1. Framing the context

An interactive dialogue between INTERACT-Bio project city-regions in Tanzania (Dodoma, Arusha, Dar es Salaam and Moshi), national government, academia and NGOs was held on 3 October 2018. The purpose of the dialogue was to bring together national, subnational and local actors to deliberate the importance and benefits of urban nature, facilitate vertical and horizontal integration of initiatives of government actors as well as of non-governmental actors, provide an opportunity for knowledge sharing and information exchange on the mainstreaming of biodiversity and ecosystem services; and build the capacity of government officials and other actors.

The dialogue was facilitated by ICLEI Africa. An investigative approach was adopted whereby information was gathered during discussion led by a few guiding questions. This dialogue forms part of a dialogue series for promoting and strengthening biodiversity mainstreaming.

According to a UN report, 55% of the world population is resident in cities (a 2018 figure) and this proportion is expected to increase to 68% by 2050. The proportion of the world’s population living in urban areas is increasing, which means that global issues of sustainability, both problems and opportunities, are increasingly concentrated in cities. Connecting people to nature-based values will motivate people to protect and invest in nature. Daily exposure to urban nature can also improve physical, psychological and social well-being. Evidence shows that exposure to nature, especially in the urban environment, can make urban residents healthier and happier. Therefore, professionals who design, plan, and build cities should have access to available tools and mechanisms to incorporate the benefits of nature into the urban design and development required by local governments.

Furthermore, the dialogue had strong links to multilateral global commitments such as the Sustainable Development Goals (SDGs) and the now dated Aichi Biodiversity Targets. In terms of SDGs, the dialogue aligns with Goal 11 to make cities and human settlements more inclusive, safe, resilient and sustainable as it seeks to merge private sector imperatives with a holistic understanding of how nature can be harnessed to benefit a city and its citizens. The dialogue also aligns with SDG Goal 15 to protect, restore and promote the sustainable use of terrestrial ecosystems and halt and reverse land degradation and biodiversity loss.

Three Tanzanian INTERACT-Bio project cities, Dar es Salaam, Moshi and Arusha respectively, presented the current status and current measures related to urban nature, focusing on the following guiding questions:
1. What are the current measures for integrating nature into urban planning?
2. What works and what does not work?
3. Why are some successful and others not?
2. The City of Arusha

Background

Situated in the North Eastern part of Tanzania, the green and lush city of Arusha (Population: 500 000; Area: 272km²) is symbolic with its river and mountain-plains systems. Arusha falls within the Eastern Arc Mountain biodiversity hotspot, which is globally unique. Arusha City depends heavily on its open spaces, gardens, parks and river systems (Themi and Naura Rivers) for essential ecosystem goods and services.

Arusha City Council and partners such as the Oikos project in Milan, Italy, have protected and maintained Arusha’s edible botanical garden of approximately 8 000 square meters (just under 1 hectare), which includes a biodiverse arboretum of trees, shrubs and birds along the Themi riverbank and the Suye Hill. The city has also cooperated with various partners such as the ICTR, individuals, business companies and hotels to protect different open spaces in the City of Arusha.

Success factors

The main reasons for success are joint efforts between public and private partners, community members that are strongly involved in business enterprises and individual stakeholders, and positive acceptance for ecosystem services among community members.

Coordinating biodiversity management within the city’s land use planning and other sectors, as well as integrating efforts with various stakeholders such as land use management, economic development and infrastructure design, will be a key function of the city. Integration was identified as a key factor in success.

Challenges

Lack of control of water pollution and low levels of awareness among citizens on urban nature’s benefits and services were identified as some of the challenges that the city face. The two rivers that pass through the city centre suffer solid and liquid waste discharges. This is mainly due to unplanned settlements and densely populated areas, such as Ngarenaro, Kijenge and Majengo, which dispose of waste in rivers that pass through residential areas. Citizens have insufficient awareness of nature’s benefits and services and some have a negative attitude towards environmental protection.
3. Moshi Municipality

Background

The fast-growing town of Moshi is located on the foothills of the iconic Mount Kilimanjaro, in the north-eastern region of Tanzania, near the Kenyan border. Moshi (Population: 200,000; Area: 59km²) falls within the Eastern Arc Mountain biodiversity hotspot, which is globally unique and boasts beautiful forests and rivers. The Karanga and Rau Rivers, which flow through the centre of the municipality, are perennial. Agriculture (in particular, coffee) and tourism are major commercial activities in Moshi.

Environmental protection and management are priorities for the Moshi City Council, and a lot of effort and resources have been invested accordingly. The city has established environmental management and cleanliness regulations, and provides space for private businesses and community organizations (CBOs) to participate in the provision of services and enforcement of the regulations, including a 50,000 Tanzanian shilling littering fine. The regulation is also supported by the installation of garbage bins on streets to promote the habit of keeping the environment clean.

The dissemination of health and environmental education to citizens generates an attitude that values a clean environment, including their participation in monthly cleaning activities on the last Saturday of each month. The community participates in cleaning up the surrounding environment and voluntarily pays solid waste collection fees.

