

**TOWN AND COUNTY PLANNING AND DEVELOPMENT CONFERENCE, WORLD TOWN
PLANNING DAY ,THE TOWN AND COUNTY EXCELLENCE AWARDS (TCEA) 2018 REPORT**



Exhibitors:





TOWN AND COUNTY PLANNING AND DEVELOPMENT CONFERENCE 2018, WORLD TOWN PLANNING DAY 2018, TOWN AND COUNTY EXCELLENCE 2018, PRIDEINN PARADISE BEACH RESORT AND SPA , SHANZU-MOMBASA.

1: INTRODUCTION

1-1 Background

The Town and County Planning and Development Conference is an annual event organized by the Town and County Planners Association of Kenya (TCPAK) to brainstorm and appreciate the value of towns and counties towards the development of Kenya. The World Town Planning Day is an annual event celebrated worldwide, commemorating the contribution of town planning professionals towards the development of towns, counties and countries. The Town and County Excellence Awards is a ceremonial practice embedded within the conference to celebrate individuals, institutions/associations who have made an impact in the development of towns, counties and country. This year, the 3-in-1 event was marked on the 7th-9th November 2018 at PrideInn Paradise Beach Hotel, Shanzu- Mombasa City. This event also marked a 10-year anniversary since the 1st celebration of the world town planning day in Kenya and 10 years since the 1st International Society of City and Regional Planners (Isocarp) established the Nairobi Liaison Office.

Over 60 delegates participated in the marking of this annual event. The delegates were drawn from various professionals, national government, county governments, corporates, private institutions, various stakeholders and individuals in appreciation of our towns, cities and counties to bring the discussion of delivery of the Big 4 Agenda under the theme “**Sustainable, Smart and Resilient**”

At the international scene, **Town and County Planners Association Kenya** (TCPAK) partners include; The International Society of City and Regional Planners (ISOCARP), the [Royal Institution of Chartered Surveyors](#) (RICS), South African Council of Planners (SACPLAN) and Activistar (Town Planning Singapore). Locally, TCPAK partners include; Kenya Private Sector Alliance (KEPSA), Strathmore Business School (SBS), Esri Eastern Africa, Kenya Green Building Society (KGBS), Kenya National Chamber of Commerce and Industry (KNCCI), Kenya Property Developers Association (KPDA) and Upper Hill District Association (UHDA).

Mr Mairura Omwenga, TCPAK Chairman officiated the event. The event facilitators were by Dr. Jason Mochache, Architects and Planners and Wanjiku Macharia, TCPAK National Council. The chief guest speech by HE Hassan Joho, Governor, Mombasa County Government who was delivered by his representative Hon. Edward Dzilla Nyale, CEC, Lands, Planning and Housing, Mombasa County Government. The opening speech was delivered by HE Wycliffe Oparanya, Governor, County Government of Kakamega through his representative Hon. Alfred Matianyi, CEC, Lands, Housing, Urban Areas and Physical Planning, County Government of Kakamega. The keynote address was delivered by the Principal Secretary Dr. Julius Muia, EBS, State Department for Planning on integration of national planning and vision 2030 “ *Smart Resort Cities/ Towns and Counties in Kenya –Delivery of the Big 4 Agenda*”

The attendance was drawn from representatives from both the national and county governments. The county governments represented were: Mombasa, Kilifi, Tana River, Kiambu, Kakamega, Nairobi City, Nakuru, Embu and Kericho counties. International bodies: UN Environment. The national government also represented include the National Land Commission, Kenya Wildlife Service, Kenya National Library Services, and State Department for Public Works. Private Institutions: National Housing Cooperative Union (NACHU), MyRita Consultants, Architects and Planners, Frontline Planning and Innovations, Clarent Urban Consultants, Adrian Kenya, Azimath, Esri Eastern Africa. Associations: Public Health Society of Kenya, Red Cross Society of Kenya, Engineers Board of Kenya, Upperhill District Association (UHDA)

1-2 Town and County Planners Association of Kenya



In his opening remarks, Mr. Mairura Omwenga acknowledged the presence of chief guests (PS, Dr. Julius Muia EBS, Hon. Alfred Matianyi and Hon. Edward Dzilla) and welcomed other participants to the conference. He also thanked everyone for attending the conference as it also marked the World Town Planning Day 2018, 8th November 2018.



