



Local Environment

The International Journal of Justice and Sustainability

ISSN: (Print) (Online) Journal homepage: www.tandfonline.com/journals/cloe20

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To cite this article: T. B. Randrup, H. Fors, Å. O. Sang, B. Persson, J. Björstad, E. Shepherdson & H. Nolmark (2024) ParkLIV – engaging non-users in green space management, *Local Environment*, 29:8, 1008-1025, DOI: [10.1080/13549839.2024.2353046](https://doi.org/10.1080/13549839.2024.2353046)

To link to this article: <https://doi.org/10.1080/13549839.2024.2353046>



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Published online: 15 May 2024.



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ParkLIV – engaging non-users in green space management

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ABSTRACT

Everyone has the right to feel welcome, safe and be able to access public green spaces without fear, anxiety or stress. However, the term “accessibility” is primarily used in relation to physical accessibility, while social and cultural dimensions of accessibility to urban public green spaces remains underexplored. Methods and tools for universal design and management that also meets the needs of marginalised groups, are needed. This requires involvement of both users and potential users through participatory methods, building on individual needs and perspectives. In Sweden, traditionally marginalised groups and non-users are rarely engaged in the development of public urban green spaces. Local governments may have the will, but lack resources and appropriate methods in order to do so. Research has recently described a further engagement of users as an unleashed potential in relation to planning and management of urban green spaces. Based on the study of three test beds and the use of public green space governance and management theory, we developed a process model for user participation in green space maintenance with focus on involving marginalised groups and non-users. The model balances what is theoretical optimal with what is practically feasible within the daily work of a municipal organisation. We present an empirically tested process model that can form the basis for future maintenance of urban green spaces, with the use of limited resources.

ARTICLE HISTORY



Received 29 September 2023
Accepted 22 March 2024

KEYWORDS

Involvement; process model; marginalised groups; local governments

Introduction

There is strong evidence that urban green spaces (UGS) contribute positively to social equity and improved quality of life (e.g. World Health Organization, Regional Office for Europe 2016). Similarly, and partly related to this, green cities and the importance of green infrastructure and ecosystem services have long been strongly emphasised in both research, policies and goals at international, national and local levels (e.g. Council of Europe 2000; United Nations 2015). As UGS are often publicly accessible areas, they can be perceived as democratic, giving different individuals and groups the right to feel welcome, safe and able to use and stay in UGS without hindrance. The UN’s New Urban Agenda, which aims to strengthen communities, enable full and meaningful participation in society and end all forms of discrimination and violence, describes the importance of quality green public spaces such as parks, gardens, beaches, squares, etc. (United Nations 2016a). These

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spaces should be multi-functional places that support social encounters and integration, health and well-being, economic exchange and cultural expression, while stimulating dialogue between a diversity of people and cultures (United Nations 2016a.). Specifically, the UN Agenda 2030 for Sustainable Development (United Nations 2015) recognises the importance of universal access to safe, inclusive and accessible, green and public spaces in SDG 11, Sustainable Cities and Communities, and points to four broad target groups: women, children, older persons and persons with disabilities (SDG 11.7; <https://sustainabledevelopment.com/sdg11-indicators/>). On a national level, the Swedish Government launched a Strategy for Living Cities in 2018, in which it states: “The design of the city must enable meetings between people and increase social coherence ... accessibility in the built environment is a prerequisite for inclusion and participation for people with disabilities” (Swedish Government’s letter 2017).

Varying social mechanisms within and between users are significant explanations for why certain users do not visit a specific place, for example, race or ethnicity and socio-economic situation (Dai 2011). Haase et al. (2017) discussed accessibility to UGS seen from an equity perspective, and argued for the need to make sure that all inhabitants not only have equal access but also equal benefits. However, a recent Swedish national study found that 59% of respondents reported that nothing prevented them from using UGS (Dawson et al. 2023). Nonetheless, different groups of respondents showed starkly divergent perceptions of constraints relating to UGS, with factors such as age, self-reported connection to nature and distance to UGS being associated with a heightened likelihood of perceived constraints (Ibid.). It must be recognised that it is a combination of many aspects that explain why a place is not used. As indicated by Dawson et al. (2023), the physical location, distance and accessibility play a significant role, as also shown by Schipperijn et al. (2010), but the planning, design and management of a place also have a major impact on its actual use (Jansson, Vogel, et al. 2020b).

National standards and norms that focus on universal design and construction have been applied widely, including in Sweden in 1967, Australia in 1992, India in 1995 and Norway since 2009 (Australian Government 1992; Indian Government 1995; Norwegian Government 2009; Statens planverk 1967). In Sweden, “inadequate accessibility” as a form of discrimination was added to the Discrimination Act in 2015 (Diskrimineringsombudsmannen 2008), and the Swedish Disability Policy is based on the United Nation’s Convention On The Rights Of Persons With Disabilities (CRPD), which includes four areas for implementation of the policy, of which one is the principle of universal design (United Nations 2016b). Thus, political priorities continue to promote universal design in the development of standards and guidelines focusing on, for example, accessibility to buildings for groups with reduced mobility, and guidance for the visually impaired along sidewalks. However, in the Swedish Planning and Building Act, usability primarily refers to technical properties of buildings and not the wider social accessibility to public environments, including UGS (Boverket 2018).

