

Towards Transformative Change

Urban Contributions To Achieving The Global Biodiversity Agendas



Nature-based Urban Solutions

Contents

About Urban 2001
About the Urban 20 Taskforces01
About the Nature-based Urban Solutions Taskforce05
About the Authors & About the Contributors
Executive Summary10
Background13
Introduction17
Challenges and Opportunities
1. The Biodiversity Crisis and the Critical Role of Cities21
2. Towards Transformative Change: Localizing the global biodiversity agenda as a precondition for achieving the global climate and sustainability agendas
3. Municipal Conservation Plans: Planning for sustainable urban growth
4. The need for resource mobilization and an ecosystem service focus to mainstream nature in cities
5. Monitoring Progress at the Local Level
Recommendations40
References
Appendices



About Urban 20

Urban20 (U20) is a city diplomacy initiative that brings together cities from G20 member states and observer cities from non-G20 states to discuss and form a common position on climate action, social inclusion and integration, and sustainable economic growth. Recommendations are then issued for consideration by the G20. The initiative is convened by C40 Cities, in collaboration with United Cities and Local Governments, under the leadership of a Chair city that rotates annually. The first U20 Mayors Summit took place in Buenos Aires in 2018, and the second took place in Tokyo in 2019. For 2020, Riyadh City is the Chair city and host of the annual Mayors Summit. The first meeting of U20 Sherpas was convened in Riyadh, Saudi Arabia, on the 5th – 6th February during which the foundations were laid for the U20 2020 Mayors Summit in the Saudi capital later this year.

About the Urban 20 Taskforces

As U20 Chair, Riyadh has introduced taskforces to add additional structure and focus to the U20. These taskforces explore specific priority issues and bring evidence-based solutions to the final Communique. Each taskforce has commissioned whitepapers led by chair cities, and with input from participating cities and knowledge partners. These whitepapers help us build an evidence-based, credible and achievable set of policy recommendations.

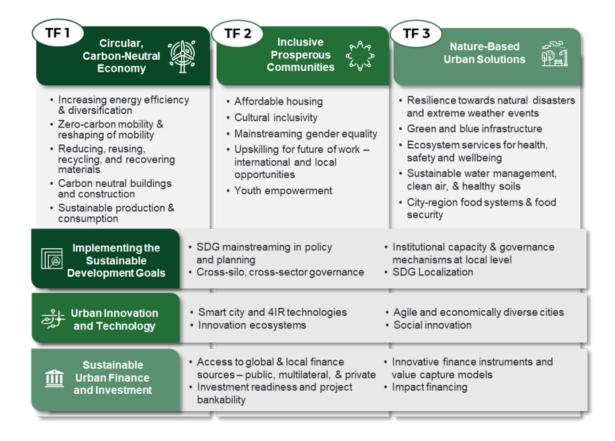
Taskforces activation

The taskforces workstream was an innovative and recent introduction to the three-year-old U20 initiative by the chairmanship of the city of Riyadh this year. Three thematic taskforces, each guided by one of the U20 Riyadh 2020 overarching themes of Circular, Carbon-neutral economy, Inclusive Prosperous Communities, and Nature-based Urban Solutions, were officially launched and activated during the U20 First Sherpa meeting back in February. During the meeting, the U20 priority topics that fell within the three overarching themes and intersecting with the three cross-sectional dimensions of Implementing the Sustainable Development Goals, Urban Innovation and Technology, and Urban Finance and Investment were prioritized and refined through the statements delivered by all attending cities. The top 5 topics were then chosen to be the focus of whitepapers for each taskforce.





The top 5 topics under each of the three taskforces and cross cutting dimensions were then chosen to be the focus of whitepapers for each taskforce:



The

Cities and Partner Engagement

The vast majority of the twenty-three cities who attended the first Sherpa meeting, representing 12 G20 countries, along with the U20 Conveners, agreed to the importance of having taskforces as interactive platforms to produce knowledge-based and evidence-based outcomes that can effectively feed into an actionable U20 Communique. During and following the meeting, several cities demonstrated interest in volunteering in the capacity of chairs and co-chairs, leading and overseeing the activities of each taskforce. The cities of Rome and Tshwane co-chaired Taskforce 1 on Circular, Carbon-neutral Economy, Izmir Taskforce 2 on Inclusive Prosperous Communities, and Durban on Nature-based Urban Solutions. Others expressed interest to participate in the taskforces, some in more than one, both during and after the meeting.

Alongside interested U20 cities, several regional and international organizations proffered to engage in the work of the taskforces, in the capacity of knowledge partners, to share their knowledge and experiences with cities in producing whitepapers. Some of the knowledge partners volunteered to play a leading role as Lead Knowledge Partners, supporting the taskforces' co/ chairs in review and guidance.

2



All participants who actively took part of the taskforces were subject matter experts nominated by the cities and knowledge partners and have enriched the taskforces' discussions with their know-how and experiences. In over 3 months, all three taskforces, with great effort and commitment from all their participants, produced a total of 15 evidence-based focused whitepapers, bringing about more than 160 policy recommendations addressing the national governments of the G20 Member States.

The taskforces content development efforts is comprised of 23 U20 cities and 31 U20 knowledge partners. The 100+ experts and city representatives produced 15 whitepapers which widely benefited and informed the development of the first draft of the communique.

23 U20 Cities		20 Partners	
18 Participating Cities	3 27	Lead Knowledge Partners	
14 G20 member countries represented (including EU)		Academic, research, and strategy consulting institutes	
ⓒ ⓒ • ↔ ● ⑧ ≫ () () ⊕ ⊕ () ♥	6	Biodiversity and health organizations	
Nigeritas Tumey agus Catado Generg Bud Sada Alica Terez "Bay Sada Aulo Open Medeo Budo	5	City networks and global initiatives for local governments and city diplomacy	
100+	3	International economic and finance organizations	
- · · · · · · · · · · · · · · · · · · ·	3	Regional development banks	
experts and city representatives	2	Gender-centered and human rights organizations and committees	
	1	United Nations program regional offices (KSA and Jordan)	

Content Development

Under the leadership and guidance of the chair city, Durban, and the lead knowledge partner, ICLEI, the work of Task Force 3 kicked off with an orientation for all participants in mid-March.

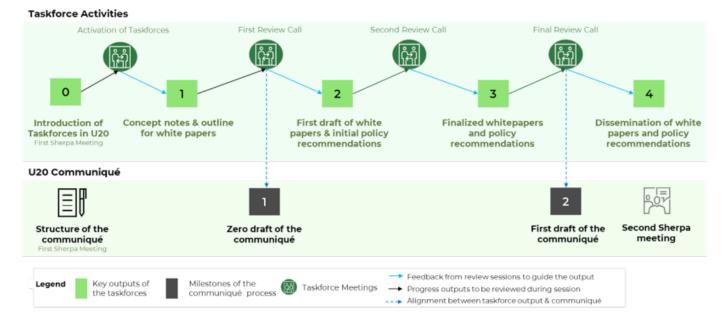
During the period between March and April, the participants of Taskforce 3 presented more than 23 concept ideas and 12 concept notes and developed initial outlines for the whitepapers focusing on topics of interest. Teaming up into six author groupings, the cities and knowledge partners developed six outlines of whitepapers. Refined and revised outlines were then developed into draft whitepapers that underwent several iterations for development and finalization, ensuring that each paper delivers a set of concrete and targeted policy recommendations that address the different U20 stakeholders.





The six whitepapers under task force 3 (listed below) explore priority topics on food systems, urban sanitation and waste management, urban healthy and safety, resilience and biodiversity:

- Towards transformative change: urban contributions to achieving the global biodiversity agendas
- 2. Resilience in the Anthropocene: mainstreaming nature-based solutions to build resilient cities
- 3. Addressing finance and capacity barriers for nature-based solutions implementation at city level
- 4. Urban health, safety, and well-being: cities enabling the provision and access of ecosystem services
- 5. Empowering cities for the development of sustainable food system policies
- 6. Urban sanitation and waste management for all



Along the taskforces timeline of activities, three review meetings were held where co/chairs and lead knowledge partners presented and discussed with the U20 Executive Team the progress and findings of the taskforces they represent, leading to the U20 Second Sherpa meeting that took place during the first week of July. Parallel to the taskforces activities, the first draft of the U20 communique was developed by the U20 Executive team incorporating recommendations presented at the third (and final) review meeting.





About the Nature-based Urban Solutions Taskforce

Nature-Based Solutions need to be mainstreamed in city planning and development to provide a healthy urban environment with productive ecosystem services, such as the provision of clean air and freshwater, food and nutrition, recreation and tourism, as well as livelihoods for local populations and resilience to climate change impacts.

Cities are highly dependent on a healthy local environment and productive ecosystem services. Rapid environmental degradation and biodiversity loss due to climate change, habitat destruction and pollution, threaten the foundation for life in and around cities across the globe. Local ecosystems need to be restored, protected, and upgraded to enable and improve the prosperity and wellbeing of people in cities. Water and food systems within which the city draws resources from, must

be managed sustainably to ensure long-term security. Nature-based solutions like endemic and biodiverse urban greening, ecosystem restoration, green roofs and walls, and natural water-retention methods, need to be mainstreamed and designed in city planning and development, taking into account the multiple co-benefits of policy choices. These can improve air and water quality, provide cost efficient cooling for districts and buildings and increase the physical and mental health of residents. They build the green and blue infrastructure needed for resilience against extreme weather events and the adverse effects of climate change, and attract global talent and sustainable tourism to the city. Nature must be integrated into urban environments. This increases both biological and economic prosperity and productivity, enabling new business opportunities for entrepreneurs and innovators, while providing habitats for biodiversity in harmony with traditional urban infrastructure.

5

15 cities

U20 Participating cities

Madrid Mexico city Montréal Moscow Rio de Janeiro

Riyadh Rome Sao Paulo Strasbourg



Knowledge partners

- Asian Development Bank Institute
- French Development Agency
- Global Alliance for Health and Pollution
- Inter-American Development Bank
- International Union for Conservation of Nature
- Lee Kuan Yew Center for Innovative Cities
- Metropolis
- National Institute of Urban Affairs
- The Nature Conservancy
- University Bocconi Milano GREEN Centre
- University of Pennsylvania
- World Economic Forum
- World Wildlife Fund

Chair city Durban U20 Observer cities Amman Dammam Helsinki Rotterdam Singapore

Lead knowledge partner

ICLEI – Local Governments for Sustainability, Cities Biodiversity Centre

THE

About the Authors & About the Contributors



Acknowledgement Note

The U20 Chair, Riyadh, would like to thank all authors and contributors for sharing their knowledge and experience on this topic; the chair city, Durban, for their guidance; and the lead knowledge partner, ICLEI, for their support in the development of this whitepaper.

About the Authors

U20 Cities

City of Costa Rica



Andrea San Gil León

Policy Advisor, Build Healthy Cities Global Team at the Nature Conservancy

Andrea is an Environmental Engineer specializing in sustainable cities and sustainability policy. She is passionate about reducing social vulnerability and increasing quality of life through city design and sustainable solutions. She has worked as an international consultant, and as a policy advisor to different international organizations, ministries and local governments in projects related to sustainable development, climate, transport and planning. She is also the Founder and Chair of the Center for Urban Sustainability (Centro Para la Sostenibilidad Urbana) in Costa Rica.

U20 Knowledge Partners

Local Governments for Biodiversity ICLEI - Cities Biodiversity Center

THE



Ingrid Coetzee

Senior Manager: Biodiversity and Nature-based Solutions, ICLEI Cities Biodiversity Center.

Ingrid has more than 30 years' experience in sustainability and governance. Her work focuses on mainstreaming nature, its benefits, and naturebased solutions into urban planning and decision-making in cities and city regions thereby helping them become healthier, and more resilient and liveable places. She also serves as technical lead on ICLEI's biodiversity advocacy work. Ingrid's expertise includes stakeholder engagement, facilitation, law reform, policy, and strategy development.



About the Authors



Timothy Blatch

Global Coordinator, CitiesWithNature and Professional Officer: Urban Development and Nature-Based Solutions, ICLEI Cities Biodiversity Center.

Timothy is an urban development professional with a background in the social sciences and city and regional planning. As a Professional Officer for ICLEI Africa and ICLEI's global Cities Biodiversity Center, Tim is responsible, amongst other projects, for driving the global partnership initiative, CitiesWithNature. Tim is interested in the nexus of humans, nature, and urban development in cities, specifically in the African context, and is passionate about nature conservation and advocacy.





