

**Urban Forests for** Resilience

Cost-effective ecosystem restoration and ecological rehabilitation for urban forests as a nature-based solution.

Urban forests are more than just trees. They are complex networks of interconnected ecosystems where the well-being of one element influences the others. When one element of the urban forest declines, it affects the entire system. To ensure urban forests thrive in the face of climate change, it is crucial to restore and rehabilitate natural ecosystems within urban areas.

To ensure that urban forests provide locally effective nature-based solution practices for urban resilience follow these five steps:

- Protect Biodiversity: Safeguarding biodiversity is crucial for the restoration and maintenance of healthy ecosystems and their services.
- Adapt the vegetation to your local context: Choose tree species that are well-suited to the local climate and soil conditions, increase genetic and species diversity.
- Implement ecological continuity strategies: Counteract the fragmentation of green infrastructure by creating ecological corridors to reconnect green spaces and strengthen nature connectivity.
- Restore and rehabilitate existing urban forests: Use practices such as new plantings, soil reclamation, and maintenance of dead organic matter. Recognize the increasing value of trees as they mature. When the removal of a mature tree is necessary, significant compensatory plantings should be done to offset the loss.
- Design green spaces that embrace multifunctionality and are socially inclusive: Well-designed and managed urban forests can deliver multiple societal benefits. Design urban forests to respond to the needs of various users and ensure equitable access is provided, particularly for underprivileged communities.

Find out more about cost-effective ecosystem restoration and ecological rehabilitation for urban forests as a nature-based solution with our detailed guideline:







Participation is very important in the field of urban forests if they are to be a successful and accepted nature-based solution. Participation processes are only successful if those directly or indirectly affected are actively involved in the process. The lead organisation also needs to be clear on why it has decided on a participatory process. The identification and description of interest groups and the corresponding considerations on communication and the level of involvement are key steps towards successful participation even though it will mean spending some time in identifying the stakeholders and deciding on the right level of participation. Conditions and parameters that cannot be changed by stakeholders must be communicated consistently and transparently at the beginning of the process.

To ensure the right approach to public and stakeholder engagement in planning and managing urban forests as a nature-based solution follow these steps developed from the work of Nick Wates':

- Define clear, measurable and realistic goals: Identify the desired results to develop appropriate activities.
- Agree on the rules and boundaries: Make the process clear and transparent and be open about constraints.
- Avoid technical jargon: Use plain language in communications, technical documents and during activities.
- Work at the human scale: Emphasise working in small groups and at the neighbourhood scale so that everyone is comfortable and heard.
- Document the process: Record what is being said and take pictures (Ask before for permission).
- Adapt the process: Avoid rigid models and modify the process as you go along, when needed.
- Vary the methods according to the target group: Use a variety of tools and methods adapted to a variety of people.
- Call on experienced facilitators: Promote everyone's participation through well-directed facilitation.
- Illustrate ideas: Use visual presentations to facilitate understanding of ideas and concepts.
- Involve groups with different interests: Reach out to major stakeholders as soon as possible to avoid potential resistance.
- Provide the necessary resources: Allocate the time and resources needed for the scale of the project.
- Emphasise quality when preparing activities: Use a few, well-planned activities to collect highly significant data.
- Learn from the experience of others: Get ideas from what has been done elsewhere. Do not try to reinvent the wheel.
- Go on-site: Facilitate the understanding of concepts and develop well-adapted solutions by working at, or near, the project site.

Find out more about mechanisms for public and stakeholder engagement in planning and managing urban forests as a nature-based solution with our detailed guideline:



Public and stakeholder

engagement

Mechanisms for public and stakeholder engagement in

planning and managing urban forests as a nature-based solution.

Wates, N. (2000). The Community Planning Handbook, London: Earthscan, 2000. 230 pages.









## **Urban Forest Policy**

Planning, policy and delivery for urban forests as a nature-based solution.

