	242.120	466			

Robust Tests of Equality of Means

		Statistic[a]	df1	df2	Sig.
Would you get involved in CFG?	Welch	14.238	5	133.670	.000
	Brown-Forsythe	10.549	5	228.894	.000

Post Hoc Tests

Dependent Variable				Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Would you get involved in CFG?	Games-Howell	Under 24	25-34	-.213	.193	.877	-.80	.37
			35-44	-.150	.195	.970	-.74	.44
			45-54	-.040	.189	1.000	-.62	.54
			55-64	.116	.189	.989	-.46	.69
			over 65	.431	.180	.199	-.13	.99
		25-34	Under 24	.213	.193	.877	-.37	.80
			35-44	.063	.122	.996	-.29	.42
			45-54	.173	.113	.649	-.15	.50
			55-64	.328*	.113	.045	.00	.65
			over 65	.644*	.097	.000	.36	.92
		35-44	Under 24	.150	.195	.970	-.44	.74
			25-34	-.063	.122	.996	-.42	.29
			45-54	.110	.116	.932	-.22	.45
			55-64	.266	.115	.197	-.07	.60
			over 65	.582*	.100	.000	.29	.87
		45-54	Under 24	.040	.189	1.000	-.54	.62
			25-34	-.173	.113	.649	-.50	.15
			35-44	-.110	.116	.932	-.45	.22
			55-64	.156	.106	.683	-.15	.46
			over 65	.471*	.089	.000	.21	.73
		55-64	Under 24	-.116	.189	.989	-.69	.46
			25-34	-.328*	.113	.045	-.65	.00
			35-44	-.266	.115	.197	-.60	.07
			45-54	-.156	.106	.683	-.46	.15
			over 65	.316*	.088	.006	.06	.57
		over 65	Under 24	-.431	.180	.199	-.99	.13
			25-34	-.644*	.097	.000	-.92	-.36
			35-44	-.582*	.100	.000	-.87	-.29
			45-54	-.471*	.089	.000	-.73	-.21
			55-64	-.316*	.088	.006	-.57	-.06

Size effect- Eta squared (h^2) = SS_{effect} / SS_{total} = 0.110= a medium effect

Appendix E.3 One-way ANOVA (Age and Could structural complexity contribute to better park management?)

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Could structural complexity contribute to better park management?	1.075	5	439	.373

Anova

		Sum of Squares	df	Mean Square	F	Sig.
Could structural complexity contribute to better park management?	Between Groups	7.458	5	1.492	3.809	.002
	Within Groups	171.922	439	.392		
	Total	179.380	444			

Post Hoc Tests

Dependent Variable				Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Could structural complexity contribute to better park	Tukey HSD	Under 24	25-34	-.219	.157	.729	-.67	.23
			35-44	-.323	.159	.325	-.78	.13
			45-54	-.108	.157	.983	-.56	.34
			55-64	-.066	.154	.998	-.51	.38
			over 65	.055	.152	.999	-.38	.49
		25-34	Under 24	.219	.157	.729	-.23	.67

management ?			35-44	-.104	.104	.918	-.40	.19
			45-54	.112	.101	.880	-.18	.40
			55-64	.154	.096	.602	-.12	.43
			over 65	.274*	.093	.039	.01	.54
		35-44	Under 24	.323	.159	.325	-.13	.78
			25-34	.104	.104	.918	-.19	.40
			45-54	.215	.104	.306	-.08	.51
			55-64	.258	.099	.102	-.03	.54
			over 65	.378*	.096	.001	.10	.65
		45-54	Under 24	.108	.157	.983	-.34	.56
			25-34	-.112	.101	.880	-.40	.18
			35-44	-.215	.104	.306	-.51	.08
			55-64	.042	.097	.998	-.23	.32
			over 65	.162	.093	.506	-.10	.43
		55-64	Under 24	.066	.154	.998	-.38	.51
			25-34	-.154	.096	.602	-.43	.12
			35-44	-.258	.099	.102	-.54	.03
			45-54	-.042	.097	.998	-.32	.23
			over 65	.120	.088	.749	-.13	.37
		over 65	Under 24	-.055	.152	.999	-.49	.38
			25-34	-.274*	.093	.039	-.54	-.01
			35-44	-.378*	.096	.001	-.65	-.10
			45-54	-.162	.093	.506	-.43	.10
			55-64	-.120	.088	.749	-.37	.13

Size effect- Eta squared (h^2) = SS_{effect} / SS_{total} = 0.041= a small effect

Appendix E.4 One-way ANOVA (Age and Would you see large meadows with wild flowers in your park?)

