

Smart Cities in Africa -Cities Experience

International Mayors
forum

Dakar, Senegal
April, 2023

WeGO
World Smart Sustainable Cities Organization

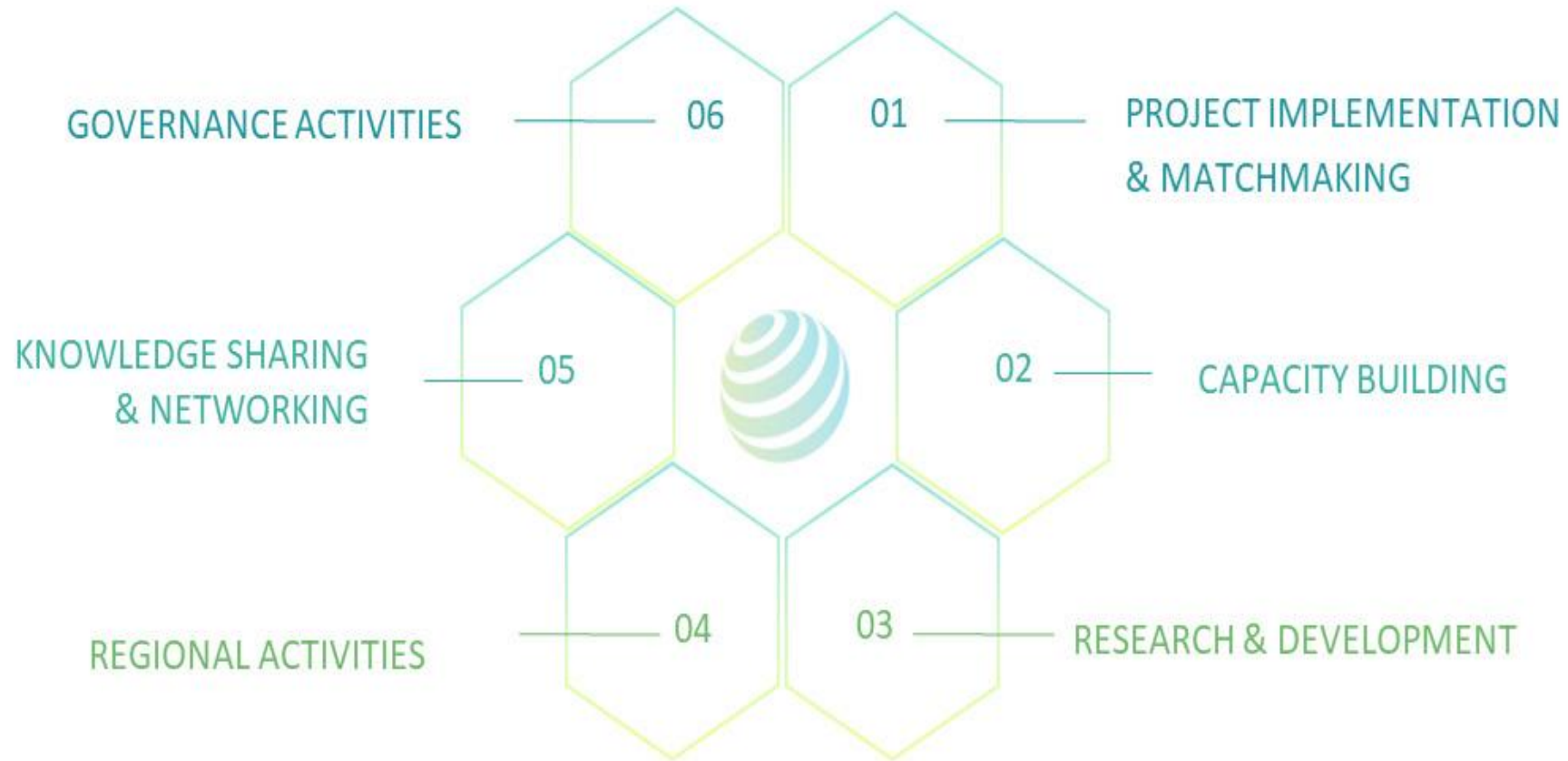


Abiodun Essiet
WeGO Africa Regional Office Director

World Smart Sustainable Cities Organization WeGO

- The World Smart Sustainable Cities Organization (WeGO), established by 50 founding members in 2010, is an international association of city and other local governments, smart tech solution providers, and national and regional institutions committed to the transformation of cities into smart sustainable cities.
- WeGO has over 200 members around the world and serves as their international platform to improve the quality of life, innovate in the delivery of public services, and strengthen regional competitiveness.

