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VICE PRESIDENT'S OFFICE



Ministry for Foreign
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UONGOZI
Institute



GREEN GROWTH PLATFORM

**Promoting investments in green parks for
sustainable development in Tanzania**



15 April, 2024



Dodoma

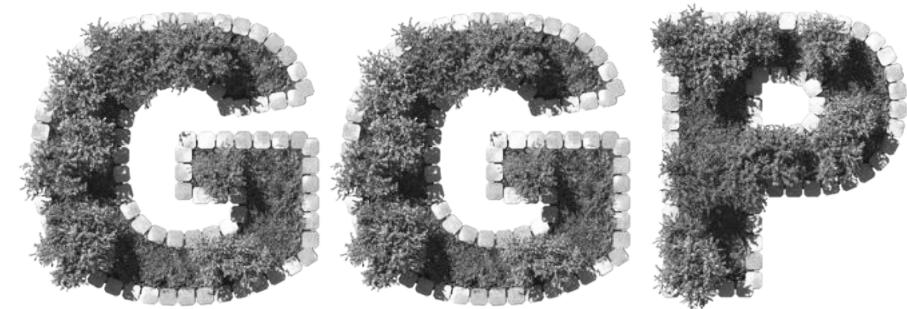


The Institute of African Leadership for Sustainable Development, commonly known as UONGOZI Institute, is a regional leadership development hub operating under the Office of the President of the United Republic of Tanzania. Established in 2010 by the governments of Tanzania and Finland, the Institute is dedicated to inspiring and equipping African leaders to deliver inclusive and sustainable solutions for their nations and the wider continent.

It applies a holistic and mutually reinforcing approach to capacity development which recognises that leadership competencies are developed through a continuous, lifelong learning process. Its two strategic pillars – leadership and sustainable development – are addressed through four main areas: executive education, policy dialogues, action-oriented research, and technical support. Its clientele includes organisations as well as individuals from the public sector, private sector, and civil society.

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CONTENTS

1. LIST OF ABBREVIATIONS	4	5. DISCUSSION	37
2. EXECUTIVE SUMMARY	5	6. CLOSING SESSION	49
2.1 Rationale and objective	6	6.1 Closing remarks by Prof. Davis Mwamfupe, Mayor of Dodoma	49
2.2 Format and participants	6	6.2 Field excursion to Chanangali Recreation Park	51
2.3 Key messages and recommendations	6		
2.4 Conclusion	10		
3. INTRODUCTION	13	7. APPENDIX A: EVENT PROGRAMME	55
3.1 The Green Growth Platform (GGP)	14		
3.2 GGP 2024	14		
4. OPENING SESSION	15		
4.1 Welcoming remarks by Mr. Kadari Singo, Chief Executive Officer of UONGOZI Institute	15		
4.2 Remarks by Hon. Rosemary Senyamule, Regional Commissioner of Dodoma	18		
4.3 Keynote presentation by Dr. William Kindeketa, Centre Director of Mufindi Pulpwood, Tanzania Forestry Research Institute (TAFORI)	19		
4.4 Introduction of the guest of honour by Hon. Dr. Suleiman Jafo (MP), Minister of State, Vice President's Office (Union Affairs and Environment)	28		
4.5 Address by the guest of honour by H.E. Dr. Philip Isidor Mpango, Vice President of the United Republic of Tanzania	29		
4.6 Presentation on development and management of green parks in Dodoma by Ms. Aziza Mumba, Assistant Administrative Secretary, Office of the Regional Commissioner of Dodoma	33		



LIST OF ABBREVIATIONS

CC	City Council
CEO	Chief executive officer
GGP	Green Growth Platform
LGA	Local government authority
MC	Municipal Council
NEMPSI	National Environmental Master Plan for Strategic Interventions
PHC	Population and Housing Census
NGO	Non-governmental organization
PO-RALG	President's Office–Regional Administration and Local Government
RAS	Regional Administrative Secretary
PPP	Public-private partnership
TAFORI	Tanzania Forestry Research Institute
TANAPA	Tanzania National Parks Authority
TANESCO	Tanzania Electric Supply Company Limited
TANROADS	Tanzania National Roads Authority
TARURA	Tanzania Rural and Urban Roads Authority
TFS	Tanzania Forest Services Agency
TZS	Tanzanian shillings
VPO	Vice President's Office



EXECUTIVE SUMMARY

Tanzania's population is rapidly growing. The Population and Housing Census (PHC) 2022 estimated the country's population at 61.7 million.¹ Based on World Bank projections, the population is expected to reach 100 million by 2040.[2] With an urban population growth rate exceeding 5 percent, Tanzania is also rapidly urbanizing. At present, approximately 35 percent of the population live in urban areas,¹ but this is projected to increase to 50 percent by 2030.² Dar es Salaam is expected to become a megacity with over 10 million residents by 2030, while smaller cities and towns throughout the country are similarly experiencing rapid expansion as greater numbers of people are drawn from rural areas seeking better jobs and economic opportunities, improved living standards and increased access to services.²

However, urbanization also significantly strains the environment, with population growth depleting or degrading resources (land, water and energy), placing pressure on infrastructure and services, increasing pollution, fragmenting and disrupting ecosystems, and driving loss of habitat and biodiversity. These risks can be mitigated through appropriate planning of new settlements and the expansion of critical infrastructure while preserving and protecting the natural environment to the furthest extent possible.

It is globally acknowledged that parks and other green spaces play a vital role in fostering the sustainable socio-economic growth of urban areas and enhancing the well-being of residents. They offer an array of benefits, including improved physical and mental health through access to nature and opportunities for exercise, recreation and social connection and cohesion. Vegetation in parks reduces air and water pollution, mitigates the risk of flooding and the urban heat island effect, and stores carbon dioxide to combat climate change. Parks also offer significant economic benefits, increasing property values, boosting local businesses, and generating revenue by attracting residents and tourists.

Recognizing the fragile nature of its landscapes and the rapidly growing population attributed to the shift of government activities to the city, the Government of Tanzania has developed a comprehensive plan to develop Dodoma as a green city through the use of native vegetation for economic, architectural, engineering and aesthetic purposes. This initiative intends to make the city economically competitive, socially inclusive, environmentally sustainable, vibrant and safe. Implementation of this plan encompasses the development of Dodoma as an academic city, a tourist destination, a sports and recreational city, eco-friendly and green multi-centred city. As such, the protection of open spaces and the establishment of green parks is a fundamental component for realizing this vision.

The Government proposes the development of four parks and associated facilities in the city. This project will necessitate rigorous planning and close collaboration among key government institutions, private and civil society stakeholders, communities and targeted users of the spaces. It will involve several phases including formulation of the coordinating team, situation analysis, land acquisition, designing of the green park facilities, resource mobilization, monitoring and evaluation as well as up-scaling of best practices for each area.

2.1 Rationale and objective

Considering the direct link between green parks and prosperity, “Promoting investments in green parks for sustainable development in Tanzania” was selected as the theme for the 8th Green Growth Platform (GGP) with a focus on the City of Dodoma. The forum engaged leaders from across Tanzania to share experiences and ideas on green parks investment and management, including but not limited to:

- 1 Policy and institutional frameworks;
- 2 Successes and failures in national attempts;
- 3 Lessons and experiences from other countries;
- 4 Investment opportunities; and
- 5 Strategic partnerships.

2.2 Format and participants

The GGP 2024 was held under the patronage of H.E. Dr. Philip Isidor Mpango, Vice President of the United Republic of Tanzania. The one-day event featured an opening ceremony followed by expert presentations, a panel discussion and a field excursion to Chinangali Recreation Park within the Dodoma City Council. The organisation of the event was managed by UONGOZI Institute in collaboration with the Vice President's Office and the Office of the Regional Commissioner of Dodoma. The dialogue brought together senior officials and representatives from government authorities, development partners, the private sector, research and academic institutions, and civil society organizations.

2.3 Key messages and recommendations

Participants universally recognized that the establishment and maintenance of green parks and other public spaces is fundamental for the sustainable development of urban areas in Tanzania but acknowledged that the resourcing and implementation of greening programmes in the country has been lacking. As a consequence, there is a shortage of green parks in Tanzania, especially in the big cities. Key messages and recommendations from the discussions on the way forward to accelerate the development of green parks are summarized in the sections below.

Improve governance of green spaces in cities and towns

The absence of good governance is a significant roadblock in the conservation and maintenance of green infrastructure in urban areas. Many designated green spaces are neglected while others disappear due to shifts in land utilisation.

¹ Ministry of Finance and Planning, Tanzania National Bureau of Statistics and President's Office – Finance and Planning, Office of the Chief Government Statistician, Zanzibar. (2022). *The 2022 Population and Housing Census: Age and Sex Distribution Report, Key Findings*.

² World Bank Group. (2020) *Tanzania Urban Resilience Program Annual Report 2020*.

Economic interests also frequently trump environmental and social goods. Sometimes, too, a lack of understanding among planning authorities on the importance of preserving green spaces constrains action.

In response, the Ministry of Land, Housing and Housing Development in conjunction with regional and city authorities should take deliberate steps to protect all areas designated for green parks and ensure that they are not encroached upon or changed in use. As part of this effort, the areas need to be properly surveyed, measured and permanently marked, and applicable land titles put in place. Local government authorities will also need to enact by-laws and supervise their implementation to ensure that green areas are protected and used as intended. Prudent local governance to conserve green spaces is particularly important when rural or peri-urban areas become small towns or municipalities and the responsibility for village forests is transferred to municipal administrations.

Law enforcement concerning public green spaces must also be prioritized to prevent encroachment and prosecute individuals who illegally cut down trees or destroy the environment. As part of this effort, planning authorities need to conduct periodic inspections of public open spaces and report on them. At the district and village level, natural resource officers play a crucial role in managing and conserving environmental resources, including forests. However, in addition, participants suggested the establishment of land rangers within the official government system to protect green spaces and open areas in Dodoma and other cities, as well as the utilization of agricultural extension officers, who support farmers in rural areas, to monitor and protect forests from being cut down.

Institutional collaboration and coordination and long-term planning are required to sustainably green cities

Institutional collaboration and coordination among environmental stakeholders and related sectors at national, regional and local government levels will need to be strengthened to develop implementation plans for green parks as well as utilization and management plans for their operation. Notably, the Government has released the National Environmental Master Plan for Strategic Interventions (NEMPSI) (2022-2032), which is a roadmap for guiding and coordinating environmental interventions across all levels in line with the National Environment Policy 2021. NEMPSI aims to address 12 key environmental challenges in Tanzania, including those faced by urban areas. A section of the master plan is dedicated to addressing the environmental challenges in Dodoma.

Promote and prioritize investment in green parks

Urban authorities often lack adequate funds for the establishment, maintenance and protection of green infrastructure. The Government will need to assess and choose the appropriate business models to operate and manage open spaces, either through public funds (from local and central governments) or collaborate with the private sector through public-private partnerships. The development of green areas should be promoted as investment opportunities for private companies, non-governmental organizations, community and religious-based groups, and individuals. The involvement of the private sector is encouraged but in the absence of corporate interest, the budgets of city councils will need to prioritize investments and allocate sufficient funds for green parks.

Create a database of all existing public open spaces

To streamline greening projects, government authorities could establish an online database/portal that lists and documents the official uses (and provides title deeds) for all existing public open spaces. This tool should be publicly accessible. To boost private investment in green parks, the database could identify the open spaces that are set aside for parks and classify those areas in terms of economic opportunities.

Educate and engage communities, especially youth, in environmental programmes and greening initiatives in urban areas

The protection and care of the environment, including green parks and public spaces in urban areas, depends on community participation. Therefore, community members need to be actively involved in making decisions on green developments to engender a sense of ownership and stewardship. Communities also need to be sensitized and educated to the important and different uses of public areas (for example, as parks and play spaces or as green reserves) so that they can appropriately utilize, respect and maintain them.

Great potential exists for youth to be involved in the development of green parks if these initiatives offer opportunities for employment and a reliable source of income. Young Tanzanians are already demonstrating their commitment, capacity and creativity in landscaping, gardening, upcycling and tree planting projects throughout Tanzania, while others are gifted in decorative arts and design.

Hence, cities and councils in collaboration with private enterprise and NGOs are encouraged to employ and empower young people to start gardens or work on other greening initiatives in their jurisdictions.