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Would you see large meadows with wild flowers in your park?	2.499	5	485	.030

Anova

		Sum of Squares	df	Mean Square	F	Sig.
Would you see large meadows with wild flowers in your park?	Between Groups	8.238	5	1.648	2.342	.041
	Within Groups	341.191	485	.703		
	Total	349.430	490			

Robust Tests of Equality of Means

		Statistic[a]	df1	df2	Sig.
Would you see large meadows with wild flowers in your park?	Welch	2.617	5	140.792	.027
	Brown-Forsythe	2.338	5	272.623	.042

Post Hoc Tests

Dependent Variable				Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Would you see large meadows with wild flowers in your park?	Games-Howell	Under 24	25-34	-.190	.213	.945	-.84	.46
			35-44	-.425	.211	.362	-1.07	.22
			45-54	-.161	.216	.974	-.82	.50
			55-64	-.216	.211	.907	-.86	.43
			over 65	-.027	.209	1.000	-.67	.61
		25-34	Under 24	.190	.213	.945	-.46	.84
			35-44	-.234	.122	.394	-.59	.12
			45-54	.030	.130	1.000	-.35	.40
			55-64	-.026	.122	1.000	-.38	.33
			over 65	.164	.119	.740	-.18	.51
		35-44	Under 24	.425	.211	.362	-.22	1.07
			25-34	.234	.122	.394	-.12	.59
			45-54	.264	.126	.298	-.10	.63
			55-64	.209	.119	.494	-.13	.55
			over 65	.398*	.115	.009	.07	.73
		45-54	Under 24	.161	.216	.974	-.50	.82
			25-34	-.030	.130	1.000	-.40	.35

			35-44	-.264	.126	.298	-.63	.10
			55-64	-.055	.127	.998	-.42	.31
			over 65	.134	.123	.885	-.22	.49
		55-64	Under 24	.216	.211	.907	-.43	.86
			25-34	.026	.122	1.000	-.33	.38
			35-44	-.209	.119	.494	-.55	.13
			45-54	.055	.127	.998	-.31	.42
			over 65	.189	.115	.571	-.14	.52
		over 65	Under 24	.027	.209	1.000	-.61	.67
			25-34	-.164	.119	.740	-.51	.18
			35-44	-.398*	.115	.009	-.73	-.07
			45-54	-.134	.123	.885	-.49	.22
			55-64	-.189	.115	.571	-.52	.14

Size effect- Eta squared (h^2) = SS_{effect} / SS_{total} = 0.023= a small effect

Appendix E.5 Evidence of an association according to gender with income generation practices

Gender associated with indicators	*df*	*t*	Sig(*p*)	Effect size (r^2)
Kiosk	465	-2.075	.039	.09
Café	496	-2.113	.035	.10
Fun-day & fayre	498	-2.833	.005	.13
Festivals	499	-3.124	.002	.15
Circuses	488	-2.836	.005	.13

Appendix E.6 One-way ANOVA (Age and Income generation (Festivals))

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Income generation - Festival	4.522	5	495	.000

Anova

		Sum of Squares	df	Mean Square	F	Sig.
Income generation - Festival	Between Groups	19.770	5	3.954	6.564	.000
	Within Groups	298.186	495	.602		
	Total	317.956	500			

Robust Tests of Equality of Means

		Statistic[a]	df1	df2	Sig.
Income generation - Festival	Welch	6.056	5	146.809	.000
	Brown-Forsythe	6.918	5	331.134	.000