About the Contributors U20 Cities



City of Montréal Joëlle Roy LeFrançois Planning advisor at Ville de Montréal's Large Parks, Mount Royal and Sports Service



Greater Amman Municipality

Ahmad Zeyad

Urban Planning Specialist and Member of the Climate Change Committee in Greater Amman Municipality

The U20 Knowledge Partners



The Lee Kuan Yew Centre for Innovative Cities

Dr Belinda Yuen

Professorial Fellow and Research Director leading the Lee Li Ming Programme in Ageing Urbanism at The Lee Kuan Yew Centre for Innovative Cities



The Nature Conservancy Robert McDonald

Lead Scientist for the Build Healthy Cities program at The Nature Conservancy

9



Worldwide Fund for Nature WWF, Sweden

Jennifer Lenhart Global Lead, Worldwide Fund for Nature WWF, Sweden

Disclaimer note

The views, opinions, positions and recommendations expressed in this White Paper are developed under the chairmanship of the City of Riyadh as U20 Chair City 2020 and are those of the authors and contributors, including contributing U20 cities and partners. They do not necessarily represent the views of all the U20 cities or any of its chairs, conveners, and partners. Many of the references in this White Paper will direct the reader to sites operated by third parties. Neither the institutions nor the authors of this White Paper have reviewed all the information on these sites or the accuracy or reliability of any information, data, opinions, advice or statements on these sites.

The P

Executive Summary



Executive Summary

Biodiversity protection and restoration by local governments in and around urban areas pose significant opportunities for countries to achieve their CBD obligations, their NDC emissions reductions and climate adaptation goals, and contribute towards achieving the Sustainable Development Goals (SDG), in particular SDG 11 (sustainable cities and communities), 13 (climate action), and 15 (life on land). However, without successful localization of these frameworks, and interpretation of local targets and indicators, we are unlikely to achieve these ambitious global agendas and goals. The coming decade is critical for addressing the global biodiversity and climate crises, as well as for achieving the SDGs and it is increasingly apparent that the costs of inaction will be severe.

This whitepaper puts forward evidence to demonstrate the critical role of local governments in implementing the ambitious global biodiversity, climate, and sustainability agendas. While there has been growing momentum and traction for localization of these agendas, the uptake has been insufficient to date. Much has been achieved by way of recognition of the central role of local governments under the UN Convention on Biological Diversity (CBD), the UN Framework Convention on Climate Change (UNFCCC), and in implementing the SDGs, but this recognition needs to be met with urgent action on the ground.

Nature is the foundation of our livelihoods, societies, and economies. It is critical to our health and well-being, and to the sustainability of our increasingly urban lives, yet it is being lost at unprecedented rates. Healthy and functional ecosystems provide a wide range of goods, services, and benefits for urban populations. Local governments are at the forefront of ecological change and need to make ambitious commitments to securing our collective future. Without scaling up the implementation of urban nature-based solutions, and without increased investment in nature at the local level, our ability to achieve the global biodiversity, climate, and sustainability agendas is under threat. This whitepaper puts forward the notion that an integrated approach to collective local biodiversity planning and action will enable countries to achieve not only their biodiversity goals and targets, but in turn their climate ambitions and the SDGs.

The Post 2020 Global Biodiversity Framework (GBF) that will be adopted at the UN CBD's 15th Conference of the Parties (COP) in 2021 provides a unique opportunity to mainstream city-led actions on nature for improved biodiversity, climate, and sustainability outcomes. The call to action has never been so urgent. The global COVID-19 pandemic has shown that we need to rethink our relationship with nature and place naturebased solutions at the center of both our response and long-term recovery plans. Building local government capacity to plan with nature, invest in nature, implement nature-based solutions, and monitor progress is critical now, more than ever before as we come together to build back better and greener.





Executive Summary

If our societies, economies, and urban communities are to thrive sustainably in the coming decade (2020-2030), collective action for nature needs to be a priority. This whitepaper will show that this action needs to be driven at the local level by cities. Strong multi-level governance mechanisms and integrated planning are critical in order to capture the full extent of urban contributions in achieving national and global goals and targets. The U20 has an opportunity to take the lead in demonstrating transformative action. Together we need to unite, collaborate, and act in support of our joint vision: Living in Harmony with Nature by 2050.

This whitepaper will put forward a series of policy recommendations from the U20 that seek to inform and influence commitments by the countries of the G20. These recommendations aim to increase recognition of the importance of nature in contributing to cities that are healthy, resilient, livable and thriving, in alignment with international

biodiversity, climate, and sustainability agendas and goals. The G20 is uniquely positioned to demonstrate leadership in supporting their local government counterparts to implement naturebased solutions. The whitepaper will show that localization of the Post 2020 GBF through local commitments, goals, targets, and actions, is an important precondition for achieving the G20 countries' biodiversity, climate, and sustainability ambitions simultaneously. We need nature in every aspect of our urban lives. It is vital that we conserve, restore, and sustainably use the ecosystems on which our very lives depend. Our ability to adapt to and mitigate the effects of climate change and transition to a more sustainably trajectory will largely depend on the extent to which we successfully mainstream nature-based solutions at the local level. The value of nature and the role of cities in enhancing this value can no longer be underestimated. The time to act is now.





In the 1990's and early 2000's conservation authorities and scientists across the world, as well as institutions such as the Convention on Biological Diversity (CBD), Global Environment Facility (GEF), United Nations Environment Programme (UNEP), World Bank realized that conventional conservation practices focusing on protected areas alone would not achieve global biodiversity benefits. The increasing demand for and use of natural resources, meant that biodiversity conservation had to be integrated into production sectors and working landscapes to simultaneously achieve the goals of conservation, economic growth and sustainable development. It also led to the realization that the root causes of biodiversity loss had to be addressed by integrating biodiversity considerations into development goals and actions. This realization is reflected in the Convention on Biological Diversity (CBD), which was signed at the 1992 Rio Earth Summit, which provides the mandate for biodiversity mainstreaming: Article 6(b) of the Convention states that parties shall: "Integrate, as far as possible and as appropriate, the conservation and sustainable use of biological diversity into relevant sectoral or cross-sectoral plans, programmes and policies."

The International Workshop on Mainstreaming Biodiversity in Production Landscapes and Sectors, held in Cape Town, South Africa in September 2004, marked a major milestone in the development of biodiversity mainstreaming

practice. It focused on developing an operational definition of biodiversity mainstreaming; its role in advancing the CBD; and exploring the scale at which biodiversity mainstreaming could be most effective, among other things. The focus at this point was on mainstreaming biodiversity considerations into production sectors and the production landscape within economic sectors, particularly those directly related to natural resource use and management, such as agriculture, forestry, fisheries, wildlife utilization, mining and tourism, as well as other areas of economic activity such as energy, infrastructure, manufacturing, transport, construction, international trade, and even in military activities. There was also recognition that biodiversity values should be integrated into the enabling environment across a wide range of functions, specifically development policy, legislation and land-use planning, finance, taxation, economic incentives, international trade, capacity building, research, and technology.

The first clear reference to the application of mainstreaming nature at the local level in the evolution of the concept, appears in the GEF STAP definition: "... the process of embedding biodiversity considerations into policies, strategies and practices of key public and private actors that impact or rely on biodiversity, so that biodiversity is conserved, and sustainably used, both **locally** and globally".





The world is not only facing a biodiversity crisis, it's also facing a climate crisis. The interconnectedness between biodiversity loss, human wellbeing and climate change was demonstrated in the IPBES 7th Assessment Report. This Report made it clear that the solution to human-induced climate change and biodiversity loss lie in solving both simultaneously. Addressing the biodiversity and climate crises in isolation will place our planet and the future of humankind on an unsustainable trajectory. Given the multiple drivers and complex humannature dynamics underpinning the biodiversity and climate crises, IPBES recommended a nexus approach for meeting climate goals, while restoring nature and its contributions to people, and in turn contributing to human wellbeing.

In an effort to mainstream biodiversity action in different areas of their development, countries around the world, including G20 governments, have assumed a series of commitments and ambitious targets aiming for a more sustainable, inclusive and resilient development. However, after almost 30 years since the creation of the CBD, nature, which provides the goods and services we cannot live without, is still under unprecedented threat, and there is increasing evidence that urban growth is a key driver of biodiversity loss and climate change worldwide.

The 2019 Urban 20 Tokyo Mayors Summit Communique made joint recommendations to the G20, including Climate Change as one of the most pressing challenges facing our planet that need to be addressed. The communique called for collaboration between G20 member countries to achieve climate change adaptation goals through, among other things, strengthening resilience and adaptive capacity to climate change by taking the following actions:

 Build and improve resilient infrastructure, decentralize energy supply, increase the use of renewable energy, conserve and restore ecosystems, and develop sustainable food systems in order to strengthen resilience and adaptive capacity to climate-related hazards and natural disasters, and ensure people's health and livelihood, with special consideration for vulnerable people and vulnerable zones such as coastal, rural or underdeveloped areas.

15

¹ Huntley & Pietersen, *Mainstreaming in the production landscape*, p2

² The Global Environmental Facility, Scientific and Technical Advisory Panel (GEF STAP) convened two workshops aimed at refining the concept of biodiversity mainstreaming. The first international workshop was held in 2004 on *Mainstreaming Biodiversity in Production Landscapes and Sectors* and the second in 2013 on *Mainstreaming Biodiversity in Production Landscapes*

The

³ Huntley & Redford, Mainstreaming biodiversity in practice: A STAP Advisory Document, p7

⁴ Link: https://ipbes.net/global-assessment



- Support cities by unlocking the necessary resources and encouraging multi-stakeholder engagement in adaptation planning across national levels of government.
- Step up our efforts to help realize the Strategic Plan of the Convention of Biological Diversity (CBD) and its Aichi Biodiversity targets and scale-up ambition to ensure the success of an ambitious post 2020 global biodiversity framework that will be adopted at CBD COP15 in 2020 in China

Now more than ever, urgent action is needed to support the transformative global change needed for a "New Deal for Nature and People." An essential part of this new deal will consist of the Post 2020 Global Biodiversity Framework (GBF), that will be adopted at the 15th Conference of the Parties (COP) to the UN Convention on Biological Diversity (CBD). The GBF will replace the Strategic Plan for Biodiversity (2011-2020) that was adopted at COP 10 and the 20 associated Aichi Targets and will guide the global biodiversity agenda over the next decade.

The next decade is also critical for the global sustainability agenda, as the Sustainable Development Goals (SDGs) are to be met by 2030. According to Chapter 3 of Global Assessment Report on Biodiversity and Ecosystem Services, nature is also essential for achieving the SDGs, which integrate all three dimensions of sustainable development: social, economic and environmental into a unified 'plan of action for people, planet, and prosperity in the form of Agenda 2030. The 2019 Tokyo Communique meant a significant step towards localizing climate action. However, there is still a long way to go to localize biodiversity action, and for cities to adequately integrate biodiversity action, climate action and SDGs into their overall urban strategies. Given the long history of building the case for localization of the global biodiversity, climate, and sustainability agendas, the coming decade is increasingly about action.

In a moment when the whole world is thinking about how to ensure the health and wellbeing of our population, and rethinking how we can reconstruct our economies, our cities and our society, it is ever so important to remind ourselves of the link between biodiversity, wellbeing and health, especially in cities. Nature and its benefits are essential for human well-being. It provides for food security, human health, the provision of clean air and water; and contributes to local livelihoods, and economic development more generally.

The current COVID-19 global pandemic offers a unique opportunity to rethink how our future economies, countries and cities should be planned, designed and operated. The potential for cities and biodiversity to generate some of this transformative change must be part of this conversation. In order to meet their international commitments and obligations to the CBD, UNFCCC, and 2030 Agenda, it is urgent for G20 countries and U20 cities to make a significant shift in their urbanization trends and patterns, and start planning with nature.



Introduction

⊢



Introduction

Nature provides us with a range of essential ecosystem goods and services that we depend on in all aspects of our increasingly urban lives. Even our economies depend on nature. According to the World Economic Forum, cities generate more than 80 percent of global GDP, and more than half of this GDP is dependent on nature. The value of nature can no longer be underplayed, especially as we are increasingly seeing the costly implications of its unprecedented loss on our communities, economies, and cities - a burden that is almost always borne by local governments. On the other hand, the growing demand for and consumption of ecosystem goods and services is concentrated in urban communities who draw resources from not only the city-region itself, but often from areas far beyond the city boundaries through telecoupled impacts.

Urban areas not only generate impact on biodiversity. They are also impacted by the loss of biodiversity and natural habitats. In the face of a global climate emergency, cities and urban populations will need to adapt to more extreme temperatures and frequent weather events. The loss of natural habitats also means the loss of a diversity of ecosystem services such as flood risk reduction, water catchment, treatment and storage (contributing to water security), reduction of erosion and the reduction of urban temperatures (also reducing heat waves and urban heat island phenomena). Hands-on experience in different cities around the world, however, has proven the potential for urban ecosystem services and biodiversity to contribute to climate-change mitigation and adaptation, while at the same time improving human wellbeing at the local level.