Mr. Mairura, TCPAK Chairman giving his welcoming remarks to the delegates

1-2.1 Town and County Planners Association of Kenya (TCPAK)

In his presentation, Mr. Mairura detailed out what the association’s mission, vision, motto, partners both internationally and locally. He then outline the association’s calendar of events 2018 leading up to the Town and County Planning and Development Conference 2018, 7-9 November and the subsequent events for the year. He appreciated the contribution of the United Nations: UN Environment and UN Habitat in championing for urban agendas particularly climate change as an important notion to town planning professionals and

city/town/country dwellers. He noted that the UN Intergovernmental Panel on Climate Change warns that the world has only 12 years to mitigate the effects on climate change before they become irreversible. A statement by the UN Secretary-General termed the report a wake-up call to the world and the planet is running out of time to prevent global temperature increase by 2⁰ centigrade.

1-2.2 International Society for City and Regional Planners (ISOCARP)

He noted that the World Town Planning Day is celebrated globally on 8th November each year as an important day when nations globally focus their attention on the development strengths, weaknesses, opportunities and challenges of their cities, towns, counties and countries. Worldwide, towns and cities are experiencing rapid growth and spatial expansion thus need for sustainable urbanization. He recognized the International Society of City and Regional Planners (ISOCARP) for the leading effort to improve planning and attain sustainable, smart and resilient development in urban areas and cities. The Chairman also acknowledged the milestone the town planning profession has made over the last 10 years since the establishment of the Isocarp Nairobi Liaison Office.

1-2.3 Town Awards for Excellence

The objective of the Town Awards for Excellence is to recognize individuals and corporate efforts in creation of sustainable, smart and resilient development of towns, counties and country.

1-2.4 Collaboration among Institutions

The new Kenya Constitution 2010 has established two levels of government – national and county governments. Kenya has now 47 county governments that include Nairobi City County. It is noted that under the new Constitution, towns and cities are under the county governments. It is also noted that town planning and development is the responsibility of the county governments. He therefore appreciated the important role that county governments play in the planning and development of towns in Kenya. TCPAK welcomes the close working relationship with the county governments, ISOCARP Nairobi Liaison office and UN-Habitat.

After his opening remarks, Mr. Mairura invited Hon. Edward Dzilla Nyale, County Executive Committee Member for Lands, Planning and Housing, County Government of Mombasa who was representing HE Hassan Joho, Governor, County Government of Mombasa.

In his speech, Mr. Koyi appreciated the work TCPAK has been undertaking in ensuring that our towns are better, sustainable and well organized. He later invited Hon. Alfred Matianyi, County Executive Committee Member for Lands, Housing, Urban Areas and Physical Planning who read the opening speech on behalf of Governor Hon Wycliffe Oparanya who was away for official duties.

2: OFFICIAL OPENING AND KEYNOTE PRESENTATIONS

2-1 Official Opening Speech by Hon. Alfred Matianyi, CEC, Lands, Housing, Urban Areas and Physical Planning, County Government of Kakamega



In a speech read on his behalf by Hon. Alfred Matianyi, HE Wycliffe Oparanya noted that he was pleased to join and preside over the official opening of the Town and County Planning and Development Conference marking the World Town Planning Day celebrations as well as the presentation of Town and County Excellence Awards 2018.

He thanked the secretariat for extending the invitation to him as the chief guest and expressed the importance of the World Town Planning Day globally, he sent a message to the rest of the world to embrace the opportunities that arise with urbanization. His message also posed the fact that urbanization affects planners and other stakeholders especially if the growth rate exceeds the existing resources.

2-1.1 Urbanization

In his speech, his Excellency quoted that population projections indicate that by 2030 more than half of the world's population shall live in cities noting that urbanization is highest in Africa, Kenya not being spared. He noted that according to World Bank and the African Centre for Economic Transformation statistics, the share of Africans living in urban areas is projected to grow from slightly below 40% in 2017 to 50% by 2030. This high rate of urbanization can positively influence economic growth, transformation and poverty reduction. If not planned for, it can lead to increased inequality, urban poverty, proliferation of slums as well as severely strained amenities. He noted that laws, policies and action plans are therefore critical in any country's transformation when addressing urbanization. This therefore calls for smart, sustainable and resilient town/counties, cities and countries.

2-1.2 Devolution and urbanization

The Governor noted that the advent of devolution has fuelled urbanization and thus the need for appropriate measures by the devolved units to mitigate its impact. Kakamega County has embraced the SymbioCity concept which is an integrated, holistic and sustainable approach to urban development. The concept considers the inter-linkages between urban centres and encourages multi-sectoral collaboration with involvement of residents to find solutions as opposed to the sectors working solo.

2-1.3 Kakamega County Way Forward

In his speech, the governor pointed out that a parcel of land has been identified at Sabatia Market in Butere Sub County that will be transformed into a multi-purpose eco-park with a resource centre, providing space for recreation and social gatherings as well as opportunities for local economic development. This project's goal is to integrate environmental and socio-economic components for the benefit of the public as it is community driven and involves all county government departments as well as different stakeholders in the society.