Post Hoc Tests

Dependent Variable				Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Income generation - Festival	Games-Howell	Under 24	25-34	-.083	.177	.997	-.62	.45
			35-44	-.087	.177	.996	-.62	.45
			45-54	-.073	.176	.998	-.61	.46
			55-64	.189	.176	.888	-.34	.72
			over 65	.386	.175	.263	-.14	.92
		25-34	Under 24	.083	.177	.997	-.45	.62
			35-44	-.003	.114	1.000	-.33	.32
			45-54	.010	.111	1.000	-.31	.33
			55-64	.272	.111	.146	-.05	.59
			over 65	.470*	.110	.000	.15	.79
		35-44	Under 24	.087	.177	.996	-.45	.62
			25-34	.003	.114	1.000	-.32	.33
			45-54	.013	.112	1.000	-.31	.34
			55-64	.275	.112	.142	-.05	.60
			over 65	.473*	.111	.000	.15	.79

		45-54	Under 24	.073	.176	.998	-.46	.61
			25-34	-.010	.111	1.000	-.33	.31
			35-44	-.013	.112	1.000	-.34	.31
			55-64	.262	.110	.166	-.05	.58
			over 65	.460*	.109	.000	.15	.77
		55-64	Under 24	-.189	.176	.888	-.72	.34
			25-34	-.272	.111	.146	-.59	.05
			35-44	-.275	.112	.142	-.60	.05
			45-54	-.262	.110	.166	-.58	.05
			over 65	.198	.108	.452	-.11	.51
		over 65	Under 24	-.386	.175	.263	-.92	.14
			25-34	-.470*	.110	.000	-.79	-.15
			35-44	-.473*	.111	.000	-.79	-.15
			45-54	-.460*	.109	.000	-.77	-.15
			55-64	-.198	.108	.452	-.51	.11

Size effect- Eta squared (h^2) = SS_{effect} / SS_{total} = 0.062= a medium effect

Appendix E.7 One-way ANOVA (Age and Income generation (Circuses))

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Income generation - Circus	1.567	5	484	.168

Anova

		Sum of Squares	df	Mean Square	F	Sig.
Income generation - Circus	Between Groups	29.252	5	5.850	7.809	.000
	Within Groups	362.587	484	.749		
	Total	391.839	489			

Post Hoc Tests

Dependent Variable				Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Income generation - Circus	Tukey HSD	Under 24	25-34	.209	.207	.915	-.38	.80
			35-44	.324	.210	.637	-.28	.92
			45-54	.462	.208	.229	-.13	1.06
			55-64	.618*	.203	.029	.04	1.20
			over 65	.823*	.200	.001	.25	1.40
		25-34	Under 24	-.209	.207	.915	-.80	.38
			35-44	.115	.138	.961	-.28	.51
			45-54	.254	.135	.415	-.13	.64
			55-64	.409*	.126	.016	.05	.77
			over 65	.614*	.123	.000	.26	.96
		35-44	Under 24	-.324	.210	.637	-.92	.28
			25-34	-.115	.138	.961	-.51	.28
			45-54	.139	.139	.918	-.26	.54
			55-64	.295	.131	.214	-.08	.67
			over 65	.499*	.127	.001	.14	.86
		45-54	Under 24	-.462	.208	.229	-1.06	.13
			25-34	-.254	.135	.415	-.64	.13
			35-44	-.139	.139	.918	-.54	.26
			55-64	.156	.128	.827	-.21	.52
			over 65	.360*	.124	.044	.01	.72
		55-64	Under 24	-.618*	.203	.029	-1.20	-.04
			25-34	-.409*	.126	.016	-.77	-.05
			35-44	-.295	.131	.214	-.67	.08
			45-54	-.156	.128	.827	-.52	.21
			over 65	.204	.115	.481	-.12	.53
		over 65	Under 24	-.823*	.200	.001	-1.40	-.25
			25-34	-.614*	.123	.000	-.96	-.26
			35-44	-.499*	.127	.001	-.86	-.14
			45-54	-.360*	.124	.044	-.72	-.01
			55-64	-.204	.115	.481	-.53	.12

Size effect- Eta squared (h^2) = SS_{effect} / SS_{total} = 0.074= a medium effect

Appendix E.8 One-way ANOVA (Age and Income generation (Green space subscription))

