Structure of this presentation

- Introduction and background information

- Importance of Green Spaces in Africa

- Opportunities & Challenges of Green Spaces in Africa
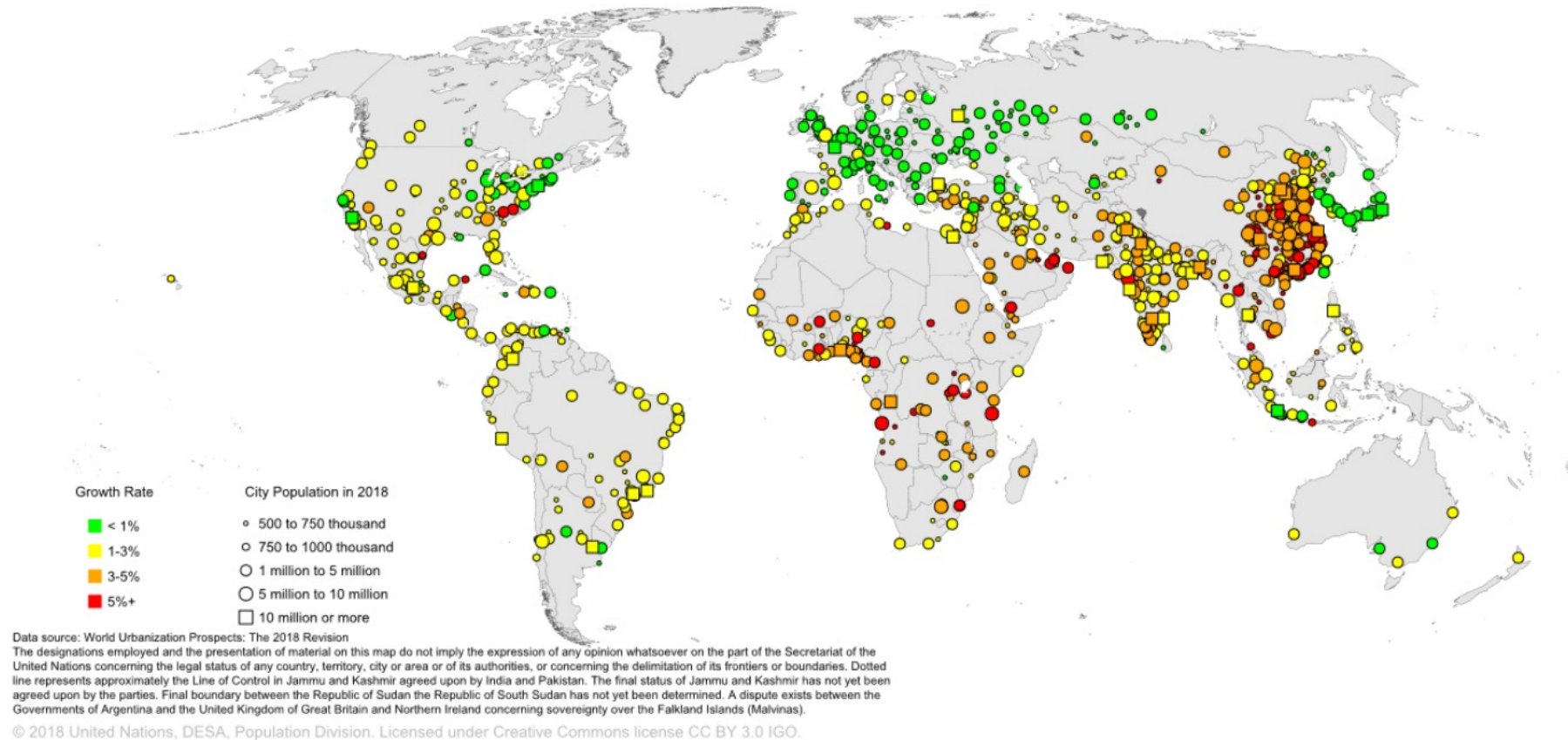
- Conclusions