Although there is strong scientific support for the positive effects of UGS, and that equal and universal accessibility is also a central issue in international and national conventions, laws and regulations, systematic efforts to increase accessibility to UGS tends to focus mainly on physical accessibility, while social and cultural aspects of accessibility have only been addressed sporadically (Koppen et al. 2014). Systematic efforts to increase socio-cultural accessibility are largely lacking, as evidenced by the fact that traditionally marginalised groups are rarely invited to participation processes related to UGS development (Fors et al. 2021). There is a lack of a systematic approach to universal design and management of UGS for equal accessibility for all, seen in relation to the aggregated spatial, social and temporal variations in UGS (e.g. Pearlmutter et al. 2017; Tan and Jim 2017). The challenge is to create an inclusive management approach to UGS that addresses the conditions experienced by those who do not already use the place, but would like to do so, the so-called “non-users”.

There are many examples showing the effects of user participation in the development of the physical environment (see e.g. an overview in FAO 2016), and in recent decades several theoretical frameworks have been developed to describe user involvement and active participation. An example

of this is Arts, Leroy, and van Tatenhove (2006) who describe a framework for governance and policy where the involved actors, their power and resources, the local discourse, and the rules of the game (policy instruments, norms, standards, etc.) together form the basis for commitment and participation. In addition, Living Labs (LLs), have been widely promoted as means for open innovation ecosystems in real-life environments (Arnouts, Maranghi, and Ryckewaert 2020; ENoLL 2022). More systemic approaches have been described and promoted, focusing on the entire social-ecological-technological systems to embrace user participation for increased relations between nature and humans (Frank, Delano, and Caniglia 2017; McPhearson et al. 2022). However, such concepts, being either rather extensive, technology-driven set-ups (Branny et al. 2022), or primarily theoretical considerations (Wellmann et al. 2023), may be too resource-intensive for practical use in a day-to-day green space maintenance practice, as described by Nordic green space managers (Randrup et al. 2021).

There appears to be strong evidence for the need to involve local user groups and ensure that specific needs are met in the actual maintenance of UGS and other public places. However, a number of studies have also highlighted the challenges of doing this (e.g. Borelli, Conigliaro, and Di Cagno 2023; Dai 2011; Fors et al. 2021; Fors, Wiström, and Nielsen 2019; Gräf et al. 2023). In 2017, a Swedish survey indicated that the public is not much involved in the development of local UGS (Haase et al. 2017), even though managers have the will to do so. However, the involvement methods are usually resource-intensive and difficult to fit into regular planning and management work (Randrup et al. 2021), as also stated by Fors et al. (2021, 2) who based on a review emphasised that “Participation processes add to the workload within the conventional organization for the municipal strategic management of UGS, and thus need to be aligned and organised within existing [organizational] structures”.

In this study, we made an initial mapping of Swedish local government practices, and found that several Swedish municipalities do indeed have ambitions to increase the use of UGS for certain marginalised groups. However, when they do, these are resource-limited efforts that are rarely evaluated. Such initiatives are often funded by national bodies and almost never implemented as a long-term sustainable UGS management strategy. Based on previous findings by Haase et al. (2017; 2021) and supported by our initial mapping of current practice, we conclude that increased user participation constitutes a so far untapped potential for future collaboration in UGS management.

Globally, many local governments have had varying degrees of citizen involvement within formal, more or less bureaucratic and hierarchical organisational structures (Mercado et al. 2023; van der Jagt et al. 2023). However, different geographical and cultural defined regions show great variation in the user participation. E.g. the Europe British and Central European planning families were found to have strong engagement traditions, while planning families of the new EU member states were still in the process of building up participatory cultures (Davies et al. 2015). However, on a local scale, governments are still organised into separated and specialised departments (silos), each relating to a specific urban sector, such as water, transportation, electricity, parks, food, health, etc., with little or no coordination let alone communication among them (Randrup and Jansson 2020; Singh et al. 2021). This lack of formal communication between those who manage and maintain UGS and those who represent different user groups within the organisation, or representatives of user groups outside the organisation, complicates the co-creation activities in practise management, needed to involve non-users.

Problem definition

There is a need to develop long-term management approaches that understand the reasons why some people do not use UGS, and then adapt UGS to meet the needs of a wider group of users. This may include increasing accessibility to UGS for people with mental and/or physical disabilities, regardless of, for example, gender, ethnicity, age and ability. The objective should be to include

those user groups who would like to use and benefit from UGS, by seeing the inclusion more as a process in relation to management, than to a specific project in itself.

In this paper, we present an empirically tested engagement process model, to be applied within existing UGS management routines,.. The aim of our project was to develop a process model for participatory UGS management, with specific focus on involving non-users representing traditionally marginalised groups, acknowledging that user participation processes can be resource intensive. Therefore, the ParkLIV process model should be seen as a new approach to operational UGS management(maintenance), which can be used as a part of the daily maintenance routines, to include non-users within the existing budgets. The "LIV" in ParkLIV stands for the Swedish words for Long-term, Inclusive Tool (in Swedish Långsiktigt, Inkluderande Verktyg). "Liv" in Swedish translates into English as "Life". Thus, adaption of the ParkLIV process model will require a new, inclusive and long-term mind-set to UGS management. Paragraph: use this for the first paragraph in a section, or to continue after an extract.