Organize competitions and awards for green parks and gardens

The Vice-President proposed that all city authorities and district councils organize competitions for young Tanzanians to design the best green garden in the headquarters of their district, city or town. He further requested that the Minister of State in the Office of the President (TAMISEMI) and the Minister of State in the Office of the Vice President cooperate to establish a regional and national competition for the best green gardens in towns and cities with awards for three categories: for individuals, for private companies, and for councils.

Following up on the Vice President's call for competitions for best green parks in the country, one participant suggested establishing a Tanzania Cities Award to coincide with World Cities Day on 31 October each year, with awards for the cleanest city and for the dirtiest city. No mayor would desire to win the latter award. Hence, such a competition could provide great incentive to green and care for urban areas.

Build local capacity for greening projects

Currently, the expertise to plan and implement greening projects below regional level is limited, so practical assistance and capacity building will be required for these efforts to move forward. For example, planning experts, such as landscape architects, are needed to advise and manage greening projects at local government level.

The UONGOZI Institute was requested to expand its capacity building programs to government officials below the regional level. Additionally, educational institutions, such as the University of Dodoma, were encouraged to organize subsequent environmental fora to educate and motivate district councillors, ward and village leaders on the need to protect their local environments, and to cooperate with leaders at the grassroots level to identify what open spaces remain and in what condition. Training and working with communities across many local areas would magnify the impact of urban greening efforts.

Expand use of renewable energy sources to protecting forests and green spaces

A major cause of deforestation in Tanzania is the ongoing use of firewood and charcoal as the main source of energy for households. Delegates called on the Ministry of Energy to invest in developing and expanding the use of renewable sources of energy as an essential part of addressing environmental destruction and degradation in the country.

Develop water infrastructure to support greening projects in urban areas

The success of greening projects in urban areas depends upon the availability of water to enable trees to become established and grow. To encourage efforts to green cities, one participant suggested that councils could provide water at a small (subsidised) tariff to people who are actively involved in greening initiatives. Other practical solutions discussed including digging wells along major arterial to supply water for trees planted on roadsides and mandating the installation of rainwater harvesting infrastructure as part of all construction permits or residential developments.

Use native trees and plants for greening projects

For greening projects to be successful, the right trees need to be planted in the right places. Therefore, participants strongly recommended the use of native trees that are endemic to the different areas of Tanzania, not foreign species. Particular care must be taken to avoid the introduction of invasive species or those that attract pests. The use of native trees reduces the cost of green developments because these plants are suited to local conditions, hence, require fewer inputs to establish and maintain. From the perspective of tourism, visitors are drawn to cities to see and experience different landscapes and plants, therefore, preserving local species also adds value for local tourist operations. All too frequently, the same exotic trees are planted, such that the urban landscapes of Dar es Salaam, Dodoma, Arusha and Mwanza look the same despite their great natural diversity. The Ministry of Natural Resources and Tourism has produced a comprehensive guide written in Kiswahili for planting and managing local trees and shrubs. The guide includes an extensive long list of tree species and plant types with information on their origins and characteristics, how to plant them, recommended sizes for planting, and where they can be planted.

Tanzanians need to “Think Green”

Delegates noted that the city of Dodoma and the country as a whole have environmental policies, plans and strategies in place. It is implementation that remains lacking. To move forward, participants highlighted the need, starting with environmental education in schools, for Tanzanians to “think green.” Most importantly, if political leaders at national, regional and district levels have the will to administer the laws well to safeguard open spaces from other development uses, the greening and beautification of any city is achievable.

Establish three new parks in Dodoma

Dodoma as the national capital is point of reference and model for urban development for the whole country. Even before Dodoma became a city, land use and settlement plans were developed by the Capital Development Authority. With respect to the greening of the national capital, the Vice-President issued specific instructions for the regional and city authorities to take immediate action to establish three new green parks in Dodoma before the end of 2025. He called upon the authorities to announce the opportunity to invest in these “pioneer” green parks and encouraged the private sector to participate in the development and maintenance of these spaces. Of the three gardens, he further instructed that one green park should be established in cooperation with the Tanzania Forestry Research Institute (TAFORI), one park with the Tanzania Forest Service (TFS), and the third green area should be a botanical garden.

2.4 Conclusion

This year’s Green Growth Platform discussed the challenges and opportunities for the preservation and development of green spaces in Tanzania’s rapidly expanding urban environments with a focus on the establishment of green parks in Dodoma, the national capital. Most notably, the Platform encouraged increased collaboration and harmonization of activities between all responsible Government authorities from national to local government levels to protect and expand green spaces for the sustainable development of Tanzania’s cities. Community awareness and engagement are also essential for the protection of the environment. Given the appropriate training and tools, communities will be the great guardians, the great conservationists of green spaces.



Kuhamasisha uwekezaji katika bustani za kijani kwa maendeleo endelevu Tanzania

ENDELEO ENDELEVU

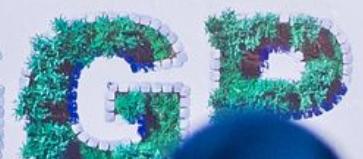


JAMHURI YA MUUNGANO WA TANZANIA
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Kuhamasisha uwekezaji
kwa maendeleo endelevu Tanzania

INTRODUCTION

Globally, it has been shown that the provision of parks and other green spaces in urban areas play an essential role in achieving sustainable development and contributing to human health and well-being. However, without appropriate planning of settlements and resource constraints for building urban infrastructure, green and blue spaces are increasingly vulnerable to degradation or disappearance across Tanzania's cities and towns.

The City of Dodoma, which officially became the national capital of Tanzania with the relocation of the Parliament and the Government in 2017, is no exception. Over the last ten years, the city has experienced rapid population growth from 410,000 in 2012 to 765,000 in 2022.³ This expansion in housing and development activities has placed significant stress upon local ecosystems, including land, water sources, forests and natural vegetation.

Recognizing the environmental pressures on the city, the Government of Tanzania has developed an ambitious plan for the capital to become a green city and a model for other growing urban areas in the country. The protection of open spaces and the creation of green parks is a fundamental part of realizing this vision for a green and sustainable Dodoma.

A core component of the activities of the UONGOZI Institute to support inclusive and sustainable development is the Green Growth Platform (GGP). It is a proactive tool for creating cross-sectoral linkages, building long-term social capital and promoting economic and social wellbeing, while safeguarding the Tanzania's diverse ecosystems and environment.

³ For a map and data from the PHC 2022 on the population for wards within Dodoma City see https://www.citypopulation.de/en/tanzania/central/admin/0105_dodoma_municipal

3.1 The Green Growth Platform (GGP)

A core component of the activities of the UONGOZI Institute to support inclusive and sustainable development is the Green Growth Platform (GGP). Launched in 2012 under the patronage of the Office of the Vice President of Tanzania, the GGP aims to increase awareness and understanding of issues related to green growth highlighting the importance of environmental conservation and the prudent use of resources for the benefit of present and future generations. The Platform brings together diverse stakeholders from Government, the private sector, civil society, academia and development partners to discuss common challenges facing Tanzania and identify mutually beneficial solutions. In this way, the GGP is a proactive tool for creating cross-sectoral linkages, building long-term social capital and promoting economic and social wellbeing, while safeguarding the country's diverse ecosystems and environment.

Each event features a dialogue on a critical issue for sustainable development combined with field excursions to enable participants to observe and learn first-hand: what the reality is, what is being done, what the results are, the challenges encountered and how they are being solved. This approach allows participants to more fully understand and internalise the challenges and solutions discussed. Going forward, delegates are tasked to be champions for change in their respective professions, institutions and communities.

3.2 GGP 2024

Given the ongoing rapid growth of urban areas in Tanzania, this year's meeting discussed the challenges and opportunities for the preservation and development of green spaces in Tanzania's cities and towns with a focus on the establishment of green parks in Dodoma, the national capital city. GGP 2024 was officiated by H.E. Dr. Philip Isidor Mpango, Vice President of the United Republic of Tanzania and organized by the UONGOZI Institute in collaboration with the Vice President's Office and the Office of the Regional Commissioner of Dodoma. Held on 15 April 2024, the event featured an opening ceremony followed by expert presentations, a panel discussion, and a field trip to Chinangali Recreation Park within the Dodoma City Council (see Appendix A for the Programme). The dialogue brought together senior officials and representatives from government authorities, including Hon. Dr. Suleiman Saidi Jafo (MP), Minister of State, Vice President's Office (Union Affairs and Environment), development partners, the private sector, research and academic institutions, and civil society organizations.

This report provides edited highlights of the official speeches, expert presentations, discussion and the excursion to Chinangali Recreation Park. It is structured in three sections. Section 1 provides edited summaries from the conference's opening session, including the address by H.E. Dr. Philip Isidor Mpango, Vice President of the United Republic of Tanzania. Section 2 provides edited highlights of key issues raised during the panel discussion. Closing remarks by Prof. Davis Mwanafupe as well as discussions at the Chinangali Recreation Park are summarized in Section 3. The programme of the dialogue is included as Appendix A at the end of the report.

OPENING SESSION

The forum's opening session included welcoming remarks by Mr. Kadari Singo, Chief Executive Officer for the UONGOZI Institute, as well as remarks by Hon. Rosemary Senyamule, Regional Commissioner of Dodoma, and Hon. Dr. Suleiman Jafo (MP), Minister of State, Vice President's Office (Union Affairs and Environment, followed by an address by the Guest of Honour and Patron of the Green Growth Platform, H.E. Dr. Philip Isdor Mpango, Vice President of the United Republic of Tanzania. The session continued with a keynote presentation on *"Promoting Investments in Green Parks for Sustainable Development in Tanzania"* by Dr. William Kindeketa from the Tanzania Forestry Research Institute, and a presentation on the "Development and Management of Green Parks in Dodoma" by Ms. Aziza Mumba, Assistant Administrative Secretary, Office of the Regional Commissioner of Dodoma. This was followed by a wide-ranging panel discussion.

4.1 Welcoming remarks by Mr. Kadari Singo, Chief Executive Officer of UONGOZI Institute

Mr. Singo warmly welcomed the Guest of Honour and Patron of the Green Growth Platform, H.E. Hon. Dr. Philip Isdor Mpango, Vice President of the United Republic of Tanzania, assembled dignitaries and invited guests.

³ For a map and data from the PHC 2022 on the population for wards within Dodoma City see https://www.citypopulation.de/en/tanzania/central/admin/0105_dodoma_municipal

To commence, he recalled a recent conversation during which the Vice President had spoken passionately about the issue of green parks and his deep pain that environmental spaces throughout the country were being turned into concrete. In Dar es Salaam, few if any green areas are left. But, despite similar mistakes, the Vice President believed that Dodoma still has the opportunity to become a greener city.

Continuing, Mr. Singo shared the story of his grandfather, who had been born in 1918 and died in 1984. He was a teacher. He related that, in 2020, his aunt had called him home to show him the boundaries of the land that belonged to his grandfather. He described his astonishment at the forests he saw.

I couldn't believe the forests he left behind. There were trees so big that even if two people held hands, their arms would not meet around the trunks. There were forests for firewood. There were fields set apart for growing corn and beans. There were fields for growing coffee. And all the fields were surrounded by forest.

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Mr. Kadari Singo

It was a powerful reminder of the wisdom of caring for the environment and the possibilities for the entire country if it takes care of the land. He said:

Imagine what kind of nation we would have, if, like my grandfather, who was only a teacher, each of the scholars in Tanzania had several hectares of trees.

He again thanked the Vice President for being at the forefront of efforts to preserve Tanzania's environment. In support, he hoped that through initiatives like the GGP established by the UONGOZI Institute that we would not forget our

responsibilities as citizens to take care of the country. So that our children and grandchildren would not be able to look down on us in the future and say that Dodoma had turned into concrete like Dar es Salaam. In closing, he said:

One of the things that hinders us in our life is not having time to meditate. If you don't have time to meditate, you can even pass the sky, because you are just running. It is important that we have time to reflect. It is one of the goals of our activity today.

#GGP20



Hon. Rosemary Senyamule

4.2 Remarks by Hon. Rosemary Senyamule, Regional Commissioner of Dodoma

To begin, Hon. Senyamule extended her welcome to the Vice President, senior officials and environmental stakeholders gathered for the Green Growth Platform. She thanked the Guest of Honour for his love for the City of Dodoma and sincere commitment to safeguard the environment of the national capital, to protect its open spaces, water sources and other areas so that Dodoma can become a safer, greener city.

