

Mainstreaming Urban Nature-Based Solutions

Improve data and monitoring



Developing evidence of the performance of nature-based solutions, through effective monitoring, assessment tools, and the use of 'big data,' is central to mainstreaming these solutions in cities. Data portals, maps and other digital tools can improve monitoring and quantify the evidence. Clearly defined indicators and metrics help make the case for investing in certain solutions and establish the business case by delivering evidence on risk reduction potential and other benefits. The lack of universal indicators, which would provide a comparison between green and grey infrastructures and calculate the added value to urban areas, is one of the primary obstacles to securing support for nature-based solutions, and a priority in the post-2020 EU Biodiversity Strategy. Data sharing by insurers such as Achmea and MunichRe is an opportunity to increase understanding and quantify the value of nature-based solutions in climate risk reduction.



Natural Capital Atlas and TEEB City are two instruments developed with funding from the Dutch national government to improve data around nature-based solutions. Natural Capital Atlas serves as a digital repository of spatial distribution of different kinds of ecosystem services, such as soil fertility or historic features. The tool helps municipalities and provinces consider natural capital in spatial planning. TEEB City provides guidance on including nature as part of urban design and development, by calculating the monetary value delivered by various urban nature-based solutions, such as air filtration services and social benefits. TEEB City helps educate water boards, health insurers, housing corporations, entrepreneurs and the public about the value of urban nature.



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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.