Theoretical framework

Governance of UGS

In most parts of the world, local governments own and manage the majority of the publicly accessible UGS (Carmona et al. 2010; Jansson et al. 2020b). This responsibility includes the planning, design, construction and management, which is often implemented by different actors or different divisions within one or more departments. Local governments are structured with a political level setting directions via visions and strategic goals, a tactical level often institutionalised in professionally, separated departments (silos) and operational levels in which projects and services are executed (Randrup and Jansson 2020). Singh et al. (2021) described how management of natural resources need to overcome the many vertical and horizontal activities within the tactical level. This is in line with Randrup and Persson (2009) who described the public management organisation as a framework for aligning stakeholders and activities. The ideal is to align both horizontally across sectors and vertically through the policy, tactical and operational levels so that planning, design and management can be performed through strategic goals and coordinated actions (Randrup and Jansson 2020).

Governance has emerged as a concept in political science, sustainability science and other fields as a response to the growing awareness that governments are no longer the only relevant stakeholder when it comes to the management of societal and ecological issues (Lange et al. 2013). Governance has been defined as "Collaboration of government and non-government actors, with emphasis on power relations, decision making and resources (knowledge and funding) within a specific discourse and in accordance with relevant rules and regulations" (Jansson, Vogel, et al. 2020b, 12). This definition is appropriate to describe the complexity and difficulty of user participation processes, with its many actors, related discourses, rules and regulations and (limited) resources. In this paper, we will use public governance theory (Randrup and Jansson 2020; Singh et al. 2021) to distinguish the extent to which existing governance arrangements focus on both vertical and horizontal alignment, (in combination referred to as "programmatic alignment"), i.e. cross-sectoral policy making, planning and management. Further, we will discuss the degree to which the proposed process model can support both long-term and inclusive user participation in UGS development.

Strategic management

Strategic management of UGS within local governments can be seen as a continued process of planning, designing, construction and maintenance (Randrup and Persson 2009). Thus, strategic management includes aspects of planning and re-planning, design and re-design and aspects of

establishment, construction, or re-construction, while maintaining the space. This process addresses ongoing societal challenges and new demands related to climate change, demographic change, biodiversity loss, human health and well-being etc. However, the prevailing organisation of local governments complicates this matter.

The need for a long-term and internally coordinated approach to sustainable and inclusive management of UGS is emphasised by Franch (2018), who describes designing on site in existing UGS as a basis for interventions and “differentiated management”. In such a site-specific approach, design and construction are intertwined with the operational maintenance. Similarly, Gustavsson et al. (2005) describe how design and management of urban forests have been separated for too long, as design is a crucial part of the relationship with landscape dynamics and thus should be an integrated part of landscape management. In line with Randrup and Persson (2009), we embrace strategic management as a holistic and long-term perspective in the development of UGS. The concept acknowledges that once a space is planned, designed and constructed, it may continue to develop over centuries. In this project, strategic management was used to address the long-term perspectives of a space, as well as to emphasise the repeated maintenance in management. By focusing on maintenance and the relevant local government departments, we were able to ensure a long-term, operational perspective on non-user participation.

Adaptive management

Adaptive management as a way of managing natural resources was introduced by Holling (1978), and further developed by Walters (1986). Their focus was on the uncertainties associated with the dynamics of natural resources and the related management approaches to reduce these uncertainties. The adaptive management approach is a learning cycle or process, that has six stages: (1) Assess the problem, define boundaries of the problem and set the management objectives, (2) Understand assumptions and predictions as a basis for further learning, (3) Identify uncertainty, and alternate hypothesis based on evidence and experience, (4) Implement actions and/ or policies to allow continued management while learning, (5) Monitor the effects of interventions and (6) Reflect on, and learn from the outcomes (Rist et al. 2013). Whereas strategic management emphasises horizontal alignment and a cross-departmental approach to planning, design, construction and maintenance, adaptive management emphasises vertical alignment in linking visionary policy making with operational maintenance but also includes perspectives on new governance arrangements, monitoring and evaluation processes (Randrup et al. 2023). Furthermore, adaptive management implies iterative, collective decision-making through participation processes, involving not only managers but also other stakeholders (Kingsford et al. 2017). In addition to its transdisciplinary character, another fundamental point of adaptive management is the existence of dynamic feedback loops, seeing management as an ongoing process and learning cycle; something that fits well with the cyclic process of strategic management. Monitoring is crucial in order to check whether the objectives and purposes of management are being achieved in order to redefine them if necessary or to correct management practices or change their implementation through re-planning, re-designing and re-construction (Jansson et al. 2019). In this project, we applied the concepts of adaptive and strategic management to develop a long-term, inclusive management approach for involving various groups of non-users in UGS provisioning, as well as to add continuous evaluations as a central part of the process.

Development of the ParkLIV process model

In the initial phase of the project, a literature review was performed (Fors et al. 2021). The review concluded that there is a need to adapt participation processes to the needs of different participant groups, including those of marginalised groups who are often excluded. In the review, different known approaches to participation were presented as a “cyclic process model for long-term

participation in strategic management of UGS”, separated into three main phases: (i) an analytical phase, focusing on various forms of value mapping and collaborative planning efforts; (ii) a design phase, focusing on co-design efforts and (iii) an implementation phase, focusing on co-management and community gardening. The cyclic process model was developed to align with management of UGS, inspired by the many process models available in project-based fields divided into the phases analysis, design and implementation as describe above for strategic and adaptive management. Thus, the ParkLIV process model (Figure 1) was developed to enable empirical testing of a range of tools for participation in three testbeds, as well as for its ability to be integrated into existing long-term management, without the need for additional funding. From adaptive management theory, we have drawn inspiration from the cyclic process and the various phases, not least the continuous evaluation phases, which are also a reflection of our initial mapping of practises, suggesting that these are not carried out systematically. The ParkLIV model suggests an initial vision to be formulated as an outset for the process. From there, an analysis of the context in the form of the physical and social landscape related to the vision is conducted, after which design and implementation phases are carried out. However, the starting point of the process can be any of the three phases, allowing flexibility in use of the process model.