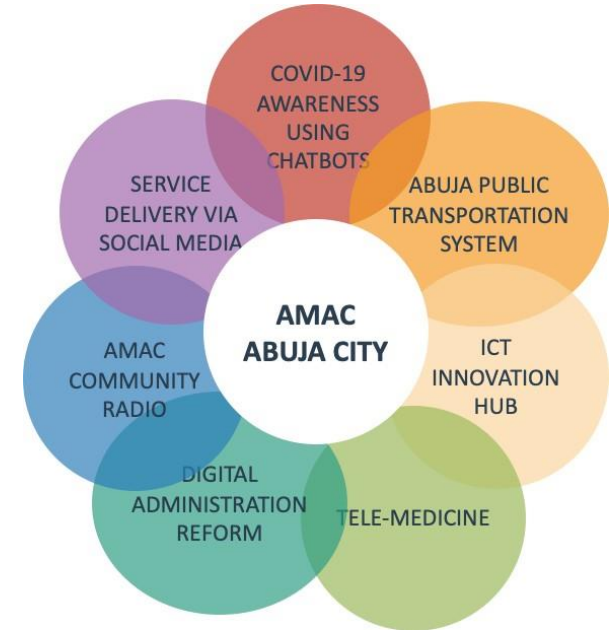
Main Activities



WeGO Africa Regional Office , Abuja Nigeria

VISION

- To build smart, sustainable, innovative and inclusive cities within the
- African context of oneness and in line with WeGO's global vision



MISSION

- To strategically identify city problems within African cities through a well-articulated innovation ecosystem
- To develop programs that provide solutions to city problems in partnership with WeGO Secretariat and partners
- To recruit new members into WeGO and ensure their active participation as members of WeGO

Smart Cities Implementation: Challenges in Nigeria

- A city is a large human settlement that have extensive systems for housing, transportation, sanitation, utilities, land use, and communication. Their density facilitates interaction between people, government organizations and businesses, sometimes benefiting different parties in the process.
- European Parliament (2014) has defined smart cities as “a place where the traditional networks and services are made more efficient with the use of digital and telecommunication technologies, for the benefits of its inhabitants and businesses”.
- In Nigeria the challenge of urbanization includes urban poverty, inadequate formal land development, squatter and slum settlements, and absence of essential services . These problems are associated with poor planning and ineffective government at all levels
- These crisis in the Nigerian urban setting is due majorly to corruption, the lack of human and material
- capitals and absence of harmony between the federal and state governments, local and state governments

Smart Cities Implementation: Challenges in Nigeria contd

- The crisis of urbanization in Nigeria was exacerbated by lack of data and outdated city plans, lack of coordination amongst planning institutions, failure to execute detailed land-use plans, absence of cutting edge technology to facilitate planning and land administration processes, lackadaisical attitude to new knowledge in the field of planning and poor urban coordination and corruption
- **Necessary conditions for smart city implementation**
- The use of Information and Communication Technology (ICT) to enhance people's living within the city shows that technology is fundamental to a smart city. A wellfunctioning infrastructure is absolutely necessary but not enough to become a smart city. IT infrastructure and applications are prerequisites, but without real engagement and willingness to collaborate and cooperate between public institutions, private sector, voluntary organizations, schools and citizens there is no smart city