AFRICAN FORUM
ON URBAN FORESTS

Introduction

Urbanization

Growth rates of urban agglomerations by size class

2018-2030

UNDESA (2019) World Urbanization Prospects: The 2018 Revision, United Nations, New York

Forest area

Trends in forest area from 1990 to 2015 by continents and sub-regions in each continent

Continent	Land area million hectare (Mha)					1990–2015 change (%)
	1990	2000	2005	2010	2015	
Africa	705.7	670.4	654.7	638.3	624.1	−11.6
Asia	568.1	565.9	580.9	589.4	593.4	4.4
Europe	994.3	1000.3	1004.1	1013.6	1015.5	2.1
North and Central America	752.5	748.6	748.0	750.3	750.7	−0.2
South America	930.8	890.8	868.6	852.1	842.0	−9.5
Oceania	176.8	177.6	176.5	172.0	173.5	−1.9
Total/world	4128.3	4053.6	4032.7	4015.7	3999.1	−3.1

Data source FAO (2015), Keenan et al. (2015)

Ussiri et Lal (2017: 407)

Wildfires

"The forestry and agricultural sectors remain a major source of air pollution due to bush and grassland fires, and this is expected to continue in the near future as demand for food and agricultural lands keep growing. Slash-and-burn is one of the most common practices employed by farmers on the continent to clear their land. It also can lead to bush and forest fires, which are fairly common in the continent particularly during dry seasons. These fires make Africa the leading region in terms of areas burned per year, representing more than 70 percent of the global total (Alonso-Canas & Chuvieco, 2015)" (UNEP: 2021: 5).