Between each phase in the process, evaluations are carried out to assess if the results of each phase are on track with the initial vision. After the analysis phase, the key evaluation question will be whether there is a need to re-formulate the vision; after the design, phase the key question will be how the actual solutions contribute to the vision; and after the implementation phase, the key question will be how to assess whether the results actually lead to the fulfilment of the original vision. At this stage, it will usually be required to ask an additional question related to the need for follow-up activities or for new or further citizen participation. From there, the cyclic process will continue, moving on with new analysis, design, implementation and evaluations.

According to Ambrose-Oji et al. (2011) participants in general, have the most power to influence decisions and outcomes in the implementation phase, but we do not see the overall aim of the ParkLIV process model as a means to reach full empowerment, rather than to make UGS more relevant for a wider group of users.

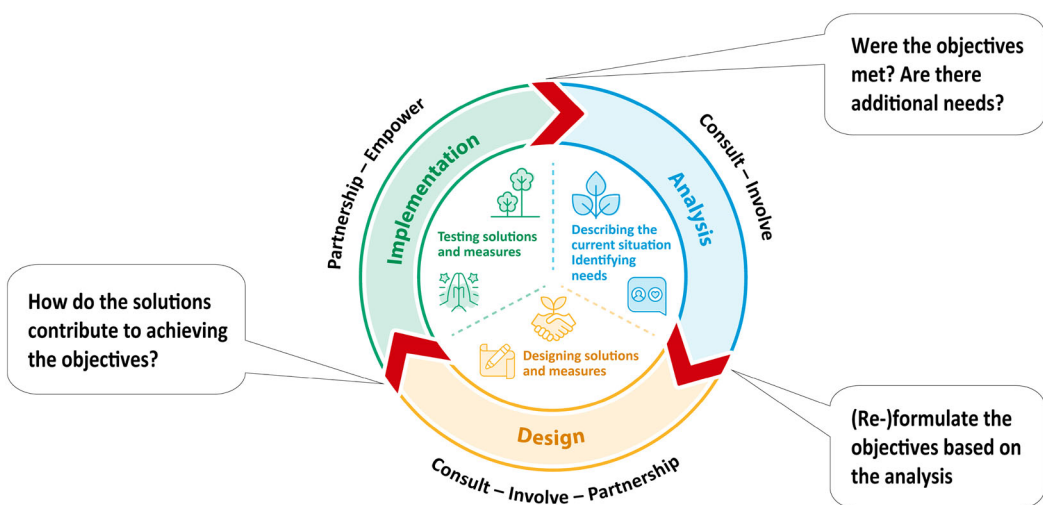


Figure 1. The ParkLIV process model illustrates a cyclic, long-term and inclusive approach for involving non-users in management of urban green spaces. The model consists of three phases: analysis, design and implementation. A short evaluation, indicated by a red arrow, is carried out before moving from one phase to another. The outer ring shows the dominant type of participation for each phase, based on Ambrose-Oji et al. (2011), and Fors et al. (2021).

Methods

We tested and refined the ParkLIV process model using the cyclic model as an outset for testing different participation tools in three different testbeds. A subset of tools was carefully selected for each phase (analysis, design and implementation), from the tools identified by Fors et al.'s (2021) review, and from an initial mapping of Swedish local government's approaches to stakeholder involvement (unpublished).

Testbed selection

In deciding which testbeds to include, we aimed for diversity and maximum variation (Flyvbjerg 2006; Yin 2014), in order to include different user groups and non-user groups in different contexts. The identification strategy included national announcements via trade journals and Sweden's innovation agency, Vinnova (funder of the project), together with project partners reaching out to local governments. This generated >20 of potential testbeds, from which we identified the potentials via dialogues.

Three public testbeds were selected, focusing on UGS all managed by local governments and all considered to be used to a limited extent. The three UGS are further described in Table 1: (i) a forested, urban landscape, located between two schools, (Tyresö), (ii) an UGS centrally located within a rural-urban area of 1500 inhabitants (Östra Göinge) and (iii) a larger UGS, previously used as a local airfield (Malmö).

Testbed process

Time wise, the literature study, mapping of current practices, identification of testbeds and formulation of testbed visions lasted approximately 12 months. The following 30 months were used to test and refine the model in the testbeds. The last 6 months of the project were used to generate final results, draw conclusions and develop policy briefs and guidelines for practise. In general, the research team acted as observers, and to a limited extent facilitators. With the local governments, we suggested future implementation and testing. Each phase of the testbed process is briefly described below.

Table 1. Overview of the three testbeds used in the project. (*) Autism is a neuropsychiatric disability and a spectrum disorder, meaning that individuals with autism can vary widely in terms of their abilities and challenges. In our case, people with autism in general had difficulties in social interaction and communication (Bölte 2020). However, people with autism can also find changes and new situations as very challenging (ibid.), just as many are hypersensitive or hypersensitive to sensory stimuli (Gaudion and McGinley 2012; Tola et al. 2021).