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Income generation - Green space subscription	1.470	5	458	.198

Anova

		Sum of Squares	df	Mean Square	F	Sig.
Income generation - Green space subscription	Between Groups	27.797	5	5.559	10.306	.000
	Within Groups	247.065	458	.539		
	Total	274.862	463			

Post Hoc Tests

Dependent Variable				Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Income generation - Green space subscription	Tukey HSD	Under 24	25-34	.209	.207	.915	-.38	.80
			35-44	.324	.210	.637	-.28	.92
			45-54	.462	.208	.229	-.13	1.06
			55-64	.618*	.203	.029	.04	1.20
			over 65	.823*	.200	.001	.25	1.40
		25-34	Under 24	-.209	.207	.915	-.80	.38
			35-44	.115	.138	.961	-.28	.51
			45-54	.254	.135	.415	-.13	.64
			55-64	.409*	.126	.016	.05	.77
			over 65	.614*	.123	.000	.26	.96
		35-44	Under 24	-.324	.210	.637	-.92	.28
			25-34	-.115	.138	.961	-.51	.28
			45-54	.139	.139	.918	-.26	.54
			55-64	.295	.131	.214	-.08	.67
			over 65	.499*	.127	.001	.14	.86
		45-54	Under 24	-.462	.208	.229	-1.06	.13
			25-34	-.254	.135	.415	-.64	.13
			35-44	-.139	.139	.918	-.54	.26
			55-64	.156	.128	.827	-.21	.52
			over 65	.360*	.124	.044	.01	.72
		55-64	Under 24	-.618*	.203	.029	-1.20	-.04
			25-34	-.409*	.126	.016	-.77	-.05
			35-44	-.295	.131	.214	-.67	.08
			45-54	-.156	.128	.827	-.52	.21
			over 65	.204	.115	.481	-.12	.53
		over 65	Under 24	-.823*	.200	.001	-1.40	-.25
			25-34	-.614*	.123	.000	-.96	-.26
			35-44	-.499*	.127	.001	-.86	-.14
			45-54	-.360*	.124	.044	-.72	-.01
			55-64	-.204	.115	.481	-.53	.12

Size effect- Eta squared (h^2) = SS_{effect} / SS_{total} = 0.101= a medium effect

Appendix E.9 Evidence of an association according to age with income generation practices

Age associated with indicators	*df (between, within)*	*F*	Sig(*p*)	Effect size (h^2)
Festivals	5, 495	6.564	.001	.062
Circuses	5, 484	7.809	.001	.074
Green space subscription	5, 458	10.306	.001	.101

Appendix E.10 One-way ANOVA (Length of residence and Income generation (Fun-day & fayre))

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Income generation – Fun-day and fayre	8.813	6	493	.000

Anova

		Sum of Squares	df	Mean Square	F	Sig.
Income generation – Fun-day and fayre	Between Groups	3.602	6	.600	2.328	.032
	Within Groups	127.140	493	.258		
	Total	130.742	499			

Robust Tests of Equality of Means

		Statistic[a]	df1	df2	Sig.
Income generation – Fun-day and fayre	Welch	3.029	6	205.538	.007
	Brown-Forsythe	2.389	6	423.027	.028