II. CON

However, this type of action needs to be escalated and mainstreamed into urban policy and planning globally as part of a multi-scale, multi-sectoral, and multi-stakeholder effort to strengthen localized biodiversity action that is also integrated to climate action and other sustainability goals.

Cities and other urban conurbations are engines of innovation and solution. Local governments can take direct steps to reduce such inequalities, increase social and ecosystem resilience, restore ecosystems and reverse extinction trends, while tackling a wide range of sustainable development issues and contributing to the attainment of national and global biodiversity and sustainable development goals. This will require mainstreaming of nature in local policy planning, development, and implementation processes, as well as significant multi-level governance to support this mainstreaming.

Other policy documents have stressed the need for localization before. The current draft of the Post 2020 Global Biodiversity Framework (GBF) presents a set of goals and action targets for biodiversity in support of achieving the 2050 vision of "Living in Harmony with Nature by 2050." The GBF emphasizes the need for localizing action, as does the 2019 Urban 20 Tokyo Mayors Summit Communique. While a whole-of-society approach is advocated by these and other documents, the critical role of local governments cannot be underplayed, and their tremendous contributions to implementation of these agendas is increasingly being recognized across sectors, and in particular by national governments.

18



Introduction

Successful localization requires strong multilevel governance structures, as well as enabling conditions to be in place to support local governments in undertaking integrated green and blue urban planning, making ambitious commitments by setting SMART targets, taking action by implementing programs, funding and projects to achieve them, and monitoring and reporting on progress.

This whitepaper will show that localization is central over the next decade in all three global agendas and will put forward recommendations for capturing urban contributions thereto. The whitepaper will highlight the potential and relevance for cities in the path to implementation of the Post 2020 GBF and in turn, NDCs and the SDGs. It will in turn illustrate how planning with nature can generate positive impacts and benefits at the local level in terms of health, wellbeing, climate readiness, competitiveness, amongst others. It will show that local governments are already taking action, and will need to continue raising their ambition as they increasingly continue to shape, influence, and implement global agendas over the next decade. Using the latest science and evidence-based research, and drawing on case studies from U20 cities, this whitepaper will make the case for mainstreaming nature in cities, showing how cities can, should, and are already, standing united, ready to tackle not only the global biodiversity and climate crises, but also contribute to tackling the current health and socio-economic crises. Finally, it will suggest ways in which we can best keep track of urban biodiversity leadership, learn from those cities' experiences and better understand the impact they are generating, through measurement and reporting mechanisms. Advocacy for nature and local governments will be put forward in issuing a call for urgent action by the members of the G20 in leading the way on supporting localization. The whitepaper will argue that by shaping, adopting, and implementing an ambitious Post 2020 GBF that recognizes the critical role of local governments, and by adopting instruments and measures to incorporate biodiversity action into local and urban planning, G20 members will increase their chances of achieving their climate ambitions and the SDGs by 2030. The whitepaper will recommend that the G20 members support the local government advocacy agenda in the preparation, adoption, and implementation processes of the Post 2020 GBF to deliver benefits for nature, people, and the planet. Furthermore, it will call on G20 members to be the frontrunners in localizing the Post 2020 GBF, Paris Agreement, and the SDGs in order to deliver on all three agendas by 2030. Ultimately, the whitepaper will argue the case for urban contributions to conserving and restoring nature as a pre-condition for achieving the global climate agenda and the SDGs.

In the coming decade, it is increasingly important to think globally and act locally. Global agendas provide an enabling framework to guide local action on the ground. Urgent action is needed now, more than ever before to conserve, protect, and restore nature in and around our cities. This nature is the very foundation on which humanity and our cities depend. Our collective actions in the coming decade will determine the quality of our urban lives for generations to come.





1. The Biodiversity Crisis and the Critical Role of Cities

Challenge: Nature is diminishing at alarming and unprecedented rates and urban growth is a major driver for biodiversity loss

We are living in a time of unprecedented biodiversity crisis. The Global Assessment Report on Biodiversity and Ecosystem Services, approved at the 7th plenary of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services(IPBES), tells us that 1 000 000 species are at risk of extinction. The report has helped to highlight the urgency of the current biodiversity crisis, identifying the drivers of ecological change. The drivers of change identified in this report include climate change, pollution, different types of land use change, invasive alien species and zoonoses, and exploitation.

Many of these drivers, both direct and indirect, are related to our current unprecedented urbanization. The next few decades will be the most rapid period of urban population growth in human history (McDonald et al. 2019). In 2000, the UN Population Division estimated there were 2.9 billion people in urban areas, rising to 4.0 billion by 2015 (UNPD, 2018). An additional 1.2 billion residents in urban areas globally are forecasted by 2030, with much of this population growth happening in countries such as China (242 million), India (178 million), Nigeria (70 million), and Indonesia (48 million). Urban population growth, together with economic development, is forecast to expand urban areas by 1.2-1.8 million km2 between 2000 and 2030 (Seto et al. 2012, Güneralp and Seto 2013, McDonald et al. 2018).

The scale and speed of urban growth have a diversity of impacts on the global environment (Elmqvist et al. 2013). Studies have shown that urban population growth has had and will continue to have significant implications for land-use (Angel et al. 2012), energy consumption and climate change (Satterthwaite 2008, Güneralp et al. 2017), water security (Flörke et al. 2018), food demand (Regmi and Dyck 2001), and air pollution (Cole and Neumayer 2004).

The Nature in the Urban Century Assessment

quantified the direct impact of urban growth on biodiversity. It found that urban growth was responsible for the loss of 190,000 km2 of natural habitat between 1992-2000. This adds up to 16 percent of all the natural habitat lost over this period. It also found that urban growth could threaten 290,000 km2 of natural habitat by 2030. Rapid rates of urban growth as we are seeing in different countries around the world, if poorly planned, will continue to destroy natural habitat and greatly impact biodiversity and human wellbeing. A recent review of the literature (McDonald et al. 2019) found that indirect effects of cities on biodiversity are likely even larger than direct effects.





For instance, the amount of agricultural land needed to supply cities with food is 36 times greater than the urban area, suggesting that the area impacted by indirect effects of food production for urban areas is far greater than the area impacted by direct effects of urban growth.

Even though the science is clear, and we know that we cannot sustain our current level of impact on nature, our collective response, at all levels of government, has not been sufficient to date. In the last decade, the difficulty in mainstreaming biodiversity into all sectors of our economies, is one of the primary obstacles to the implementation of the global biodiversity agenda. Although there is growing momentum and awareness of the need for transformative change, this has not necessarily resulted in the level of action required to realize it in our cities. While a fair number of early biodiversity mainstreaming projects and activities involved the urban planning sector, biodiversity mainstreaming practice has mainly been directed at the global and national scale.

Actions taken by local governments in the coming decade will, to a large extent, determine the sustainability of our collective urban future.

Opportunity: Recognizing the critical role for cities in achieving global biodiversity goals and mainstreaming nature protection at the local level

Why cities?

If we are to bend the curve on the loss of biodiversity, we need a renewed global ambition to do so. Local governments are central roleplayers in achieving this global ambition, since it is in cities where the majority of humanity already live and where most actions to restore ecosystems, implement nature-based solutions, raise awareness etc., will be taken. The critical role of cities in implementing the global biodiversity agenda has increasingly been recognized over the last decade through the mobilization of ICLEI and more recently other networks to demonstrate their contributions to achieving it. Looking to the next decade, the role of local governments will only come more into focus in implementing the Post-2020 Global Biodiversity Framework (GBF). Action at the local level to protect, enhance, and restore the ecosystems that sustain our social, economic, and environmental systems, is urgently needed now, more than ever before.

22

⁶ Huntley & Pietersen, Mainstreaming in the production landscape , pp19 20

The



Local governments are at the forefront of global ecological change and have the unique opportunity to effectively navigate uncertainty, embrace innovations and new technology and respond effectively to changing conditions. It is at the local level - in and around our cities - where decisions and actions on nature and people are made, and where the impacts of these decisions are most directly felt. Cities have the power to address the drivers of urban biodiversity loss and to conserve and restore nature so that urban populations thrive. Local and where governments have the power to plan for and control the ways in which our cities change and grow. It is at this scale where urban development, infrastructure, and land use decisions are made, and where the impacts of urbanization on biodiversity are negotiated. It is only through collective action at the local level that we can realize positive global impact to secure our collective future and ensure sustainable outcomes for both nature and people in the coming decade and effectively leave no one and no place behind.

Local governments have the mandate for land use planning and management, and it is at the local level where the battle to protect and restore nature will either be won or lost. By protecting, conserving, and restoring nature in and around urban areas, local governments contribute to achieving both national and international biodiversity targets. Similarly, with key responsibilities over the urban-rural continuum, local governments implement actions that contribute to territorial connectivity and cohesion, which directly impact biodiversity conservation. If the global biodiversity targets are to be achieved in the coming decade, the contributions of local governments are going to be increasingly important.

Recognizing their role

Because local governments are not parties to international conventions, their contributions and status have historically not been adequately recognized. In the CBD, specifically, there has been a long history of local government advocacy (outlined in Appendix 1) to recognize the critical role of the constituency in implementing the global biodiversity agenda. This advocacy has intended to influence decisions adopted by the CBD Parties at the biannual COPs and accelerate the localization of the global agenda. This history also shows how momentum has increased significantly on the local government advocacy agenda and how the CBD has evolved since 2006 in its growing recognition of the critical role of local governments in achieving the objectives of the Convention.

Successive Global Biodiversity Summits of Local Governments, co-convened by ICLEI, host governments, and key partners as official events in parallel to the CBD COPs since COP 9 in 2008, have generated a number of official COP decisions dedicated to local governments emerging from each Summit's negotiations.





Most notably, Decision X/22 adopted at COP 10 in Nagoya, Japan marked a unique and groundbreaking decision as it endorsed a 10-year (2011-2020) "Plan of Action on Subnational Governments, Cities and Other Local Authorities for Biodiversity", with a timeline matching that of the broader CBD Strategic Plan for Biodiversity (2011-2020) and its associated Aichi Biodiversity Targets which were adopted at COP 10, too. Perhaps most notably, Decision X/22 was the first-ever long-term Decision by a Rio Convention to recognize and support the role of local governments as key implementing partners to the Parties. As its validity period draws to a close in 2020, local governments, under the leadership of ICLEI and partners' global advocacy agenda, are calling for a new dedicated, stepped-up Decision on local and subnational governments to be adopted at COP 15 to renew Decision X/22: The Plan of Action for Subnational Governments, Cities, and other Local Authorities (2011-2020).

COP 14, held Sharm El-Sheikh, Egypt, in 2018, surpassed all previous COPs, with an unprecedented number of decisions – seven in total – that relate to local governments. It gave effect to Decision 14/34, which relates to the establishment of a comprehensive and participatory process for the preparation of the Post-2020 Global Biodiversity Framework (GBF). This Decision urges local governments to actively engage and contribute to the process of developing a robust post-2020 global biodiversity framework in order to foster strong ownership support for its immediate implementation. This is testimony to CBD Parties' and the SCBD's increasing recognition of the critical role that cities play in conserving, restoring, and sustainably using nature.

The period since COP 14 has seen unprecedented advocacy, mobilization and coordination of local action and contributions to the Action Agenda for Nature and People on the journey to COP 15 in China and the associated consultation and negotiation process on the post-2020 GBF. The adoption of the Post 2020 GBF at COP 15 has the aspiration of being the "Paris moment for nature," in reference to its potential to match the climate ambition of the Paris COP, and the collective local government constituency is calling for a stepped-up, dedicated decision and a renewed Plan of Action that is more ambitious than ever before.

The local government Roadmap to COP 15 builds on more than a decade of advocacy, which has laid the foundations for a stronger than ever position statement by local governments, calling for a stepped-up, dedicated decision at COP 15 that builds on the legacy of previous achievements in this arena. Despite a long history of previous achievements by the local government constituency in the CBD, there is still much work to be done. While the constituency is now well-recognized as being critical implementers of the Convention, the slow uptake of the global biodiversity agenda at the local level, and inadequate support for localization is hindering progress in achieving it.





The drafting of the Post 2020 GBF is a unique moment to ensure that the role of local governments is recognized and mainstreamed across the Post 2020 GBF, in the goals, action targets, and monitoring framework thereof. It is critical that the Post 2020 GBF make explicit reference to local targets and indicators to measure progress and that the principles of multilevel governance are evident in order to capture local contributions. The U20 is faced with a unique opportunity to influence the GBF and other CBD COP decisions through this U20 communique to ensure that emerging policy recommendations are fed into the preparatory and negotiation processes. As the CBD is currently negotiating the elements to be included in the Post 2020 GBF, this is an opportunity to cement the rightful place of local governments at the center of the global biodiversity agenda by mainstreaming cities in the framework more ambitiously than has ever been achieved before.

