How Can Inequalities in Access to Green Space be Addressed in a Post- Pandemic World? Lessons from London

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Introduction

Parks and green spaces have long featured prominently in city design and planning. Although once valued as a "rejuvenative antidote to the city itself"' (Pincetl and Gearin, 2005: 366), today green space is recognized as integral to the ecological, social, and economic functioning of cities. As global urbanization continues and cities grow more dense, congested, and polluted, providing healthy, liveable urban environments has become increasingly important. As such, delivering sufficient green space is a key objective for cities worldwide.

The value of green space has been underscored during the COVID- 19 pandemic, as these spaces were some of the few places people could safely go to during lockdowns. Visiting green spaces became essential for getting daily exercise and combating social isolation. But, the pandemic also has highlighted the unequal provision of green space across cities. Thus, the need to not only increase the amount of green space, but to do so in a way that addresses existing disparities has emerged as an urgent policy priority. In this chapter, we use London as a case study to explore opportunities for greening and the health benefit it provides by thinking beyond typical approaches to green space planning.

Green space in London

Parks and green spaces are central to London's identity. The British capital recently became a "national park city," and almost half of London is green (Greater London Authority (GLA), 2018a). Public parks consistently rank as one of the most popular services London's 33 local borough councils provide, and politicians from across the political spectrum support protection of the city's encircling Green Belt.

In 2019, London's population reached an estimated 8.9 million, the largest in its history, and is projected to surpass 10.8 million by 2041 (GLA, 2021). Competing pressures on the use of space have significant ramifications for the demand on and ability to provide quality green spaces (GLA, 2021). Although the London Plan – the city's spatial development strategy – asserts that green spaces should be protected, it also acknowledges that

London needs 66,000 new homes each year, for at least 20 years (GLA, 2021). Thus, to prevent urban sprawl, the London Plan calls for high- density development within urban centers, putting further stress on existing green spaces, many of which are reaching or are beyond their full capacity. Consequently, greening the urban environment is becoming more reliant on elements such as vegetated roofs and walls, street trees, and pocket parks to augment the green space network.

During the pandemic, green spaces have been the preferred sites for exercise and social interaction, use has increased, and Londoners have expressed renewed appreciation for nature (London Legacy Development Corporation (LLDC), 2020). Yet, COVID- 19 has also brought existing inequalities – already a concern pre- pandemic – into sharper focus. Although London is a green city, green space is not equally distributed or accessible. Only half of London households are within 400 meters, or a five- minute walk, of a local park (London Assembly Environment Committee (LAEC), 2017). Residents in areas deficient in green space are more likely to experience poorer health outcomes than those who live in green environments, and these disparities have been linked to obesity, longevity, and mental health issues (Public Health England (PHE), 2020). Initial data suggests increased park use during the pandemic has been driven by younger and wealthier residents (LLDC, 2020; The Nursery Research and Planning Ltd, 2020). Meanwhile, residents in lower socio- economic, minority ethnic, and other disadvantaged groups are less likely to have access to a private garden or nearby high- quality park (Natural England, 2020; Office for National Statistics (ONS), 2020). As such, Londoners' experiences during the pandemic have varied greatly.

Evolving green initiatives

As Londoners flocked to green spaces during the pandemic, policy discussions urgently turned to adding quality, accessible green spaces. Yet, rather than proposing creation of extensive areas of new parks, which has proven unachievable in a growing city determined to contain its urban footprint, a pragmatic approach to achieving a more equitable, greener urban environment is beginning to accelerate.

Two initiatives that have come to the fore are "Liveable Neighbourhoods" and the "Urban Greening" policy. These ideas, initially developed pre- pandemic, reframe London's approach to urban greening by integrating a broader spectrum of green elements – including trees, pocket parks, and green roofs and walls – into streets, buildings, and

public realm. This builds a network of greener civic spaces that connect to and supplement existing parks.

Recent urban greening policies reflect an evolution of thinking about London's urban ecology that has moved from a focus on simply protecting existing green space to ensuring the benefits of green space are manifest within the built environment. These policy shifts were motivated primarily by managing the risks of climate change, which poses a significant threat to London's resilience. Recently, however, public health issues have become more significant drivers of urban greening policy and practice. COVID- 19 has further thrown this into sharp focus.

Liveable Neighbourhoods

In 2018, London introduced the Liveable Neighbourhoods program to improve the local environment by transforming the city's streets into places of active travel. As part of a broader Healthy Streets approach set out in the Mayor's Transport Strategy to change how people move about the city, Liveable Neighbourhoods invests in long- term local schemes that reduce car trips and provide more sustainable travel options, including walking, cycling, and public transport (GLA, 2018b).

Projects, which are expected to include a mode shift away from private vehicles, involve creating green spaces, adding cycling infrastructure, redesigning junctions, and widening walking routes. The program's broad design allows for flexibility to accommodate a wide range of projects across London neighborhoods, which have distinct characteristics and challenges (Transport for London (TfL), 2019).

As an immediate response to the impact of COVID- 19, the need to encourage social distancing on London's high streets led to the initiation of the Streetspace for London Plan, which has implemented hundreds of temporary measures to reduce traffic and promote walking and cycling. These are precursors to more permanent solutions implemented through acceleration of the Liveable Neighbourhoods approach as London transitions to the new normal of the post-COVID- 19 city.