She said that the city had continued its efforts to carry out the instructions of the Vice President from the previous year to engage public institutions to take care of 162 open spaces of the capital. However, only 52 institutions responded and those that are very active are not more than 10. On a more positive note, she said that students in Dodoma region have been actively participating in the Soma na Mti campaign⁴ launched by the Vice President's Office in 2022 to plant and care for trees in their schools.

Many children are now studying in greener schools, and she thanked the Vice President for creating this programme to help build the culture of Tanzania's youth to plant trees and take care of the environment.

In closing, she warmly welcomed delegates to the city, extended an invitation to the Vice President and other attendees to take part in a tour of places in Dodoma where greening efforts have commenced, and wished all a good meeting.

⁴ Launched in 2022 by Dr. Suleiman Jafo, Minister of State in the Vice President's Office (Union and Environment), the Soma na Mti campaign seeks to educate every young Tanzanian in formal education from primary schools through to universities on the need to protect the country's environment and biodiversity. The programme also aims for each student to plant at least one tree. If successful, the campaign would result in over 14 million trees planted across the country. See [WWF article on launch of campaign](#).

4.3 Keynote presentation by Dr. William Kindeketa, Centre Director of Mufindi Pulpwood, Tanzania Forestry Research Institute (TAFORI)

To begin, Dr. Kindeketa defined “public” or “open” space as an area set aside in any planning scheme primarily for community enjoyment, recreation or entertainment. A botanical (green) garden is a specialized space with a documented collection of living plants for scientific research, conservation, display and education. These gardens are often associated with research institutions or universities, which can be private or public, while green parks are areas of public land, mostly managed by local government authorities (LGAs), that have been set aside for community recreation and enjoyment as well as for ecological and environmental reasons. Green parks are commonly understood as public areas surrounded by trees and used for social events and activities.

He further explained that within Tanzania’s land planning system, (i.e., Urban Planning Space Standards stipulated in Government Notice GN 93 of 2018), there are four principal types of green parks. The first type is the Neighbourhood Green Park (NGP) developed at the neighbourhood level (i.e. residential areas within walking distance) for a population of 3,000–5,000 people on an area of 0.6–2.5 hectares. The second type is the Community Recreational Green Park (CRGP), which is developed at the community level for a population of 10,000–20,000 on an area of 1.5–4.0 hectares. The Recreational Green Park (RGP) is the third type, developed at the district/town level for a population of 10,000–100,000 on an area of 10–20 hectares, while the fourth type is a Central Park (CP) developed at the municipality/city level for a population of 100,000–1,000,000 on an area of 20 to 100 hectares.

He said that other public spaces need to follow similar spatial criteria, for example, housing clusters, road corridors, urban forests, riparian zones (i.e., areas adjacent to rivers, streams, lakes, wetlands), and community infrastructure (such as markets), schools, and the compounds of public and private institutions (such as offices). Vitally, all of these spaces must be liveable, not every surface should be pavement, and trees should be planted. He added that these do not have to be big trees, they can be coconuts or smaller bushes. Greening public spaces has many environmental benefits, for example, to protect water sources, stop erosion, provide shade, offer refreshment to people, and be pleasing to the eye, whether a major road, a sewerage drain, a roundabout or a local bus station.

Principles of green parks

Dr. Kindeketa then enumerated three important principles for green public spaces. First, a green park must have clarity of purpose. To achieve this, spaces need to be visible, fit into the urban surroundings/neighbourhood, and be connected and accessible to the community. This, in turn, means the area needs to be located where it can be easily reached by pedestrian means or, where applicable, by public transport. The space also needs appropriate infrastructure and amenities for all users, such as benches, water, and food and drink vendors. So, too, the parks should incorporate a diversity of uses and functions, such as recreational, environmental, cultural and educational. Community stakeholders should be actively involved through communication, consultation, collaboration and participation so that the spaces reflect a diversity of ideas.

#GGP2024

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Dr. William Kindeketa

The second principle for green public spaces is that, once created, these spaces need to be well-maintained and managed with plans in place for progressive improvements. Again, communities should be encouraged to participate by ensuring community connection. Third, green spaces need be environmentally sustainable, enhance biodiversity and be connected internally and to their surroundings.

Design and construction of green parks

To achieve these outcomes, Dr. Kindeketa outlined a process for design and construction of a green park. To start, a needs assessment needs to be carried out in conjunction with the municipality, community, landscape architect and the developer. Typically, during the design phase, the municipality will focus on the legal and sustainability issues, for example, whether the land had been appropriately set aside and zoned, while the community will focus on the needs of the community both now and in the future.

In contrast, the developer will be interested in ensuring the financial sustainability for its investment in constructing the space. A landscape architect will be engaged to develop a concept and detailed plans and specifications for the space that not only respond to the needs of stakeholders and available budget for construction, but also a comprehensive site analysis to ensure that the design reflects the actual conditions of the site (topography and climate) and that suitable trees and plants are selected for the space.

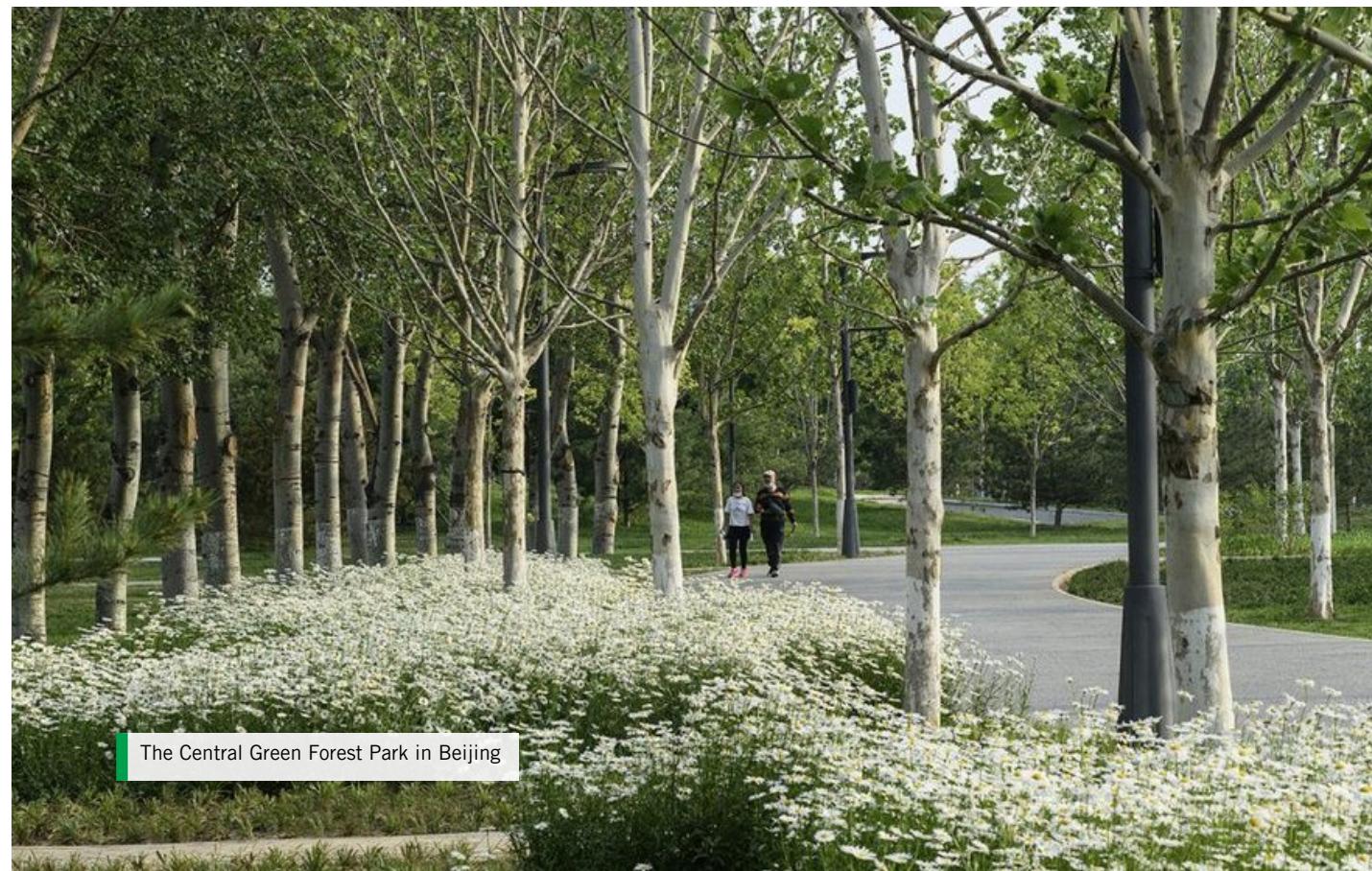
After selection and appointment of the contractor in line with national construction industry and procurement standards, the construction or implementation of green space will take place. During this phase, the design team needs to inspect the works on a regular basis and administer the terms of the contract until completion of the work and handover to the municipality and users of the park.

Green parks internationally

To give a sense of what is possible for future parks in Tanzania, Dr. Kindeketa showcased a series of green parks from around the world. In Beijing, Central Green Forest Park was developed in 2020 on a contaminated industrial estate (chemicals factory) to become a 5.5 sq. km oasis of nature in the heart of the city. It has been an essential component in the ecological recovery of the area and has fast become one of Beijing's most popular green spaces, playing host to an array of recreational and educational activities. The park was designed around the traditional 24-season Chinese lunar calendar with the park's mosaic of flexible forest, garden arrangements and pathways emphasizing the changing seasons.

The eight Royal Parks of London cover an area of over 2,000 hectares of the city. These beautiful, natural and historic parklands protect the habitats for 7,000 species of wildlife and feature 150,000 pollinator-friendly bulbs and wildflower plugs to attract bees and butterflies. Across the eight parks, amenities include 14 children's playgrounds and 64 kiosks, cafes or restaurants. They host 30 major sporting and music events each year. They have dedicated programs to support the physical and mental health and well-being for up to 20,000 people a week and also deliver around 250 education programmes to children to teach them the importance of preserving the environment. Funds to support the upkeep of the Parks are raised in many ways, including the annual Royal Parks Half Marathon. Runners in this event in 2024 collectively donated £504,350.

Forest Park in St. Louis, Missouri is the largest urban park (526 hectares) in the United States and attracts more than 12 million visitors every year. Opened to the public on 24 June 1876, the park is owned and operated by the City of St. Louis. The municipality has 110 city parks under the jurisdiction of the Department of Parks, Recreation and Forestry. The park features historical buildings and monuments, diverse landscapes, waterways and wildlife to form a unique cultural institution where people of all ages, ethnicities and economic backgrounds can gather and mix positively to exercise, play and enjoy themselves. It also serves as a sports centre for golf, tennis, baseball, cycling, fishing, soccer, rugby, running, walking and more.