2-1.4 Strategies for proper management of urban areas

HE Oparanya highlighted the following directives to guide and ensure proper management of urban areas:

- Green building technologies.
- Mobilization of finances for urban development.
- Investments in mass urban transport.
- Social housing for the urban poor.
- Investment in urban sanitation and infrastructure.
- Proper urban planning.

2-1.5 Town and County Planning and Development Conference 2018

In his speech the Governor hoped that the conference will give delegates an opportunity to look into challenges and opportunities in urbanization. It is his belief that the shared experiences will be helpful in addressing and finding sustainable solutions to Africa's rapid

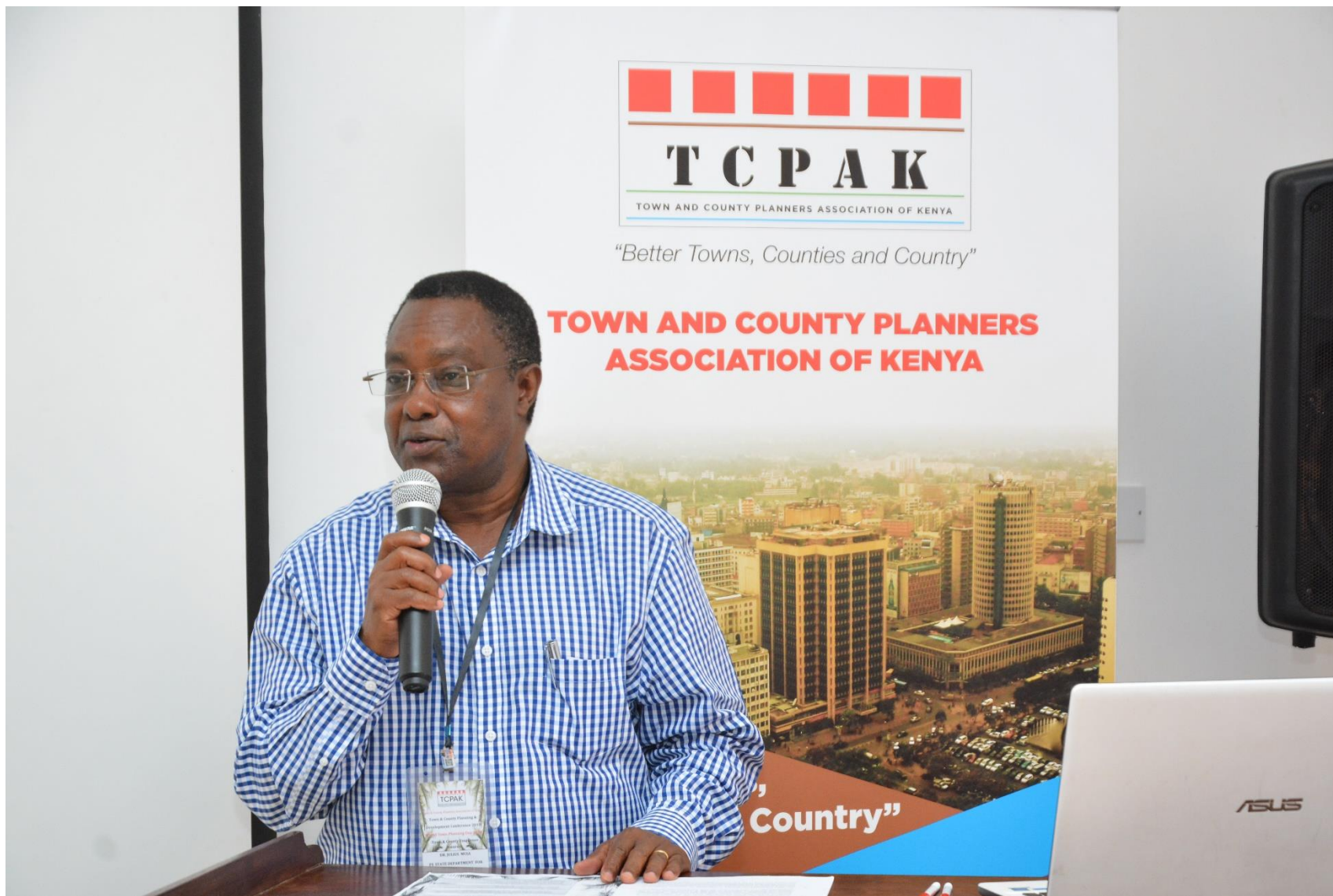
urbanization. He highlighted the sessions chosen for the conference are critical in addressing proper management of towns, counties and country.

