NATURVATION
cities – nature – innovation

Mainstreaming Urban Nature-Based Solutions

Establish demonstration projects

Demonstration projects offer tangible examples of how nature-based solutions work in practice, building knowledge and confidence about their performance. Governments can act as frontrunners in greening their own assets, such as the eco-districts in industrial areas of Sweden. Pilot efforts, such as Budapest's biodiversity trail which demonstrates roof gardens, improve collaboration between private and academic partners. Platforms that envision potential benefits help stakeholders appreciate the value of ecosystem services. The TEEB concept (The Economics of Ecosystems and Biodiversity) was implemented in the Netherlands as an online tool to monetise ecosystem services and consider multiple simultaneous benefits. Similarly, EU research funding on 'Nature-Based Solutions and Re-Naturing Cities' created a broad research community empowered to conceptualise the benefits of urban nature and influence the European agenda.

In the UK, demonstration projects have been influential in tackling evidence gaps, developing knowledge about performance of green infrastructure, and prompting scale-up and broader implementation in public policy. In response to flooding, the Environment Agency invested in a large multi-year pilot project in natural flood management, complementing existing expertise in hard infrastructure engineering. While experts knew how to design a floodwall and could predict its performance, there was less evidence about how a leaky pond model would perform. Similarly, Scotland's Green Infrastructure Fund demonstrated how nature-based solutions can address environmental and social problems, establishing these benefits as critical to urban development.

Mainstreaming Nature Based Solutions

Promising Pathways for Sustainability Goals

Climate Change

With the race to reach 'net zero' targets and build back resilience, nature-based solutions are increasingly seen as a critical tool for responding to climate change. Whether by cooling cities and reducing energy demand or providing new ways of managing flooding, nature-based solutions are gaining support globally. We identify four pathways through which mainstreaming is taking place: recognising their potential as a climate solution; investing to reduce climate risk; integrating climate action with other sustainability goals; and learning through practical experience on the ground.

Biodiversity

As the world seeks to develop a transformative agenda for biodiversity over the next decade, we explore how mainstreaming nature-based solutions can enable cities to conserve, restore and thrive with nature. Four pathways are identified based on regulating for 'no net loss' of biodiversity, developing co-governance arrangements for public-private finance, integrating biodiversity with existing sustainability priorities, and integrating biodiversity into urban development and the built environment.

Social Inclusion

Nature-based solutions such as new parks, rooftop gardens, and tree-lined streets play an important role in improving wellbeing and enhancing community spaces. However, the potential for gentrification and displacement of lower income groups means that these solutions must actively foster social inclusion and tackle inequalities. We identify three pathways that strengthen social inclusion: broadening community participation, securing genuine political commitment and policies that support social inclusion, and pursuing social inclusion measures as a way of achieving health and wellbeing.

Economic Regeneration

Nature-based solutions can create economic regeneration through increasing economic activity and employment and by improving the quality of life. Nature-based solutions both directly contribute to economic vitality and well-being, and leverage new forms of economic activity in cities that generate opportunities. Mainstreaming for economic regeneration takes place through developing partnerships for investment, increasing our knowledge of their economic value, seizing opportunities emerging from other sustainability initiatives, and stimulating market demand for nature-based solutions.

Sustainable Development Goals

To achieve the SDGs, urban development must prepare for growing populations while also creating sustainable and inclusive cities. Nature-based solutions can address a range of sustainability goals from climate resilience to health to economic development. For example, green space provides cooling, reduces pollutants, and encourages physical activity. Pathways that engage urban nature-based solutions to address SDGs include: involving diverse actors, strengthening local engagement, addressing multiple sustainability objectives simultaneously, establishing institutional arrangements that integrate sustainable development, and monitoring and assessing sustainable urban transformation.