



# A Presentation at the ATI & LoGRI Workshop

Theme: “ Effective Information Technology Systems for Property Tax Administration”

Topic: Key Issues and Lessons in the automation of Land  
Taxes Administration in Kenya : A case of Nairobi County

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# Introduction



- Kenya had until the promulgation of the 2010 constitution a centralized form of government where local authorities operated at the grassroots with discretionary support from Central Government and limited powers to raise own source revenue.
- After 2010 Kenya adopted the devolved Government structure with 47 County Governments and one Central Government.
- The Central Government collects National Taxes and the County Governments have powers to collect Land related taxes (Land rates, Ground rents ,Planning and Development Control), Entertainment taxes, as well as local fees and charges for services offered.
- In some counties like Nairobi County, Land rates form the biggest revenue source, making approx. 25-30% of annual revenues. In other counties as low as 10%
- The rates are collected in most counties mostly based on a percentage of Unimproved Site Value(USV) for lease hold land. Counties however have the leeway to charge based on Improved Site value, and also on freehold land.
- Performance for this revenue stream has been below par. eg in Nairobi the performance was at 51% of target in FY2022/23.
- One of the Major struggles is in getting the right revenue collection system and implementing it right.

# Legacy Land Rates Collection System



- Valuation rolls are developed by the County Governments, adopted by County Assemblies and uploaded in the system– A requirement for every 10 years (Valuation for Rating Act), but reality is different.
- New land pieces are valued by County valuers and uploaded in the system–
  - Registration and Valuation is based on self declaration in manual forms, then data uploaded in system
  - Supplementary valuation roll are adopted by the County Assemblies every year
  - Only titled land pays land rates, other land ownerships pay for ground rent/ land rent
  - There are some flat rated areas **vs** rating based on % of value as per the Valuation roll
- Superseded land pieces deactivated in to the system based on self declaration
- Billing for Land Rates is based on values in the system and mostly done between Dec and March by printing physical bills and sending/distributing to ratepayers or collected from County offices.
- Government properties are billed for Contributions in Lieu of Rates (CILOR)
- Payments has been through bank deposits and receipting done at the cash office.
- Compliance checking is through review of system reports
- Enforcement done through manual demand notices, monthly interest on unpaid amounts calculated by the system and clamping of land/building

# Issues with Legacy Revenue Management Systems



The land rates collection system described in previous slide face different problems, issues which are similar in many Counties in Kenya:

1. Use of disparate systems – Non integrated or poorly integrated systems, leading to duplicated, inaccurate or incomplete taxpayer and tax payment data , usually employed to offer better customer service
  - Politically or vendor driven systems – usually on short contracts based on election cycles
  - Over reliance on legacy systems – outdated technologies, few touchpoints, inflexible
2. Manual and semi manual processes – registration, assessment, billing, receipting
3. Data Integrity
  - Incomplete Data eg Not all ratable properties are included, little ownership and contacts data
  - System migration issues e.g. data loss, incompatible datasets,
  - Un-validated data, hence questionable quality
  - Unavailable data eg Cadastral , Ownership, GIS, Addressing system, Building Approvals, Land Transfers
  - Data Security –Government Data in the hands of private citizens and corporations, hacking
4. Disruption in service delivery – due to non-payment of fees, legal disagreements for third party systems
5. Inadequate infrastructure at local level – Internet, power, servers, user devices(laptops,/computers, tablets)
6. Other issues –Weak legal framework(multiple land registration legislations), outdated valuation rolls, poor titling reach (land buying companies, Government leases)
7. Transparency issues –Arising from above issues

# Solution to the Legacy System Issues ....conti



- Disparate systems
- Over reliance on legacy systems
- Vendor/politically driven systems

- National Government driven IRMS deployed at the Centre and offered as a System As a Service(SAAS) or On- Premise with local and remote support

## Requirements:

- ✓ Need for proper legal and policy framework to anchor the National Government IRMS
- ✓ Need to boost internal ICT Capacity to support the IRMS
- ✓ Adequate internal and external stakeholder mapping and engagement in the building of the system
- ✓ Close collaboration between National and Local Governments to facilitate data exchange

## Opportunities:

- Local Authority Owned modern and robust IRMS
- Collaboration by several Local Authorities to develop and rollout jointly owned IRMS