The Central Green Forest Park in Beijing



The Green Park in London



Green parks in East Africa

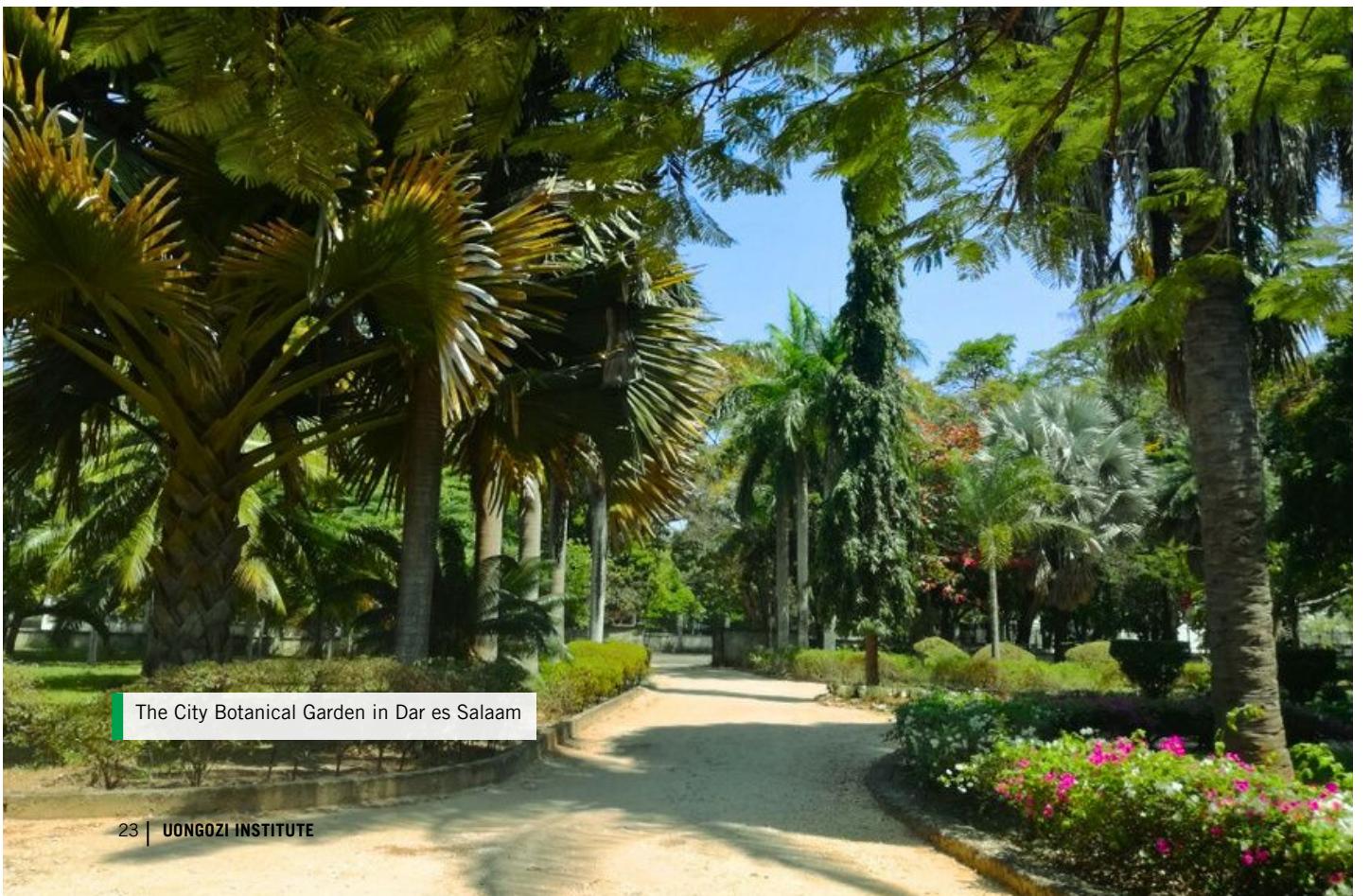
Turning to examples of green parks regionally, Dr. Kindeketa highlighted Uhuru Park in Kenya, a 13-hectare recreational area adjacent to the Nairobi city centre. Open and free to the public since 1969, the main purpose of the park is community entertainment, exercise and enjoyment. The park includes an artificial lake, several national monuments and an assembly ground.⁵ Opened in 1996, the Nairobi Botanical Garden is a project of the National Museums of Kenya to showcase the diversity of plants in Kenya. The garden, located at Museum Hill, aims to facilitate plant science and conservation through habitat and systematic displays.

Status of botanical gardens and green parks in Tanzania

Domestically in Tanzania, the Dar es Salaam City Botanical Garden was established in 1893 with the main goal of testing agricultural cash crops. Although the area is in danger of disappearing beneath development (parking lots and small businesses), the botanical gardens are a shady oasis in the city and remains home to the Horticultural Society, which tends the indigenous and exotic plants, including scarlet flame trees, several species of palm, cycads and jacaranda.

Other green spaces in Dar es Salaam include the Mnazi Mmoja Gardens in the city centre, which hosted the initial gathering of the Tanganyika African National Union (TANU) in 1954 and where the Uhuru Torch was first ignited in 1961, symbolising Tanzania's struggle for freedom.

⁵ At the time of the dialogue, Dr. Kindeketa observed that Uhuru Park had been closed since November 2021 for extensive renovations, but the newly refurbished park was fully re-opened to the public on 28 September 2024.



Dr. Kindeketa also mentioned Mwembe Yanga Park located in Temeke and Kinondoni Botanical Garden, but these areas suffer from encroachment by government offices, informal traders and car parking, damaged pathways, pollution and dumping of waste, flooding and soil erosion, and lack proper amenities, lighting or playing fields. All of these areas are historically significant but currently lack proper governance, management, supervision or care.

Policy and legal frameworks for green parks

Dr. Kindeketa said that the policy and legal framework is in place to support the protection, creation and management of public open spaces and green parks. For example, key statutes include the Urban Planning Act, 2007; Local Government (Urban Authorities) Act, 1982; Environmental Management Act, 2004; Land Use Planning Act, 2007; Water Resources Management Act, 2009; The Forest Act, 2002; and Road Act, 2007. Relevant policies and regulations include the National Forestry Policy, 1998, and the National Environmental Management Policy, 2021, Water Resources Management Regulations, 2018 and the Urban Planning (Control and Management of Public Open Spaces) Regulations, 2018. He also showed plan drawings for the rejuvenation of Mnazi Mmoja, Kinondoni and Mwembe Yanga Parks.

He highlighted the significant and well-understood environmental, social and economic benefits of green spaces.

Where there are trees, the weather becomes good in that area, the dust is absorbed and the temperature decreases. And the soil is not eroded or polluted...water sources are protected and kept clean...and all of the community activities that can be done [in a green space] increases the health of the community.

Environmentally, the presence of green parks has many benefits. They improve air quality, mitigate the urban heat island effect by providing shade and cooling the air through evapotranspiration, contribute to flood control through stormwater infiltration, thereby reducing surface flow rates, reduce soil erosion caused by rainfall impacts and stabilise soil on steep terrain, provide habitat and restore biodiversity, protect water catchments by recharging aquifers and watersheds to ensure a clean and consistent water supply, and treat wastewater using a nature-based, ecologically friendly approach.

Well-maintained green spaces also enhance local identity and improve community cohesion and well-being by providing attractive spaces for events, festivals and celebrations, and encouraging healthy sporting and outdoor activities. Economically, by providing shade and reducing the heat in urban areas, trees and plants reduce energy costs for air conditioning, and by enhancing the aesthetics of streets and neighbourhoods, green spaces increase property values.

What hinders the development of green parks in Tanzania?

Given that the benefits are known and understood and the legislation, policies and plans are in place for the development of green spaces, Dr. Kindeketa asked, "What is stopping us?" In answer, he said that the most significant constraint on the improvement of public spaces is the lack of community awareness and engagement. If actively involved, he strongly felt that communities would be the great guardians, the great conservationists for green spaces.

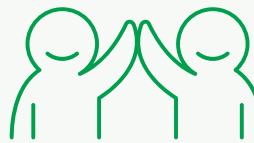
The lack of good governance is another significant roadblock. He said that often laws are not followed. Given the speed of development, by the time city planners communicate that an area has been designated for planting trees, the space may have already been encroached upon. Most urban areas in Tanzania are crowded and unplanned, so planners are commonly faced with the challenge of securing free land for green spaces. Economic interests also frequently trump environmental and social goods. Sometimes, too, a lack of understanding among planning authorities on the importance of preserving green spaces constrains action. And urban authorities often lack adequate funds for the establishment, maintenance and protection of green infrastructure.

Way forward. What should be done?

Dr. Kindeketa recommended that:



Government authorities establish an online database/portal that lists and documents the official uses (and provides title deeds) for all existing public open spaces. This tool should be publicly accessible. As part of this effort, planning authorities need to conduct periodic inspections of public open spaces and report on them. Communities also need to be sensitized to the important and different uses of public areas (for example, as parks and play spaces or as green reserves) so that they can appropriately respect, utilize and protect them.



Community members should be involved in making decisions and other activities to engender a sense of ownership and stewardship. Governance and law enforcement concerning public open green spaces must also be prioritized to stop encroachment.



Lastly, the government will need to assess and choose the appropriate business models to operate and manage the open spaces, either through public funds (from local and central governments) or collaborate with the private sector through public-private partnerships.

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4.4 Introduction of the guest of honour by Hon. Dr. Suleiman Jafo (MP), Minister of State, Vice President's Office (Union Affairs and Environment)

Following warm salutations to the Vice President, fellow government officials and the representatives from the private sector and NGOs present, Hon. Dr. Jafo expressed his gratefulness to the Vice President for bearing the heavy responsibility of protecting the environment for the whole country. Turning to the theme of the event, he highlighted that the issue of green parks is a fundamental issue for the Tanzanian government. He related that government plans and strategies to achieve a green economy rest on three pillars: economic growth, social welfare and environmental protection. So, too, the topic of the event is pertinent to the global Sustainable Development Goals (SDGs), especially SDG 11 to achieve sustainable cities and SDG 15 that focuses on environmental conservation.⁶ He said that:

Right now, more than 56 percent of all people in the world live in urban areas, but...by the year 2050, more than 75 percent of humans will be living in urban areas, which means that we are going to increase the pressure on the environment in cities...It will be a very big environmental challenge.

Therefore, he commended the UONGOZI Institute for organizing the dialogue and the Vice President for officiating at an event upon an issue that is hugely important for Tanzania and the world. In welcoming the Vice President to give his address, he reiterated the call for government officials from all the different municipalities across the nation to implement the instructions of the Vice President to beautify their cities.

⁶ SDG 11: Make cities and human settlements inclusive, safe, resilient and sustainable; 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.

4.5 Address by the guest of honour by H.E. Dr. Philip Isdor Mpango, Vice President of the United Republic of Tanzania

The importance of green parks

To start his address, the Vice President highlighted the myriad reasons that green parks are important and beneficial. They improve the quality of the air, protect water sources, preserve the country's natural resources, and contribute to reducing carbon emissions. In addition, green gardens help to mitigate some of the negative effects of climate change, such as increases in temperature, especially in urban areas, which, in turn, reduces mortality due to heatwaves. Green parks also provide people with places to relax, exercise and play sports, thereby, boosting community health and well-being. So, too, if well maintained, parks can become tourist attractions and contribute to national income.

However, despite their great importance, he observed that there is still limited awareness and action to establish, maintain or develop green parks in Tanzania. Most areas set aside for green parks are not well maintained, while the uses of some areas have been changed from what was originally intended, hence, the laughter of the audience when pictures of parks in Dar es Salaam were shown earlier.

Investment in green parks has been lacking

The Vice President observed that, in years past, many Tanzanian cities made efforts to set aside areas and establish green parks, for example, the park opposite Karimjee Hall in Dar es Salaam, the area adjacent to the Chama cha Mapinduzi (CCM) office in Mwanza region, Nyerere Square, Chinangali Recreation Park and Medeli One Park here in Dodoma, and the park behind the referral hospital in Iringa. However, the investment in and maintenance of those areas is not satisfactory. Plans and efforts have been made here and there to establish and develop these gardens, but, in general, implementation has not been sustainable. As a consequence, there is a shortage of green parks in Tanzania, especially in the big cities.

Clearly, greater efforts are needed to increase awareness and action among government officials and citizens in establishing, developing and maintaining green parks in the country. To achieve this, investments will need to be prioritized in the budgets of city councils because the private sector is largely not excited about the opportunity to invest in the development of parks. Therefore, the Vice President applauded the choice of theme for this year's dialogue, "Promoting investment in green parks for sustainable development in Tanzania." And he sincerely congratulated the entrepreneurial women and young people who are involved in the maintenance of tree and flower nurseries in towns and cities across the country as well as the community-based and religious institutions that are already working to green different areas of Dodoma, including CDA Tree Garden, Chapakazi Group, Chinangali Recreation Park, St. Gasper and Martin Luther School.



H.E. Dr. Philip Isdor Mpango

Looking abroad, the Vice President noted that many countries have made huge strides in developing green parks and had benefited greatly from these investments, for example, City Garden in Singapore, the extensive green areas in Sejong, South Korea, Central Park in New York, the Summer Palace, Beijing, Boboli garden in Florence, Hampstead Heath in London, England, Al-Azhar Park in Cairo, and the beautiful parks in Abu Dhabi and Dubai in the United Arab Emirates. He added that their popularity is due to the investment, management and good maintenance of those parks. They have become major tourist attractions for international visitors, and, in some countries, these areas are being used to preserve medicinal plants and endangered species.