2-1.6 Town and County Excellence Awards (TCEA)

He appreciated the presentation of annual Town and County Excellence Awards. He congratulated all those who have been nominated to receive the awards and wished them a joyous experience as they keep up the good work.

In his conclusion he wished all participants fruitful discussions and experience at the conference. He declared the conference officially opened.

2-2 Kenya's National Planning and Development Policies



Presentation by Dr. J. Muia, EBS – Principal Secretary, State Department for Planning

The Principal Secretary, State Department for Planning, Dr. Julius Muia began by noting the importance of the 3-in-1: Town and County Planning and Development Conference 2018, World Town Planning Day 2018, Town and County Excellence Awards, 2018. He acknowledged that the theme of this event “*Towns and Counties – Sustainable, Smart and Resilient – Delivery of the Big 4*” touches on the core of the National Development Agenda in which the State Department for Planning plays an important role.

He pointed out that the State Department for Planning is responsible for providing leadership in National and Sectoral Planning in the Country as well as providing guidelines for the preparation of County Integrated Development Plans. In Kenya, it is fair to state that **Town and County Planning** has become even more important with the coming into being of the two levels of government that is the National and the County Governments following the promulgation of the Kenyan Constitution in 2010.

In introductory conclusion, he congratulated the Town and County Planners Association of Kenya (TCPAK) together with their respective partners for their continued efforts in public sensitization and advocacy, awareness creation and professional opinions on matters that hinge on sustainable maintenance of the built and natural environment as well as the consequences of violation of the statutes provided for the same.

2-2.1 Delivery of the Big 4 Agenda- Manufacturing

Dr Muia pointed out the following 3 directives given by the government to guide Kenya in achieving the improved manufacturing goal:

1. To enhance the attainment of increase of manufacturing to 15 percent of GDP by 2022, among other initiatives the Governments focus will be on textile/apparel/ cotton industry with an aim of increasing the exports to US Dollar 200 Million. The Government plans to review policies and incentives in the sector, train 50,000 youth and women. In the leather industry, the aim is to make 20 million shoes and hence increase the exports from US Dollar140 million to Us Dollar500 million. Such initiatives require proper planning for the space.

2. Further, the Government aims at enhancing Small and Medium Enterprises' (SMEs) Development funds by \$500m and guarantee schemes which will increase the SMEs from 11.8% to 20% by 2022. In addition, **Ladies and Gentlemen**, merging of various Government funds which include; UWEZO Fund, Women Enterprise Fund and Youth Enterprise Development Fund to form Biashara Fund Kenya is envisioned to be of great help to the SMEs. Biashara Fund Kenya will advance loans on an interest payable at the rate of six per cent per annum on a monthly reducing balance to the youth, women and persons with disabilities.
3. The Government envisages on leveraging on the construction industry by identifying key housing components and implementing the “Buy Kenya Build Kenya” policy whereby 70 percent of total materials used for housing are locally produced. For fish processing, the Government will identify 2 aquaculture investors and key local and foreign investors to invest in fish feed mill and develop blue-ocean policy. In the Information and Communication Technology (ICT) industry, the Government will implement Kenya Industry & Entrepreneurship Project, Computer, light electronics & Information Technology (IT) related parts assembly/ manufacture and strengthen the Innovation Ecosystem which involve the incubators and the accelerators.

2-2.2 Delivery of the Big 4 Agenda – Agriculture and Food Security

Dr. Muia pointed that in order for the country to grow economically, there ought to be enough food to feed its people and thus the need by the government to improve on agriculture and food security. The following is a guideline by the government to achieve food security.

1. The Government is developing new and innovative initiatives that will drive 100% food and nutrition security. In this regard, the Government aims at enhancing large scale production with a specific focus on increasing the production of maize to 2.76 million bags of maize, rice, potato, cotton, aqua culture and feeds production by the end of 2018.

2. Further, the Government aims at driving the small scale holder productivity through establishing 1,000 targeted production level SMEs using a performance based incentive model in the entire value chain. This will help the restructuring of large enterprises by streamlining manufacturing complexes as units and hence increase the efficiency. Assessing the status of research in agriculture and its contribution to improving production in the sector and economy in general is important to ensure affordability and support value addition.

2-2.3 Delivery of the Big 4 Agenda – Universal Health Care

Dr Muia noted that the Government aspires to have Universal Health Coverage by the year 2022. The Government aims at achieving this by scaling up the National Health Insurance Fund (NHIF) and introducing a multi-tier benefit package and thereby increase the number of contributors from 6.8 m to 9.9m. The digitalization of NHIF will create customer friendly processes in terms of registration and claims and improve productivity and reduce costs.