Challenges and success factors

Participants in the dialogue revealed that other councils have visited Moshi to learn about Moshi Municipality’s success in relation to environmental cleanliness. Many local governments have ordinances, but there are problems with law enforcement in Moshi. This problem is overcome by the fact that all civil NGOs can enforce the ordinance. It was also emphasized that Dar es Salaam learned about the slum clean-up campaign from Moshi, so everyone agreed that despite the size differences between cities, it is valuable to learn from each other.

Dialogue participants noted that ‘machingas’ (informal traders) are a common problem in cities and some of the suggestions made to Moshi to address this challenge were that the city should include traders in the discussions on how they should be managed or should be allowed to control themselves. They also note that lessons can be learned from the Bodabodas settlement, for example by restricting entry to the city center.

A Moshi success story on waste

The Moshi discussions as part of this dialogue, led to the idea to write a more comprehensive article on Moshi’s success to enable wider dissemination and appreciation of these lessons. The article, titled: Environmental Cleanliness in Moshi: Lessons for waste collection, service delivery and revenue generation, can be found here.

This case study features the success that the Moshi Municipal Council has achieved in environmental cleanliness and waste management by making use of grassroots level structures to deliver services, generate revenue, and create shared value among residents.

All residents participate in waste management in Moshi
4. Dar es Salaam City

Background

Dar es Salaam (Population: 4.4 million, Area: 1 393 km$^2$) is situated within the East African Coastal Forest Biodiversity hotspot which is unique in the world. Dar es Salaam is also Tanzania’s major commercial, trade and transport hub and a place of transit to and from well-known nature tourism destinations such as Zanzibar, Arusha National Park and Mount Kilimanjaro. Despite rapid urbanisation, Dar es Salaam City has a long history of greening and contains remnants of important natural areas worthy of protection.

Challenges and success factors

Clean City: The City has a permanent environmental and solid waste management campaign that aims to establish good drainage systems, clean rivers and good practices in sustainable, pollution-free and clean communities, and develop basic sanitation. Even though people make an effort to keep their environment clean, the challenge of dumping garbage into the rivers still exists. Supervision and law enforcement need to be mobilized to establish garbage collection, incineration and establishing recycling sites.

To green the city, the Dar es Salaam City Council involves all stakeholders in tree planting activities and require that everyone should plant a tree in their garden. The purpose of the plan is to create a resilient green area to counteract the heat of the city, provide oxygen, capture carbon dioxide and increase the city’s biodiversity and ecosystem services.

The challenge for Dar es Salaam is that, at the time of writing, the city’s master plan is still under development and it is currently in its final stages and will soon be approved and will be a useful tool to guide all the city councils. The Dar es Salaam City Council uses GIS for waste management; there is a map with different types of garbage and collection locations, which is shared with a wide range of stakeholders.

Cleaning up in Dar es Salaam
5. Post-2020 Global Biodiversity Framework implications

Looking to the future, this dialogue and the points raised can be viewed within the context of post-2020 global policy for biodiversity. Following the era of the Aichi Biodiversity Targets (2010-2020), the global biodiversity community in the form of the Contracting Parties to the UN Convention (including Tanzania), have developed the Global Biodiversity Framework (GBF), to guide the 2020 – 2030 decade of biodiversity action within the Convention’s 2050 vision of “living in harmony with nature”.

When considering the 21 targets of the GBF, five action targets and two enabling conditions match well with the dialogue topics discussed:

Reducing threats to biodiversity

Target 1. Ensure that all land and sea areas globally are under integrated biodiversity-inclusive spatial planning addressing land- and sea-use change, retaining existing intact and wilderness areas.

Target 7. Reduce pollution from all sources to levels that are not harmful to biodiversity and ecosystem functions and human human health, including by reducing nutrients lost to the environment by at least half, and pesticides by at least two thirds and eliminating the discharge of plastic waste.

Meeting people’s needs through sustainable use and benefit-sharing

Target 12. Increase the area of, access to, and benefits from green and blue spaces, for human health and well-being in urban areas and other densely populated areas.

Tools and solutions for implementation and mainstreaming

Target 14. Fully integrate biodiversity values into policies, regulations, planning, development processes, poverty reduction strategies, accounts, and assessments of environmental impacts at all levels of government and across all sectors of the economy, ensuring that all activities and financial flows are aligned with biodiversity values.

Target 21. Ensure equitable and effective participation in decision-making related to biodiversity by indigenous peoples and local communities, and respect their rights over lands, territories and resources, as well as by women and girls, and youth.
Enabling conditions

- The implementation of the global biodiversity framework requires integrative governance and whole-of-government approaches to ensure policy coherence and effectiveness, political will and recognition at the highest levels of government.
- It will require a participatory and inclusive whole-of-society approach that engages actors beyond national Governments, including subnational governments, cities and other local authorities (including through the Edinburgh Declaration), 11 intergovernmental organizations, non-governmental organizations, indigenous peoples and local communities, women’s groups, youth groups, the business and finance community, the scientific community, academia, faith-based organizations, representatives of sectors related to or dependent on biodiversity, citizens at large, and other stakeholders.

**INTERACT-Bio project at a glance**

**Full title:** Integrated subnational action for biodiversity: Supporting implementation of National Biodiversity Strategy and Action Plans through the mainstreaming of biodiversity objectives across city-regions

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