Continuing, he said:

Now, it is our responsibility to imitate the examples of successful countries in investing in green parks...[and] facilitate such investments in this country for sustainable development. And, I have written this in capital letters: IT IS NOT ENOUGH TO PRAISE BEAUTIFUL GREEN PARKS IN OTHER COUNTRIES, THE TIME HAS COME TO MAKE GREEN PARKS HERE.

He stressed that these green spaces should be of the highest quality, and he believed that young Tanzanians possessed great potential and creativity to work miracles in many areas, including the development of green parks, because it provides them with the opportunity for employment and a good and reliable source of income. He added that the country has many skilled good young people in the landscaping industry to improve the use and appearance of land. In addition, Tanzania has many young people with great talents to design and make

various types of decorations, which can be placed at the entrances and throughout the gardens, to attract visitors, including tourists, to come and see and buy flowers, plants and trees, pots and pottery, and stone and wood carvings of animals and so on.

The development of green parks requires an action plan and stakeholder collaboration

Looking ahead, the Vice President said that the establishment and development of green parks would necessitate the involvement of various institutions and stakeholders with relevant expertise and experience to ensure the sustainability of these gardens and the value of the money to be invested. As Dr. Kindeketa explained, careful analysis is needed prior to any investment to identify and assess the climate and topography of the proposed land and the garden itself, the types of trees and flowers suitable for the area, the equipment to be used, and the areas for various services such as relaxation, sports or exercise. Resources have to be gathered and an action plan for implementation prepared.

In this context, the Vice President congratulated the UONGOZI Institute for organizing this conference to discuss how to attract investment in green parks through cooperation between the private sector and the Government. He hoped that through the conference, important issues related to investment and development of green gardens in the beautiful country of Tanzania would be discussed and an implementation strategy formulated to identify next steps. To this end, he suggested that discussions highlight various methods of investing in and running green parks, how the experience and creativity of Tanzanian youth can be harnessed, and, when necessary, how knowledge from other countries could be adopted and adapted to the Tanzanian situation.

In addition, the conference should not only identify the opportunities and challenges for the establishment, operation and development of green gardens, but also discuss how to deal with them. Cooperation with stakeholders is also vitally important, so he encouraged that these and other related issues for sustainable investment in green parks be discussed in detail. He asked that he be informed about the deliberations of the conference along with its recommendations for short-term and medium-term measures to develop green parks throughout the country.

Before concluding his speech, the Vice President provided a set of priorities and instructions to be followed to accelerate the development of green parks in the country. First, the Ministry of Land, Housing and Housing Development and the authorities of cities, councils and cities should take deliberate steps to protect all the areas designated for green parks and ensure that they are not invaded or changed in use. Those areas should be measured and permanently marked to show their boundaries. In addition, local government authorities needed to make by-laws and supervise their implementation to ensure that these green spaces are protected and used as intended.

Second, all city authorities and district councils should organize competitions for young Tanzanians to design the best green garden in the headquarters of their district, city. Third, he requested that the Minister of State in the President's Office-Regional Administration and Local Government (PO-RALG) and the Minister of State in the Vice President's Office cooperate to establish a regional and national competition for the best green gardens in towns and cities with awards for three categories: for individuals, for private companies, and for councils.

Fourth, he called upon the private sector, companies, individuals and groups as well as organizations and public institutions and non-governmental organizations, not forgetting religious institutions, to invest in the establishment and development of green gardens in Tanzania for sustainable development. This last instruction should be in addition to strengthening cooperation between the public and private sectors in the implementation of this important agenda. Private companies and public organizations should include the establishment, maintenance and development of green gardens as part of their corporate social responsibility.

In conclusion, the Vice President expressed his desire to see at least three new green parks established in Dodoma before the end of 2025. He was aware that the Dodoma city authorities had set aside areas for establishing these gardens and wished to now persuade the city to take action to announce the opportunity to invest in these "pioneer" green parks. He called on the private sector to come forward and invest in establishing these gardens in Dodoma so that, in addition to taking care of the environment, Tanzania's national capital could become more beautiful. He reiterated that the experience from other countries is that establishing and maintaining good green parks pays off; it is a profitable investment. In closing, he further instructed the Regional Commissioner of Dodoma that of the three gardens, one green park should be established in cooperation with TAFORI, one park with the Tanzania Forest Service (TFS), and the third green area should be a botanical garden. With optimism, he said: "Together nothing fails. If we decide we can." He declared the conference officially opened and wished the participants a good discussion.



Ms. Aziza Mumba

4.6 Presentation on development and management of green parks in Dodoma by Ms. Aziza Mumba, Assistant Administrative Secretary, Office of the Regional Commissioner of Dodoma

In introduction, Ms. Mumba advised that, following on from Dr. Kindeketa's summary on the development of green parks in Africa and in Tanzania, specifically, Dar es Salaam, she would inform the meeting of the status of implementation in the City of Dodoma,

including the sites identified for greening, the concept of beautification, the proposed uses and management of those areas, and the challenges faced.

To begin, she provided some background information on the City of Dodoma. As participants would be aware, Dodoma officially became the national capital of Tanzania, with the relocation of Parliament and the Government in 2017.

Since then, the city has experienced rapid population growth. In the most recent Population and Housing Census, the population of the city had risen to 765,000 in 2022, up from 410,000 in 2012, an increase of 86 percent, which has brought great pressure on the environment from the increase in human activities that affect ecosystems, especially forests and natural vegetation. Consequently, it is imperative that stakeholders work to protect and improve the environment so that Dodoma will be a safe place for this generation and future generations, not only for the residents of Dodoma but also for the Tanzanians who visit the city to access government services.

Dodoma National Capital City Plan 2019-2029

Continuing, Ms. Mumba related that the development of green parks for the City of Dodoma could be traced back to the ambitious plan for the development of the city of 1976. It was Mwalimu Nyerere's dream that Dodoma would be a green city and efforts to realize his vision started back in the 1970s. Recently, the new Dodoma National Capital City Plan 2019-2029 was developed to provide a blueprint for the city's development over the next 20 years. The plan identifies areas where existing natural vegetation needs to be preserved and where trees and flowers are to be planted to make the city pleasant and help reduce air and other pollution caused by human activities. For open areas, the plan is to create attractive recreational parks and public squares. The general uses recommended for these developments include areas for rest and relaxation, jogging and bicycle paths, exercise areas, places to sell cultural products, shops and gardens, memorial statues, swimming pools, an information centre, an open library, bookshops, refreshment stands and playgrounds.

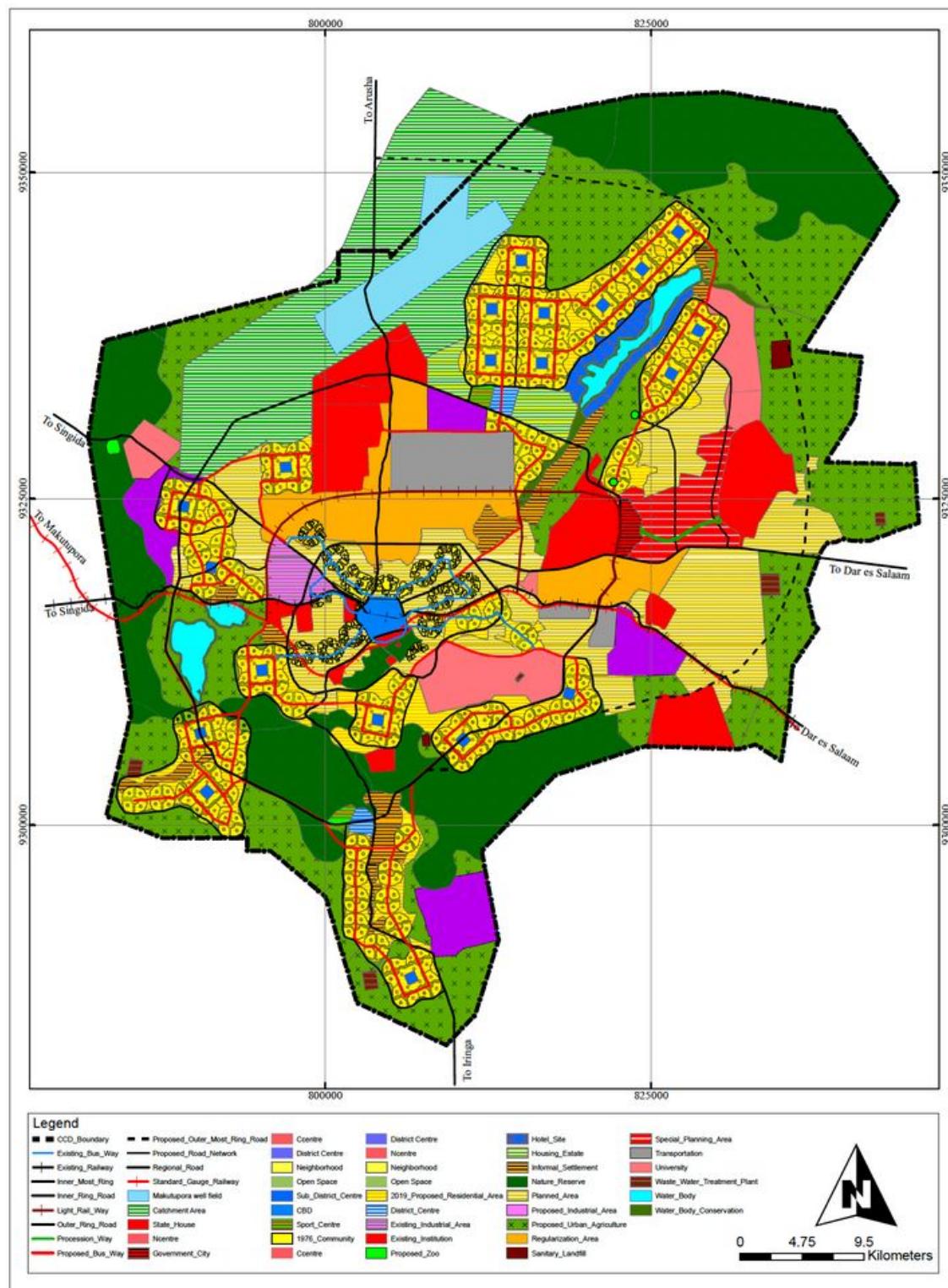
In addition, as part of the design of Magufuli (or Government) City—which is to be the home for all ministerial offices and connected to Dodoma City—space has been allocated for green parks. Dodoma is also famous for the cultivation of grapes. These vines can live for about 70 to 80 years, so the plan aims to care for all the areas that cultivate grapes as well as the hills surrounding the city. Areas have also been set aside for industries, for example, Nala Industrial Park. The plan further encompasses rehabilitating/greening the dams that provide water for the city, including the Hombolo, Zuzu and Mkalama dams.

Status of implementation

Turning her attention to the status of implementation of the Dodoma City plan, Ms. Mumba highlighted two open areas: Medeli One and an area in Ipagala Ward. In Medeli One, the city has collaborated with the Vodacom Foundation to create a botanical garden, while, in Ipagala, STAMICO has contributed plant trees and take care of the land. As mentioned by the Vice President, Martin Luther School has done well in the greening of its grounds. The students have also planted trees on the roads that border the school. Indeed, almost all of the schools in the city have been planted with trees that are being cared for. She remarked that, within a short time, the scenery in the schools will be very beautiful.

Additionally, the trees planted at the central market (Job Ndigai Market) and the main city bus stand at Nzunguni are all growing well. In Government City, every site developed has to include an area for green gardens, and she congratulated the efforts to date of the Ministries of Natural Resources, Home Affairs and Foreign Affairs. The grounds of the PO-RALG also feature a beautiful garden with fruit trees.

Figure 1: Dodoma National Capital City Plan 2019-2029



Ms. Mumba also applauded the Tanzania Forest Service (TFS) for their contributions to other areas of Magufuli City, including the entrance road. Indeed, almost all of the roads are planted with trees. And as part of the preparations for the celebration of the 60th anniversary of Union Day, the University of Dodoma held a one-week greening campaign that planted 31,400 trees! In the future, Ms. Mumba expected that the UDOM campus will be a central tourist attraction for people visiting the city's green parks. All housing developments in Dodoma also require trees to be planted, with the result that almost every house, every hotel, every institution in the city is green. Ms. Mumba also showcased the development of Chinangali Recreation Park which boasts sports fields, exercise areas, including a fitness centre, as well as recreation areas and facilities.