	Tyresö	Östra Göinge	Malmö
Landscape type	Forested, urban (ca 2,5 ha)	Urban park (ca ½ ha)	Urban park (ca 60 ha)
Main objective of interventions	To increase use by local school-children	To increase use by local residents in general	To increase use by people with autism, with high support needs
Main stakeholders	Municipal planners, UGS managers and school teachers	Municipal UGS managers, school teachers, reps. of local interest groups and NGOs	Municipal UGS managers and the Disability Support Department
Key (non-)user groups	Local school children	Local organisations and schools	People with autism*
Testbed in existing planning	A strategic plan for the area had already been politically approved. The UGS is part of the routine maintenance programme.	The UGS is part of the routine maintenance programme, but no specific development plan had been developed.	The UGS is part of the routine maintenance programme, but no specific development plan had been developed.

Vision formulation

For each of the three testbeds, an overall vision of the intervention was formulated by the municipal planners and UGS managers (main stakeholders), who also acted as owners of the intervention. The visions can be characterised as overarching with an aim to stimulate citizen involvement, while also relating to changes in the current maintenance routines, or they could be an invitation for new uses of an existing area. The visions were accompanied with specific objectives (Merkus, Willems, and Veenswijk 2019). The overall visions varied between “adapting an UGS to the needs of a specific non-user group” (Malmö), to “increased use of an UGS for a specific group” (Tyresö), to “increased use of an UGS for unspecified local groups” (Östra Göinge).

Application of the ParkLIV process model

After formulation of the visions, the main stakeholders analysed the UGS to describe its qualities and identified the key (non-)users based on the vision (see Table 1). All three testbeds applied the ParkLIV process model’s three phases. None of the three testbeds were able to perform long-term co-management activities with users due to the limitations of Covid-19. However, in both Tyresö and Malmö the installed alterations and interventions are now being managed by the local government, with the ambition to involve the selected user groups in future dialogues about relevance, potential alterations to the designs and future maintenance.

Application of tools

The central and most widely used tools were “park walks” and “co-design workshops”, which were used to varying extents in each of the three phases. Evaluations were carried out after each phase.

Park-walks

The “park walk” tool (Janse and Konijnendijk 2007; Kowalewski and Bartłomiejski 2020), was used primarily in the analysis phase, and was conducted either as a walking interview in which the participants described their experience, using their own terminology to describe how they have perceived and used the place, or as child-led walks centred around observation and interaction with the environment rather than interviewing. Park walks were held as individual or group walks. In Malmö, people with autism were represented by staff from both the Disability Support Department and the special municipal accommodation service for people with autism, due to their inherent disability (see Table 1).

Co-design workshops

In “co-design workshops” (see e.g. Mackie et al. 2018; Patton-López et al. 2015) the participants were divided into groups to discuss the actual use of the space, the actual non-use, why people would use the space and why they would not. Each group then chose a case of why people do not use the space, and brainstormed solutions to be presented in plenum for adjustments to the chosen challenges. From there, each group discussed what, why, how, for whom, where and when, to be briefly presented in a final plenum, where all participants could vote for one or more solution.

The co-design workshops were facilitated by representatives of the municipal organisation and participants were randomly divided into groups of 3–4 people. The size of the groups depended on the total amount of participants and the complexity of the UGS. The co-design workshop tool was tested twice in Östra Göinge (see Table 2).

Alternatives to co-design workshops

In Tyresö, in-depth stakeholder interviews and on-site surveys (Stake 1995), with current users of the UGS were performed as an alternative to the co-design workshop. The interviews replaced a physical

Table 2. Overview of activities carried out in each of the three testbeds. (*) The workshop was held as three individual walks, due to Covid-19 restrictions. (**) Individual interviews were held as alternative to a workshop, due to Covid-19 restrictions.

		Östra Göinge	Tyresö	Malmö
The analysis phase Tools: Park walks / surveys / interviews	No of participants	Workshop 1: 8 reps from local org. Workshop 2: 14 school children (age 12)	Workshop 1: 3 children (age 8 and 10), 5 adults Workshop 2: 5 children (age 10), and 3 adults Workshop 3: (evaluation of temporary installations): 7 children (age 10), and 3 adults	Workshop 1: 1 rep from the Streets and Parks Department, 1 rep from the Disability Support Department
	Time spent (plann, hosting, evaluating)	Workshop 1: 16 h. Workshop 2: 18 h.	Workshop 1: 2.5 h. Workshop 2: 2,5 h. Workshop 3: 2,5 h.	Workshop 1: 8 h. per participant*
	Other resources, materials etc.	None	None	None
Design workshops	No of participants	Workshop 3: 7 reps from local org. Workshop 4: 5 reps from local org.	“Workshop 4” 47 (interviewees, on-site surveys collected during 5 on-site sessions)	Workshop 2 7 reps. from the Disability Support Department, staff from the special accommodation for people with autism and the national Autism org.
	Time spent (planning, hosting, evaluating)	Workshop 3: 6 h Workshop 4: 46 h (follow up and design from WS3)	“Workshop 4”: 3 h. + 1 h/on-site session 3 in-depth interviews with stakeholders** 1 h/ interview	Workshop 2 3 h per participant
	Other resources, materials, etc.	None	None	None
Implementation		Halted due to contaminated soil	Temp. installations season 1, evaluated and adjusted. Permanent installations established in season 2, incl. marked trails with different themes. Summer quiz event	Pathway established through lawn mowing, new benches and signposting Additional funds for benches and signposts

co-design workshop due to Covid-19 restrictions at that time. In Malmö, educators and staff working with people with autism acted as “bridge-builders”, together with representatives from the Swedish Autism- and Asperger Association and a researcher who works with the local government on autism-related cases (see also [Table 1](#)).