2. Towards Transformative Change: Localizing the global biodiversity agenda as a precondition for achieving the global climate and sustainability agendas

Challenge: Action on the global biodiversity agenda is still centralized at the national level, and not enough at the local level

Article 6 of the CBD and Aichi Biodiversity Target 17 require each Party to develop, adopt as a policy instrument, and commence implementation on an effective, participatory and updated National Biodiversity Strategy and Action Plan (NBSAP). NBSAPs are the primary mechanisms used to express a country's ambition, goals, and targets regarding their commitment to implementing the objectives of the CBD, and will remain as such under the Post 2020 GBF in the coming decade.

The Paris Agreement, signed in 2016 by Parties to the UN Framework Convention for Climate Change (UNFCCC) brings together all nations to tackle the climate crisis and adapt to the impacts of climate change. It is the global equivalent of the Post 2020 GBF in the climate arena. The Paris Agreement (Article 4, paragraph 2) requires each Party to prepare, communicate and maintain successive nationally determined contributions (NDCs) that it intends to achieve. These NDCs are central to achieving the Paris Agreement as they articulate the approach and actions of each national government with regards to climate change mitigation and adaptation. The NDCs are the climate equivalent of NBSAPs.

The global sustainability agenda draws remarkably striking parallels to both the global biodiversity and climate agendas in the need for localization of goals and targets and implementation through local action. Agenda 2030 sets out a groundbreaking framework of 17 transformational Sustainable Development Goals (SDGs) to tackle our social, economic and environmental challenges by 2030. The SDGs, which came into effect in 2015, represent an ambitious and remarkable attempt for the international community to unite and chart a course towards





ending poverty, and improving health, the environment, education, and overall sustainability of the planet by 2030. Each year, the UN High Level Political Forum (HLPF) is the space where national governments gather to report on progress towards achieving the SDGs. This is undertaken in the form of Voluntary National Reviews (VNRs), which are prepared by countries as they periodically reflect and measure their progress.

In spite of efforts and advances in advocacy for the recognition of local governments in the CBD, UNFCCC or other UN spaces, recognition of the role of local governments in achieving global agendas is not enough. Advocacy for the role of local governments will be futile if it is not matched with the same level of ambition in the actions taken by them. While much has been achieved over the last decade, localization of the global biodiversity agenda to date has still not been adequate to achieve the level of action needed to ensure a sustainable future for people and planet. Very few countries are on track to achieve the SDGs or the Paris Agreement. This whitepaper suggests that the struggle to achieve CBD goals, SDGs and the Paris Agreement can, in part, be attributed to the load being taken mainly by central governments, and an insufficient uptake by local governments. We suggest that the localization of these ambitious agendas through effective multi-level governance and decentralized cooperation approaches, is the key to accelerating the implementation of global agendas, sharing responsibility and consolidating efforts between different levels of government.

Opportunity: Localizing action on biodiversity will contribute to achieving other global agendas, such as the Paris Agreement and Agenda 2030

Although parties are usually the level of government that set national targets, it is local government planning and development processes where the implementation of global goals and targets should ultimately find their expression. As such, many local governments have undertaken the development of the local equivalent of NBSAPs, NDCs and VNRs which seek to articulate the local government expression of national targets and put forward local strategies and action plans to achieve them.

Local biodiversity planning has typically taken the form of Local Biodiversity Strategies and Action Plans (**LBSAPs**) or equivalent municipal conservation plans to guide the local government approach to biodiversity, in line with the objectives of the CBD. LBSAPs have increasingly been developed in the last decade as local government participation in CBD processes has gained increased traction.

In the climate space, similarly to the biodiversity agenda, the Paris climate agreement does not foresee any formal counting and reporting method that accounts for cities' efforts and achievements in reducing GHG emissions. Andrew Cooper, the European Committee of the Regions (CoR) rapporteur on post-2020 climate governance, is credited as the originator of the concept of Regionally and Locally Determined





Contributions (**RLDCs**) to complement each country's NDCs and demonstrate further ambition by cities (Cooper, 2018).

The same is so for the SDGs. While some local governments around the world have taken the lead, and have started producing SDG Voluntary Local Reviews (**VLRs**), a universal methodology has not been agreed to yet and the role of local governments is still under-exaggerated in both the SDG localization and reporting processes.

The level of uptake of these plans has yet to achieve the critical mass necessary to ensure they are common practice. While there has been significant progress in rolling out local government action planning under different Conventions, these efforts need to be scaled up significantly. This opens an opportunity of leveraging the power of localized impact and decentralization to increase the potential impact of G20 countries in contributing to global agendas.

Even when these localized plans are developed, they are rarely aligned and integrated. While each plan is important in its own right, it is the connections between them that are arguably more relevant, and where there are valuable opportunities for escalating positive impact and generating co-benefits for different global agendas. This opens the conversation for an additional opportunity beyond the localization of agendas: the opportunity for city-led actions to be integrated to achieve all three global agendas simultaneously. More than an opportunity, this paper would argue that without successful localization of global targets and indicators, we are unlikely to achieve the global biodiversity, climate or sustainability agendas in the coming decade.

Opportunity: Consolidating localized biodiversity action with other global agendas can maximize impact and optimize resources to achieve global targets and goals

It is becoming increasingly clear that nature is the foundation for successfully achieving the SDGs and that biodiversity underpins human wellbeing and livelihoods (Tsioumani, 2019). The world is currently undergoing a global pandemic, and world leaders are increasingly trying to find ways to reconstruct their economies with a focus on wellbeing, health, and resilience.

Considering the current global economic situation, the very short amount of time and the limited resources (technical, financial, social, etc.) that are available to tackle the enormous challenges that humanity is facing, it is beyond urgent to consolidate strategies, goals, policy and action towards a more sustainable, resilient, and equitable future. Considering also that approximately 70 percent of the world's greenhouse gases are generated in cities (UN Habitat, 2016), that 60 percent of the world's resources are being consumed in them (UN Environment, 2017), that cities and urban growth account for a significant amount of biodiversity and habitat loss (IPBES, 2019; TNC, 2018), and approximately 13 percent of the world's urban population lives in coastal areas that are highly vulnerable to climate change (UN, 2016), there is an evident need and opportunity for local action to contribute to tackling these challenges in an integrated way.





In a review of the interlinkages between the global urban, biodiversity, climate and sustainable development agendas, there are several key insights that are important to guide efforts towards the integration of these agendas for local action:

- The New Urban Agenda recognizes ecosystems as providers of several key services for urban life. It also recognizes the importance of protecting natural ecosystems and commits to that. However, the focus is on the potential for nature based solutions in function of climate adaptation and resilience in urban areas.
- 2. The **2030 Agenda** is quite balanced in terms of including SDGs for urban action, climate action and biodiversity action, but not necessarily presents interlinkages between different SDGs to consolidate agendas and potentiate localized action. SDG 11 shows a good integration in terms of orienting urban climate action, and considering natural heritage protection, the importance of green spaces and an indirect opportunity for disaster risk reduction through NBS. SDG 13 highlights the importance of localized action for risk reduction, however, shows no explicit linkage to natural ecosystems or NBS. SDG 14 presents potential linkages to NBS in coastal areas through the need to reduce pollution in marine ecosystems, but no explicit wording regarding climate risk or links to urban growth. SDG 15 has a direct link to the biodiversity agenda in terms of integrating biodiversity values into local planning, but no linkages to climate risks or the urban agenda.
- 3. The Paris Agreement has a limited approach to nature and ecosystems, visualizing the need to protect them and taking them into consideration when planning adaptation and resilience measures. There is no explicit link to the potential of nature for climate mitigation or on the services that ecosystems can provide to tackle climate change through nature based solutions. Fortunately, recommendations, guidance and tools have been developed by entities like WWF and TNC after the Paris Agreement to incorporate nature based solutions into NDCs and climate action. The Agreement is clear on the importance of climate action, planning, and building capacity for that at the local level. The potential for cities to lead on the climate agenda however, is not explicit.
- 4. In the biodiversity agenda, the links between climate and biodiversity action have been clear since 2011. Despite the adoption of the Plan of Action in 2010, no explicit linkages were made to cities or urban areas to achieve biodiversity protection goals. The draft post-2020 framework has clearer and more concrete goals connecting biodiversity to urban areas, however limited to the value of green spaces for wellbeing and health. Although both the pre-2020 and the post-2020 strategies stress on the importance of integrating biodiversity values into local planning, the localization of these biodiversity strategies is not always linked to urban growth or urban areas.

⁶ Link to examples: https://www.worldwildlife.org/publications/enhancing-ndcs-through-naturebased-solutions http://naturalclimatesolutions.org/

The P

28



(A more detailed analysis on these interlinkages is shown in Appendix 2)

Even though they may seem to be aligned with each other, each global agenda on its own fails to integrate all the necessary elements to ensure an urban transition that is climate aware and inclusive for people and nature. Focusing on localizing only one agenda, without clarity of its potential contributions to other global agendas will fail to make the necessary contributions and progress that the world needs. There are enormous opportunities for global discussions and efforts to go beyond localizing agendas, and explicitly recognize the role of cities and urban areas in contributing to advancing these agendas. Finally, it is also necessary to understand the value of nature in cities beyond green public spaces and better position the potential role of nature based solutions in improving urban life and contributing to other sustainability and climate goals.

Example: Localizing biodiversity action: Montréal's Good Practices for Biodiversity

Localization of the Post 2020 GBF is a critical precondition to achieving the Paris Agreement and the SDGs and should be the priority for cities in the coming decade. Many cities have already begun to link their ambitious actions to the goals and targets in the zero draft of the Post 2020 GBF. Once localization of the biodiversity agenda has been undertaken, cities should then begin exploring how their actions on biodiversity are linked and contribute to climate goals and targets and the SDGs, as this case study will present.

On World Environment Day on 5 June 2020, held under the theme "Time for Nature", Montréal launched a series of good practice sheets, in collaboration with ICLEI, CitiesWithNature, and the Secretariat of the CBD. These short briefing sheets showcase biodiversity actions taken by the City of Montréal, provide advice to facilitate replication in other cities, and indicate which of the Post-2020 Global Biodiversity Targets (Zero Draft) the initiatives contribute to achieving. Mayor Valérie Plante invited cities to share their own good practices, as Montréal is doing, to create a dynamic community of practice and contribute to ensuring a healthy planet, where people and biodiversity can thrive.

Montréal produced six good practice sheets, covering a broad range of topics that can be of interest for many cities:

- 1. Ecosystem management in parks,
- 2. Conservation of wildlife trees,

(continued)





Example: Localizing biodiversity action: Montréal's Good Practices for Biodiversity

- 3. Environmental action days,
- 4. Improved wildlife observatories,
- 5. Coexistence with coyotes,
- 6. Wildlife passages in the urban environment.

Thinking both locally and globally, Montréal wanted to show the local usefulness of the initiatives but also worked to identify the specific international biodiversity goals that each initiative contributes to achieving, whether it be through habitat conservation and restoration, control of invasive exotic plant species, public access to nature and ecosystem services enhancement, integration of biodiversity protection into planning processes, availability of reliable and up-to-date information for effective management, or promotion of sustainable behaviors, to name a few.

French and English versions of the briefing sheets were made available on Montréal's website (Montreal.ca) and the CitiesWithNature platform to inspire action and replication by other cities and to demonstrate urban contributions to achieving the global biodiversity agenda in practice, thereby accelerating the transition towards greener and biodiversity-friendlier cities all over the world.

3. Municipal Conservation Plans: Planning for sustainable urban growth

Challenge: Not enough cities are integrating nature conservation and nature based solutions into their local planning and strategies.

Many cities in the world, in particular in the Global South, still lack formal planning mechanisms. If they do have planning mechanisms, many of these are still outdated modes of planning, not necessarily compatible with the current city dynamics and future growth, climate, transport and housing challenges. Beyond traditional planning mechanisms, the existing experiences integrating nature and biodiversity into local planning are still limited. By 2018, only 129 cities from 31 countries had produced a local biodiversity report and/ or plan. Most of the cities and municipal governments that developed these plans are in the United Kingdom in Europe, North America, and Asia. Unfortunately, the most significant impacts on biodiversity from urban growth expected to happen between 2000 and 2030 will happen in Asia, Africa, and South America. In addition to this, countries (and cities) in these geographical regions also have lower governance capacities and pressing socio-economic challenges to tend to.