However, Ms. Mumba related that Dodoma would have to overcome significant challenges to become a green city. Significant sums of money and other resources are required to develop even a single park or botanical garden. For example, the development of Chinangali Recreation Park cost TZS 2.9 billion. In addition, given that Dodoma experiences long dry periods, initial investment amounts have to be set high to ensure that the areas developed are properly fenced and irrigated for at least two years to ensure the growth of the vegetation. She also highlighted the challenge that some areas set aside as green spaces have been converted to other uses due to the pressures of increasing population and human activities, such as agriculture and livestock breeding. A forested area of the city has been converted into a residential area and Kisasa Park has been reduced in size for other uses.

To overcome these challenges, sites designated or developed as green areas would need to be respected and properly maintained. She said that the city's strategy right now is to make sure that all trees planted have a caretaker. She stressed the importance for urban planners to consider and set aside green areas, but, vitally too, these areas must be appropriately measured and documented. She said that many of these areas are designated as open areas and do not have the necessary titles to protect them from invasion and encroachment by residents for other uses. In addition, cities should stipulate development conditions for public/private institutions to create green gardens as part of their office compounds and ensure that a relevant by-law is in place to facilitate the implementation of the established guidelines. Finally, given the high costs of development and management, cities should look for partners in industry to assist in development, in the same way that Dodoma has partnered with the Vodacom Foundation and STAMICO to help make Tanzania's capital city green.

DISCUSSION

A discussion followed the official speeches and expert presentations. Key issues emerging from the session are summarized in the sections below.

Tanzanians need to “Think Green”

Asked by the moderator for how to move forward in the greening of Tanzania, Prof. Davis Mwamfupe, Mayor of Dodoma, enumerated a series of important steps. He said that the country and the city of Dodoma had never lacked policies or strategies, but implementation was lacking. To kickstart efforts, he counselled:

Let's unite our thinking first, let's “green our thinking.” If we don't think green, it won't be possible at all. So, in short, education should continue to be provided, influence should continue to be provided. Let's start with schools and the like, that is the first.

The importance of local governance and citizen participant in greening initiatives

Prof. Mwamfupe also suggested a movement from the government approach to a governance approach. On the side of government, the importance of laws is duly recognized, even if, unfortunately, there are limitations to their implementation and enforcement. He recommended pursuing a governance approach in the sense of encouraging the involvement of citizens and social institutions to participate in the greening of the city. He said that citizens are frequently invited to reconciliation events by the

government instead of being the ones who invite us. By switching the agenda from a few government players to citizens at large, the special days used to plant trees, such as Union Day, May Day and Independence Day, can become days to take stock of what communities have done instead of planting trees only during those celebrations. Councils, too, have to fully recognize their central responsibility to improve the environment in their jurisdictions and convince the people that it is their local politicians and institutions that will need to be the ones who achieve that goal. He would welcome more involvement of the private sector but indicated their participation tends to be more self-promotional than sincere involvement. In closing, he said:

Lastly, there is a language where we say, 'Small is beautiful.' Let's not wait to have a very large area of 5, 10, 20, 50 hectares... even if we get one square meter, it is enough to plant a tree.

Mr. Lazarus Silonga, Women's Health and Environment Advocacy Foundation (WHEA), concurred that care for the environment depended on community participation. He suggested that environmental awareness and education campaigns were needed, especially in rural areas, to promote sustainable development. From his experience, many tree planting programs failed due to a lack of monitoring of the trees planted. Hence, the need to engage the leaders of in wards and villages to motivate community members, especially young people to participate in protecting their local environment.

He said that many young Tanzanians are already demonstrating their creativity by upcycling waste products to earn income, such as car tyres to become couches or other furniture. Similarly, great potential exists to motivate young people to be involved in environmental protection if they are able to see they can earn an income from greening initiatives.

With respect to youth participation in greening initiatives, Mr. Victor Congo, Executive Director, Global Water Partnership Institute, also recommended that cities and councils can work together with the private sector to encourage and empower young people to rent plots in urban areas to start gardens or otherwise provide employment for youth to green city areas.

Consistent laws and guidelines are needed to preserve Tanzania's forests and green its cities

Mr. Charles Meshack, Executive Director, Tanzania Forest Conservation Group (TFCG) offered his assessment on why Tanzania's cities are not green. TFCG based is an organization dedicated to preserving the country's forest. It is based in Dar es Salaam, but most of its work is done in rural areas. In his experience, when areas become small towns or municipalities, the responsibility for village forests is transferred to the municipal administration. But these officials frequently do not have sufficient knowledge on the importance of green cities. He said:

Without setting laws or planning guidelines, these [green] cities will never happen.

Second, he highlighted that laws that govern forest areas conflict. When forested areas come under the jurisdiction of a municipality, the forest often disappears, unless it continues to fall under the protection of TFS or the Tanzania National Parks Authority (TANAPA) as is the situation for Pande Game Reserve in Dar es Salaam region and Pugu Kazimzumbwi Nature Forest Reserve in Kisarawe district of Pwani (Coast) region. He suggested that areas like Vikindu Forest Reserve in Mkuranga District, again in Coast region, that are located on the edge of big cities, could be used as opportunities (test cases) to safeguard green belts in urban areas.

He lamented the peculiar state of laws and policies with respect to forests whereby the law readily recognizes the right of ownership for plantations of foreign or commercial trees but still struggles to acknowledge people's ownership of areas where native species are planted. He added that if an area of native forest is cut down to plant cashews as part of the national campaign to expand the cashew industry then that land is disqualified from carbon credit programmes. He also remarked on the language of forests and development. Forests are typically seen in policy terms as undeveloped areas. For an area to be considered developed, one had to build a factory or a school. He said:

But the forest, the thing called forest in the language of the people of the land, is not developed. In other words, it is not used, and if it is not used as it is required, all the areas look like they are not developed.

Participants during the discussion



Therefore, he agreed with Prof. Mwamfupe that Tanzanians need to “green their thinking” and continue to plant trees every year. It will be impossible to achieve the planning targets without keeping the cities green and preserving the country’s forests.

In his comments to the forum, Amb. Ami Mpungwe reiterated the need for clear greening policies supported by legal and regulatory frameworks. For example, in South Africa, homeowners cannot cut down trees without council permission, and they must show cause. He considered that simply going back to the basics would prevent a huge amount of environmental damage. For example, as Chairman of the Kilombero Valley Tea Company, only 12,000 of the 30,000 hectares owned by the company had been planted with tea. He said that the company applied a technique of mosaic planting, i.e., “you plant tea here, you leave the park there and so on.” The other areas have remained as miombo woodlands and habitat for wildlife. Unfortunately, at the same time, these areas have been invaded by herdsmen, which is an unfolding tragedy across Tanzania, whereby the whole country is becoming grazing land.

From his experience in rural areas such as Mufindi, Mr. Cathbert Tomitho, Executive Director, Land Rights Research and Resources Institute (HAKIARDI), advised that a balance had to be struck between initiatives to plant trees and the maintenance of land for agriculture and livestock so that citizens, especially women, still have sufficient places to grow food.

Mr. John Mboya, Regional Administrative Secretary (RAS) of Tabora, suggested that, in addition, to clearly identifying and documenting open areas in cities for gardens and trees, adequate space is required in residential titles given to individuals and institutions. He said: I think this is a problem. When [a person] is given an area of 400 [square] metres [to build a house], where is the area to plant trees? We haven't thought about it properly yet. It is necessary to at least add a little provision or space for planting trees due to the importance of this matter.

Enforcement of environmental laws

Mr. Mboya also highlighted the need for interventions to prevent and prosecute individuals who illegally cut down trees or destroy the environment. In Tabora, campaigns are run to train citizens to patrol and protect forest areas in collaboration with TFS. If the environment is not protected, the country’s economy will face a huge problem.

To reduce land conflicts and protect open areas in Dodoma and other cities of Tanzania, Mr. Tomitho recommended the establishment of land rangers. He related that his organization supported the creation of land rights monitors in villages, which have helped communities to protect village land. He said that the involvement of community members was essential to preserve land because they are the ones who suffer most when it is taken. Therefore, he strongly advised the establishment of land rangers within the official government system.

Mr. Jackson Ndahani, Secretary of the Chiefs for the Dodoma region said that taking care of the environment was a central responsibility for the traditional chiefs of Tanzania.

He also pointed out the key role of natural resource officers at all levels (district and villages) to manage and monitor forests and related that the Ministry of Agriculture distributed about 6,000 motorbikes nationally to extension officers to support farmers and landowners, especially in rural areas. These officers could also be used to monitor and protect forests from being cut down. In closing, he proposed that the chiefs could work in collaboration with the colleges and expert speakers at today’s forum to talk and disseminate information to their people so that greening knowledge reaches the grassroots.

Protecting forests will require expansion of renewable energy sources

Ms. Sadda Seif, Founder, Sadda Foundation, reflected that the Office of the Vice President carries a very heavy burden as the national office responsible for the environment. But she felt that nothing could be achieved to protect Tanzania’s environment without the involvement of the Ministry of Energy to develop alternative, renewable sources of energy. She said:

Even if we hold a million meetings and conferences, if the Ministry of Energy does not sit down and find a solution to the destruction of the environment, we cannot achieve success. Planting one tree takes five to ten years to become a forest, but one chainsaw cuts 100,000 trees in an hour, so we are doing nothing.

Another participant similarly highlighted that the investment and use of renewable energy is needed to stop trees being cut down by households for firewood.

Urban greening initiatives depend on access to water

Mr. Congo stressed that greening urban areas depended upon the availability of water to enable trees to become established and grow. To encourage efforts to green cities, he suggested that councils could provide water at a small (subsidised) tariff to people who are actively involved in greening initiatives. From his experience, the success of greening is directly related to access to enough water.

As a practical solution to the availability of water in Dodoma, Mr. Emmanuel Likuda, Director, Go Plant Tanzania recommended that deep wells be dug every five kilometres along the four main roads into the city to guarantee a water supply for the trees planted during Dodoma’s dry season. The relevant ward administrations along these arterials could be given responsible for the wells and the trees planted. Also, solar technology could be installed to power water pumps.

In later comments, the facilitator remarked that urban planners as well as the authorities that issue construction permits already strongly encourage rainwater harvesting.⁷

⁷ The Water Resources Management Act does not mandate the establishment of rainwater harvesting infrastructure as a compulsory requirement for all construction permits but it is encouraged. The Act also grants individuals the right to establish rainwater harvesting systems for domestic use. In August 2020, the Ministry of Water published [“Guidelines for Rainwater Harvesting in Tanzania.”](#)

Long-term planning and institutional collaboration are required to sustainably green cities

One participant highlighted that efforts to sustainably green cities will necessitate close planning and cooperation between central government ministries, departments and agencies (MDAs) and local government authorities. For example, at a minimum, greening road corridors will require the involvement of city planners, Tanzania National Roads Authority (TANROADS), Tanzania Rural and Urban Roads Agency (TARURA) and Tanzania Electric Supply Company Limited (TANESCO). For the same reason, long-term national plans are needed to ensure coordination and sustainability, not institution by institution, ministry by ministry, or council by council. It was noted that the UONGOZI Institute is a close partner with the National Planning Commission, which is in the process of drafting the National Development Vision 2050. Therefore, it was asked that recommendations from this meeting be relayed to the Commission for consideration and incorporation in the final Vision.

Hon. Kaspar Mmuya, RAS of Dodoma, related that the administration for the City of Dodoma is collaborating closely with the Prime Minister's Office on the development of the city in recognition of its strategic importance as the capital and the wish that Dodoma is a model and example of a green city in Tanzania. As noted above, the city has a specific plan for its development.

Additionally, the city is currently implementing a series of strategic projects which include instructions on how these projects should be compatible with the greening of the city. These projects are all closely coordinated with the relevant authorities and stakeholders, though some delays have been experienced in discussions with TANROADS on the width of the entrance roads to the city.

