

WEBINAR | November 18, 2025

Urban Greening: Moving from Practice to Policy

Post-Webinar Question and Answer:

- 1. We had many questions about how to select the proper plants for a region and city's needs. How should practitioners determine what to plant?**

Addis Ababa:

WRI is developing a **“Right Tree in the Right Place” species selection guideline** and an Addis Ababa tree selection guideline designed to help cities choose climate-appropriate, multifunctional trees and ensure they are planted in suitable locations. This guideline includes species characteristics, environmental functions, and site-specific recommendations. These documents can serve as comprehensive references for anyone seeking guidance on species selection, planning, implementation, and long-term management of urban greening initiatives. These reports are still under review, but we will share as soon as they are available.

Johannesburg:

Tree selection is guided by available information from SANBI (South African Biodiversity Institute on trees that grows well on Highveld Region). The team also uses ground research on indigenous trees that have grown in various households and have adapted to CoJ climate.

Tree selection has also focused on small to medium trees on the road reserves to minimise damage caused by large trees to household and servitudes (Electric, water and road), and on trees that are drought resistant, have medium to high frost tolerance, and have minimal maintenance requirements e.g, *Celtis africana*, *Olea spp africana*, *Searsia lancea*.

On open public spaces, we select trees that promotes biodiversity (Birds, bees and butterflies) e.g *Vachelia sieberiana*, *Vachelia xanthophloea*

Tree selection also takes into account encouraging species diversity to minimize monocultural tree planting practices, preference for indigenous plants over exotic trees, and the size of planting sites. Food security is also a consideration that encourages the planting of fruit trees.

2. Maintenance tends to be a common issue in nature-based solutions, how do you ensure that the trees [and other plants] being planted are sustained for the long-term impact that you wish to see such as improved biodiversity, urban cooling and other benefits?

Addis Ababa:

In Addis Ababa, the City Administration has taken significant steps by organizing women and youth groups into formal enterprises responsible for maintaining green infrastructure. Currently, there are over 717 organized enterprises dedicated to this work. Each enterprise is composed of 10 members, and each group is responsible for managing and maintaining 0.5 hectares of green area. They are compensated at a rate of 25 ETB per square meter, which creates a sustainable incentive system while also generating green jobs for local youth and women. In total, more than 7,000 youth groups across the city are engaged in watering, protecting, and monitoring tree seedlings and other green spaces. This large-scale community stewardship model has significantly improved the survival and performance of planted trees.

Within our SUNCASA project, we apply the same principle. The project engages local communities and women's groups in ongoing maintenance. Youth groups, in particular, take full responsibility for managing the seedlings—watering, mulching, protecting, and reporting on growth conditions. For agroforestry sites, farmers and landowners manage the seedlings themselves because they directly benefit from the trees, which strengthens long-term care and ownership. Through this community-driven and incentive-based model, we have seen encouraging results: our most recent survival count shows a seedling survival rate of over 85% across SUNCASA and related urban greening sites.

In addition to community engagement, we prioritize:

- Species selection (“Right Tree in the Right Place”) to ensure trees suit local conditions and require minimal maintenance.
- Training for youth and women's groups on proper maintenance, pruning, and pest control.
- Regular monitoring and survival assessments to identify and respond to challenges early.
- Collaboration with city sector offices to align responsibilities and avoid conflicts (e.g., trees removed by other departments).
- Embedding maintenance plans and budgets directly into project design from the start.

This combined approach—community stewardship, economic incentives, technical guidance, and coordinated governance—has proven effective in sustaining nature-based solutions and ensuring long-term climate resilience in Addis Ababa.

Johannesburg:

Some methods in Johannesburg include:

- Having robust tree-after care maintenance management plans, constant monitoring of newly planted trees, community involvement and buy-in
- Discourage mass tree planting initiatives by promoting establishment / pocket of excellence approach
- Proper planning and political support and buy-in
- On-going education and awareness programme / discourage the uprooting of trees
- The selection of trees is influenced by a number of factors such as encouraging species diversity to minimize monocultural tree planting practices; preference of indigenous plants over exotic trees; size of the planting sites, food security by encouraging the planting of fruit trees
- City of Johannesburg does not plant seedlings/sampling, the City plants 50L and 100 L trees. This improves survival rate of the tree and does not require constant maintenance. This approach has benefitted the City because Newly planted trees may be pruned once in 3 to 5 years depending on the species without compromising long term sustainability of the trees.
- There is operational budget allocated for tree after care program (maintenance).
- Regional maintenance is responsible for maintenance of trees to ensure long term impact of the trees planted
- There is public/private partnership where communities take ownership of the trees planted, they ensure that they safeguard the trees from vandalism. Furthermore, homeowners can take ownership of the tree planted next to their home by watering the newly planted tree until maturity.
- CoJ has policies/bylaw that protect the trees, thus this encourages the communities to safeguard the trees

3. What does it take to acquire land used for other purposes for establishment of public spaces? What techniques can be used in cities that have limited planting space?

Addis Ababa:

Acquiring land already in use is often the primary barrier to establishing new public spaces. The experience from **Addis Ababa's corridor development** shows that **high-level political commitment** is the most critical enabler. When the City leadership prioritizes green public space creation, sector offices can coordinate effectively, land can be reallocated more efficiently, and negotiations with affected users become more structured and transparent.