Burned Areas
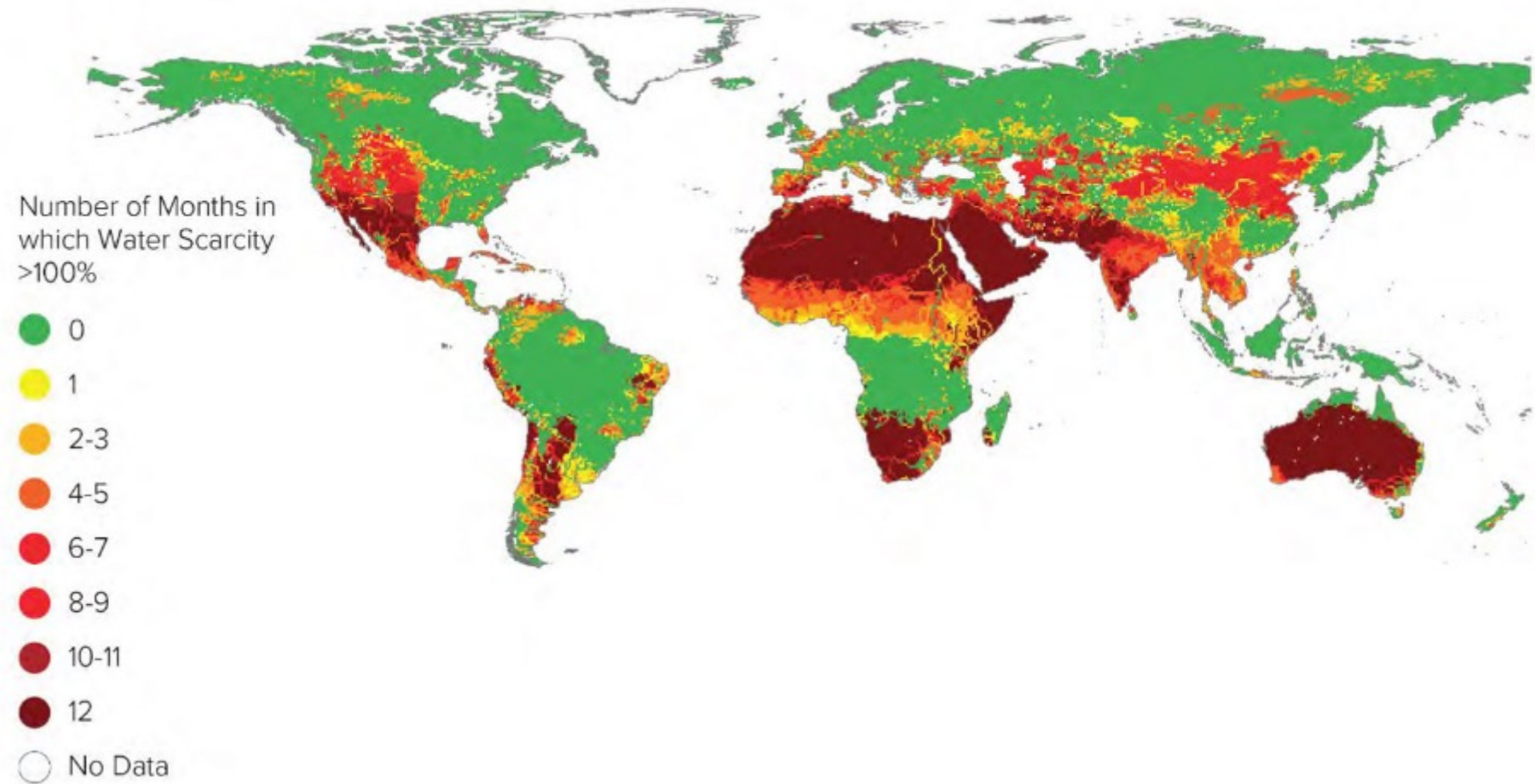
- 🟩 <Million Ha
- 🟧 1 to 5 million Ha
- 🟥 >5 Million Ha
- ⬜ No data
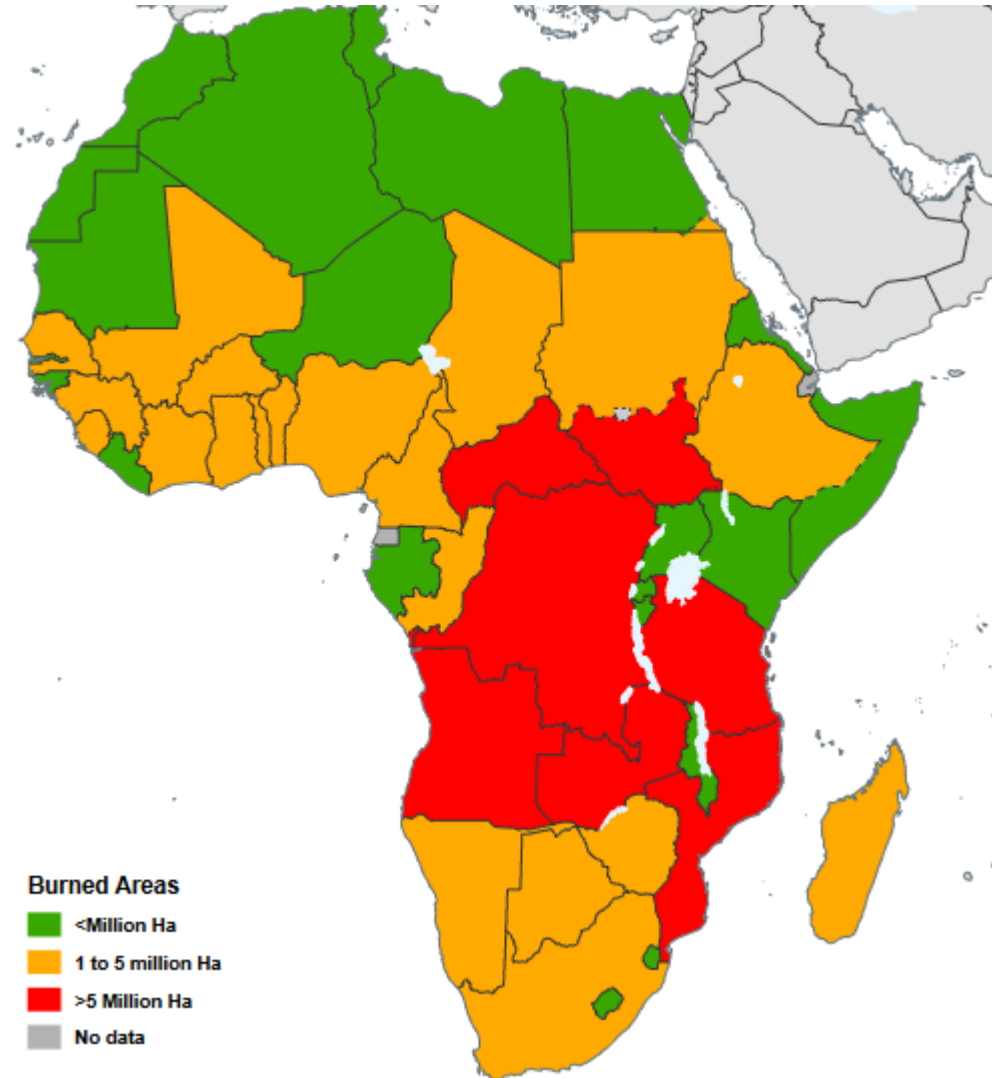
Source: FAO (2019)