Opportunity: Municipal conservation plans as a tool for sustainable urban growth

30

Planning for nature is becoming popular in cities across the world. There are different terms

The

⁷ McDonald, R., Colbert, M., Hamann, M., Simkin, R., & Walsh, B. (2018). Nature in the Urban Century: A global assessment of where and how to conserve nature for biodiversity and human wellbeing. https://www.nature.org/en-us/what-we-do/our-insights/perspectives/ nature-in-the-urban-century/



commonly used for the type of planning actions involved in local conservation planning, such as greenprinting, urban natural resource planning, eco-urban assessments, and urban conservation planning.

A Municipal Conservation Plan is a strategic conservation plan and tool through which local stakeholders can identify, map, and prioritize areas important to the conservation of plants and wildlife, water resources, recreational opportunities, and working landscapes. These plans **help local governments view how nature can contribute to its different development goals and strategies**. It reveals the economic and social benefits that parks, open space, and working lands provide communities, such as recreation opportunities, habitat protection and connectivity, clean water, agricultural land preservation, and increased resilience to climate change.

This approach to planning can be used to **integrate an ecosystem view to other urban plans** such as zoning, affordable housing or transportation plans, in no way restricting the overall growth of a city. Rather, it will allow the city to identify which are the areas on highest and lowest importance in terms of biodiversity and ecosystems (protected or endangered areas vs degraded lands/brownfields or agriculture lands), and orient its growth grow in a way that avoids putting natural habitats at risk, but allows it to reach its urban needs and goals. By bringing together different city agencies and other stakeholders to elaborate a common vision of a greener urban growth, cities can also improve their governance and align different agendas and priorities to maximize positive outcomes of this planning exercise.

Beyond identifying and prioritizing areas for urban expansion, localized conservation planning also focuses on how to **improve existing urban areas through biodiversity and ecosystem services**. Plans for densification, the design of parks, streets and water management infrastructure can highly benefit from multiple ecosystem services to improve their potential for recreation, aesthetic beauty, and storm water management. In this way, cities can consolidate their biodiversity agenda with other global but localized agendas, such as water quality and security, health, food safety, heritage, amongst others.

Planning with nature allows for cities to grow while protecting biodiversity and human wellbeing. In the midst of a global pandemic, preserving, and increasing the amount of nature in cities is also an opportunity to reduce the vulnerability of urban population. Nature in cities has shown to reduce obesity and depression, improve productivity, boost educational outcomes and reduce incidence of asthma and heart⁸ disease, all elements that

31

II. ES III



increase the vulnerability and risk of death for people exposed to COVID-19. In a time where cities are developing strategies for reactivating their economies, and improving wellbeing, there is an important opportunity for this planning exercise in a way that ensures a future urban environment that is healthier and more resilient.

A series of resources and tools to help cities develop these types of plans can be found at The Nature Conservancy's Greenprint Resource Hub.

Example: Living Melbourne Greenprint

In 2016, The Nature Conservancy and Resilient Melbourne came together to develop Living Melbourne, a "greenprint", or plan for a greener city. The plan involved 32 local councils and many additional stakeholders, and covers an area of about 10,000 square kilometers including parks, gardens, river and creek corridors, wetlands, street and railway corridors, backyards and community gardens.

The cost of the Living Melbourne Plan was distributed between dozens of partner organizations, and it includes examples of collaboration, financing, and policy mechanisms from across the world to guide cost-effective strategies for implementation of specific regional targets by 2030, 2040, and 2050. The strategy also included data collection and analysis to help create a practical roadmap to identify, plan, and undertake the highest impact conservation projects. It was also designed to develop neighborhood pride, improve mental and physical health and enhance property values. Factors of social vulnerability were layered into the analysis to inform decision-making and improve equity in vulnerable communities.

By reflecting the outcomes delineated in the plan, Melbourne will be able to manage its growing population, balancing urban density with the need for natural assets across the landscape. Wildlife – birds in particular – will have corridors to migrate as climate change shifts their ranges, offering some degree of protection for rare or threatened species. And natural assets, including parks, street trees, and trees on private property will help the city adapt to a hotter, wetter climate regime, providing shade and helping the city manage stormwater and the flooding and pollution that it can cause. Public health and recreation benefits will also flow from this work, making Melbourne a desirable city to call home.

THE

32

⁹ McDonald, R., Aljabar, L., Aubuchon, C., Birnbaum, H., Chandler, C., Toomey, B., Daley, J., Jimenez, W., Trieschman, E., Paque, J., Zeiper, M. (2018). Funding Trees for Health. An Analysis of Finance and Policy Actions to Enable Tree Planting for Public Health. Link: https://www.nature.org/en-us/what-we-do/ our-insights/perspectives/funding-trees-for-health/



Example: City of Amman

Amman developed the Resilience Strategy in 2017 that had 5 main pillars with one of them being "An Environmentally Proactive City" containing 5 main goals addressing all aspects of its natural ecosystem. Amman also became the first country in The Southern and Eastern Mediterranean region (SEMED) to join the EBRD's Green Cities Framework, planning and investing in its future green development. EBRD will work with Greater Amman Municipality to develop a Green City Action Plan (GCAP) and strategically address the city's needs for sustainable growth and how these strategies can turn into fixed policies in the very near future. The Greater Amman Municipality (GAM) is currently developing a new system to identify and expand its Natural Heritage Systems (NHS) through mainstreaming the term with more categories related to its natural ecosystems. Currently, this system is partially supported through an incentive program to new projects that take into consideration preserving or enhancing any natural system present in their sites. The emphasis on the word heritage gives leverage when discussing the importance of preserving or restoring natural ecosystems, since this word is directly related to the social identities of the city's dwellers further emboldening the narrative of mainstreaming biodiversity.

4. The need for resource mobilization and an ecosystem service focus to mainstream nature in cities

Challenge: In the face of limited budgets and multiple and competing priorities, cities find it difficult to invest in nature.

Around the world, countries and cities are facing a number of different crises at once, such as economic, political, migratory, climate or biodiversity. With limited budgets, time and resources, policy makers and political leaders often must make the difficult decision of prioritizing and choosing which crisis to tend to first. This is particularly common in countries and cities in the global south, where the needs tend to be numerous and the resources to tend to these are scarce. For many of these cities, investing in nature and biodiversity is still not seen as a priority. In addition to this, for decades, funding for cities (and development funding) has been highly focused on traditional grey infrastructure. Only recently have new programs and initiatives to fund NBS and green infrastructure in countries and cities emerged in national government, multilateral entities and international funds. Research from EU's Naturvation Program has shown that even when funds exist, there are stillsignificant challenges regarding knowledge and capacity in local governments, consultancy companies in charge of project design, communities, NGOs, amongst others to develop projects that adequately incorporate NBS, that are able to concretely identify the value proposition of NBS projects and calculate impacts as profits or returns, so projects are "bankable" or attractive for investment. Profits or return of investment from NBS projects are not always easy to quantify or

https://www.epa.gov/green-infrastructure/green-infrastructure-funding-opportunities

The P

https://ec.europa.eu/environment/biodiversity/business/assets/pdf/Part%203_2_Naturvation.pdf

33

¹⁰ Link to examples: https://www.eib.org/attachments/pj/ncff-invest-nature-report-en.pdf



compare to traditional projects, and their scale is not always to what city officials, banks or donors might be used to funding.

Finally, global agenda items and international conversations on nature based solutions and ecosystems services tend to be focused on their potential mainly for climate adaptation. Their advantages in terms of social and economic impact are not as deeply discussed or highlighted, which might work in detriment of their adoption, in particular for cities that are struggling with deep social and economic issues.

Opportunity: Leveraging on an ecosystems services focus to gain visibility on nature's multiple benefits (goods and services) on which our urban lives depend

There is growing evidence for the role of nature in addressing multiple urban challenges and improving the resilience of our cities and urban communities. Preserving, restoring and maintaining functioning urban ecosystems can generate significant benefits that are aligned with both local and global agendas and priorities. Some examples include:

34

Health	Climate	Water security	Economy
 Improved mental health 	Mitigation:CO2 capture	• Maintain and improve water quality	Tourist attractionsIncreased land value
 Improved air quality Improved physical health: increased physical activity, reduced asthma, lower levels of obesity and other chronic illnesses Improved food security 	 Adaptation and resilience: Flood and coastal risk reduction and impact Urban temperature regulation Reduced soil erosion Reduced frequency and intensity of forest fires, flooding and droughts Coastal risk-reduction services 	 Increased cost- efficiency in water infrastructure investments Improved storm water management Water storage and reservoirs Maintain or improve river flows and aquifer recharge 	 Increased land value Cost reductions in terms of health, risk management, infrastructure, etc.

The



Considering the challenge of prioritizing investments at the local level, it is crucial to build upon knowledge and create visibility on the multiple benefits and services that biodiversity and ecosystems provide to cities, in particular in terms of their economic and social advantages. This will allow to break the false dichotomy that states that in order to advance on economic/social agendas, cities must sacrifice investing in environment and biodiversity. Creating capacities to be able to quantify and measure the business case for NBS, in particular in terms of their social and economic benefits will in turn facilitate the process of acquiring funds, and attracting investment in these types of projects. Many cities and countries are reconsidering and refocusing their development strategies due to the global health and economic crisis. By incorporating biodiversity and an ecosystem service focus in urban redevelopment and economic reactivation plans, cities can not only shift their previous patterns of urban growth, but strive for investments that will generate revenue, employment, cost-effectiveness, are health-oriented, will help them better face future crises (climate, economic, etc.), and avoid straying from their pre-existing commitments linked to global agendas.

Example: An economic view on the benefits of an ecosystems services focus in city planning and infrastructure investments

Cost-effectiveness in infrastructure investment: New York City used nature based solutions in a water source protection program for its watersheds forested areas as an alternative to building a water treatment plant for an estimated US\$8-10 billion and saved the city more than US\$300 million a year on water treatment operation and maintenance costs (Abell et al., 2017).

Increased land value: In the USA, city parks increase the value of nearby residential properties by an average of 5 percent; but this increase can go up to 15 percent depending on the type and quality of the park.

Revenue and job creation for local communities: In South Africa, the Table Mountain National Park in Cape Town contributed R377 million to South Africa's GDP between 1998 and 2003. It also provides numerous employment opportunities in conservation.

Climate adaptation and resilience: In the northern coastal regions of Vietnam, planting and protecting mangrove forests (an investment of US\$ 1.1 million) instead of building and maintaining artificial barriers (sea dykes) has saved approximately US\$ 7.3 million/year in dyke maintenance alone.

Source: TNC, 2018; Secretariat of the Convention on Biological Diversity, 2012; Trémolet S. et al., 2019; TEEB, 2010





Example: City of Amman

Improving Liveability in Socially Vulnerable Communities Through Green Infrastructure

Improving Living Conditions in poverty-stricken Areas in Amman (ILCA) is a pilot project set up to develop and improve existing elements of green infrastructure in selected sites in East Amman. The project aims to create ownership and enhance quality of life of the residents through community participatory involvement in the design, planning and management processes of the newly created or revived public open spaces. Improving the connection to public transport plays a prominent role, as well as increasing the accessibility of public spaces for all with an attention to women and girls' specific needs. The project also intends to raise awareness on the potential of green infrastructure to mitigate/adapt to climate change, and support Jordan in the achievement of their commitments to global and national agendas such as SDGs and NDCs

Opportunity: Resource mobilization and innovative investment models that hold nature at their core

Despite the challenges mentioned previously in this section, cities around the world have found different ways to fund nature protection and NBS at the local level. Initiatives like Naturvation and Horizon 2020's project GrowGreen have carried out recent studies to identify which models and experiences have been effective in citiesDespite the challenges mentioned previously in this section, cities around the world have found different ways to fund nature protection and NBS at the local level. Initiatives like Naturvation and Horizon 2020's project GrowGreen have carried out recent studies to identify which models and experiences have been effective in cities to mobilize resources to invest in nature at the local level. The experience of projects such as Clever Cities has shown that national and local governments are the most common funding source for urban greening projects at the local level, but cities are increasingly finding other innovative ways to reduce their reliance on public funding. Finding innovative alternatives for public funding of urban greening and NBS is particularly relevant considering that a) most of the research and implementation experiences have been carried out in Europe and cities from the Global North (where public budgets and local capacity for implementation tends to be greater), and b) in a context of crisis, the availability of public budgeting for investing in nature will be limited and might be in conflict with other urgent priorities to decide upon.

