



**Commission on Revenue Allocation**

## **SURVEY REPORT**

# **County Implementation of Automated Revenue Management Systems**

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## SURVEY REPORT

### COUNTY IMPLEMENTATION OF AUTOMATED REVENUE MANAGEMENT SYSTEMS

©

**Commission on Revenue Allocation**

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## 1. Executive Summary

The Commission on Revenue Allocation (CRA) is mandated by the Constitution of Kenya 2010 under Article 216 (3) (b & c), to encourage fiscal responsibility define and enhance revenue sources for both national and county levels of government, while formulating its recommendations.

Devolution is expected to bring increased coverage and quality services to the people, but this can only be achieved if there are commensurate revenues to meet requisite costs. Own Source Revenues (OSR) by counties have the potential of being a significant contributor to total revenues in respective counties and thereby supporting enhanced service delivery. To this end, CRA deemed it fit to examine how counties performed on OSR during the first term of devolution (2013 -2014). More specifically CRA sought to assess the effort and impact of automation on OSR in various counties.

During the first term of devolution, 33 counties made attempts to automate revenue collection. The effort and outcome of these attempts varied. Some counties showed steady increase in OSR, these included: Baringo, Bungoma, Kericho, Kisumu, Meru, Mombasa, Nyandarua, yet others such as Busia, Isiolo, Mandera, Nakuru, Samburu, Tana River and Vihiga, had an overall decline in OSR.

At the onset of devolution, CRA had issued guidelines to help counties to efficiently and effectively undertake revenue enhancement measures through automation of revenue management. Revenue management from the perspective of CRA encompasses both revenue collection and revenue administration. Thus, one of the key aspects of this review was to assess the level of compliance with the provided CRA guidelines and to examine the output of the various efforts by counties.

From the outset it was noted that counties that tried automation, had mainly focused on one aspect of revenue management, that is revenue collection. Little effort had gone towards extending automating revenue administration to ensure efficiencies, compliance and transparency.

The review was focused on understanding these key gaps in revenue management and exploring options towards mitigating these critical shortfalls. Whereas the review was heavily focused on the technical and technology aspects of automation, it also broadly looked at the overall context

of the OSR value chain, interrogating important elements that have an equally significant bearing on revenue enhancement, among these are: Requisite legislation, subsidiary laws, issues to do with enforcement, administration, HR resources technical skills gap required, change management issues.

Arising from the review, high-level insights and approach to help counties transform their Revenue Management strategies, include but not limited to the following:

- A pointed focus on taxpayer service delivery experience—creating a direct correlation between payment of taxes, fees, user charges and the expectation of quality and quantity of service delivered;
- Designing and implementing revenue collection and revenue administration systems and processes that are efficient and that comply with the PFM as well as attendant regulations and guidelines;
- Review and improve on revenue administration and governance structures;
- Identify skills gap in revenue management structures and undertake skills upgrade and training;
- Plan and implement change management processes;
- Assess, evaluate and monitor the impact of proposed solutions.

## 2. Forward

County Governments serve as the pillar of development and economic growth, and it is essential to ensure they have the capacity to raise enough revenue to support development projects. A county government is a huge and complex organisation, whose operations and strategic focus could be greatly enhanced by the well-focused application of Information and Communication Technologies (ICT) to support improvements in productivity, management effectiveness and ultimately, the quality of services offered to citizens.

Own Source Revenue collection is an integral component of fiscal policy and administration in the county. It is the fuel of every county government and supplements the equitable revenue share. With growing demand for services by the citizens and limited available resources from the national government, the need to strengthen county revenue management systems is important. Yet, devising efficient means of collecting revenue remains a challenge.

While the benefits of ICT in government cannot be disputed, there are several concerns about its success as well as the strategies to be adopted in implementation of systems in various counties. Despite the best effort by the counties to automate their revenues, they still face challenges. As a commission we have, in pursuit of our mandate on revenue enhancement and financial management by the county government, issued various recommendations on means and ways by which counties can enhance their revenue sources.