Speaking with respect to the involvement of NGOs, Mr. Isaiah Sirungwe, Director, Agri Youth Forum Tanzania, requested that the city meet with local environmental organizations to develop a joint work plan so that there is no disconnect between organizational plans and the city's plan. He also highlighted the importance of listening to and working with young environmental activists who have valuable ideas to contribute. On the topic of capacity building, he encouraged colleges to include information on carbon trading in their environmental courses so that graduates will be knowledgeable to teach young people what is required to qualify for carbon credits.

In response to issue of coordination and harmonization of activities among government institutions, private enterprises and NGOs, Hon. Jabir Shekimweri, District Commissioner of Dodoma, advised that the council has an existing official procedure, whereby institutions are requested to submit their work plans for the year and information on implementation work each quarter. In this way, the council knows who is doing what and can coordinate and monitor activities. However, in light of the Vice President's instruction and the requests of delegates to the Forum, he agreed that a meeting of stakeholders would be beneficial.

Dr. Deogratius Nyangu, Vice President's Office (Division of Environment), informed the audience that the government released the National Environmental Master Plan for Strategic Interventions (NEMPSI) in 2022.⁸ This ambitious plan identifies interventions to preserve the environment, including a chapter on environmental challenges in urban areas. Special attention was also given to Dodoma. As described by Ms. Mumba, the plan identifies areas of the city that need to be beautified. For instance, the Office of the Vice President, in collaboration with the city, is in the final stages of identifying a contractor to develop the Swaswa wastewater stabilization pond.

The status of greening activities in Dodoma

Mr. Joseph Fungo, Acting Director, City of Dodoma, provided an update on greening activities in Dodoma. He said that the city is still young, still becoming. Under the City Plan, areas for parks have already been identified and, as surveying continues, the administration is allocating further open spaces and collaborating with stakeholders on projects and activities to unite Dodoma. For example, Yumbu Park is a very large area; Chimwaga is another. The city has also been working directly on government facilities, such as schools and health centres. Using funds provided by the city from local revenue, wells have been dug in eight schools and work is underway to plant trees and improve those areas. In addition, the city is building a district hospital in the Nara area, including installation of a well and planting of green spaces. The city has also worked to plant

trees along the four main highways that enter the city of Dodoma from Dar es Salaam, Arusha, Singida and Iringa. In relation to community participation, he commended the efforts of Chapakazi Group. Additionally, the administration had also allocated areas for people to set up seedling nurseries with good success.

The administration is actively working on areas under its jurisdiction, but further support from citizens and other institutions would be welcomed. Clearly, much work is being done to green Dodoma, but the administration will extend its activities to include the establishment of the three gardens requested by the Vice President. He said that these special works will be duly submitted to the legislature for approval and implementation. Finally, he flagged the possibility of partnering with sister cities from other countries.

The importance of urban planning for green developments

From an urban planning perspective, Ms. Lilian Msasi, Assistant Lecturer, Institute of Rural Development Planning, Dodoma, stressed the importance of ensuring connections and continuity between the three parks proposed and the community/neighbourhood areas and other parts of the city. Planning principles, such as uniformity, repetition and rhythm in the trees planted and the types, materials and heights of houses and buildings are essential for achieving the goal of beautification. Additionally, greening plans for cities need to address the impacts of climate change.

⁸ NEMPSI (2022-2032) is a roadmap for guiding and coordinating environmental interventions across all levels in line with the National Environment Policy 2021. NEMPSI aims to address 12 key environmental challenges in Tanzania over a 10-year period (2022-2032): (1) land degradation; (2) deterioration of water sources; (3) impacts of climate change; (4) environmental pollution; (5) deforestation and forest degradation; (6) loss of wildlife habitat and biodiversity; (7) deterioration of coastal and marine ecosystem; (8) wetland deterioration; (9) inadequate waste management; (10) urban environmental challenges; (11) proliferation of invasive species; and (12) inadequate environmental governance. A section of the master plan is dedicated to addressing the environmental challenges in Dodoma.

For Dodoma to avoid the situation of urban sprawl and loss of open areas that has characterized development in Dar es Salaam, Mr. Tomitho advised that the city pursue a strategy of vertical rather than horizontal growth. He said that the city should "Beware of taking a large area to start one investment." Building up instead of outwards will strengthen the care of the environment and free up space for greening.

Another participant proposed that the government fund a special programme for implementation by TANROADS and TARURA to modernize and standardize the frontages of the four main arterial roads into the city. They also recommended that similar types of trees and flowers be planted along these main roads to connect the city. To date, people have worked hard to improve these areas but there is no uniformity. At present, the sides of these roads look very dirty and are occupied by unofficial businesses, such as garages and car washes. They proposed that the city's laws could also be reviewed such that the owners of businesses along the roads be required to contribute to the beautification and care of the roads. The participant also advised that council by-laws need to be harmonized so they do not conflict with the main laws to make Dodoma green. In addition, the authorities need to mobilize Dodoma's citizens to participate because the government budget alone is not sufficient to carry out activities to beautify the capital.

With respect to the main arterials, another participant counselled that, prior to any tree planting activities, the authorities will first need to measure and determine the final width of the four main highways and other local connecting roads. Similarly, the council should survey and measure the open areas that need to be planted with trees.

Finally, he considered that any efforts to green the capital need to go hand-in-hand with ensuring the cleanliness of the city environment. He also remarked that specialized equipment is being used in Chinese cities to uproot trees for re-planting instead of simply cutting trees down to clear land to build houses or other developments.

Public and private funding for greening projects

Based on the clear instructions of the Vice President that investment in green areas is a fundamental Government responsibility, Mr. Mboya counselled that institutional budgets would need to reflect this priority and allocate sufficient funds. Similarly, donor funds for tree planting programs need to be sent to the regions in the same way that resources are presently distributed for the construction of classrooms or health centres. He also requested the assistance of the Tanzania Investment Centre (TIC) to advise on how best to attract private sector investment in the green space.

On the issue of attracting investment for green parks or botanical gardens, Prof. Fortunata Makene, Executive Director, Economic and Social Research Foundation, advanced that public-private partnerships (PPPs) could be a way forward, whereby the government and private sector/other stakeholders commit to jointly invest in specific projects. On this issue, Ms. Salma Mwako, Founder and Managing Director, Maestro Africa Solutions suggested entering into agreements with foreign investors to develop and operate green parks for a specified period of time prior to transferring the investment into the care a local company. In this way, Tanzania would be able to benefit from the expertise and technologies for the development and maintenance of green spaces.

To boost private investment in green parks, Ms. Mwako, also stressed the need to establish a database to identify all the open spaces that are available for green parks and classify those areas in terms of economic opportunities. If properly designed and built in a modern way, she was certain that people would flock to green parks.

Hon. Shekimweri remarked that unlike many parts of the country, Dodoma has a master plan in place for 2019 through 2039. He reiterated that under this plan almost all areas have been designated for various uses, including parks, and are ready for investment! But when they come to invest, he encouraged stakeholders, not only investors for green parks but all other investments, to pay close attention to the uses of land specified in the master plan. He said this will go a long way to overcoming the significant problem of changes in land use in the city of Dodoma, including changing the use of open spaces. These two issues go hand-in-hand. He also agreed with earlier comments that greater coordination among the many stakeholders in the future agenda of the capital would be invaluable, including the Office of the Vice President, the Office of the Prime Minister, the sectoral ministries, and district heads. But he also highlighted the need to reduce the bureaucracy in facilitating investments in the city.

Capacity building for green projects

Mr. Mboya also highlighted the need for planning experts, such as landscape architects, to advise and manage greening projects. At present, the expertise at regional and council level is limited, so practical assistance will be required for beautification efforts at the local level to move forward. He asked that the UONGOZI Institute could continue to expand its capacity building programs to government officials below the regional level.

Similarly, Hon. Shekimweri commended the efforts of the UONGOZI Institute to convene the current high-level forum but strongly encouraged educational institutions, like UDOM, to organize subsequent events at the divisional level to educate and motivate all of the district councillors, ward and village leaders to have a common understanding of the need to protect their local environments. And cooperate with leaders at the grassroots level to identify what open spaces remain and in what condition. He believed that working across many local areas could have a very big impact. He said:

We are ready as district leaders to create an enabling environment for educational institutions to come and collaborate with us and the leaders at the grassroots level, in official sessions or meetings, but also in the council so that instead of blaming councillors for selling plots, [they are] participating in providing open spaces.

Optimistically, Amb. Mpungwe pointed to technologies to address the issue of deforestation. For example, drone technology enables both mapping and surveillance. Indeed, drone are now available that can plant 100,000 trees per day, so along with ensuring appropriate policy and legal frameworks and various incentives, the government should look into technologies to enhance the process of greening Tanzania's cities and the whole country. Asked by the facilitator if international assistance was required, Amb Mpungwe said:

I don't think that the requirement of gardens and parks needs foreign investment. I think we can do it ourselves.

With respect to capacity building, Prof. Makene considered that Tanzanians have had very high exposure to different countries on the issue of greening the environment. But she wondered why this knowledge had not translated into action. Did it reflect a challenge to implement plans domestically or the lack of financial resources?

Political will

Dr. Toba Nguvilla, RAS of Dar es Salaam said that the biggest issue with respect to the greening and beautification of any city is the willingness of the authorities. He considered that Dodoma as the national capital was a point of reference for the whole country. Even before Dodoma became a city, land use and settlement plans were developed by the Capital Development Authority.

Despite this, many open spaces set aside have been converted to residential use and others sold to build hotels and other developments. But he held that Dodoma still had advantages; the city is well planned and still has places to breathe. He believed that the city has every possibility to be better than it is now but cautioned not to go back to where we came from. Many groups desire open areas for investment and to change the use of those areas to activities outside the master plan of the city.

He believed that if Dodoma's political leaders at regional and district levels are willing and administer the laws well, then the Vice President's directions for greening the city can be implemented. Indeed, the Vice President's clear instructions during today's forum provided "the shield to protect us and [can be] the reference in all our meetings."

The need for implementation plans and periodic assessments

Continuing, Dr. Nguvilla said that to facilitate greening/environmental initiatives in Dodoma and throughout Tanzania, each region and each district would need an implementation plan for their areas and undertake periodic (priority) assessments to provide feedback on their progress in fulfilling the Government's instructions. To accelerate progress in greening projects, Mr. Mboya recommended that tree planting be made a criterion for evaluating the performance of ward leaders.

Awards for green cities

Following up on the Vice President's call for competitions for best green parks in the country, Mr. Likuda also recommended establishing a Tanzania Cities Award to coincide with World Cities Day on 31 October each year with awards for the cleanest city and for the dirtiest city. He said that no mayor or official would desire to win the dirty city, hence, such awards could provide great incentive to green and care for urban areas.

The choice of trees for greening projects

Mr. Meshack expressed his concern that the trees commonly being planted on the outskirts of Tanzanian cities are foreign species such as the Ashoka tree (Indian Mast tree) instead of mivule (African teak), gourd trees (like Calabash) or reeds for wetland areas. All these trees are disappearing. He remarked:

I visited some councils this year and found that the area was cleaned very well, but after cleaning was planted with Ashoka. Some councils have kept some trees for shade, but native trees are not planted. And if we don't do that, natural trees will no longer exist, we will be witnessing Ashoka forests.

From his experience, Mr. Likuda considered that larger tree seedlings are required for sustainable planting. He indicated that the TFS currently provides very small seedlings, typically the height of a water bottle. He suggested that larger tree stock will have much greater likelihood of survival.

Dr. Nyangu, Office of the Vice President, advised that TAFORI in collaboration with TFS have published a guide for tree planting that details what type of tree should be planted when and where. He said that tree planting had become a big business; if you walked down the street you will find young people driving trucks selling tree seedlings. But he stressed that trees should not be planted arbitrarily.

To conclude the panel discussion, the keynote speaker, Dr. Kindeketa reiterated the advice of earlier contributors to plant native trees endemic to the different areas of Tanzania not foreign species. All too frequently, the same exotic trees are planted everywhere such that the urban landscapes of Dar es Salaam, Dodoma, Arusha and Mwanza all look the same despite their great natural diversity. To start, planting foreign trees increases the cost of green developments because many of these plants are not suited to the conditions, hence, require more inputs to establish and maintain such as water, pesticides and fertilizers. Particular care must also be taken not to introduce invasive species or those that attract pests. For example, some places in Tanzania have planted the Jamaican cherry tree (*Muntingia calabura*), which is native to South America. It grows quickly; in only two years, it can become a big, beautiful shade tree, but the people of Morogoro have started to complain that the tree attracts bats.