36

¹³ https://oppla.eu/sites/default/files/uploads/working-documentfinancing-nbs-citiesv5.pdf https://naturvation.eu/sites/default/files/news/files/naturvation_characterizing_nature-based_ solutions_from_a_business_model_and_financing_perspective.pdf

The



International experience has shown two trends on innovative ways to mobilize resources to invest in urban nature (Naturvation, 2017; Clever Cities, 2019). The most innovative approaches that show opportunities in the current world context are highlighted below:

1. Innovative use of public budgets:

- Search resources from **different government departments that can be linked to the economic and societal benefits of nature** (health, education, risk reduction, water provision, etc.), to access previously untapped sources to achieve joint goals within the municipal administration.
- **Instruments generating revenue**, including value-capture mechanisms, revenues from land sales or leases, taxes (aimed at cost-recovery), user fees, developer contributions or charges, betterment levies, voluntary contributions from beneficiaries, sale of development rights and leases, funds linked to offsetting or compensation requirements, amongst other voluntary schemes

2. Engaging with other actors (e.g. social investors and the private sector): using market-based instruments to finance urban greening, developing incentives, tax rebates or payment for ecosystem services for individuals or private actors, creating publicprivate partnerships, developing finance and business models that are attractive to a variety of potential partners, in addition to developing strategies that consider not only financial aspects but also social benefits. To attract the private sector, policy makers can encourage finance and business models through changing accounting frameworks, adjusting procurement rules and providing risk guarantees. Social investors can also be good funding partners for projects with financial returns below standard commercial yields but with high societal impact. Leveraging on public private partnerships and blended finance can enable the development of projects with results that benefit each of the stakeholders, while sharing and reducing risks for all of them.

Mainstreaming these innovative practices and opportunities to mobilize resources will require support and investment to build the capacity of cities to do so. In particular, in countries where local governance is not strong, local governments might not have the capacity to adequately design such models, or make them attractive for different stakeholders. They also might not be seen as trustworthy partners to raise capital through PPPs or to negotiate concessions with. Therefore, there are significant gaps (and opportunities) in strengthening local capacity in how to develop policy, regulation, and tools to innovate how public funding is sourced and used, and how to engage with non-public actors to increase their confidence for joint investments.

¹³ https://clevercities.eu/news/?c=search&uid=ijT0Qn3K

The seat

37



Examples of innovative approaches to resource mobilization for urban nature Blended finance:

• **Milan, Italy** - Milan launched a public bid to cofinance EUR 1.1 million by mixing EU grants and private resources. Through this mechanism, they subsidized public and private building owners at 25-35 percent to build green roofs and walls, including green features and areas to be built within the CLEVER Cities project.

Leverage on the societal benefits of nature:

 Liverpool, UK - Natural Choices for Health and Wellbeing programme. To reduce inequality in health and wellbeing, increase engagement with the natural environment and provide opportunities for disadvantaged people, community groups in disadvantaged areas and areas lacking in green infrastructure were invited to apply for grants to increase wellbeing by improving their local environment. 38 projects were awarded grants of £1,000 to £38,000 in 2012. The programme's evaluation showed an increase in wellbeing among residents of up to 18 per cent.

Levies and instruments to generate revenue:

• Vancouver, Canada - property developers are required to pay a Development Cost Levy as a

prerequisite for receiving the building permit. If the new development also involves rezoning, developers also pay a Community Amenity Contribution. These revenues are used by the city to fund public facilities, including parks and green spaces.

Source: TNC, 2020; Trinomics and IUCN, 2019

5. Monitoring Progress at the Local Level Challenge: Monitoring frameworks for global biodiversity goals are focused on the national level, do not sufficiently contemplate the contribution of local governments and are hardly integrated with the monitoring of other sustainability agendas at the local level

Countries are required to measure and report on progress made towards achieving global agendas. However, in order for them to do so accurately, they need to aggregate contributions made by their local counterparts, who are central to the implementation of the agendas themselves. The biodiversity agenda is no exception. This requires strong monitoring and reporting mechanisms to be in place at the local level. These processes are essential not only to showcase city progress in achieving their biodiversity goals and targets, but also to demonstrate the contributions of city-led action to achieving national and global biodiversity goals and targets.





According to the Zero Draft of the Post 2020 GBF (2020), the framework will be implemented primarily through activities at the national level, with supporting action at the subnational, regional and global levels. It is said that it will provide a global, outcome-oriented framework for the development of national, and as appropriate, regional, goals and targets and, as necessary, the updating of national biodiversity strategies and action plans to achieve these, and regular monitoring and review of progress at the global level. However, to date, the draft Post 2020 monitoring framework is primarily focused on national governments. There is ongoing advocacy to explicitly include reference to local governments in the goals and action targets of the draft Post 2020 GBF. If this is not achieved, there is a significant risk of repeating past mistakes in relation to the Aichi Biodiversity Targets, whereby limited progress has been made.

Biodiversity actions taken by cities are often not comprehensively or even adequately measured, aggregated, or reported on and thus, meaningful monitoring of progress on achieving global goals is compromised even in instances where this action is, indeed, taking place on the ground. In addition to this, cities have not been sufficiently included in global action targets, indicators, or monitoring frameworks to date.

Mandatory reporting requirements placed on local governments by their national counterparts, are often onerous and in some instances burdensome. It is common that each country has mechanisms in place for local governments to report on their progress in alignment with national priorities. However, these mechanisms often do not integrate biodiversity, climate, and sustainability indicators or in some cases do not even include indicators to measure the contributions of nature-based solutions to achieving other priorities at all. As such, local governments are faced with existing reporting requirements, which are often not well aligned with NBSAPs, NDCs, or the SDGs. Under these circumstances, there is limited capacity for cities to enable effective and integrated monitoring and reporting of their contributions to global agendas.

Opportunity: Strengthening the capacity for monitoring and reporting cities' contributions to biodiversity goals and other global agenda targets

Rather than impose additional indicators on local governments to explicitly report on progress in achieving national biodiversity, climate, and sustainability goals and targets, this whitepaper advocates for the need for national-local collaboration and strong multi-level governance structures when it comes to streamlining and integrating monitoring and reporting efforts.





For purposes of this section of the whitepaper, four primary recommendations are put forward to structure the more detailed recommendations that follow:

- Recognize the importance of nature in contributing to cities that are healthy, resilient, liveable and thriving, in alignment with international biodiversity, climate, and sustainability agendas and goals.
- Mainstream the role and active participation of local governments in the implementation of the global biodiversity, climate and sustainability agendas
- Support and encourage cities to invest in nature
- Strengthen the capacity of cities to act, monitor and report on their contributions to biodiversity, climate and sustainability goals

The detailed recommendations put forward in this whitepaper each fall under the primary recommendations mentioned above. Policy Recommendations addressed to G20 leaders, proposed for the U20 Communique

Recognize the importance of nature in contributing to cities that are healthy, resilient, liveable and thriving, in alignment with international biodiversity, climate, and sustainability agendas and goals.

This whitepaper has shown that it is critical to recognize the interconnectedness of the global biodiversity, climate, and sustainability agendas and to support local governments in mainstreaming biodiversity across policies, including land-use planning, development processes, poverty reduction strategies, fiscal policies, budgets and accounts to achieve all three agendas. This whitepaper puts forward the argument that by investing in nature and biodiversity action at the local level, cities are contributing to achieving not only the global biodiversity agenda, but also the global climate and sustainability agendas. By this logic, it is argued that nature-based solutions are a precondition for achieving all three of these global agendas simultaneously through an integrated, multi-level governance approach.





Furthermore, the U20 can be instrumental in elevating the voice of cities and highlighting their contributions in the participatory process on the Roadmap to the UN CBD's 15th COP and in the preparation of the Post 2020 GBF, in particular through the 24th meeting of the CBD Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA 24), the Subsidiary Body on Implementation meeting (SBI-3) and the Inter-Sessional Open-Ended Work Group (OEWG3) Meeting.

Mainstream the role and active participation of local governments in the implementation of the global biodiversity, climate and sustainability agendas

- Support and advocate for the voice of local governments in the Roadmap to COP 15 and call for the inclusion of cities in the 2030 and 2050 goals, 2030 action targets, and in the monitoring framework of the Post 2020 GBF.
- 2. Integrate the convergence of biodiversity, climate, and the SDGs in National Biodiversity Strategies and Action Plans (NBSAPs) and in the Nationally Determined Contributions (NDCs) and subsequent planning frameworks and action taken at the local level

- Endorse the call for a dedicated, stepped-up Decision on local and subnational governments and adopt such a decision at COP 15 to renew Decision X/22: The Plan of Action for Subnational Governments, Cities, and other Local Authorities (2011-2020).
- 4. Mainstream the role & contribution of cities' biodiversity actions in the implementation of the Paris Agreement and Agenda 2030.
- 5. Encourage UN organizations and associated global actors to invite city representatives to serve formally and participate fully in UN institutional structures where appropriate to ensure that city positions and contributions are fully realized and enabled.
- 6. Commit to support the negotiation of integrating the role and contribution of cities throughout the Post-2020 GBF, to optimize cities active participation in the implementation of the GBF and thereby ensure urban development planning considers the conservation, restoration, and sustainable use of biodiversity, enhancing the environmental services provided by nature-based solutions.





Support and encourage cities to invest in nature

- Create enabling mechanisms and conditions at global and national levels, including financial incentives, regulation, cooperation, programs, and innovative funding for increased public and private investment in nature-based solutions at the local level.
- 2. Encourage WHO to set minimum standards and guidelines to ensure access to green space in cities, key to improving health and wellbeing in urban areas.
- 3. Destine resources to project preparation facilities to increase cities' capacity in investing in nature, strengthening resource mobilization, the business and investment case for nature in cities, and the number of project proposals related to NBS.

Strengthen the capacity of cities to act, monitor and report on their contributions to biodiversity, climate and sustainability goals

1. Coordinate local monitoring and reporting efforts in order to report on progress in achieving their NBSAPs, NDCs, and the SDGs. Support the assessment of implementation of measures included in NBSAPs, by collecting data from the local and subnational levels in harmonized ways across the G20

- 2. Provide technical support to strengthen the capacity of cities to develop tools and mechanisms for monitoring and reporting their contributions to different targets and goals.
 - Support local governments in data collection techniques for improved decision-making and in developing monitoring and reporting processes to ensure that local actions are captured as contributions to achieving national and global targets for biodiversity, climate, and sustainability.
 - Incentivize and support local governments to measure progress through existing nationallymandated reporting mechanisms, or official mechanisms for local governments (such as the CitiesWithNature online platform).





Policy Recommendations addressed to key stakeholders including local and sub-national governments, private sector and civil society

Mainstream the role and active participation of local governments in the implementation of the global biodiversity, climate and sustainability agendas

- Call for urgent commitments to conserve, restore, sustainably use, and equitably distribute the benefits of biodiversity at the local level by cities and for increased recognition, support, and enhancement of the critical role and contributions of local governments in implementing the Post 2020 Global Biodiversity Framework in the coming decade (2020-2030)
- 2. Enable the localization of the Post 2020 GBF through a multi-level governance approach of integrated planning and development at the local level.

Support and encourage cities to invest in nature

- Make the case that investing in naturebased solutions in cities not only has many environmental benefits, but also leads to longterm savings that are fundamental in securing our collective urban future.
- 2. Adjust procurement criteria and standards to incorporate nature based solutions in infrastructure projects, upstream planning and feasibility assessments (when comparing to traditional infrastructure solutions),
- 3. Mainstream NBS into planning and development frameworks and harness opportunities for implementation of tools and mechanisms such as Municipal Conservation Plans and Greenprinting, and other planning frameworks, to identify the conservation value of natural areas and ecosystems in cities
- 4. Enable integrated planning to protect areas and natural habitats within city boundaries, and maximize the potential for nature based solutions to achieve global goals and targets in the biodiversity, climate, and sustainability arenas.





Strengthen the capacity of cities to act, monitor and report on their contributions to biodiversity, climate and sustainability goals

- Build the capacity in cities to plan for, budget for, and implement nature-based solutions and mainstream biodiversity across all policies and operations
- 2. Encourage the development of solutions on the ground mobilizing the business sector, civil society organizations, indigenous peoples and

local communities, youth and women to support and enable the localization of the Post 2020 GBF through a multi-level governance approach and integrated planning and development

3. Create technical capacity in local governments to implement tools and mechanisms to identify the value of natural areas and ecosystems in cities, and plan urban growth hand in hand with nature.



References

Angel, S., A. M. Blei, D. L. Civco, and J. Parent. (2012). *Atlas of urban expansion*. Lincoln Institute of Land Policy Cambridge, MA.

Cole, M. A., and E. Neumayer. (2004). Examining the impact of demographic factors on air pollution. *Population and Environment* 26:5-21.

Convention on Biological Diversity (CBD). (1992) Article 6. General Measures for *Conservation and Sustainable Use*. Retrieved from https://www.cbd. int/convention/articles/default.shtml?a=cbd-06 [Accessed 29 May 2020].