Smart cities experience in Africa

SRPOST -SMART SOLUTIONS THAT POWER UP MUNICIPALITIES IN KAMPALA CITY

- **INTELLIGENT PARKING SYSTEM**
- **Program**
- WeGO Smart Sustainable City Feasibility Study (F/S): Smart Parking
- **Funding body:** WeGO
- **Purpose-** Prior assessment and model suggestion, pilot project execution
- **Schedule-** June 2019 – early January 2020 (6 months)
- **Outcomes**
 1. Introduction of a smart parking technology to Kampala Capital City Authority (KCCA).
 2. Detailed assessment of the current environment (as-is and to-be analyses).
 3. Provision of a scalable solution model for Kampala via Master Plan.
 4. Implementation of a small-scale pilot project

Smart cities experience in Africa

INTELLIGENT PARKING SYSTEM

- A parking strategy that combines technology and human innovation in an effort to use as few resources as possible—such as fuel, time and space—to achieve faster, easier and denser parking of vehicles for the majority of time they remain idle
- On-street parking
- Parking spaces designed for vehicles to park on the street or along the curb (edge of the sidewalk)
- of the street, typically with a limited parking duration.
- Off-street parking
 - a. Outdoor parking lots. This includes outdoor parking facilities with a gate or barrier, located on the ground level, and has limited parking duration.
 - b. Indoor parking houses. This includes indoor parking facilities with a gate or barrier, typically located in a multi-storey building architecture or underground garage

Parking Management System


CONNECTIONCAM1VER 1.02020-01-08 15:26:09

CCTVPassword

CAM

DRAW TYPE

RECT



PARKING LOT

Load Video

Position_1

Position_2

Position_3

Position_4

Save Position

drawonly

clear

X: 1157 Y: 367

POINT SET UP

X Point

Y Point

Add Point

Add Point(Auto)

Draw Point

Clear List

Current Parking Lot

9

Max Parking Lot

24

TEMPLATE

CROP

CLEAR

SAVE

Test Mode

Streaming Mode

MENU

Main

Setup

Statistics

EXIT

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R&D ON CITIZEN PARTICIPATION SYSTEM

- **Overview of the project**
- **Program**
- R&D Project funding for Korean SMEs Funding body: Korean Ministry of SMEs and Startups
- **Project name-** Implementation of the CPS (Citizen Participation System) in the Kampala Capital City Authority (KCCA)
- **Purpose-** To provide KCCA with Korean know-how in e-Gov, to develop an integrative online petition solution for the municipality
- **Schedule-** June 2019 – May 2021 (2 years)
- **Outcomes-** Direct provision of the solution to the KCCA, guidance in working with platfor



Smart cities experience in Nigeria

NITDA's Taraba Smart City Project Gets

The Jalingo Smart City Tracking and Monitoring project, designed and implemented under the tutelage of the Smart City initiative of the National Information Technology Development Agency NITDA, has been global recognised.

The project was awarded the Global City Teams Challenge (GCTC), \$10,000 Leadership Prize at the just- concluded Smart City Innovation Summit in Austin, Texas, United States.

The Internet of Things (IoT)-based solution, offers hope to thousands of internally displaced persons (IDPs) in Jalingo, Taraba State. It has a medium and long term plan to implement the solution throughout the North eastern region.

The project will also provide more accurate data to government agencies and support groups as well as enable citizens receive quicker and better quality response before, during and after displacements.

Smart cities experience in Nigeria contd

- The Nigeria Smart City Initiatives was inaugurated in February, 2016 by the Permanent Secretary, Federal Ministry of Communications, Sonny Echono, with the goal of enabling cities across Nigeria build smart solutions to their most pressing challenges.
- Other projects include the Abuja Integrated Transportation Project, the Ibadan Smart Waste Collection and Mapping System, The Awka Smart Internally Generated Revenue Collection Project, The Port Harcourt Traffic Flow Control System and the Smart Education Management Hubs in Sokoto and Kaduna cities.
- All projects under the programme are achieved on a public private partnership basis with strong emphasis on the use of indigenous software solutions.

Leading the Smart City Agenda in Africa



The Africa Regional Office is prepared to work with and support our members and partners to push WeGO's mission of achieving smart sustainable cities for all African cities

UBUNTU

Thank you.



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Wego Regional Office Abuja



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