2-2.4 Delivery of the Big 4 Agenda – Affordable Housing

On Affordable Housing, Dr. Muia articulated that the government's plan is to have at least 500,000 affordable homes in all major cities by 2022 and thereby improve the living conditions for Kenyans. The need to develop affordable housing is consistent with the achievement of Sustainable Development Goal (SDG) No. 11 that all people should have access to adequate, safe and affordable housing.

2-2.5 Integration between Town Planning and Delivery of the Big 4 Agenda

Dr. Muia, then spoke of the inextricable connection between town and county planning in achievement of the Big Four Agenda and the National Development Agenda in general. He pointed on the below parameters to articulate on the importance of town and county planning in leading the delivery of the Big 4 Agenda:

1. Provision of both the social and affordable housing requires proper planning and demarcation of land to ensure that the infrastructure not only meets the physical standards but also the health and sanitation standards as well. An economically empowered population in terms of employment and reduced poverty levels is a productive population.
2. As the Big Four Agenda espouses to enhance the manufacturing and agricultural sector, employment opportunities will improve the living standards of the people, most of whom will be living in these towns and counties. Space for both Large, Small, Medium and Micro enterprises will also be availed in the towns and counties. In this regard, this population will provide the much needed demand for services such as housing, roads, sanitation, healthcare, food and other urban related services. The multiplier effect of a conscious and prudent urban and metropolitan planning will thus be manifested in the way we manage our towns, counties and cities.
3. Food and nutrition security can only be achieved in a properly planned environment. This is so because the residents of these urban dwellings are not only meant to provide a sustainable market to the food produced but they need the food to enhance their capacity towards nation building through employment.
4. A well planned urban setup requires space for all amenities which include hospitals, access roads, crossings and many others. The Big Four Agenda regarding healthcare requires proper allocation of space for medical facilities and access roads for prompt response to health related emergencies, including ambulance, fire response, air evacuation services among others.

2-3 Reflections: Planned Land as a Key Enabler for the Delivery of the Big Four: National Land Commission (NLC)



Presentation by Dr. Rose Musyoka-Commissioner, National Land Commission (NLC)

Dr. Rose began by pointing that for successful delivery of planned land for the Big 4 Agenda, the following directives will have to be met:

- Clear understanding and adherence to relevant constitutional provisions,
- Observance of policy direction and
- Compliance with relevant legislative requirements;
- Collaborative action among the various public agencies;

2-3.1 Constitutional References

Dr. Musyoka quoted the constitutional provisions with regard to land and land use planning. She quoted the following articles:

Article 260 of the constitution which generally defines the term land as: the surface of the earth and sub-surface rock, any body of water on or under the surface, marine waters in the territorial sea and exclusive economic zone, natural resources completely contained on or under the surface and the air space above the surface.

Article 66(1) which provides for planning by articulating that ‘The State may regulate the use of any land, or any interest in or right over any land, in the interest of defence, public safety, public order, public morality, public health, or **land use planning**’

Article 42 which enforces environmental rights, it states that Every person has the right to a clean and healthy environment, which includes the right— to have the environment protected for the benefit of present and future generations through legislative and other measures, particularly those contemplated in Article 69 and to have obligations relating to the environment fulfilled under Article 70.

Article 43(1) enforces on social and environmental rights. It states that Every person has the right—

- (a) to the highest attainable standard of health, which includes the right to health care services, including reproductive health care;
- (b) to accessible and adequate housing, and to reasonable standards of sanitation;
- (c) to be free from hunger, and to have adequate food of acceptable quality;