Convention on Biological Diversity (CBD). (2010). Decision X/22 Plan of Action on Subnational Governments, Cities and Other Local Authorities for Biodiversity (2011 - 2020). Decision adopted by the Conference of the Parties to the Convention on Biological Diversity at its tenth meeting, 18-29 October 2010, Nagoya, Japan.

Convention on Biological Diversity (CBD). (2011). Strategic Plan for Biodiversity 2011–2020 and the Aichi Targets (Secretariat of the Convention on Biological Diversity) Retrieved from https://www.cbd.int/sp/ [Accessed 2 May 2020] Convention on Biological Diversity (CBD). (2018). Decision 14/34 *Comprehensive and participatory process for the preparation of the post-2020 global biodiversity framework*. Decision adopted by the Conference of the Parties to the Convention on Biological Diversity at its fourteenth meeting, 17-29 November 2018, Sharm-El-Sheikh, Egypt.

Cooper, A. (2018). Regionally and Locally Determined Contributions (RLDCs) [leaflet]. Retrieved from https://cor.europa.eu/en/news/ Documents/3894-leaflet-Cooper-v3-LR.PDF [Accessed 12 June 2020]

Díaz, S., Settele, J., Brondízio, E., Ngo, H., Guèze, M., Agard, J., ... & Chan, K. (2020). Summary for policymakers of the global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services.

Elmqvist, T., M. Fragkias, J. Goodness, B. Güneralp, P. J. Marcotullio, R. I. McDonald, S. Parnell, M. Schewenius, S. M., K. Seto, and C. Wilkinson. (2013). Urbanization, biodiversity, and ecosystem services: Challenges and opportunities, a global assessment. Springer, New York.





Flörke, M., C. Schneider, and R. I. McDonald. (2018). Water competition between cities and agriculture driven by climate change and urban growth. Nature Sustainability 1:51-58.

Güneralp, B., and K. Seto. (2013). *Futures of global urban expansion: uncertainties and implications for biodiversity conservation*. Environmental Research Letters 8:014025.

Güneralp, B., Y. Zhou, D. Ürge-Vorsatz, M. Gupta, S. Yu, P. L. Patel, M. Fragkias, X. Li, and K. C. Seto. (2017). *Global scenarios of urban density and its impacts on building energy use through 2050*. Proceedings of the National Academy of Sciences 114:8945-8950.

McDonald, R., M. L. Colbert, M. Hamann, R. Simkin, B. Walsh, F. Ascensao, M. Barton, K. Crossman, M. Edgecomb, T. Elmqvist, A. Gonzalez, B. Guneralp, D. Haase, O. Hillel, K. Huang, D. Maddox, A. V. Mansur, H. Pereira, J. R. Pierce, R. Weller, K. Seto, M. Tan, and C. Ziter. (2018). *Nature in the Urban Century: A global assessment of where and how to conserve nature for biodiversity and human wellbeing*. The Nature Conservancy, Washington, DC. Retrieved from https://www.nature.org/en-us/what-we-do/ our-insights/perspectives/nature-in-the-urbancentury/ [Accessed 15 June 2020]

McDonald, R. I., A. V. Mansur, F. Ascensão, K. Crossman, T. Elmqvist, A. Gonzalez, B. Güneralp, D. Haase, M. Hamann, and O. Hillel. (2019). *Research gaps in knowledge of the impact of urban growth on biodiversity*. Nature Sustainability:1-9.

McDonald, R., Aljabar, L., Aubuchon, C., Birnbaum, H., Chandler, C., Toomey, B., Daley, J., Jimenez, W., Trieschman, E., Paque, J., Zeiper, M. (2018). *Funding Trees for Health. An Analysis of Finance and* Policy Actions to Enable Tree Planting for Public Health. The Nature Conservancy, Washington, DC. Retrieved from https://www.nature.org/en-us/ what-we-do/our-insights/perspectives/fundingtrees-for-health/ [Accessed 20 June 2020]

Regmi, A., and J. Dyck. (2001). Effects of urbanization on global food demand. *Changing structure of global food consumption and trade*:23-30.

Rouget, M, O'Donoghue, Taylor, C and Roberts, D.C.. (2016) Editorial: Improving the management of threatened ecosystems in an urban biodiversity hotspot through the Durban Research Action Partnership. Bothalia - African Biodiversity and Conservation 46:2

Satterthwaite, D. (2008). Climate change and urbanization: Effects and implications for urban governance. United Nations Expert Group meeting on population distribution, urbanization, internal migration and development. DESA New York. Pp 21-23

Secretariat of the Convention on Biological Diversity (CBD). (2020). *Zero Draft of the Post-2020 Global Biodiversity Framework*. Retrieved from https://www.cbd.int/article/2020-01-10-19-02-38 [Accessed 14 April 2020]

Seddon, N., Sengupta, S., García-Espinosa, M., Hauler, I., Herr, D. and Rizvi, A.R. (2019). *Naturebased Solutions in Nationally Determined Contributions: Synthesis and recommendations for enhancing climate ambition and action by 2020*. Gland, Switzerland and Oxford, UK: IUCN and University of Oxford.





Seto, K., B. Guneralp, and L. Hutyra. (2012). *Clobal* forecasts of urban expansion to 2030 and direct impacts on biodiversity and carbon pools. *Proceedings of the National Academy of Science* 109:16083-16088.

UN Habitat. (2016) *World Cities Report*. Retrieved from: http://wcr.unhabitat.org/main-report/ [Accessed 14 May 2020]

UNPD. (2018). World Urbanization Prospects: The 2018 Revision. United Nations Population Division, New York.

The Nature Conservancy. (2020). Waterfunds. Investing in Nature to Improve Water Security. Retrieved from: https://s3.amazonaws.com/ tnc-craft/library/water-funds-fact-sheet-2. pdf?mtime=20180219003837 [Accessed 24 May 2020]

Toxopeus, H and Polzin, F. (2017). Characterizing nature-based solutions from a business model and financing perspective. Retrieved from: https://naturvation.eu/sites/default/files/news/ files/naturvation_characterizing_naturebased_solutions_from_a_business_model_and_ financing_perspective.pdf [Accessed 10 June 2020] Tsioumani, E. (2019). Policy Brief: Why Biodiversity Matters: Mapping the Linkages between Biodiversity and the SDGs | SDG Knowledge Hub | IISD. IISD SDG Knowledge Hub. Retrieved from https://sdg.iisd.org/commentary/policy-briefs/ why-biodiversity-matters-mapping-the-linkagesbetween-biodiversity-and-the-sdgs/ [Accessed 16 May 2020]

Trinomics and IUCN. (2019). Approaches to financing nature-based solutions in cities. Working document prepared in the framework of the Horizon 2020 project GrowGreen. Retrieved from: https://oppla.eu/sites/default/files/uploads/ working-documentfinancing-nbs-citiesv5.pdf [Accessed 16 May 2020]

UN General Assembly (2015). *Transforming our world: the 2030 Agenda for Sustainable Development*, 21 October 2015, A/RES/70/1. Retrieved from https://www.refworld.org/ docid/57b6e3e44.html [Accessed 24 June 2020]

United Nations / Framework Convention on Climate Change (UNFCCC). (2015). Adoption of the Paris Agreement, 21st Conference of the Parties, Paris: United Nations.



Appendices





History of local government advocacy in the UN CBD since 2008

The background and history of the local government advocacy for nature is outlined below, in relation to the relevant UN CBD COPs that have taken place every two years. In 2006, the 8th Conference of the Parties (COP8) was chaired in Curitiba, Brazil, and marked the first meeting where local authorities were recognized by the Convention on Biological Diversity (CBD) signatory governments. ICLEI – Local Governments for Sustainability in a partnership with the International Union for Conservation of Nature (IUCN), launched the Local Action for Biodiversity (LAB) program, highlighting the importance of local biodiversity actions. The LAB Initiative was a world-first international initiative to guide, support, capacitate and motivate local governments and their partners to enhance the management of biodiversity in areas under their jurisdiction. Critically, this included the integration of biodiversity considerations into policy, strategy and implementation decisions.

The parties first discussed the role of local authorities in the implementation of the CBD in Bonn, Germany in 2008 at COP9. As a result, and for the first time ever, a decision was adopted on cities and biodiversity (Decision IX/28). This decision encouraged parties to the CBD to recognize the role of cities in national strategies and plans, as well as invited Parties to support and assist cities in implementing the CBD at the local level. Decision IX/28 was the first United Nations environmental convention to dedicate a decision to local governments. One of the take home messages of COP9 was the recognition that the implementation of the three objectives of the CBD requires the full engagement of cities and local authorities.

The Strategic Plan for Biodiversity (2011-2020) was adopted at COP10 in Nagoya, Japan, defining a global agenda for biodiversity, under the 20 Aichi Biodiversity Targets. Decision X/22 marked a unique and ground-breaking decision as it endorsed a 10-year (2011-2020) "Plan of Action on Subnational Governments, Cities and Other Local Authorities for Biodiversity", with a timeline matching that of the broader CBD Strategic Plan for Biodiversity (2011-2020). Perhaps most notably, Decision X/22 was the first-ever long-term Decision by a Rio Convention to recognize and support the role of local governments as key implementing partners to the Parties. Although not legally binding, Decision X/22 provided guidelines outlining how national governments can support local governments in implementing the objectives of the CBD and preparing action plans, and in so doing assist themselves by benefitting from the collective contributions of local governments, which significantly account for implementation and therefore national monitoring and reporting efforts. The Decision provided a framework for localization of key aspects of the adopted Strategic Plan for Biodiversity (2011-2020), which has since then, been guiding the global biodiversity agenda throughout the past decade, thereby making way for the Post 2020 GBF that will steer the CBD's agenda in the UN's Decade of Ecosystem Restoration.



The adoption of this Plan of Action was a pivotal moment in highlighting the critical role of local governments in implementing the global biodiversity agenda, since it provides suggestions to Parties on how to mobilize and coordinate local actions on biodiversity, to bring national strategies and plans into the local context. Since then, there has been a significant increase in momentum built on this advocacy agenda, with at least one official decision dedicated to local governments emerging from each COP. This is further testimony to CBD Parties' and the SCBD's growing recognition of the vital role that cities play in contributing to the CBD objectives.

In 2012, COP11 was chaired in Hyderabad, India, where Decision XI/8 requested the Executive Secretary to support the activities of the Global Partnership (a CBD-facilitated global instrument used to collate and support the local constituencies in partnership with key partners such as ICLEI) and inviting Parties to develop and support tools and initiatives that facilitate the local implementation of the CBD.

CBD COP 12 in Gangwon, Korea saw the adoption of Decision XII/9, on engagement with Subnational and Local Governments, requesting the CBD Executive Secretary to support the Global Partnership on Local Action on Biodiversity and its activities as an effective platform for scientific and technical cooperation, capacity development and the dissemination of best practices for local implementation of the Convention. The Gangwon/ Pyeongchang Resolution for Cities Governments for Biodiversity was also co-developed at the 4th Biodiversity Summit For Cities GovernmentCBD. COP 13 Decision XIII/3, on Strategic actions to enhance the implementation of the Strategic Plan for Biodiversity 2011-2020 and the achievement of the Aichi Biodiversity Targets was adopted by the Parties at COP 13 in Cancun, Mexico. Parties agreed to enhance their efforts to engage subnational and local governments in order to strengthen their contribution to the implementation of the Convention and its Strategic Plan. The 5th Global Biodiversity Summit for Cities Governments also produced the Quintana Roo Communiqué on Mainstreaming Local Biodiversity Action in the CBD.

COP 14, held Sharm El-Sheikh, Egypt, in 2018, surpassed all previous COPs, with an unprecedented number of decisions - seven in total - that relate to local governments. It gave effect to Decision 14/34, which relates to the establishment of a comprehensive and participatory process for the preparation of the Post-2020 Global Biodiversity Framework (GBF). This Decision urges local governments to actively engage and contribute to the process of developing a robust post-2020 global biodiversity framework in order to foster strong ownership of the framework to be agreed and strong support for its immediate implementation. It was the culmination of advocacy efforts dating back to COP 13 in Cancún (2016), where the participatory process was first supported. This process was further validated at COP 14, where the Sharm El-Sheikh to Kunming Action Agenda for Nature and People was launched in an attempt to mobilize urgent action in the lead up to COP 15, enhance the implementation of the Strategic Plan for Biodiversity (2011-2020) and the Aichi Biodiversity targets in the final two years of their validity, as well





as support the development of a Post 2020 Global Biodiversity Framework (GBF). The Action Agenda has three main objectives:

- to raise public awareness about the urgent need to stem biodiversity loss and restore areas that may have suffered from human impact, to benefit the health of all living species, including humanity, and rebalance our global ecological system;
- to inspire and implement nature-based solutions to meet key global challenges; and
- to catalyze cooperative initiatives in support of global biodiversity goals.