From the perspective of tourism, it is also not economically sustainable. Visitors are drawn to cities to see and experience different landscapes and plants, therefore, preserving local species adds value for local tourist operations.

Similarly, he said that businesses that specialize in native trees will be more successful. He recommended that anyone looking to start a nursery should first identify what kinds of trees grow locally.

Finally, he explained that planting trees in an arboretum and urban planting are very different. In the city, the environment has been damaged, the soil is often infertile, and plants further stressed by vehicles and people passing by. So, it is no surprise that a proportion of trees planted will die. To reduce losses, he advised that the right trees need to be planted in the right places. For this, the Ministry of Natural Resources and Tourism has produced a comprehensive guide written in Kiswahili for planting and managing local trees and shrubs. A long list of tree and plant types can be found at the end of the guide with information on their origins and characteristics, how to plant them, recommended sizes for planting and where they can be planted, for example, small-sized trees for the sides of the road that don't grow too tall and interfere with telephone or electricity lines or have roots that damage water pipes.

He concurred with earlier discussion that close engagement and agreement of all relevant stakeholders are essential when planting trees along roads, including TANROADS, TARURA and TANESCO. As a representative of TAFORI, which is a public institution, he would be happy to provide expertise and work together with any group that wants to improve Tanzania's cities.

CLOSING SESSION

6.1 Closing remarks by Prof. Davis Mwamfupe, Mayor of Dodoma

On behalf of the participants in this event, Prof. Mwamfupe thanked the UONGOZI Institute and the Office of the RAS in Dodoma for their invitation and organization of the meeting and congratulated delegates for their attendance. He extended his gratitude to the Vice President for his clear instructions to protect the open spaces of the city and establish three urban parks. In this, the biggest beneficiary will be the City of Dodoma. He noted that many areas had been invaded in the past. But, with today's directions from the Vice President, he was certain that "we are going to do better." He commended the successful efforts of the youth in Dodoma in greening their schools. He said:

It tells us that if we start early at a young age, children will have a green mind. So, let's unite our communities through schools and let these be the focal points to connect the city's open spaces.

He also thanked the meeting's participants for their constructive and practical contributions. He said that one delegate reminded us that the cities must have a viable green concept and plan, not just plant trees. Unfortunately, like many urban areas, Dodoma has been a big victim of the country's changing demographics. The rapid increase in the number of residents has contributed significantly to the encroachment of spaces set aside as green areas. These invasions have caused many problems in managing the laws and finding ways to preserve nature in urban areas.

In essence, the challenge is to return the city closer to its original condition. But to do so, Prof. Mwanfupe felt that city authorities "will have to be more open in the whole concept of open space." Drawing upon what was emphasized by contributors to the meeting, he counselled that:

Open space means open access...and that's why areas are called public spaces. We with the big bureaucracy ruling our towns and cities used to think that these areas must be protected by a building a fence so that they are not invaded, but that is not the case ... We can invest in these areas as long as we can see that nature will remain preserved. This is also very basic. Let's not have frozen thoughts. The concept of open spaces is wider than ... the concept that many of us have contributed to the bureaucracy of developing those spaces. We believe that right now we are going to get a new guide that will be of great help to us.

Most importantly, Prof. Mwamfume asked the officials and other delegates to continue their efforts to help communities. He said:

All cities start as villages. If Dar es Salaam fails, then let's move to other cities. Let's go to Rufiji. The existing forests in our villages will be the urban forests of the coming years. We may not exist, we may exist, but let's take care of nature in that way.

Upon returning to their workplaces, he asked for participants' assistance to truly make Dodoma the Pride of Tanzanians by promoting the city in their institutions and sectors, whether it be in education, the environment or other fields.



Prof. Davis Mwamfupe

He was grateful for any donations or contributions to the city's development but, most of all, he encouraged delegates to raise awareness and work to protect and sustainably develop the environment in their local areas. He said:

If you can contribute to developing the environment in Rufiji, 'Hewala, thank you.' If you do it in Musoma or Tarime, 'Hewala, thank you.' Today, only a small number [attended this event] but I believe the information and what we learned here will be of great benefit to our citizens.

6.2 Field excursion to Chanangali Recreation Park

Mr. Kayombo related that Chinangali Park was built by the Government through the Tanzania Strategic Cities Project (TSCP).⁹ The park is 12.3 hectares in size and located north of the city centre near the airport on the road to Arusha. The goal of the project was to provide an attractive and pleasant resort for visitors to relax and access services upon arrival to the city or while awaiting departure. Another goal was to increase the revenue of the Dodoma City Council through income generated for services provided by the council. Development of the park commenced in July 2018 and was completed in November 2019 at a cost of 2.9 billion Tanzanian shillings. Services include car parks, entertainment areas, restaurants, concert and meeting places, changing rooms as well as gyms, playgrounds, swimming pools, and bathroom and toilet services.

Following construction, the city engaged a company to manage the park. Unfortunately, this agreement has been terminated due to failure by the investor to carry out the terms of the contract. The city is now in the early stages of a process to identify new investors to improve and return the park to the condition when first built and then properly oversee the area to fulfil its original objectives.

The role of the Tanzania Forest Service

Beyond the Vice President's instructions to develop two green parks and one botanical garden in the centre of Dodoma, Mr. Mwampashi,

Tanzania Forest Service, Central Zone counselled that city authorities should also look further afield. For example, open areas are available to the south in Mpunguzi ward on the road to Iringa and Mzakwe to the north. It would be beneficial for the city to secure these open spaces before they fill up with people and the costs of their development becomes too high.

As a key stakeholder for greening initiatives, he said that TFS supplies free seedlings to individuals and institutions, government or private. Locally, the organization has two tree nurseries in Dodoma region, one at Mailimbili not far from Chinangali Recreation Park and the other in Chamwino District. Seedlings are available all year round. He also highlighted that TFS supports the environmental conservation initiatives in schools by providing saplings to schools for their tree plantings.

Finally, he reiterated the need for coordination between stakeholders. He said:

I know that the city wants to survey a plot to build a house to earn money. I come to plant a tree and take care of the trees. The miner wants to sell pebbles to build roads. All of them have a good thing for our country. But let's build one house, let's not fight each other, let's sit at the table and organize ourselves well and decorate our city.

Following up on comments during the plenary, the facilitator asked Mr. Mwampashi what he considered was the optimal height or size of tree seedlings for planting. In response, he said that the optimal size varies depending on the species of tree and the conditions of the site where it is to be planted. He said TFS typically distributes seedlings in four-inch pots approximately three to four months after germination. If proper care is provided following planting, these small saplings can take off well. However, if an individual or institution wants larger saplings for their site, they will need to transplant the seedlings into a larger pot (6 to 12 inches in size). But they need to be aware that as the seedlings grow, regular pruning is needed, and water and fertilizer requirements increase. He said that TFS will look into adding containers or bags to produce larger seedlings. But regardless of size, trees still need care and maintenance after planting. Of further note, the climate in Dodoma can be challenging. From his experience, during the wet season, land in the city can become saturated quickly because the water table is high, but the summer can also be very bad, especially in Mtumba, the Government Town, such that seedlings that are my size need to be watered. Hence, he reiterated the importance of building the appropriate water infrastructure, such as digging wells, to enable trees to be watered until properly established.

Turning his focus to how individual residents might contribute to greening the city, he recommended taking a measured approach. Given the chronic water shortages in the city, he advised that homeowners start with only two seedlings in the first year so that they can allocate enough water for the trees to grow. Once these trees are established after two to three years, additional trees can be planted. In this way, over time, the house plot, even if only 20 x 20 square metres,

will have at least two fruit trees and one or two trees for shade. He reiterated that TFS provides seedlings to residents for free. He added that TFS has seedling stock of many different varieties, including shade trees, trees for timber and many types of fruit trees, such as mango, guava and parinari.

The future of Chinangali Park and other greening initiatives in Dodoma

Following up on the comments of the Executive Director of Dodoma City Council, Hon. Jabir Shekimweri, District Commissioner of Dodoma, reiterated that the city is in the process of reviewing the future management and operation of Chinangali Recreation Park. But, once the review is complete, the government would welcome the ideas and expressions of interest from serious investors with the necessary expertise and experience to manage and run (even expand) the scope of services provided by the park. He said:

It's a park. It's not a bar, it's a park... We have learned from those mistakes. We want someone to come with a complete package for the whole thing.

He also emphasized that the city has an ambitious master plan, which includes the areas set aside for parks. He encouraged all stakeholders to recognize the importance of the master plan and avoid any attempts to encroach and force development upon those open spaces. He said that the city is experiencing rapid growth. Therefore, he advised that stakeholders should look beyond the city centre to the outskirts of Dodoma to buy land for development.

⁹ Since its commencement in 2010 with funding by the World Bank through President's Office-Regional Administration and Local Government (PO-RALG), the TSCP has been worked to improve urban infrastructure in eight participating urban Local Government Authorities (LGAs): Tanga CC, Arusha CC, Mwanza CC, the City Council of Dodoma, Illemela MC, Kigoma Ujiji MC, Mbeya CC and Mtwara Mikindani MC.

Lastly, he highlighted that beyond the knowledge and political will to green Dodoma, the agenda to plant trees, to take care of trees, to conserve and beautify the landscape requires significant amounts of money. He commended Minister Jafo for being the architect of many environmental programmes and campaigns, but he considered that his initiative to create environmental ambassadors was particularly important. He suggested that empowering these ambassadors with specific areas and goals—and the resources to achieve these objectives—could have a great impact.

Hence, for the goals of greening Dodoma and other areas of Tanzania to be achieved, every municipality or council needs to allocate a sufficient percentage of their budget resources to plant, maintain, protect and preserve green spaces. In turn, he asked for the assistance of academia to advise government authorities on the right policies and projects. He also confirmed that water was a huge challenge in Dodoma. The demand for water for domestic households and industry is currently estimated at 132 million litres per day, while production is only 58 million litres or about 42 percent of demand. Adding a large stock of trees would necessarily add further stress to the water supply. Therefore, stakeholders will need to be empowered, including digging wells for them if the green agenda for the capital is to move forward.



APPENDIX A: EVENT PROGRAMME

8:00 – 9:00 AM	ARRIVAL AND REGISTRATION	10:20 – 10:30 AM	GROUP PHOTOS
9:00 – 9:10 AM	ARRIVAL OF THE GUEST OF HONOUR	10:30 – 11:00 AM	KEYNOTE PRESENTATION: PROMOTING INVESTMENTS IN GREEN PARKS FOR SUSTAINABLE DEVELOPMENT IN TANZANIA Dr. William Kindeketa, Centre Director of Mufindi Pulpwood, Tanzania Forestry Research Institute (TAFORI)
9:10 – 9:15 AM	NATIONAL ANTHEM	11:00 – 11:20 AM	PRESENTATION: DEVELOPMENT AND MANAGEMENT OF GREEN PARKS IN DODOMA Ms. Aziza Mumba, Assistant Administrative Secretary, Office of the Regional Commissioner of Dodoma
9:15 – 9:25 AM	WELCOMING MESSAGE Mr. Kadari Singo, Chief Executive Officer, UONGOZI Institute	11:20 – 2:00 PM	DISCUSSION
9:25 – 9:35 AM	REMARKS Hon. Rosemary Senyamule, Regional Commissioner of Dodoma	2:00 – 3:00 PM	LUNCH
9:35 – 9:45 AM	WELCOMING THE GUEST OF HONOUR Hon. Dr. Suleiman Jafo (MP), Minister of State, Vice President's Office (Union Affairs and Environment)	3:00 – 3:15 PM	CLOSING REMARKS Prof. Davis Mwamfupe, Mayor of Dodoma
9:45 – 10:20 AM	ADDRESS BY THE GUEST OF HONOUR H.E. Dr. Philip Isdor Mpango, Vice President of the United Republic of Tanzania and Patron of the Green Growth Platform	3:15 – 4:15 PM	A SHORT EXCURSION TO THE CHINANGALI RECREATION PARK Mr. John Kayombo, Executive Director, Dodoma City Council

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