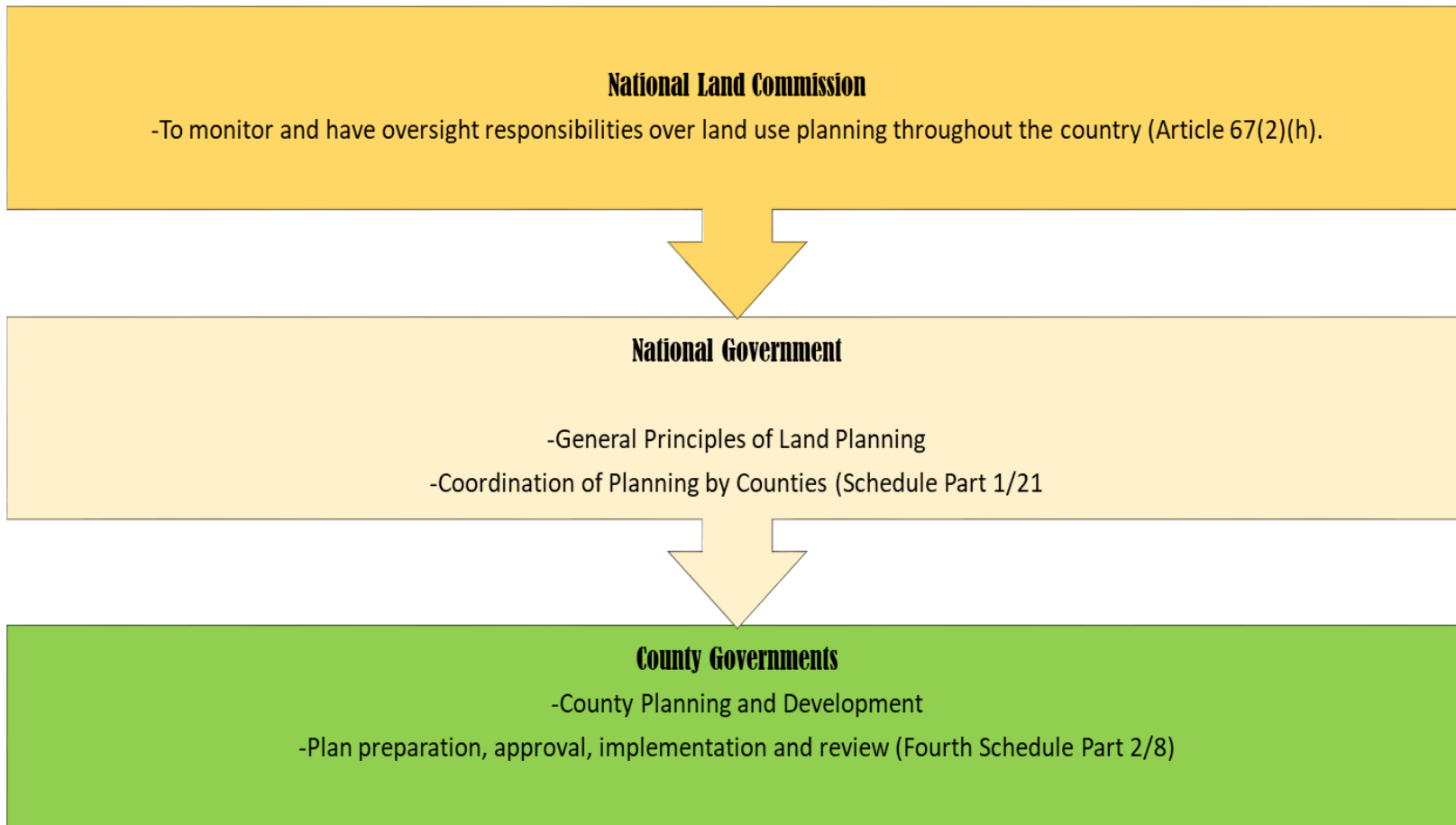
- (d) to clean and safe water in adequate quantities;
- (e) to social security and education.

Article 60(1) enforces on the principles of land policy by articulating that land in Kenya shall be held, used and managed in a manner that is *equitable, efficient, productive and sustainable*, and in accordance with the following principles—

- (a) equitable access to land;
- (b) security of land rights; (c) sustainable and productive management of land resources;
- (d) transparent and cost effective administration of land;
- (e) sound conservation and protection of ecologically sensitive areas;
- (f) elimination of gender discrimination in law, customs and practices related to land and property in land

2-3.2 Principal public actors in delivery of planned land

Dr Rose Musyoka pointed out that in delivery of planned land for delivery of the Big 4 Agenda, the National Land Commission is key in monitoring and oversight guidelines then the National Government provides general principles in relation to planning and coordination for planning in counties as provided for in the Constitution 2010, Schedule 1/21 then planning processes, preparation, approval, implementation and review is undertaken by the counties as provided for in the Constitution 2010 Fourth Schedule 4/28. The following figure illustrates the flow:



One of the NLC major contribution-County Spatial Planning: Monitoring and Oversight Guidelines.