Yet, Liveable Neighbourhood projects have not been problem- free. Several boroughs have reversed or paused their initiatives after some residents and businesses expressed opposition. Arguments against the schemes contend they can exacerbate inequalities, with

those living in more affluent central neighborhoods with better public transport provision benefiting at the expense of residents in the poorer suburbs who are dependent on their cars or unable to walk or cycle to workplaces, schools, and other destinations.

Urban greening

The new London Plan has introduced the Urban Greening Factor (UGF) as part of a new Urban Greening policy. As a planning tool, the UGF provides a means for ensuring new developments contain an appropriate amount of on- site greening by setting targets for how green a project should be. Each landscape element – such as a tree, green roof, or rain garden – is assigned a factor between zero and one; natural elements score higher, while sealed surfaces score zero (GLA, 2021). The UGF enables local authorities to encourage particular green infrastructure interventions. For example, those concerned about flooding can confer a higher factor for sustainable drainage elements. The policy encourages developers to integrate greening into projects at the start of the design process and provides flexibility to adapt their designs if circumstances change (Massini and Smith, 2018).

The UGF aims to enhance the functionality of urban greening by shifting the use of green elements from a passive adornment in development schemes to essential working landscapes. This is particularly impactful as an area grows denser, as embedding green infrastructure into development can offset some adverse impacts resulting from increased pressure on land use (Massini and Smith, 2018). More localized UGF policies could target neighborhoods that are most deficient in access to green space, thus helping to address existing health inequalities.

This approach requires a shift from longstanding conceptualizations of green space as merely public parks to recognition of the potential benefits that a more diverse range of green elements can deliver in increasingly dense urban areas. It can increase the greening of those areas where creating new parks is unachievable. However, it is reliant on a trade-off between creating features that improve flood prevention, air and water filtration, urban cooling, and biodiversity – which all contribute to positive health outcomes – and more conventional green space interventions that can accommodate activities, such as team sports and dog walking. Enhancing urban greening through urban regeneration can also shift more of the provision of urban greening to the private sector, which further raises issues of access and inequalities and the risk of gentrification.

Discussion

Although London has provided strong protection for its expansive green space network, a growing population and land- use policies favoring high- density development curtail opportunities to deliver new conventional green spaces (Whitten, 2020). At the same time, the increasingly urgent threats of climate change, public health, and loss of biodiversity have deepened pressure to leverage the comprehensive benefits urban green space provides. Further, COVID- 19 has intensified demand to prioritize tackling longstanding inequalities in access to green spaces and the positive health outcomes they provide.

Pre- pandemic, London had already begun implementing a new approach to greening the urban environment. Supplementing the traditional approach of conventional features, such as parks, for delivering green space, London has adopted an ambitious urban greening policy and proactive initiatives, including the UGF and Liveable Neighbourhoods. This approach represents a more efficient use of the policy and funding levers available to deliver enhanced urban greening more quickly.

Yet, these approaches should not be implemented as a matter of parks versus urban greening. Although these initiatives help mitigate some of the disadvantages of insufficient access to green space, they do not eliminate them. Protecting the existing network of public parks is a prerequisite, and a network of green space of multiple shapes, sizes, and uses is needed to address health and environmental inequities. The urban greening approach simply reflects the realities of providing green space in urban areas already, and increasingly, spatially constrained by density.

Rather than reacting to issues raised by the pandemic by introducing rushed and impractical schemes, London is able to accelerate initiatives already in motion that were designed to green the built environment and influence how people engage with the city. Central to this is more assertively using the planning system to facilitate a holistic and collaborative approach to delivering urban greening. This requires a challenging shift away from entrenched approaches to green space as an adornment to understanding it as essential, functional infrastructure (Whitten, 2020).

These initiatives also open up opportunities for funding from a wider range of sources. Instead of relying largely on discretionary public parks budgets – which are often the first

to be raided in times of austerity – approaching urban greening from a functional perspective enables access to public and private finance that ostensibly deliver health, transport, and wider environmental objectives. These budgets would not be available if green space were managed strictly for amenity. Again, however, these funding sources should extend, not replace, existing green space resources.

Accelerated adoption and implementation has been possible because Liveable Neighbourhoods and the Urban Greening policy allow flexibility for local priorities. These initiatives also embed greening objectives earlier in the design and planning process, thus contributing to making urban greening the norm.

Conclusion

Pre- pandemic, London was taking action to enhance and expand urban greening to reduce inequalities in access to quality green space and improve health outcomes as the city grows in population and density. When COVID- 19 emerged, the objectives of the Liveable Neighbourhoods program and the Urban Greening policy were reinforced by the city's ability to quickly respond to changing needs. This was further accelerated by the locally responsive nature inherent in both initiatives.

As cities around the world wrestle with the need to provide equitably distributed green space, conceptualizing green space more holistically can present opportunities to accelerate this. This also opens up opportunities to collaborate with a wider range of stakeholders on transformative models of urban design, such as the 15- minute city being championed in Paris, presenting an attractive proposition for those struggling with chronic underfunding for traditional public parks.

Urban greening per se cannot address some of the systemic issues of social justice highlighted by the pandemic. However, if targeted to areas that are deficient in more conventional green space, urban greening can begin to address a broad range of public health issues, as well as the bigger challenge on the horizon – the impact of climate change on the urban environment. Given that climate change could further expose inequality in an even more profound way, a more holistic approach to urban greening should be integrated into postpandemic cities.

BIOGRAPHIES

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