The commission, in recognition of the role that Information Communication technology plays in revenue enhancement, has been organising Annual County Revenue Automation Conferences. It is in this conference that counties share best practices and creates a conducive environment for counties to bench mark. During the 2<sup>nd</sup> Annual Revenue Automation Conference, the delegates mandated the commission to do an assessment survey to identify the impact of automation in revenue enhancement and at the same time identify gaps that hinder successful automation of revenue in the counties. It is in pursuit of this need that the commission commissioned this survey whose findings are shared in this report.

In this report, we have highlighted key observations in the success and obstacles to revenue enhancement and automation and have shared various policy recommendations. These recommendations are to the counties as well as the various government and non-governmental stakeholders supporting the county governments.

We would like to extend our appreciation to the United States Agency for International Development (USAID) through the Agile and Harmonized Assistance for Devolved Institutions (AHADI) Program and the consultants who tirelessly travelled to the 15 sample counties to conduct this survey. The financial and technical assistance enabled this report to be finalized. We would also like to appreciate, the governors of the 15 sample counties for the support that they accorded to the consultant in the quest to get relevant data.

We hope the findings and recommendations will bring forth marked improvement in Own Source Revenue growth once implemented.



**George Ooko**  
Commission Secretary & CEO  
Commission on Revenue Allocation

### 3. Introduction

In 2010, Kenyans promulgated a new Constitution. One of the pillars of the Constitution is devolution centered on 47 county governments. The constitution grants counties the freedom to generate revenue to implement their functions. Article 209 (3) of the Constitution empowers the county governments to impose two types of taxes and charges. The sources of county government revenue include revenue generated locally, revenue received from the national government, and revenue sourced externally. These local revenue sources are property rates and entertainment taxes. The county governments can also impose charges for any services they provide in accordance with the stipulated laws.

As part of the devolution process, county governments are mandated to provide the essential services to its citizens such as good education, health care and good roads. Each county receives a percentage of funds from the national government depending on some factors such as poverty level index. This amount received from the national government is not sufficient to provide these services. To ensure sustainability, counties are expected to generate their own income. It is therefore very necessary to have a good and strong foundation of an automated revenue collection management system. The county government contends with slow performance in own-source revenue because of the following: Weak revenue management leading to revenue leaks, under collection and poor revenue management; ineffective revenue monitoring and control systems; lack of updated revenue databases; lack of enumeration and classification of revenue source. Other reasons are: Slow pace to enact revenue legislation; low capacity support in revenue function; and slow progress towards automation and integration of revenue functions. Also, inadequate political goodwill from both arms of county government.

The commission is mandated under Article 216 (3) (b) of the Constitution to define and enhance revenues sources to both the national and county governments. Further Article 216 (c) mandates the commission to encourage fiscal responsibility. In furtherance of its mandate, the commission engaged with county governments in recommending ways of enhancing their local revenue through automation. In the FY 2013/14, the commission, the National Treasury and other stakeholders jointly developed county revenue automation guidelines to be strictly followed by counties while procuring revenue management systems. While some have followed these guidelines, others have not leading to mixed outcomes. So far more than 30 counties have attempted to automate their revenues with mixed results.



