naturo

Inclusive co-creation depends not only on who participates, but on how local governance is organised.





Governance arrangements influence who can participate, how relationships are maintained, how decisions can adapt, and whether learning is carried forward.

The study examined three European Micro Urban Living Labs involving residents in assisted housing, high school students, and children with disabilities and their families. The cases show that inclusive co-creation can be constrained when flexibility, participation and learning depend mainly on individual practitioners rather than being supported institutionally.

Governance Dimensions for Inclusive Co-Creation of Nature-based Solutions

Four connected governance dimensions shape whether co-creation of Nature-based Solutions (NbS) can be inclusive. Together, they offer a practical governance lens.





The Naturo Micro Urban Living Lab at Källan, a municipal residence for people recovering from addiction, turned an underused outdoor area into a restorative green space for rest, play, and shared maintenance. Residents, staff, and several municipal units, including landscape architects and an educator in inclusive meeting places, co-created it through workshops and hands-on redevelopment, and the positive results mean the initiative will continue beyond the project.

1 Inclusivity

Inclusive governance recognises different knowledge, needs and capacities. Participation can become tokenistic when people only provide input without meaningful influence over decisions.

Municipalities need a portfolio of participation pathways. Formal processes can be complemented by informal and targeted approaches that reach people outside established organisations and networks. Inclusion also means considering barriers such as time, energy, accessibility and care responsibilities.

2 Trust-building and cooperation

Trust requires continuity. Short project cycles and one-off consultations make relationships difficult to maintain.

The cases point to the value of combining formal responsibilities with informal, recurring contact. Less formal, recurring spaces can build familiarity and address issues early. Trust-building is therefore part of the governance infrastructure of co-creation processes.

3 Adaptability

Inclusive processes need to respond to changing social conditions, project constraints and participant capacities. In some cases, adaptability depends strongly on individual practitioners who find creative ways around institutional constraints. This enables action, but makes the system fragile when dependent on individuals.

Adaptability becomes more robust when roles, resources and decision-making arrangements allow teams to adjust participation formats, timing and responsibilities. Informal networks can also create exclusion if access depends on existing connections or resources.

4 Reflexivity and long-term perspectives

Co-creation requires opportunities to reflect on what is working, what is changing and whose perspectives may still be missing. In the cases, reflexive practices were often informal, isolated or dependent on individual staff. Surveys can collect feedback, but do not necessarily create shared learning.

Municipalities can strengthen reflexivity through recurring review points, cross-departmental learning, documentation of decisions and structured reflection with participants. This can turn individual



The Naturo Mirco Urban Living Lab (MULL) in Velenje has been dedicated to designing future solutions for an urban park by an inclusive and participatory approach. Guided by academic researchers, students at the local school in Velenje conducted behavioural mapping of the park visitors and participated in design workshops; developing a plan for how to create a more inclusive and climate resilient park.

Flexibility becomes more sustainable when it is built into governance structures.

From principles to operational practice

The four governance dimensions can be used as a practical checklist when designing or reviewing an NBS co-creation process. Ask: Who can participate, and through which routes? How will relationships be maintained? What can be adapted when circumstances change? When will participants and organisations jointly review what has been learned?

The answers can show where governance needs reinforcement and where municipalities can move from individual "champions" towards institutional support, roles, resources and follow-up.

A long-term governance challenge

Participant groups change over time. Students move through school, residents may complete rehabilitation programmes, and children and families may experience changing support needs. Inclusive governance therefore needs mechanisms for continuity, onboarding and transition.

Inclusivity is not achieved by simply adding participation. Governance arrangements must make meaningful participation possible and support learning over time.

KEY FACTS

Inclusive participation needs more than formal procedures.

Informal and formal participation pathways are both needed to reach diverse groups and avoid participation becoming tokenistic.

Adaptability is fragile when it depends on individuals.

Practitioner initiative can enable flexible responses, but lasting adaptability requires institutional roles, resources and decision-making support.

Reflexive learning is rarely embedded in governance.

Without recurring spaces for joint reflection, lessons from co-creation tend to remain isolated with individual staff or project teams.



IMPORTANT LEARNINGS

1. Inclusive participation depends on governance conditions.
2. Trust requires recurring relationships and follow-up.
3. Flexibility should be supported institutionally, not individually.
4. Reflexive learning needs to become part of governance.

Developed through the Naturo project, the Pentagon of Participation is an interactive tool helping municipalities reflect on participation in NbS and identify where further attention is needed to support long term participation.

Scan the QR to open the interactive tool

References

Buijs, A. E., Gulsrud, N. M., Rodela, R., et al. (2024). Advancing environmental justice in cities through the mosaic governance of nature-based solutions. Cities, 147, Article 104799. https://doi.org/10.1016/j.cities.2024.104799

Fors, H., F. Aa Hagemann, Å. O Sang, and T. B. Randrup. 2021. "Striving for Inclusion – A Systematic Review of Long-Term Participation in Strategic Management of Urban Green Spaces." Frontiers in Sustainable Cities, Section Urban Greening 3: 572423. https://doi.org/10.3389/frsc.2021.572423

Nguyen, N. T., Collins, A., & Collins, C. M. (2024). Trends and patterns in the application of co-production, co-creation, and co-design methods in studies of green spaces: A systematic review. Environmental Science & Policy, 152, 103642.

Randrup, T. B., Fors, H., Sang, Å. O., Persson, B., Björstad, J., Shepherdson, E., & Nolmark, H. (2024). ParkLIV–engaging non-users in green space management. Local Environment, 29(8), 1008-1025.

Co-funded by the European Union