Implementation of solutions

Implementation was conducted in Tyresö and Malmö, and integrated into the daily maintenance routines. In Tyresö, simple benches and temporary signage and trail markings were introduced in the first test season, and then evaluated and adjusted by children through a “park-walk”. The permanent implementations were in place for the second test season. In Malmö, a permanent installation of a path adapted to people with autism was established via simple signposts, new benches, changed grass mowing routines and a few clearings in the existing vegetation. In Östra Göinge the implementation process was put on hold due to contaminants identified in the soil during pre-construction activities.

Integrated evaluation

In all three testbeds, short evaluations were carried out after each phase to ensure that the process was on track using key/control questions. These evaluations mostly took form of briefings or structured reflections among the key stakeholders.

Resources involved

For all activities, estimates were made of the time and resources used to plan, host and evaluate the events. It also included the number of participants and an assessment of what worked well and what could be changed. [Table 2](#) provides an overview of the activities carried out in each of the three testbeds.

Results

Degree of inclusiveness of marginalised groups

The project succeeded in involving different groups of people to various degrees. In Malmö, only representatives of people with autism were involved, i.e. not the actual user group. When planning to engage people with autism, which represent a diverse group of conditions (World Health Organisation 2024) some may prefer peers, or trustful staff to express their preferences on their behalf (Ministry of Health 2024). The academic literature suggests that there is a need for broader constructions of relationships or even friendships (Brownlow, Bertilsdotter Rosqvist, and O'Dell 2015), in order to best account for the desire and abilities of high-functioning people with autism, and in order to actually perform active participation activities. In the case of Malmö, the staff at the Disability Support Department felt that the range of people with autism they represented, would not prefer to be directly involved in the various analytical phases, and thus should be represented by qualified staff. This notion was further exacerbated by the corona pandemic, which hindered direct engagement, as several meetings and workshops were held online.

In Tyresö two local schools and their pupils were involved, and in Östra Göinge, representatives of different organised groups and school children were involved. Here, it was acknowledged by the local planners that more could have been done to also involve non-organised users who, as mentioned above, lack traditional representation.

Inclusion of the ParkLIV model into the existing organisation

ParkLIV is a process, and although the model was intended to be incorporated into the daily life of UGS management, it still needs to be acknowledged within the organisation at the highest political level in order to ensure the attention and secure the resources needed at both the tactical and operational levels. In Tyresö, the testbed activities followed two existing strategic plans for the area, which were already approved by the political body. Children and their access to local UGS was one of the focus areas in the strategic plan for parks and the municipal comprehensive plan specified the political will to revitalise the specific UGS chosen for the testbed. Thus, this testbed could be viewed as a top-down intervention, with the case already being politically approved, but with no specifications to how the revitalisation should be carried out in practice.

In Malmö, the ParkLIV process can be viewed as a bottom-up process, as the initiative came from the potential users, represented by a local government department. It took time to establish a horizontal alignment between two separate local government administrations that had not previously been in contact. A concern of the UGS management department was how to serve a very specific user group and how to justify the allocation of resources (expressed as time) to one group in relation to the needs of other user groups. Once contact had been made between the two involved

municipal departments and discussions initiated, it became clear that addressing the needs of people with autism as a specifically challenged user group of UGS would also benefit many other user groups by creating low stimulus, calm and predictable environments.

In Östra Göinge, a relationship already existed between the UGS planners and the schools due to ongoing schoolyard planning and maintenance activities. The involvement of the organisations and civil society occurred via organised groups, with established channels of communication to the local government. The programmatic alignment in Östra Göinge was primarily on the tactical level, and with a horizontal character, internally across departments and externally in relation to the involved user groups. Here, minimal resources and the simple tools applied increased the interest and relevance of the central, but not previously well-used UGS. The application of the ParkLIV process model and subsequent engagement of local residents in the planning process was experienced as a valuable learning experience and has already served as inspiration for development of other UGS within the municipality. Participants found it particularly positive that they had been involved at the earliest stage of planning, before any pre-determined planned solutions were in place. The democratic value of the model was evident, and participants felt actively involved and listened to.

Discussion

With the ParkLIV process model we have emphasised a shift from management organisations engaging users in time-limited, specific projects that are rarely evaluated and lessons learned seldom transferred to the next project, to initiating a continuously ongoing long-term process of participation activities with reoccurring evaluation phases as an integrated part of the process.

We tested a process model for how a local government planning and management organisation can better integrate and involve users as well as “non-users” in activities leading to a more balanced and fair representation in urban green space use. We showed how existing green spaces can be better utilised by cross-departmental cooperation, and by applying relatively simple tools into the daily work programme. As such, we believe we have introduced a new approach to public involvement which to a large degree address the challenges observed by many public organisations in terms of finding time and means to engage various user groups, and especially those who are not frequently using the available public accessible green spaces. In the following, we discuss some of the key learnings from the project.

The three testbeds applied action research methodologies (Gunnarsson et al. 2016), as the three testbeds were initiated by the research team. However, during each of the interventions and testing of tools, the research team acted as observers, and to a limited extent facilitators, so that all tests were planned and executed by the local main stakeholders. In this sense, the researchers acted more as facilitators for the local “connoisseurs”, a term described by Mellqvist (2017) used in studies of long-term participation in landscape planning.