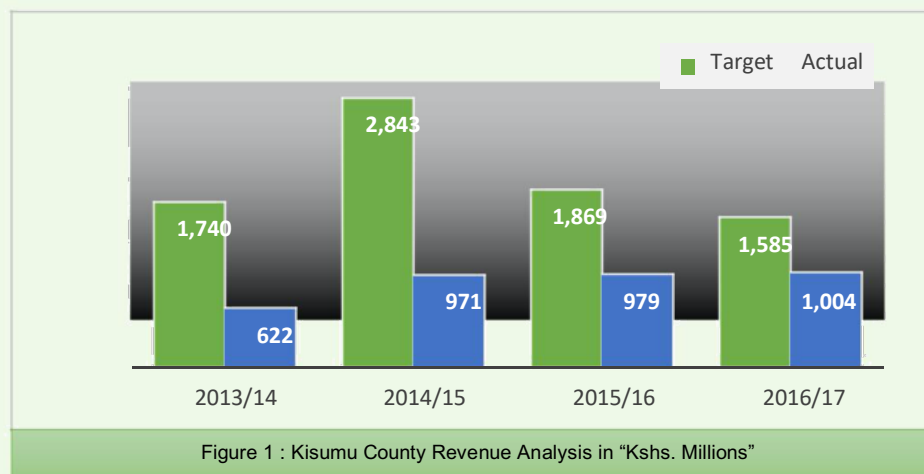
In view of the above, the commission, with support from USAID, commissioned this study popularly referred to as County Revenue Management System (CRMS) Review Study in fifteen counties to ascertain the impact and the gaps in the revenue automation and provide appropriate recommendations. The CRMS study draft report was validated with all the stakeholder through workshops and eventually was presented during the 3rd County Revenue Enhancement and Automation Conference.

The observation made by the commission from the above study showed despite the fact that most of the counties had automated, only a fraction of the revenue streams had been captured. In some instances a county would have several independent revenue management systems in operation. Other notable observations included weak internal control in the revenue management system; revenue collected not being fully accounted for; cash and bank reconciliations not consistently being carried out. Also, the internal audit department that would have recommended strong internal control procedures was understaffed in most counties, and in some cases, the staff lacked the technical capacity to carry out checks. Moreover, the cost of revenue collection and administration still remains high hence reducing the gains of revenue automation. It is, however, worth noting there are counties that have done the automation the right way following the guidelines and have significantly grown their revenues.

## 4. County Governments Findings & Recommendations

### 4.1. Kisumu County

Kisumu County has more than 30 revenue streams, a few of these have been automated. The



automated revenue streams are mainly the unstructured ones like bus-parks and markets. Other automated services are not integrated and may be operating on a stand-alone basis.

The automation was commissioned in April 2015 after the selection of the vendor through a tender process. However, during the meeting with the Revenue Task Force, it emerged there was a second contract that had been signed in 2016 with another vendor (JamboPay). Details of the second service provider contract and the attendant service order were unavailable.

#### **Report Findings:**

**Cost of the System – KES 31 million.**

**Revenue Share:** 5% to the Vendor

**Revenues Automated** include mainly unstructured revenues like Bus Park and markets.

**Support & Maintenance Contract:** Included in the Revenue Share Fees

The Revenue Management System in Kisumu is provided by KCB Riverbank.

#### **• Vendor Related Problems:**

Notably, the vendor has been receiving and keeping the county revenue for more than a week before remitting the same to the County Revenue Fund account. The other concern is that crucial

system module like Automated Revenue enforcement has been deactivated in the system thus making it difficult to enforce revenue and collect defaulting penalties

Lastly, the vendor has deployed limited on-site technical support team hence incapacitating the revenue function due to limited support.

It takes a long time to either repair or replace broken down Point of Sale gadgets for revenue collection hence creating a challenge for the affected revenue collectors to meet their revenue targets.

- **Use of LAIFOMS:**

Continued use of LAIFOMS is equally a source of concern based on the fact that it portends revenue loss to the county due to such system duplications, or system alternatives not provided for in law.

- **Human Resource Issues:**

The revenue officers, entrusted with the responsibility of revenue collection for and on behalf of the county, have largely been hired on casual terms and are not paid on time sometimes delay in salary extends to months. This has not only lowered their morale but have increased their propensity to pilfer the revenues they have collected. It is also true that a majority of these revenue officers were inherited from the now defunct local authorities and have not reconciled their minds towards revenue automation. During this survey, it became evident that these revenue officers are strongly against revenue automation as well as its implementation. Cases of non-revenue staff being deployed to collect revenue is evident due to the shortage of revenue officers and this has complicated the issue of revenue accountability.