Post Hoc Tests

Dependent Variable				Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Income generation – Fun-day and fayre	Games-Howell	less than 3	3 to 5	.125	.070	.564	-.09	.34
			6 to 10	.167	.072	.236	-.05	.38
			11 to 15	.044	.067	.995	-.16	.25
			16 to 20	.146	.090	.670	-.13	.42
			21 to 30	.279*	.076	.007	.05	.51
			Over 30	.162	.064	.157	-.03	.35
		3 to 5	less than 3	-.125	.070	.564	-.34	.09
			6 to 10	.042	.085	.999	-.21	.30
			11 to 15	-.082	.081	.952	-.33	.16
			16 to 20	.020	.101	1.000	-.28	.32
			21 to 30	.154	.089	.600	-.11	.42
			Over 30	.037	.079	.999	-.20	.27
		6 to 10	less than 3	-.167	.072	.236	-.38	.05
			3 to 5	-.042	.085	.999	-.30	.21
			11 to 15	-.123	.082	.745	-.37	.12
			16 to 20	-.022	.102	1.000	-.33	.28
			21 to 30	.112	.090	.876	-.16	.38
			Over 30	-.005	.080	1.000	-.24	.23
		11 to 15	less than 3	-.044	.067	.995	-.25	.16
			3 to 5	.082	.081	.952	-.16	.33
			6 to 10	.123	.082	.745	-.12	.37
			16 to 20	.102	.099	.945	-.20	.40
			21 to 30	.236	.087	.101	-.02	.49
			Over 30	.119	.076	.708	-.11	.35
		16 to 20	less than 3	-.146	.090	.670	-.42	.13
			3 to 5	-.020	.101	1.000	-.32	.28
			6 to 10	.022	.102	1.000	-.28	.33
			11 to 15	-.102	.099	.945	-.40	.20
			21 to 30	.134	.105	.864	-.18	.45
			Over 30	.017	.097	1.000	-.28	.31
		21 to 30	less than 3	-.279*	.076	.007	-.51	-.05
			3 to 5	-.154	.089	.600	-.42	.11
			6 to 10	-.112	.090	.876	-.38	.16
			11 to 15	-.236	.087	.101	-.49	.02
			16 to 20	-.134	.105	.864	-.45	.18
			Over 30	-.117	.084	.808	-.37	.13
		Over 30	less than 3	-.162	.064	.157	-.35	.03
			3 to 5	-.037	.079	.999	-.27	.20
			6 to 10	.005	.080	1.000	-.23	.24
			11 to 15	-.119	.076	.708	-.35	.11
			21 to 30	-.017	.097	1.000	-.31	.28
			Over 30	.117	.084	.808	-.13	.37

Size effect- Eta squared (h^2) = SS_{effect} / SS_{total} = 0.027= a small effect

Appendix E.11 One-way ANOVA (Length of residence and Income generation (Festivals))

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Income generation - Festivals	3.941	6	494	.001

Anova

		Sum of Squares	df	Mean Square	F	Sig.
Income generation - Festivals	Between Groups	13.480	6	2.247	3.645	.001
	Within Groups	304.476	494	.616		
	Total	317.956	500			

Robust Tests of Equality of Means

		Statistic[a]	df1	df2	Sig.
Income generation - Festivals	Welch	3.711	6	205.112	.002
	Brown-Forsythe	3.662	6	446.358	.001

Post Hoc Tests

Dependent Variable				Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Income generation - Festivals	Games-Howell	less than 3	3 to 5	.166	.125	.839	-.21	.54
			6 to 10	.044	.114	1.000	-.30	.38
			11 to 15	.093	.131	.991	-.30	.49
			16 to 20	.299	.148	.410	-.15	.75
			21 to 30	.388*	.120	.025	.03	.75
			Over 30	.427*	.122	.011	.06	.79
		3 to 5	less than 3	-.166	.125	.839	-.54	.21
			6 to 10	-.122	.123	.955	-.49	.25
			11 to 15	-.073	.139	.998	-.49	.34
			16 to 20	.133	.155	.978	-.33	.60
			21 to 30	.222	.129	.600	-.16	.61
			Over 30	.261	.131	.418	-.13	.65
		6 to 10	less than 3	-.044	.114	1.000	-.38	.30
			3 to 5	.122	.123	.955	-.25	.49
			11 to 15	.049	.128	1.000	-.34	.43
			16 to 20	.255	.146	.587	-.19	.70
			21 to 30	.344	.118	.058	-.01	.70
			Over 30	.383*	.119	.026	.03	.74
		11 to 15	less than 3	-.093	.131	.991	-.49	.30
			3 to 5	.073	.139	.998	-.34	.49
			6 to 10	-.049	.128	1.000	-.43	.34
			16 to 20	.206	.160	.855	-.28	.69
			21 to 30	.295	.134	.303	-.11	.70
			Over 30	.334	.136	.183	-.07	.74
		16 to 20	less than 3	-.299	.148	.410	-.75	.15
			3 to 5	-.133	.155	.978	-.60	.33
			6 to 10	-.255	.146	.587	-.70	.19
			11 to 15	-.206	.160	.855	-.69	.28
			21 to 30	.089	.151	.997	-.37	.54
			Over 30	.128	.153	.980	-.33	.59
		21 to 30	less than 3	-.388*	.120	.025	-.75	-.03
			3 to 5	-.222	.129	.600	-.61	.16
			6 to 10	-.344	.118	.058	-.70	.01
			11 to 15	-.295	.134	.303	-.70	.11
			16 to 20	-.089	.151	.997	-.54	.37
			Over 30	.039	.126	1.000	-.34	.41
		Over 30	less than 3	-.427*	.122	.011	-.79	-.06
			3 to 5	-.261	.131	.418	-.65	.13
			6 to 10	-.383*	.119	.026	-.74	-.03
			11 to 15	-.334	.136	.183	-.74	.07
			21 to 30	-.128	.153	.980	-.59	.33
			Over 30	-.039	.126	1.000	-.41	.34