A robust framework encompassing planning, policy and delivery are critical in delivering urban forestry at the city or regional level. An appropriate strategy and planning processes can help set the objectives and secure the resources for the long-term management of the urban forest as a nature-based resource. However existing planning practice will need to be reviewed and updated to ensure that it is nature-based compliant, this means putting an ecosystem services approach first and foremost.

To ensure the right planning, policy, and delivery of urban forests as a nature-based solution follow these five steps:

- Embrace a strategic ecosystem services approach: Current practice may already be delivering ecosystem services, but this is often by chance rather than by design. Revise your local urban forest plan or strategy to intentionally incorporate ecosystem services as the central guiding principle.
- Foster sustainable development and well-being: Ensure that your urban forestry plans deliver at least the following: three goals; (i) contribute to health and well-being, (ii) are integrated into all new urban development and (iii) maximise close to nature living.
- Prioritise maturity: Mature trees play a significant role as a cultural ecosystem service. Knowing what you already have is vital and mature trees also need the highest level of legal protection as it takes generations to replace their lost ecosystem services when they disappear. Invest in mature trees protection and professional management.
- Focus on the small things: Put in place policies for the sustenance of the micro and macro-biome and monitor facilitated by trees. Continuously monitor changes over time and take swift adaptive measures when necessary.
- Harness the potential of brownfields: Capitalise on brownfields as a valuable, non-renewable land resource which can act as part of a wider green infrastructure network and have high cultural ecosystem values, through protecting existing spontaneous developed ecological values, and/or through including nature restoration in brownfield redevelopment.
- Urban forests as a transdisciplinary approach: Preserving and extending urban green should be an objective in all relevant policy domains, such as sports and recreation, mobility, infrastructure development, urban design, agriculture, heritage. All development or redevelopment projects should contribute to increasing the urban tree cover.

Find out more about planning, policy and delivery for urban forests as a nature-based solution with our detailed guideline:











Since, creating and managing urban forests as a nature-based solution requires an ecosystem focused approach, delivering this may require institutional change among lead organisations at multiple levels.

Critical to this is to ensure that your institutional structure facilitates the integration of urban forestry into broader planning strategies, enables an increase in funding and resources for creation and maintenance, establishes stronger policies and regulations, engages and educates the community, and fosters collaboration and partnerships between different stakeholders. To ensure that change management and institutional reform for the better management of urban forestry as a nature base solution takes place, we recommend that both horizontal and vertical integration activities are first reviewed and then reformed as necessary.

- Review interdepartmental collaboration, since urban forestry management and planning involves various departments within a municipality, including parks and recreation, public works, planning, and environmental protection.
- Strengthen public-private partnership as collaboration between the public and private sectors can help to lever resources and expertise.
- **Enhance collaboration with non-governmental organisations (NGOs)** since they play an important role in urban forest as a nature-based solution management, providing expertise, resources, and community engagement.
- Integrate municipal plans and policies with urban forestry management such as land use planning, transportation planning, and development management.
- Maximise data sharing and analysis including tree inventory data, monitoring data, and socioeconomic data in pursuit of informed decision-making.
- Coordinate your urban forest planning with different levels of government including adjacent local authorities, regional, national, and international as appropriate.
- Share your resources reciprocally as this can improve funding and resources for urban forests such as skilled professionals and joint funding applications.
- Build your capacity by providing training and professional development opportunities for urban forest managers and other involved actors.
- Support innovative activities and initiatives that can support creation of new institutional arrangements and bottom-up structures to support the sustainable management and conservation of UF-NBS.
- Monitor and evaluate your work regularly so that changes can be made in preparation for new circumstances.
- Be an advocate since trees need friends. Use your publicity and promotional exercises to raise awareness of how a healthy urban forest is a key component of sustainable development and urban health and well-being.

Find out more about **change management and institutional reform for the better management of urban forestry as a nature-based solution** with our detailed guideline:



Reform for Better

Management

Change management and institutional reform for the

better management of urban forestry as a nature-based solution.