The revenue department has not had staff rotation for a long time thus leading to collusion between revenue collectors and the citizens. There is need to develop a policy on staff rotation to make the revenue collection process efficient and stem revenue leakages arising from familiarity.

The enforcement officers also perform the role of revenue collectors whilst abandoning their enforcement responsibilities. The enforcement officers also collect revenue in the livestock markets and since these markets are far apart, sometimes they are confined to specific markets as a way of avoiding to travel long distances to other markets.

- **The need for Training and Capacity Development:**

It was noted revenue staff need capacity training to enable them carry out their duties efficiently. These skills include, but not limited to, basic revenue accounting skills, customer relations skills and revenue reporting.

- **Partial Automation:**

The county is yet to undertake full automation. Further, the process is not cashless and thus presenting avenues for collectors to cling onto funds for long periods without banking. It was also evident some of these collectors stay with funds beyond the weekend and in some cases the money that is banked the following Monday is less than what was captured on the Z reports.

- **Political Interference:**

Lack of political goodwill and the interference thereof remains a big challenge in collection of revenue where interested parties use those in power to intimidate the revenue clerks especially at cess points and bus parks. This was exacerbated by political interference where residents were sometimes urged by politicians not to pay taxes often for political mileage and expediency.

### **Recommendations:**

1. Improved infrastructure in Kisumu County must be defined as a priority as this will enable the county to enhance its network coverage and as a result, automate its revenue collection processes in a more efficient and productive manner. Poor roads leading to sub counties, frequent power outages and lack of good internet are major obstacles towards improved and seamless revenue collection and support systems.
2. Integration of RCS with the bank to allow for automatic uploads of slips to ZIZI records. It will reduce the inconvenience and time of queuing at revenue offices.
3. Improvement of internet infrastructure and power backup at the revenue office. This will serve to eliminate interruptions and ensure round the clock system availability. It will also ease the uploading process.
4. Separation of the bus park from the market is something that ought to be considered. Having the bus park and the market in one location causes congestion and this location is always busy thus it is not practical for the collectors to leave their station to go around collecting revenue. There is too much congestion of both market vendors, shoppers, drivers, conductors and the fish market which also operates in the same premises.

- 5.** Enhancement of security at the market: The bus park collects a lot of money which can be risky to the collectors. There are no security features or systems that have been put in place by the county to ensure safety of both the collectors and daily collections. The bus park collection points should be customised to ensure maximum safety to the collectors and the cash that is collected on routine basis. Alternatively, it is highly advisable that the county considers embracing a cashless payment system at the bus stop which potentially shall serve the purpose of reducing the risks associated with cash transactions.
- 6.** Creation of a fully dedicated revenue enforcement department. There is need to create an enforcement department that is part of the revenue collection team. It will be easier to set targets and manage an enforcement team for greater efficiency in revenue collection and management.
- 7.** HR to review the feasibility of recruiting new staff to support the current team that is greatly understaffed and to replace the retirees. There is need to also have clearly defined job descriptions for all staff (a) revenue collectors (b) inspection and enforcement officers (c) technical and service provision staff.
- 8.** Training is necessary to enhance the skills of the revenue staff. This will also eliminate the involvement of non-revenue staff collecting revenues.
- 9.** Reporting is mandatory. Currently there is no visibility of the back-end and front-end reports. Banking figures given are based on the front-end. The county never receives reports from the bank system as this is not integrated to the revenue collection system. Money collected by the POS is usually handed to a second party (supervisor) who takes it to the agent, who then takes it to the bank. This current process creates a gap in the flow of revenue.
- 10.** Disaster Recovery Site is needed as the county does not currently have one. All data sits with the vendor and this poses a big risk to the county.
- 11.** Discontinue the use of LAIFOMS since the interviewed staff members who were able to confirm that the data contained in LAIFORMS is not refined data and as such incapable of being relied upon. Further, the continued use of two parallel systems also creates a gap in the revenue collection process and is susceptible to revenue leakages through under reporting.