2-4 Policy Directions

Dr Rose pointed out 2 Sessional Papers that guide the delivery of planned land in order to achieve the Big 4 Agenda namely:

1. Sessional No. 3 of 2009 on the National Land Policy which provides for:

- Preparation of land use plans at national, regional and local levels on the basis of predetermined goals and integrating rural and urban development;
- Actualization of spatial frameworks for orderly management of human activities to ensure that such activities are carried out taking into account considerations such as the economy, safety, aesthetics, harmony in land use and environmental sustainability;
- Efficient and sustainable utilization and management of land and land based resources;
- Establishment of an appropriate framework for public participation in the development of land use and spatial plans;
- Establishment of an effective framework for coordination of land use plans to ensure implementation of the planning proposals and regulations;
- Provide an appropriate framework for preparation and implementation of national, regional and local area land use plans and ensure that the planning process is integrated, participatory and meets stakeholder needs;

2. Session No.1 of 2017 on National Land Use Policy which provides for:

- A framework to ensure a land use system that will provide for:
- Land Use Planning, resource allocation and resource management for sustainable development to promote public good and general welfare;
- Coordination and integration of institutional linkages in planning at sectoral and cross-sectoral levels to foster collaboration and decision making among different land users;
- Equitable utilization of land resources to meet governance, socio-economic and cultural obligations of the people of Kenya;
- Anchoring land development initiatives that will respond positively to the market demands;
- Mainstreaming of gender and special interest groups in land use planning and management.

Legislation Provisions

2-4.1 Planning envisaged under the County Government Act 2012

Dr. Musyoka highlighted that planning is envisaged in the **County Government Act of 2012** within the following guidelines:

- County Spatial Plan (Section 110)
- County Integrated Development Plans (section 108)
- Sectoral Plans (section 109)
- City or Municipal Land Use Plans (Section 111)
- City of Municipal Building and Zoning Plans
- City or Urban Area Building and Zoning Plans
- Location of recreational Areas and Public facilities

She proceeded to point out that plans form the mandatory basis for application of public funds thus quoting the following provisions in the County Government Act of 2012:

104. (1) A county government shall plan for the county and no public funds shall be appropriated outside a planning framework developed by the county executive committee and approved by the county assembly.

(2) The county planning framework shall integrate economic, physical, social, environmental and spatial planning.

Urban Plans to facilitate development

(2) A City or municipal plans shall be the instruments for development facilitation and development control within the respective city or municipality.

(4) City or municipal land use and building plans shall be binding on all public entities and private citizens operating within the particular city or municipality.

(5) City or municipal land use and building plans shall be the regulatory instruments for guiding and facilitating development within the particular city or municipality. (County Governments Act 2012, section 111)

2-4.2 Planning envisaged under Urban Areas and Cities Act 2011

Dr. Musyoka proceeded to quote sections embedded within the Urban Areas and Cities Act 2011 where:

Section 36(1) stipulates that every city and municipality established under this Act shall operate within the framework of integrated development planning which shall:

- (a). Give effect to the development of urban areas and cities as required by this Act and any other written law;
- (b). Strive to achieve the objects of devolved government as set out in Article 174 of the Constitution;
- (c). Contribute to the protection and promotion of the fundamental rights and freedoms contained in Chapter Four of the Constitution and the progressive realization of the socio-economic rights;

2-4.3 Contribution of NLC in delivery of the Big 4 Agenda

- To manage public land on behalf of the national and county governments;
- To recommend a national land policy to the national government;

- To advise the national government on a comprehensive programme for the registration of title in land throughout Kenya;
- To conduct research related to land and the use of natural resources, and make recommendations to appropriate authorities;
- To initiate investigations, on its own initiative or on a complaint, into present or historical land injustices, and recommend appropriate redress;
- To encourage the application of traditional dispute resolution mechanisms in land conflicts;
- To assess tax on land and premiums on immovable property in any area designated by law; and
- To monitor and have oversight responsibilities over land use planning throughout the country. (Article 67(2)(h))

2-4.4 Specific roles of the NLC in facilitating delivery of the Big 4 Agenda

- Ensure that County Spatial Plans and Urban Areas and Cities Land Use Plans are prepared as a basis for identifying the appropriate land for locating the sites for development of the Big 4;
- That these plans are prepared in conformity with the relevant constitution provisions, policy direction , legislative requirements , best practice planning standards and are facilitative of the delivery of the Big 4 Agenda;
- That requisite measures are taken to correct instances of non-conformity with the land use planning law, policies and guidelines by the planning authorities;
- Facilitate setting aside of land for the Big 4- working in collaboration with County Governments;
- Expedite valuation and compensation for acquisition of private land for development of the Big 4;
- Facilitate documentation and vesting of public for the Big 4;

- Monitor the use of land set aside for the Big 4.