The Action Agenda will culminate in the adoption of the Post-2020 Global Biodiversity Framework by the CBD Parties at COP 15 in Kunming, China, where local governments will mobilize to participate in the 7th Global Biodiversity Summit of Cities Governments and present their consolidated position to the CBD.

At COP14, Parties also decided to establish an Informal Advisory Group (IAG) on the Mainstreaming of Biodiversity, to advise the Executive Secretary and the Bureau of the CBD, on a long-term approach to mainstreaming biodiversity, including on ways to integrate mainstreaming adequately into the Post-2020 GBF. The IAG was established in 2019 with the appointment of representatives from Parties, organizations, indigenous peoples and local communities. ICLEI was appointed to represent all local governments on the IAG. ICLEI's appointment demonstrates the contribution that ICLEI, through its Cities Biodiversity Center and with support from key partners has made over the past decade in advocating for greater recognition of, and involvement by, local governments in the CBD.

Additionally, the Subnational Coalition for Biodiversity Action was launched at COP 14, with the objective of gathering a group of leading provinces, states and regions of the world in support of CBD Parties in the preparation of the Post-2020 GBF. We welcome other actors, networks and initiatives to join this growing community of leading local and subnational actors under the auspices of the Global Partnership on Cities and Biodiversity, co-chaired by the SCBD, ICLEI and Regions4.

The period since COP 14 has seen unprecedented advocacy, mobilization and coordination of local and subnational action and contributions to the Action Agenda for Nature and People on the journey to COP 15 in China in 2020, and the associated consultation and negotiation process on the Post-2020 GBF. The adoption of the Post-2020 GBF at COP 15 has the aspiration of being the "Paris moment for nature," and the collective local and subnational government constituency is calling for a stepped-up, dedicated Decision and a renewed Plan of Action that is more ambitious than ever before.





At this important moment, with COP 15 fast approaching, a review of Decision X/22, the Plan of Action on Subnational Governments, Cities and Other Local Authorities for Biodiversity (2011 - 2020) has been undertaken, highlighting achievements at the global, national and all subnational levels, identifying gaps and strengths, and putting forward recommendations on principles for inclusion in a dedicated, stepped-up Decision and renewed Plan of Action.

Successive Global Biodiversity Summits of Local and Subnational Governments have been coconvened by ICLEI, host governments and key partners as official events in parallel to the CBD COPs since COP 9 in 2008.

The resulting Summit communiques, resolutions and declarations presented to CBD Parties have been as follows:

Bonn Call for Action on Cities and Biodiversity (Mayors Conference - Local Action for Biodiversity, COP 9 in Bonn, Germany 2008) [https://www.bonn. de/medien-global/amt-02/Bonn_Call_for_Action. pdf]

Aichi/Nagoya Declaration on Local Authorities and Biodiversity Support of Plan of Action on Subnational Governments, Cities and Other Local Authorities for Biodiversity (City Biodiversity Summit, COP 10 in Nagoya, Japan 2010) [https:// www.cbd.int/authorities/doc/CBS-declaration/ Aichi-Nagoya-Declaration-CBS-en.pdf] Hyderabad Declaration on Subnational Governments, Cities and Local Authorities for Biodiversity (Cities for Life: City and Subnational Biodiversity Summit, COP 11 in Hyderabad, India 2012) [http://chm-thai.onep.go.th/chm/city/ document/Hyderabad_Declaration.pdf]

Gangwon/Pyeongchang Resolution for Cities and Subnational Governments for Biodiversity (Biodiversity Summit For Cities and Subnational Governments, COP 12 in Gangwon, Republic of Korea 2014) [http://www.biodivercity-summit.org/ common/file/path/MTQxNjE4Mzk2NTY1NTE=.pdf/ name/Pyeongchang-Gangwon%20Resolution_ final.pdf]

Quintana Roo Communiqué on Mainstreaming Local and Subnational Biodiversity Action (5th Global Biodiversity Summit for Cities and Subnational Governments, COP 13 in Cancun, Mexico 2016) [https://cbc.iclei.org/wp-content/ uploads/2016/12/Quintana-Roo-Communique-1. pdf]

Sharm El-Sheikh Communiqué for Local and Subnational Action for Nature and People (6th Global Biodiversity Summit for Cities and Subnational Governments, COP 14 in Sharm El-Sheikh, Egypt 2018) [https://www.cbd.int/doc/c/ c745/007e/3ac98825a03a8073bf0d547d/cop-14inf-48-en.pdf]





Nature-based Urban Solutions

Interlinkages between urban, biodiversity, climate and sustainable development agendas with a focus on the potential for local action.

Table to demonstrate interlinkages between urban, biodiversity, climate and sustainable development agendas with a focus on the potential for local action.

Global Agenda	Commitments and targets with interlinkages to other agendas and for action at the local level
New Urban	<u>Commitments:</u>
Agenda	68. We commit ourselves to giving particular consideration to urban deltas, coastal areas and other environmentally sensitive areas, highlighting their importance as ecosystems' providers of significant resources for transport, food security, economic prosperity, ecosystem services and resilience. We commit ourselves to integrating appropriate measures into sustainable urban and territorial planning and development.
	67. We commit ourselves to promoting the creation and maintenance of well-connected and well distributed networks of open, multipurpose, safe, inclusive, accessible, green and quality public spaces, to improving the resilience of cities to disasters and climate change, including floods, drought risks and heat waves, to improving food security and nutrition, physical and mental health, and household and ambient air quality, to reducing noise and promoting attractive and liveable cities, human settlements and urban landscapes and to prioritizing the conservation of endemic species.
	69. We commit ourselves to preserving and promoting the ecological and social function of land, including coastal areas that support cities and human settlements, and to fostering ecosystem based solutions to ensure sustainable consumption and production patterns, so that the ecosystem's regenerative capacity is not exceeded. We also commit ourselves to promoting sustainable land use, combining urban extensions with adequate densities and compactness to prevent and contain urban sprawl, as well as preventing unnecessary land-use change and the loss of productive land and fragile and important ecosystems.
	71. We commit ourselves to strengthening the sustainable management of resources, including land, water (oceans, seas and freshwater), energy, materials, forests and food, with particular attention to the environmentally sound management and minimization of all waste, hazardous chemicals, including air and short-lived climate pollutants, greenhouse gases and noise, and in a way that considers urban-rural linkages, functional supply and value chains vis-à-vis environmental impact and sustainability and that strives to transition to a circular economy while facilitating ecosystem conservation, regeneration, restoration and resilience in the face of new and emerging challenges.





Global Agenda	Commitments and targets with interlinkages to other agendas and for action at the local level
New Urban Agenda	77. We commit ourselves to strengthening the resilience of cities and human settlements, including through the development of quality infrastructure and spatial planning, by adopting and implementing integrated, age- and gender-responsive policies and plans and ecosystem-based approaches in line with the Sendai Framework for Disaster Risk Reduction 2015-2030 and by mainstreaming holistic and data-informed disaster risk reduction and management at all levels to reduce vulnerabilities and risk, especially in risk-prone areas of formal and informal settlements, including slums, and to enable households, communities, institutions and services to prepare for, respond to, adapt to and rapidly recover from the effects of hazards, including shocks or latent stresses. We will promote the development of disasters, including the rehabilitation and upgrading of slums and informal settlements. We will also promote measures for strengthening and retrofitting all risky housing stock, including in slums and informal settlements, to make it resilient to disasters, in coordination with local authorities and stakeholders.
	79. We commit ourselves to promoting international, national, subnational and local climate action, including climate change adaptation and mitigation, and to supporting the efforts of cities and human settlements, their inhabitants and all local stakeholders as important implementers. We further commit ourselves to supporting building resilience and reducing emissions of greenhouse gases from all relevant sectors. Such measures should be consistent with the goals of the Paris Agreement adopted under the United Nations Framework Convention on Climate Change, including holding the increase in the global average temperature to well below 2 degrees Celsius above preindustrial levels and pursuing efforts to limit the temperature increase to 1.5 degrees Celsius above pre-industrial levels.
	80. We commit ourselves to supporting the medium- to long-term adaptation planning process, as well as city-level assessments of climate vulnerability and impact, to inform adaptation plans, policies, programmes and actions that build the resilience of urban inhabitants, including through the use of ecosystem-based adaptation.





Global Agenda	Commitments and targets with interlinkages to other agendas and for action at the local level
CBD Biodiversity Framework	2011-2020 Strategic Plan for Biodiversity and Aichi Targets:
	2. By 2020, at the latest, biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems.
	10. By 2015, the multiple anthropogenic pressures on coral reefs, and other vulnerable ecosystems impacted by climate change or ocean acidification are minimized , so as to maintain their integrity and functioning.
	15. By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 percent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification.
	Zero Draft of the Post 2020 Biodiversity Framework:
	6. Contribute to climate change mitigation and adaptation and disaster risk reduction through nature-based solutions providing by 2030 [about 30 percent] [at least XXX MT CO2=] of the mitigation effort needed to achieve the goals of the Paris Agreement, complementing stringent emission reductions, and avoiding negative impacts on biodiversity and food security.
	10. Enhance the benefits of green spaces for health and well-being, especially for urban dwellers , increasing by 2030 the proportion of people with access to such spaces by at least [100 percent]
	13. Integrate biodiversity values into national and local planning , development processes, poverty reduction strategies and accounts, ensuring by 2030 that biodiversity values are mainstreamed across all sectors and that biodiversity-inclusive strategic environmental assessments and environmental impact assessments are comprehensively applied.





Global Agenda	Commitments and targets with interlinkages to other agendas and for action at the local level
2030	SDG 11: Make cities and human settlements inclusive, safe, resilient and sustainable
Agenda	11.4. Strengthen efforts to protect and safeguard the world's cultural and natural heritage
	1.7. By 2030, provide universal access to safe, inclusive and accessible, green and public spaces , in particular for women and children, older persons and persons with disabilities
	11.B. By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters , and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels.
	Indirect linkage to ecosystems and nature-based solutions:
	11.5. By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters , with a focus on protecting the poor and people in vulnerable situations
	11.C. Support least developed countries, including through financial and technical assistance, in building sustainable and resilient buildings utilizing local materials
	SDG 13: Take urgent action to combat climate change and its impacts
	13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries
	Indicators:
	13.1.3 Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies
	13.1.2 Number of countries with national and local disaster risk reduction strategies
	SDG 14: Conserve and sustainably use the oceans, seas and marine resources for
	sustainable development
	14.1 By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities , including marine debris and nutrient pollution
	SDG 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
	15.9. By 2020, integrate ecosystem and biodiversity values into national and local planning , development processes, poverty reduction strategies and accounts.



Global Agenda	Commitments and targets with interlinkages to other agendas and for action at the local level
Paris	Article 7
Agreement	2. Parties recognize that adaptation is a global challenge faced by all with local , subnational, national, regional and international dimensions , and that it is a key component of and makes a contribution to the long-term global response to climate change to protect people, livelihoods and ecosystems , taking into account the urgent and immediate needs of those developing country Parties that are particularly vulnerable to the adverse effects of climate change.
	5. Parties acknowledge that adaptation action should follow a country-driven , gender-responsive , participatory and fully transparent approach , taking into consideration vulnerable groups , communities and ecosystems , and should be based on and guided by the best available science and, as appropriate, traditional knowledge, knowledge of indigenous peoples and local knowledge systems, with a view to integrating adaptation into relevant socioeconomic and environmental policies and actions, where appropriate
	9. Each Party shall, as appropriate, engage in adaptation planning processes and the implementation of actions, including the development or enhancement of relevant plans, policies and/or contributions , which may include: (a) The implementation of adaptation actions, undertakings and/or efforts; (b) The process to formulate and implement national adaptation plans; (c) The assessment of climate change impacts and vulnerability, with a view to formulating nationally determined prioritized actions, taking into account vulnerable people, places and ecosystems ;
	Article 8
	4. Accordingly, areas of cooperation and facilitation to enhance understanding, action and support may include: (a) Early warning systems; (b) Emergency preparedness; (c) Slow onset events; (d) Events that may involve irreversible and permanent loss and damage; (e) Comprehensive risk assessment and management; (f) Risk insurance facilities, climate risk pooling and other insurance solutions; (g) Non-economic losses; and (h) Resilience of communities, livelihoods and ecosystems .
	Article 11
	2. Capacity-building should be country-driven, based on and responsive to national needs, and foster country ownership of Parties for developing country Parties, including at the national, subnational and local levels. Capacity-building should be guided by lessons learned, including those from capacity-building activities under the Convention, and should be an effective, iterative process that is participatory, cross-cutting and gender-responsive.

The



@Urban20Riyadh