Size effect- Eta squared (h^2) = SS_{effect} / SS_{total} = 0.042= a small effect

Appendix E.12 One-way ANOVA (Length of residence and Income generation (Circuses))

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Income generation - Circuses	1.829	6	483	.092

Anova

		Sum of Squares	df	Mean Square	F	Sig.
Income generation - Circuses	Between Groups	22.331	6	3.722	4.865	.000
	Within Groups	369.507	483	.765		
	Total	391.839	489			

Post Hoc Tests

Dependent Variable				Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Income generation - Circuses	Tukey HSD	less than 3	3 to 5	-.079	.148	.998	-.52	.36
			6 to 10	-.048	.146	1.000	-.48	.38
			11 to 15	.052	.160	1.000	-.42	.53
			16 to 20	.203	.166	.886	-.29	.69
			21 to 30	.365	.144	.152	-.06	.79
			Over 30	.480*	.143	.015	.06	.90
		3 to 5	less than 3	.079	.148	.998	-.36	.52
			6 to 10	.031	.141	1.000	-.39	.45
			11 to 15	.132	.157	.981	-.33	.60
			16 to 20	.282	.162	.589	-.20	.76
			21 to 30	.444*	.140	.026	.03	.86
			Over 30	.560*	.139	.001	.15	.97
		6 to 10	less than 3	.048	.146	1.000	-.38	.48
			3 to 5	-.031	.141	1.000	-.45	.39
			11 to 15	.100	.154	.995	-.36	.56
			16 to 20	.251	.160	.704	-.22	.72
			21 to 30	.413*	.137	.044	.01	.82
			Over 30	.528*	.136	.002	.12	.93
		11 to 15	less than 3	-.052	.160	1.000	-.53	.42
			3 to 5	-.132	.157	.981	-.60	.33
			6 to 10	-.100	.154	.995	-.56	.36
			16 to 20	.150	.174	.977	-.36	.66
			21 to 30	.312	.153	.389	-.14	.77
			Over 30	.428	.152	.074	-.02	.88
		16 to 20	less than 3	-.203	.166	.886	-.69	.29
			3 to 5	-.282	.162	.589	-.76	.20
			6 to 10	-.251	.160	.704	-.72	.22
			11 to 15	-.150	.174	.977	-.66	.36
			21 to 30	.162	.159	.949	-.31	.63
			Over 30	.278	.158	.575	-.19	.74
		21 to 30	less than 3	-.365	.144	.152	-.79	.06
			3 to 5	-.444*	.140	.026	-.86	-.03
			6 to 10	-.413*	.137	.044	-.82	-.01
			11 to 15	-.312	.153	.389	-.77	.14
			16 to 20	-.162	.159	.949	-.63	.31
			Over 30	.116	.135	.978	-.28	.51
		Over 30	less than 3	-.480*	.143	.015	-.90	-.06
			3 to 5	-.560*	.139	.001	-.97	-.15
			6 to 10	-.528*	.136	.002	-.93	-.12
			11 to 15	-.428	.152	.074	-.88	.02
			21 to 30	-.278	.158	.575	-.74	.19
			Over 30	-.116	.135	.978	-.51	.28