The process of testing the ParkLIV model was affected by the Covid-19 pandemic. This meant that several of the planned activities, and involving multiple stakeholders had to be postponed and, in some cases, held under alternative circumstances. This obviously hindered a thorough test, but also generated a number of alternative and valuable insights about the relevance, process and dedication towards the development of new approaches to participation processes, and new ways of making existing UGS more relevant and accessible for non-users.

Degree of inclusiveness of marginalised groups

The “Spectrum of Public Participation in Forest and Woodland Planning”, defined by Ambrose-Oji et al. (2011) describes different types of participation and goes from informing users e.g. about a future management plan, to consulting them, i.e. to obtain their feedback on analysis or alternatives, to involving them in a close collaboration throughout the process, ensuring that their needs and concerns are understood and considered, to partnerships, where responsibility and power is

shared between users and the municipality when developing and deciding on alternatives and preferred solutions, to empowerment, where final decision-making is placed in the hands of the users and the municipality has more of a facilitating role (Ambrose-Oji et al. 2011). The different types of participation in the spectrum differs in how much power that is transferred from the municipality to participating users. We included these five involvement typologies in the ParkLIV process model to emphasising the different involvement needs, and approaches related to each of the three phases. However, as stated in the literature, we also experienced that e.g. the Park walk would work well in both the analytical and the design phases.

We did experience that the three involvement phases, are reflecting various degrees of involvement, but we did not test all degrees of involvement, and did not have this as a core aspect of the project either. ParkLIV should be seen as inspiration to involve in various ways in various parts of the process, using simple tools. This should lead to increased use of UGS, and not necessarily lead to e.g. specific empowerment of specific user groups.

Citizen participation processes are generally seen as a challenge in local government planning and management of UGS (Jansson, Fors, et al. 2020a). Montesanti et al. (2017) studied marginalised groups via health care organisations in Canada, and found that involvement in various community participation initiatives strengthened their skills, abilities and leadership. We found similar results in the Tyresö testbed where we involved children. However, in Malmö where the non-users were represented by peers from the disability support administration, we believe that the initiated process has potential for long-term engagements. This is based, not at least on the strong relations built between departments within the local governments (overcoming horizontal alignment), serving as intermediaries or “bridge builders” between interests, as described by Frantzeskaki and Bush (2021) who studied UGS-related participation processes in Australia.

In Östra Göinge, where a site rather than a target group was used as a starting point, with the potential to involve all interested groups, it proved more difficult to reach and actively involve marginalised groups. Instead, already existing organised groups linked to the local cultural centre, local sports clubs, and the local schools were involved. Although this introduced new users, more could have been done to reach marginalised groups that are not represented by a traditional organisation. Such identification and initial participation processes have been described as very resource demanding (International Institute for Democracy and Electoral Assistance 2012; Pratt 2019). However, based on the experiences from this project, investment in identifying and actively involving marginalised groups may prove to be the main investment to be made. Thus, there is reason to consider initial investment in identifying, and reaching out to the targeted non-users, among the marginalised groups to be involved.

Our project also showed that it takes time to build and develop new relationships and collaborations. Identifying the right contacts within the formal organisations can also be a challenge. We worked with school teachers, coordinators for integration and newly arrived immigrants, and disability support experts. All of these roles are located in different departments, and all have primary tasks other than making UGS relevant for the groups they are representing. Further, we learned that relevant contacts often change job or functions, taking background knowledge with them. Often, these relationships are built on an individual basis, making it important to formalise cross-departmental relationships.

The tools – keep it simple

We found that the individual tools we tested needed to be simple in order for them to be feasible to implement within existing municipal processes. They needed to be simple to understand and use as well as adaptable to different geographic and social contexts and challenges. It is important that the tools support and underpin the participation process, rather than being an additional, detailed projects of it's own. The “park walk” was an example of this, which worked for involvement of both children and adults. In the children case, the park walk was child-led, allowing the accompanying UGS

managers to observe and join the children's play and thereby learn how the site was perceived and used. The discussions during the "park walks" about existing qualities in the UGS provided a very insightful analysis, and useful information for the next stages of the process. In all three testbeds, the planning of the park walks was perceived as very valuable for the park managers, who experienced the space from a new perspective during and after the walks.

The simple approach of presenting the ParkLIV process model for a future transformation of a site, proved to be very effective. This approach can be viewed as similar to hosting formal Future Workshops as proposed and tested by Sharpe et al. (2016). Here, participants first build a narrative about likely future scenarios by extrapolating current trends and considering where "business as usual" is leading to. From there, participants share their visions for an imagined future, before backcasting by reflecting on which pathways are needed to obtain the envisioned future scenario. The activities hosted in ParkLIV all reflect on a potential future vision, but this is done in a pragmatic manner, where the future vision is "limited" to what can be achieved within the existing allocated maintenance resources, including monetary budgets as well as time constraints. Such limitations to an open and creative future vision did not seem to limit the participants in developing local and relevant changes in any of the three testbeds.

In general, ParkLIV proved to be a powerful approach due to its simplicity and relevance in starting the process with open dialogues about (non-)user needs. Further, the flexibility of beginning a process based on the actual needs of UGS (as in Östra Göinge), or the specific needs of users (as in Tyresö and Malmö) was a way to get started with small initiatives with immediate relevance for the users.