- Manual and semi manual processes
- Data integrity issues

- Implement an IRMS allows for:
  - Integration with single sources of truth – National Government land registries, registrar of persons/companies, tax authority for mutual data exchange between National and Local Governments
  - Online/mobile self registration by taxpayers – validation of registration data through integrations with registrar of persons/companies, Email and SMS OTPs during registration to validate contacts
  - Business Process reengineering to allow for computer aided valuation (based on valuation factors), Self declaration(for valuation), automated billing, online/USSD Bills retrieval, receipting and document issuance
  - Integrated payment channels – Bank Platforms, Mobile Payment channels, Cards for instant update of taxpayer ledgers
  - Multichannel customer interactions – Web, Mobile apps, USSD, distributed/mobile service/support centers /desks ,
  - Automated workflows for self applications, inspections, approvals
  - Multi channel communications – Email, SMS with real time notifications
  - Real time Customer Ledgers with downloadable bills, receipts , statements and certificates
  - Compliance Management – Computer or Mobile app based
  - Electronic Enforcement actions – Email, SMS reminders/warnings, demand notices
  - Rich reporting modules – Detailed and summary operational and financial reports and Dashboards

### Opportunities :

- Data cleanup, updates and reconstruction for base data e.g. Land/Property details, Taxpayer Details, GIS/Locational data – Need for intentional, well coordinated and funded data cleanup/ reconstruction program.
- Data Exchange between National and County Government for mutual benefits – Cadastral Data, Land Subdivision/Amalgamation
- GIS based compliance Management
- Sensitizing citizens, key stakeholders (eg land selling companies) on self service capabilities and consequences of non compliance to encourage voluntary onboarding
- Agency network

# Login Requirements:

**Individuals:** National/Alien ID, Phone Number , Email(Optional)

**Organizations:** Business Registration Number, Tax PIN, Phone Number, Email



The screenshot shows the Nairobi Pay login page for individuals. The header includes the Nairobi Pay logo and navigation links: Home, Services, Contact, FAQs, and a Log In button. The main content area features a 'Hello, Welcome' message and four selection buttons: Individual (highlighted in dark green), Organisation, Citizen (highlighted in dark green), and Non-citizen. Below these are two input fields: 'Your National ID' with a placeholder 'Enter Your National ID' and 'Password' with a placeholder 'Enter password'. A 'Forgot password?' link is positioned above a 'Login' button. At the bottom, there is a 'Register' link for users without an account.

The screenshot shows the Nairobi Pay login page for organizations. The header includes the Nairobi Pay logo and navigation links: Home, Services, Contact, FAQs, and a Log In button. The main content area features a 'Hello, Welcome' message and two selection buttons: Individual and Organisation (highlighted in dark green). Below these are two input fields: 'Organisation KRA PIN / BRS Number' with a placeholder 'Organisation KRA PIN / BRS Number' and 'Password' with a placeholder 'Enter password'. A 'Forgot password?' link is positioned above a 'Login' button. At the bottom, there is a 'Register' link for users without an account.



# Services Page



The screenshot shows the Nairobi Services website interface. At the top, there is a navigation bar with the following links: Home, Services, Contact, FAQs, and a prominent green 'Log In' button. The main content area is divided into several columns of service categories:

- Parking Management**
  - Daily Parking
  - Seasonal Parking
  - Reserved Parking
- Land & Urban Planning**
  - Land Rates Bill
  - Ground Rent/SDR
  - Land Owner Ammendment
  - Land Survey
  - Land Clearance
  - Property Development Applications
- Property Management**
  - Tenancy Application
  - Tenancy Transfer
- Social Services**
  - Hire of County Grounds
  - Hire of County Halls
  - Hire of School Facilities
  - Hire of County Equipment
  - Hire of Stadium
- Business Licencing**
  - Single Business permits
  - Weights and Measures
  - Betting and gaming
- Essential Services**
  - Fire & disaster management
  - Education
  - Environment
  - Roads, Public works & Transport
  - Admin and Other Services
  - Agriculture (Fisheries & Vet Services)
  - Cooperative
  - Bus shelter services
- Health Services**
  - Health Certificate and Other Licences
  - Other Health Services
  - Ambulance Services
- Cess Management**
  - Market Cess
  - Transport Cess
- Outdoor Advertisement**
  - Advertisement(Small Format)
  - Advertisement(Large Format)
- Jitambue**
  - Validate County Staff

At the bottom of the page, there is a promotional banner with the text: "Access our services easily and quickly. Create an account and get to enjoy Nairobi County services online." Below this text are two buttons: a yellow 'Log in' button and a white 'Create account' button with a plus icon. To the right of the text is an illustration of two people looking at a smartphone, and a small icon of a person at a service counter.