Size effect- Eta squared (h^2) = SS_{effect} / SS_{total} = 0.056= a small effect

Appendix E.13 One-way ANOVA (Length of residence and Income generation (Green space subscription))

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Income generation - Green space subscription	1.896	6	457	.080

Anova

		Sum of Squares	df	Mean Square	F	Sig.
Income generation - Green space subscription	Between Groups	22.212	6	3.702	6.696	.000
	Within Groups	252.650	457	.553		
	Total	274.862	463			

Post Hoc Tests

Dependent Variable				Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Income generation - Green space subscription	Tukey HSD	less than 3	3 to 5	.341	.128	.110	-.04	.72
			6 to 10	.432*	.125	.011	.06	.80
			11 to 15	.288	.142	.397	-.13	.71
			16 to 20	.373	.142	.119	-.05	.79
			21 to 30	.636*	.125	.000	.27	1.01
			Over 30	.682*	.123	.000	.32	1.05
		3 to 5	less than 3	-.341	.128	.110	-.72	.04
			6 to 10	.091	.124	.991	-.28	.46
			11 to 15	-.053	.141	1.000	-.47	.36
			16 to 20	.032	.141	1.000	-.38	.45
			21 to 30	.295	.123	.203	-.07	.66
			Over 30	.341	.121	.077	-.02	.70
		6 to 10	less than 3	-.432*	.125	.011	-.80	-.06
			3 to 5	-.091	.124	.991	-.46	.28
			11 to 15	-.144	.138	.944	-.55	.26
			16 to 20	-.059	.138	1.000	-.47	.35
			21 to 30	.205	.120	.616	-.15	.56
			Over 30	.250	.118	.347	-.10	.60
		11 to 15	less than 3	-.288	.142	.397	-.71	.13
			3 to 5	.053	.141	1.000	-.36	.47
			6 to 10	.144	.138	.944	-.26	.55
			16 to 20	.085	.153	.998	-.37	.54
			21 to 30	.348	.138	.151	-.06	.76
			Over 30	.394	.136	.060	-.01	.80
		16 to 20	less than 3	-.373	.142	.119	-.79	.05
			3 to 5	-.032	.141	1.000	-.45	.38
			6 to 10	.059	.138	1.000	-.35	.47
			11 to 15	-.085	.153	.998	-.54	.37
			21 to 30	.263	.138	.474	-.14	.67
			Over 30	.309	.136	.262	-.09	.71
		21 to 30	less than 3	-.636*	.125	.000	-1.01	-.27
			3 to 5	-.295	.123	.203	-.66	.07
			6 to 10	-.205	.120	.616	-.56	.15
			11 to 15	-.348	.138	.151	-.76	.06
			16 to 20	-.263	.138	.474	-.67	.14
			Over 30	.045	.118	1.000	-.30	.39
		Over 30	less than 3	-.682*	.123	.000	-1.05	-.32
			3 to 5	-.341	.121	.077	-.70	.02
			6 to 10	-.250	.118	.347	-.60	.10
			11 to 15	-.394	.136	.060	-.80	.01
			21 to 30	-.309	.136	.262	-.71	.09
			Over 30	-.045	.118	1.000	-.39	.30

Size effect- Eta squared (h^2) = SS_{effect} / SS_{total} = 0.080= a medium effect

Appendix E.14 Evidence of an association according to six parks with income generation practices

Six parks associated with indicators	*df (between, within)*	*F*	Sig(*p*)	Effect size (h^2)
Voluntary donation	5, 500	5.604	.000	.053
Hiring tennis	5, 500	6.424	.000	.060
Football pitches	5, 500	7.074	.000	.066
Kiosk	5, 477	3.076	.010	.031
Shop	5, 482	6.436	.000	.062
Fun-day & Fayre	5, 494	3.514	.004	.034
Festivals	5, 495	5.582	.000	.053
Circuses	5, 484	9.281	.000	.087
Green space subscription	5, 458	5.904	.000	.061
Sponsorship	5, 472	4.486	.001	.045