Organisational alignment

The time resources that were used (see Table 2), were in general experienced as limited by the local governments involved, and as such were not seen as a hindrance to adoption of the overall ParkLIV model. The continuous evaluation phases worked well, in order to keep track of the direction of the process, and in general did not take long. The simple and re-occurring focus on the overall objective allowed for adaptability and needed adjustments. This proved very helpful, not at least in relation to the Covid-19 pandemics changing effects on the projects envisioned activities.

Across the three testbeds, it is clear that if an activity like ParkLIV can be lifted into an existing strategic decision (plan, policy or strategy), it is an advantage in terms of focus and use of resources. The process was implemented much faster in Tyresö where the initiative was based on two politically approved strategies. In Östra Göinge, there was support from high-level planners, working close to strategic and political decision-making, which helped to secure focus and resources for the initiative. In Malmö, the initiative grew from employees working somewhere between the tactical and the operational levels within the municipal organisation. It is therefore recommended that when participation processes are initiated at the operational or tactical level, political support should also be secured and ideally such initiatives should be rooted in strategic documents to ensure political awareness and attention.

A key learning from ParkLIV is thus, that even the part of the participation process that occurs internally within the municipal organisation takes time and may be more focused and stable if there is top management focus and/ or political decisions backing up the initiative. This shows that the need for vertical alignment within a municipal organisation goes both ways: top-down and bottom-up. However, as the Malmö testbed showed, the need for horizontal alignment across departments is a process that needs time and consistency to become successful.

The project owner –bridge builder?

In a Western context, and especially within the Nordic countries, the formal local government organisation, the municipality, experience a lot of trust from civil society (Andreasson 2017). Trust refers to

social trust not only for good economics, but also for low levels of crime, happiness and people taking responsibility for the development of the societies in which they live (ibid). In relation to UGS management, it is expected that the local government takes the formal initiative and sets the direction in terms of formulating the purpose of an UGS, and in initiating and inviting to participation processes. Thus, ParkLIV was tested within a context where the initiatives often come from the formal land owner. This may be very different in other parts of the world, where governance is more centralised and hierarchical. Such structures have been found to support more formalised non-government structures, identified amongst local stakeholders, grass-roots movements and NGOs, thus being able to initiate new forms or uses of UGS (Rigolon and Gibson 2021).

Initiatives to increase the use of UGS, such as ParkLIV, can attract wider attention and act as a reference point for similar activities and processes in other parts of the city. As such, successful ongoing activities can inform and enable rapid reactions to new challenges. ParkLIV has worked as a catalyst for involving local stakeholder groups who had previously not been involved, and in all three testbeds these new experiences were perceived as convincing for future urban development activities, and thus not only in relation to UGS management. However, we learned that there is a need for a project owner or facilitator to ensure the process keeps running.

The formal organisation being responsible for planning and management plays a central role in reassessing such needs, at least in a Swedish context. However, we believe this also applies to most other Western democracies, with strong formal rules and regulations related to UGS. This is in line with previous discussions of the role of local governments in planning and management of UGS (Carmona et al. 2010; Jansson, Vogel, et al. 2020b), but is emphasising a more systemic approach to future planning and management of UGS, as also suggested by for example, McPhearson et al. (2022). In Tyresö, it was discussed if such a role could actually be rooted in the municipal Communications Department.

Conclusions

Employing tools for citizen involvement in UGS management can be a way for local governments to capture important issues from users, potential users, as well as excluded ones, for example in relation to disability and other reasons for discrimination, and thereby raise the quality and relevance of UGS. In order to create conditions for increased accessibility and inclusion for all regardless of gender, ethnicity, age and ability, we developed an approach for UGS planners and managers to work actively to also reach traditionally marginalised groups that are partially or totally excluded from using UGS today, but who would like to use and benefit from UGS as much as existing user groups.

In this project, the social, economic, cultural and emotional accessibility to UGS was in focus in order to capture the voices of current non-users of UGS. The project's user-oriented working method has uncovered solutions that challenge norms about who has access to public space.

For each of the three phases in the ParkLIV process, a number of tools can be applied and used. For a comprehensive overview of user participation tools that can be used in the context of UGS development, please see Fors et al. (2021) which formed the basis for the development of the ParkLIV process model. In this project, we tested two tools, and found that many simple approaches, such as a few hours of involvement but repeated several times, worked well. Smaller and quicker events seemed to attract users; it was easy to maintain momentum and get inputs from users, as well as keep interest in the next steps of the process.

Involvement of users before actual site designs and alterations were proposed was perceived very well by participants. In some cases, the invited stakeholder groups had expected to be asked to reflect on and criticise proposals made by the local government. However, as there were no designs prepared for the initial user involvement activities, participants' interest was turned towards analysing the potentials of the site instead.

ParkLIV did prove to be a powerful approach to involvement of marginalised groups, or non-users. It is a process and differs from the more traditional participation approaches by not requiring

specific or additional funding, but instead benefiting from high-level attention, preferably at the political level. This is needed to secure focus, and to allow planners and managers at the tactical level to prioritize their daily work. Investments in identifying non-users (often referred to as marginalised groups) may be intensive, but can prove very valuable in terms of creating new types of use and relevance to existing UGS, as well as adhering to anti-discrimination legislation, principles of universal design and the Agenda 2030.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

This work was supported by VINNOVA [grant number 2018-04141].

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