# Receipt/Invoice Download Page



Browser address bar: [nairobiservices.go.ke/account/transactions-history](http://nairobiservices.go.ke/account/transactions-history)

Navigation: Home Services Contact FAQs

User Profile: Andrew Waboi  
andiewamae@gmail.com

Total Outstanding Bill: **Ksh. 0.00** [DOWNLOAD](#)

Left Sidebar: Unpaid Bills, **Transaction History**, Service Applications, Obligations, Draft Applications

### Transactions History

Search

Date ++	Invoice. no ++	Description ++	Receipt No ++	Amount ++		
10/19/22	BL-ESS-00088	Payment Receipt	TESTT	2,000	<a href="#">Download</a>	<a href="#">View</a>
04/24/23	BL-LR-047633	Payment Receipt Parcel No. BLOCK 136/9106	RC08PYBVT8	10,560	<a href="#">Download</a>	<a href="#">View</a>

5 Showing 1 to 2 of 2 results 1

# Online Billing Page

The screenshot shows a web browser at the URL [nairobiservices.go.ke/land-rates-bill](https://nairobiservices.go.ke/land-rates-bill). The page features the Nairobi Revenue Services logo and navigation links for Home, Services, Contact, and FAQs. A sidebar menu under the heading "Lands" includes options for Land Rates Bill, Ground Rent/SDR, Land Owner Ammendment, Land Survey, Land Clearance, and Property Development Applications. The main content area is titled "Land Rates Bill" and shows a progress indicator with two steps: "1 Land Info" and "2 Confirm Details". Below the progress indicator, there is a form field labeled "Enter your land / parcel number" with a placeholder text "Enter your land / parcel number". At the bottom of the form, there are "Previous" and "Next" buttons.



## USSD and SMS

Welcome to Nairobi Revenue Services.

- 1.Parking Services
- 2.Markets Cess
- 3.Licencing Services
- 4.Land Services
- 5.Property Services
- 6.My Bills
- 7.My Profile

CANCEL

SEND

Dear Andrew, pay your 2023 land rates for BLOCK 136/9106 of KES 9,600 via MPESA Paybill 6060047 A/c. No BL-LR-047633 or at Equity Bank 1770279910476, Co-op Bank 01141709410000. Take advantage of the extended interest-free period ending 30th Apr 2023

# Solutions...conti



Inadequate infrastructure at local level – Internet, power, servers, user devices(laptops/computers, tablets)

- Investment by the Local Authority in the required IT infrastructure and end user devices – Framework contracts with prequalified vendors ideal.
- Collaboration with National Government to use available but idle National Government resources e.g. Census tablets, laptops, etc – There is need for National-Local Governments collaboration frameworks

## Opportunities :

- Donor funding for required IT infrastructure
- Leasing of infrastructure
- Cloud Services
- Agency model – collaboration with Private Sector
- Common infrastructure across counties

# Solutions...conti



➤ Other issues – Weak legal framework(multiple land registration legislations), outdated valuation rolls, poor titling reach (land selling companies, Government leases, poor compliance and enforcement laws)

- Dedicated legal counsel for Local Authority's revenue legal and policy reforms e.g. Out of Court settlement for valuation issues, fast track set up of valuation court, strengthening of revenue laws eg introduction of Agency notices, etc.
- Collaboration with Private Sector players in Valuation roll update for mass valuations

## Opportunities:

- Collaboration between Local Authorities and National Governments on legal and policy reforms affecting both levels of governments. e.g. Sectional Properties, Land Registration, Land Valuation, Land Titling laws reforms
- Computer assisted valuation based on predefined valuation factors
- Property Taxes based on developments on land.

# Conclusion



- ❑ With the current technology advancement , it is possible to have an integrated system for property taxes that enables: data collection, computer assisted valuation, tax assessment and online invoicing, integrated payments with automated reconciliations, automated compliance management and enforcement support, and that offers multiple touchpoints for staff and customers.
  
- ❑ Collaboration between National Government and Local Authorities as well as among Local Authorities through clear collaboration frameworks provides an opportunity to synergize for mutual benefit of the two levels of Government in the following areas:
  - a) Building and rolling out of a robust IRMS,
  - b) Legal reforms
  - c) Validation and improvement of available data
  - d) Capacity building
  - e) Infrastructure sharing



**Thank You**

**Merci**