Water scarcity

The number of months per year where water scarcity exceeds 100% during the period 1996–2005

Number of Months in which Water Scarcity >100%
- 0
- 1
- 2-3
- 4-5
- 6-7
- 8-9
- 10-11
- 12
- No Data

- Mekonnen, 2016:119

Climate change

1851 to 2021

Contribution to Global Change in GMST (°C)

0.01   0.02   0.03   0.04   0.05   0.1   0.2   0.25

- Jones et al., 2023: 4
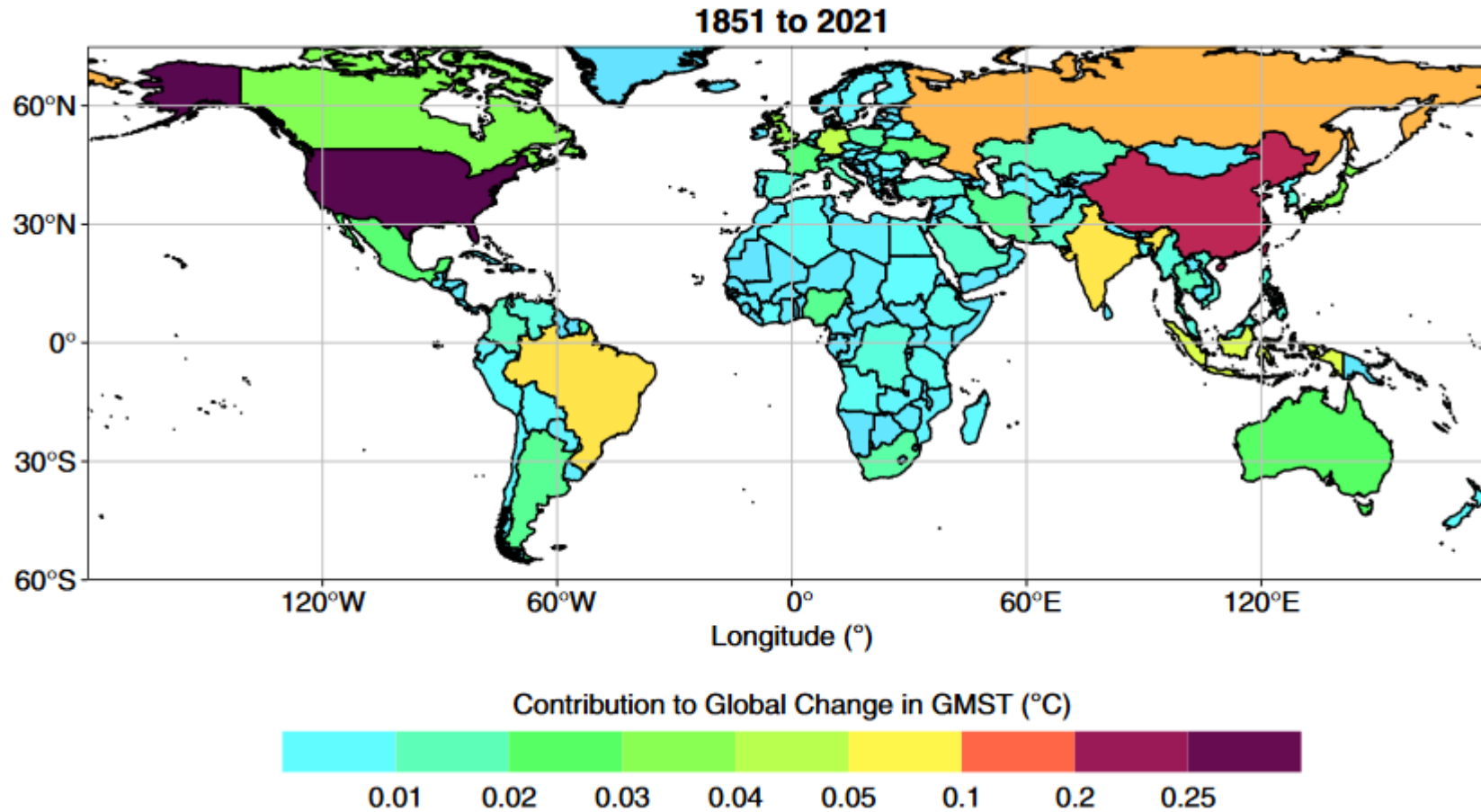
Armed conflicts

Active state-based conflicts in 2021

2023, Africa: More than 35 Armed Conflicts

Source: The Uppsala Conflict Data Program (UCDP)
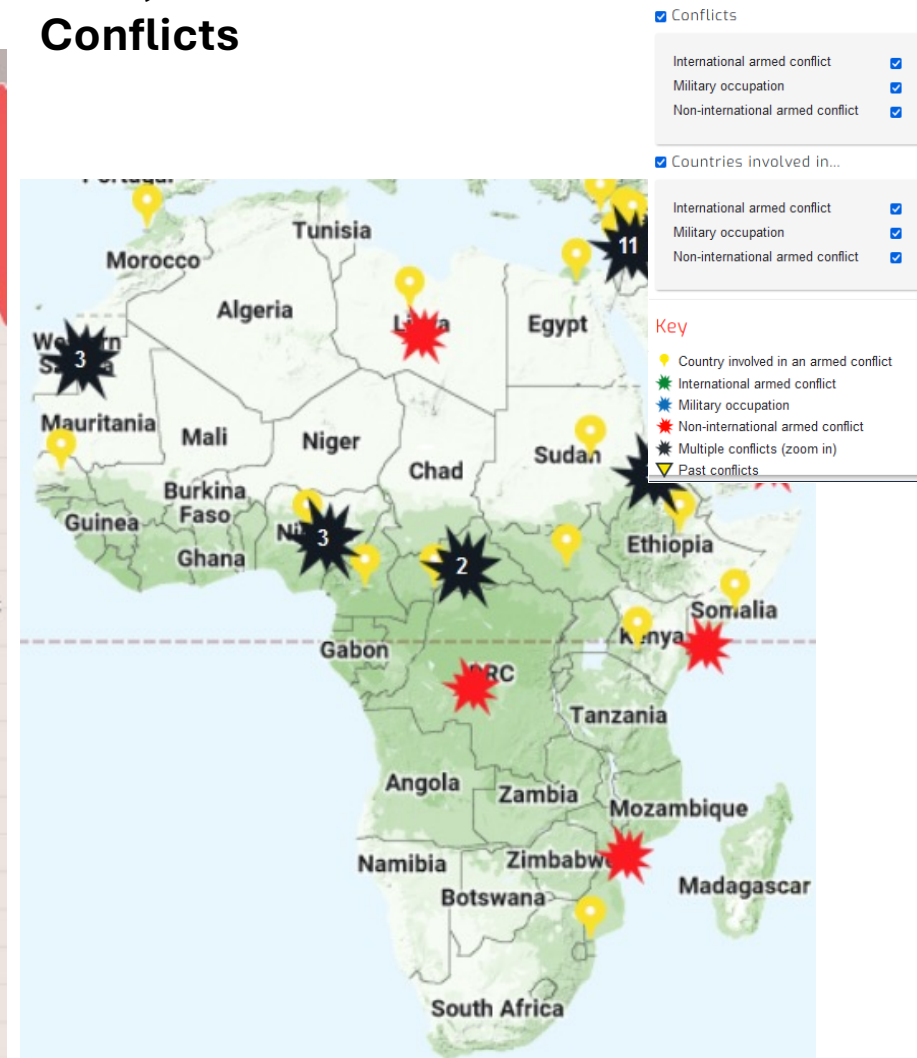
Source: Geneva Academy of International Humanitarian Law and Human Rights.