2-4.5 County Spatial Plan as a critical enabler in facilitating the delivery of the Big 4 Agenda

It is a requirement under Section 110 of the County Governments Act 2012;

It is an instrument for realizing constitutional promises and expectations which include; environment, economic and social rights envisaged under Article 42 and 43 of the Constitution;

Indicates where public and private land developments and infrastructure investments shall take place and areas where strategic intervention is required;

Interprets national and regional policies and guides the use of land and natural resources in the county;

Integrates sectoral policies and provides an anchor for lower level plans. (CGA 2012, section 110)

2-4.6 Conclusion and Way forward

- Location and siting of the Big 4 should be informed and led by appropriate land use plans;
- The land use plans should be prepared and implemented in strict compliance with the constitutional provisions, policy direction, professional best practices and guidelines. As well, they should respond to needs of the citizens and situational realities.
- A collaborative and inclusive approach should be taken for best results in delivering planned land for the Big 4

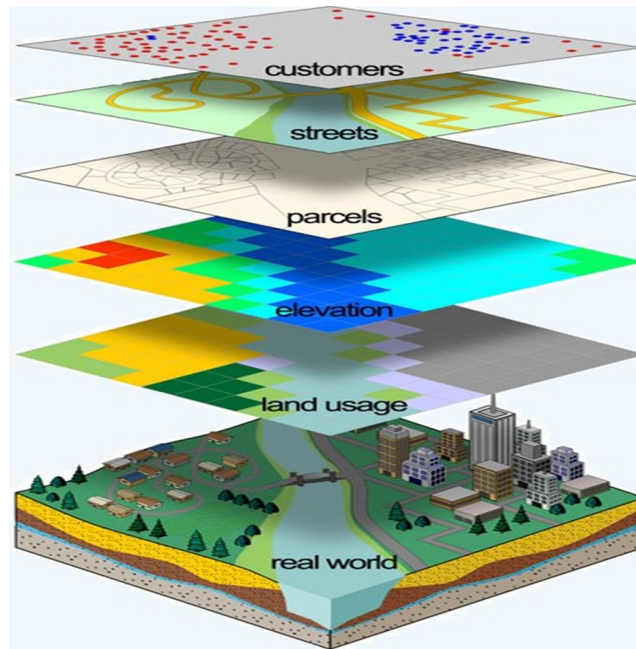
2-5 Smart Towns and Counties- GIS for Urban Planning by Esri Eastern Africa



Presentation by Everton Namasake- ESRI Eastern Africa

Mr. Everton Namasake began his presentation by introducing the company briefly. He noted that ESRI Eastern Africa is the leading marketer in GIS and has been in existence for the last 40 years. It is in over 130 countries. He defined a geographic information system

(GIS) as a system that lets us visualize, question, analyze, and interpret data to understand relationships, patterns, and trends. He emphasized on the importance of GIS as 80% of planning data has a spatial component. This can be illustrated as below:



Graphical illustration of GIS spatial analysis

Components of GIS



Function of a GIS

A geographic information system is a platform used to create, store, analyze, and present data with a spatial component.



2-5.1 GIS and Planning

The presentation slide illustrates a digital workflow for development applications. It starts with 'Current Plans to digital format', followed by 'Uploading to online platform' (labeled 'Uploading...'). The next step is 'development application and approval', which includes a visual of a keyboard with 'Menu' and 'Ctrl' keys and a green 'Approved' stamp. The final step is a 'Dashboard for monitoring and reporting on the various projects', shown as a computer screen with various charts and maps. A 3D architectural rendering of a building complex is also visible on the slide.

TCPAK
TOWN AND COUNTY PLANNERS ASSOCIATION OF KENYA
"Better Towns, Counties and Country"

TOWN AND COUNTY PLANNERS ASSOCIATION OF KENYA

Better Towns, Counties and Country

Presentation by Everlyne Lelei- ESRI Eastern Africa

Ms. Lelei tried to link GIS and urban planning in the analysis of spatial data. She cited various examples on how GIS shows and interprets spatial data.



Illustration of GIS incorporation within the built environment for Counties

Integrating 3D GIS into the planning workflows



2D Zoning Layout



3D Zoning Simulation

Urban Design & Planning with GIS

Conceptual
Planning
SMEs in AEC



Site
Planning
City Planning Dept



Master
Planning
Large AEC firms



VR/AR
Experiences
Planning & GIS Professionals



The Use of 3D to Plan Across Scales



Current Planning

Active Development Projects

[Citywide]



Long Range Planning

Zoning and Land Use Plans

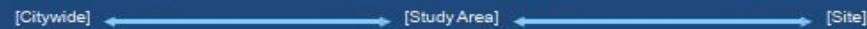
[Study Area]



Site Design

Preliminary Project Designs

[Site]



The diagrams illustrate how GIS is used in modelling of plans.