From a technical standpoint, successful land transition requires:

- Clear planning frameworks and design standards
- Early multi-sector coordination (roads, housing, utilities, environment)
- Stakeholder engagement and relocation/compensation mechanisms
- Phased implementation to minimize disruption

For cities with **limited planting space**, several space-efficient greening techniques can be applied:

- **Linear greening** along corridors: street trees, median planting, bioswales
- **Micro-spaces**: pocket parks, reclaimed road edges, unused public corners
 - *Bukavu: Prof. Alphonse also recommended hanging gardens or potted plants*
- **Multi-functional species selection** to maximize cooling, shading, and stormwater absorption within compact sites

The Addis corridor initiative demonstrates that even in dense urban environments, combining strong political backing with technical design solutions can unlock land and create meaningful, climate-resilient green public spaces.

Johannesburg:

Planting of trees like fruit trees in house-holds, inter-planting approach, planting trees in containers, re-greening initiatives to replace aged / dying trees, encourage roof-top gardens, etc.

4. For the cities that are well underway have there been any pests or nuisance animals reductions seen or surprising wildlife resurgences? Have there been other collaborations with ecologist or public health researchers to maximize the understanding the One Health aspects of greening within African cities specifically within the WRI partner cities?

Bukavu:

Once vegetation is restored, biodiversity is also restored because a suitable habitat is established, especially for birds and invertebrates. It should also be noted that in this case, beneficial ecosystem services are provided in cities when the urban ecosystem is restored.

Johannesburg:

What we have observed with the infestation of the shot-hole borer beetle (PSHB) is that some of the trees are reproductive, non-reproductive or resistant. To mitigate against the effects of PSHB, the City is part of the national PSHB Steering Committee and PSHB Research Network, and we do employ our own specialists like the Ecologist, Arboricultural Advisor, Arboriculturists, Botanist. The City does participate in collaborative efforts and also to the peer-to-peer knowledge exchange programmes organized by SUNCASA / WRI.

5. Which measures do you use to mitigate urban heat?

Addis Ababa:

To mitigate urban heat in Addis Ababa, we focus on **strategic tree planting, green infrastructure, and community stewardship**.

For example, in Addis **green corridor development projects**, diverse, climate-appropriate trees are planted along streets, medians, and public spaces to provide shade and cooling. Green infrastructure like bioswales and pocket parks further reduces heat, while **youth and women's groups manage the maintenance**, ensuring high survival and sustained benefits.

We also apply the **“Right Tree in the Right Place” guideline** to select species that maximize shade, evapotranspiration, and multifunctional benefits. These measures

collectively help reduce urban heat, improve comfort, and enhance the city's climate resilience.

6. What strategies are used to address irrigation needs for new tree plantings?

Johannesburg:

City of Johannesburg has seven Regions and each region has a water tanker that is used to water the trees (newly planted) during dry seasons until trees are well established where they can survive on their own.

7. Are the NBS solutions protected with long-term land use planning so that these areas are not encroached by urbanisation?

Bukavu:

Yes, the protection of Nature-based Solutions (NbS) through long-term land use planning is critical to ensuring their sustainability and preventing encroachment by urban development.

Addis Ababa/Dire Dawa:

In Addis Ababa, NbS initiatives—such as the corridor greening projects and urban forest and street tree programs—are being integrated into the city's planning frameworks and designated green corridors. Strong high-level political commitment has been instrumental in securing these areas, while interdepartmental coordination ensures that planted trees and green infrastructure are maintained and protected from conflicting land uses. Community stewardship further reinforces this protection, with over 7,000 youth and women's groups actively engaged in the care and maintenance of these green assets.

In Dire Dawa, NbS interventions—including riverbank restoration, afforestation, agroforestry, urban greening, and small park development—are incorporated into local development plans. Community involvement is central, with residents and farmers managing and maintaining these spaces.

In both cities, the combination of strategic land use planning, institutional coordination, and community stewardship ensures that NbS interventions are safeguarded for the long term, thereby contributing to urban climate resilience, heat reduction, and enhanced biodiversity.

- 8. Difficult collaboration between different services seems to be a recurring issue in these projects (trees being cut after being planted by one department for example); is there any way to prevent this lack of collaboration between departments at the early stage of the project and develop collaborative ways to design and implement projects to prevent this type of situation? Can you share ideas or actions to prevent this recurring issue?**

Johannesburg:

City of Johannesburg has a wayleave process, whereby all affected departments and service providers can comment on tree planting projects.

In some development planning projects, tree planting may not be approved. Previously such instances have happened, however, coordination between the wayleave office and user department has improved over the years.

The City of Johannesburg's draft Urban Design Guidelines, for example, indicates that, inter alia, strategic alignment and interdepartmental collaboration are critical to the successful implementation of the strategy. Successful implementation requires alignment in terms of policy and strategy, and clarity on roles and responsibilities – and it's critical to get this right before getting out of the blocks to set the strategy up for success.

The Framework has a section on Institutional mechanisms and coordination, which lays out three mechanisms, including an interdepartmental task team, regional implementation forums, and technical working groups to ensure ongoing coordination across departments and offices.

There are instances where the trees need to be removed due to urgent construction of drainage system, on such occasions, the service providers will rehabilitate the construction site by planting trees; and where necessary trees can be relocated to the new location.