Importance of Green Spaces in Africa

Opportunities of Green Spaces:

Living, working or being educated in or near green/blue spaces

Improved mental health

Improved cognitive functioning

Reduced cardiovascular morbidity

Reduced prevalence of type 2 diabetes

Reduced mortality

Improve maternal and foetal outcomes

Improved immune functioning

Improved social cohesion

Enhanced physical activity

Improved relaxation and restoration

Importance of Tree Planting in Urban Africa

Africa is a particularly vulnerable continent to the effects of climate and environmental change.

To address environmental threats, several tree projects were launched as one of the plausible solutions to climate action in cities.

Planting projects in African cities, initiated between 2009-2020 are reviewed with the focus to analyze the expected benefits to the populations.

In reviewing tree projects in African urban areas, national arbor days were highly noticed as the driving motive to plant trees in Africa by governments and population.

- 1. Projections indicate that urbanization in Africa is expected to become 56 percent by 2050 and SSA (largest region) will become the fastest urbanizing region from 2020 to 2050 (UNDESA, 2014)

Planting trees in African cities

Article

How Many Trees Are Planted in African Cities? Expectations of and Challenges to Planning Considering Current Tree Planting Projects

Emmanuel S. H. Lobe Ekamby [1,2,*] and Pierpaolo Mudu [3]

Review of the recent tree planting projects in African cities, initiated between 2009 to 2021, focusing on analyzing the expected benefits to the populations

	Country (City)	The Number of Trees to Be Planted or Already Planted	Duration of Plantation
1.	Algiers (Algeria)	25 million trees planted at the National Arbor Day announcement, and 17 million were expected to be planted by March 2020, in line with the national tree program of 43 million trees. Number of trees not mentioned in the master plan that aims at transforming the city into a sustainable city with a garden city implanted within it. Number of trees not mentioned, but there is a project aimed at transforming the Oued Smar landfill (30 ha) into an urban ecological park. This project falls into to the major green plan of Algiers of 2035.	Algiers 1 Tree project:2019–2021 Algiers 2 Tree project: 2013–2030 Algiers 3 Tree project: 2009–2018
2.	Baraki (Algeria)	More than 2000 trees were planted after the announcement and 1 million trees are expected to be planted in one year.	2020
3.	Luanda (Angola)	1500 trees were planted in the city. Number of trees not mentioned, but in Rangel (neighborhood of Luanda) there is a trees planting project announced during the national trees day.	Luanda 1 Tree project: 2018 Luanda 2 Tree project: 2019
4.	Andulo (Angola)	300 trees were planted.	2020
5.	Huambo (Angola)	1000 trees were planted, and 2000 trees were expected to be planted.	2020
6.	Allada (Benin)	2500 trees were planted at the announcement.	2019–2020
7.	Parakou (Benin)	2100 trees were planted at the announcement by the Beninese government and municipal authority.	2019–2020
8.	Savé (Benin)	1250 trees were planted at the announcement.	2019–2020
9.	Gaborone (Botswana)	300 trees were planted.	2013
10.	Bobo-Dioulasso (Burkina Faso)	The number of trees not mentioned, but 6.9 hectare of green spaces were planted.	2012–12014
11.	Ouagadougou (Burkina Faso)	1000 trees were planted, and 80,000 trees are expected to be planted.	2019–ongoing
12.	Pissa (Central African Republic)	12,000 trees were plannted and 300,000 trees were to be planted afterwards.	2019–2020
13.	Brazzaville (Congo Republic)	160,000 trees planted.	2011–2021
14.	Abidjan (Cote d'Ivoire)	500 trees planted in 2019 along the road of the airport Port-Bouët within 3 km long, 400,000 trees in Abidjan and the 2.1 milllion planted nationwide.	2019–2030
15.	Cairo (Egypt)	12,000 trees planted, and 1 million trees to be planted by 2019, as part of a national project called the Egypt's 1 Million Trees. 350 trees were planted, and 14,000 shrubs were also added for a vertical forest. The number of trees not available but trees are a fundamental part of construction of the capital park located in the under construction Egypt's New Administrative Capital close to	Cairo 1 Tree project: 2019. Cairo 2 Tree project: 2020–2022. Cairo 3 Tree project: 2016–2030.

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To summarize, from this review and analysis of projects, some indications for urban planning emerged clearly on planting trees in cities:
 • The geographical context matters and cannot be ignored: indigenous species of trees, latitude, altitude, lack of precipitation, and proximity to the coast all influence the organization and potential positive outcomes of projects.
• The health and social impacts of projects should be taken into consideration to discuss all the implications of such projects.
• Policy monitoring and tracking, which is the necessary to have a systematic multidisciplinary approach to identifying, monitoring, and evaluating the implementation and progress of a policy in time and space, should always be included

Planting Trees Projects in Africa: summarizing various typologies

- National projects and national events (arbor days) for reforestation and afforestation
- Local projects (mostly initiated by local NGOs and communities)
- Local with international NGOs
- Commercial
- Large scale projects

Opportunities & Challenges of Green Spaces in Africa

Planting trees in Africa

At a superficial level of analysis, we see that the obvious suggestions for planning that emerge are:

- The need to have regular reports provided by responsible agencies and the governments should be the rule.
- Efforts of greening rural areas should not just be one day event but a coordinated effort of governments, non-governmental organizations and local community.
- National projects are usually launched in capital cities and later nationwide. It is likely that there are more urban green projects sponsored and advertised than rural tree projects.
- The expected social outcomes of these projects should really be considered and the wellbeing of the population should be highly considered as they are the main beneficiaries of these projects.
- Also, health consideration, air pollution, and water impacts should be included in all trees' projects before executed.
- Many African governments should take into consideration greening spaces projects into their yearly budget rather than always relying on funds from international donors and partners..

Planting trees in Africa

At a more detailed level, we can identify a first set of points that are related to best practices for planning.

1. the planting of trees should be part of a large effort to see planning in a wide and integrated way. The integration should consider at least three aspects: between the different parts of the territory , social economic and well-being aspects, feasibility and constraints including all cultural aspects.
2. We face reductionist definitions based solely on the presence of trees, disregarding the fact that rural areas and forests are a habitat for different ecosystems, as well as the home of local communities.
3. Trees plantation cannot be done in a haphazard manner as it can limit other land-use patterns and activities relevant for sustainable livelihoods. Also, trees plantation implies many negative effects such as soil acidification and a decrease in soil fertility in the long-term as nutrients are highly demanded from afforestation.
4. We face a hegemonic top-bottom approach, very often paternalistic, that leaves very few space for participatory planning.
5. The majority of the projects have characteristics that limit their development. For example, anthropocentrism looks like the only approach to planting trees, accompanied by the promotion of a binary views of nature/society where non-humans are absent.

Conclusions

Some notes for to conclude

- The analysis of National Tree Days across 54 African countries and several projects underscores the mixed trends and directions observed.
- On one hand, there is a growing awareness and willingness to tackle environmental challenges.
- On the other hand, the submission to an international agenda and the challenging political and social conditions of many countries poses significant obstacles.

Thank you
Na som jita
Jërëjëf!
Assante

Thank You.