## 4.2. Vihiga County

### Revenue Performance in terms revenue target against Actual Revenue

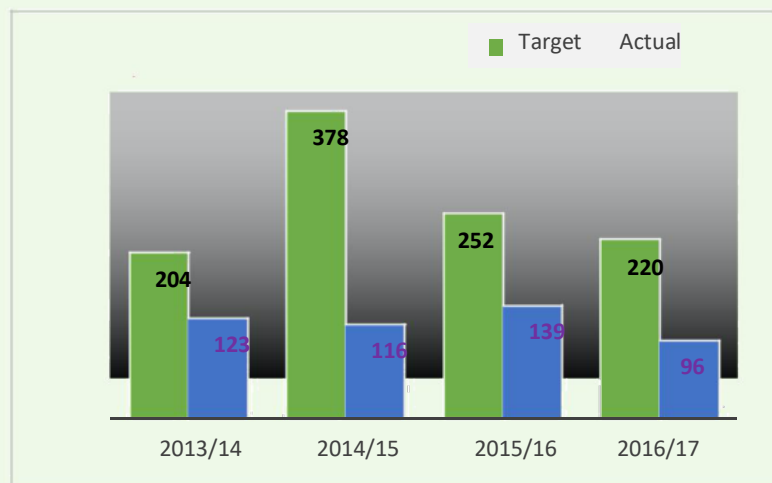


Figure 2 : Vihiga County Revenue Analysis (in "Kshs. Millions")

the automation of these two revenue streams.

The county faces many limitations that have impacted on the automation process. 150 POS devices were provided by the vendor for the automation of the two revenue streams.

The acquisition process for the revenue management system was not clear to the stakeholders and there is no proper documentation for the entire process.

**Cost of the System** – The cost of the system was **KES 23 million** for implementation. The initial budget for implementing the system was KES 15 million. This means that there was an additional charge of **KES 8 million** the justification for which no one in the county was able to explain.

**Revenue Share:** None

**Support & Maintenance:** This was to be covered under the Service Level Agreement which remains unsigned to-date.

**Revenues Automated** – Market Fees and Parking

Vihiga County has a total of 22 revenue streams. The original plan was to automate six revenue streams including miscellaneous, ground rates, motorbike stickers, plot rent/rates, parking fees and market fees. However, only two of these have been automated, market fees and parking fees. The county has not seen much impact in its revenue collection following

## **Report Findings:**

- 1. Weak enforcement:** As manual collection and partial-automation are running parallel to each other, this has the effect of undermining revenue collection and enforcement. When citizens do not pay their fees, there is little the enforcement officers can do thereby impacting revenue collection in the county.
- 2. Departmental wrangles:** There is need for clarification of roles for both the county finance and ICT department as far a management and ownership of the revenue management system is concerned. This clarification will bring focus delivery of revenue targets through the system.
- 3. Sharing of POS devices:** Such acts provide loopholes or a window through which revenue eventually gets pilfered or outright not accounted for. In the course of such sharing of POS machines, passwords also get shared and the revenue officers work in a manner that they can balance or equalise their daily collections as between each other.
- 4. Hosting of data on foreign cloud servers:** This is a concern and though the county affirmed it had shifted the hosting to a local server, this assertion ought to be checked.
- 5. Lack of data:** It is of concern the county does not know how many businesses there are in the county and as such are unable to set targets or even track which revenues have not been paid, thereby limiting or undermining their enforcement capacity.
- 6. A Support and Maintenance contract is lacking.** There is no Service Level Agreement between the County Government and the Vendor. Due to this, the vendor has discontinued all support to the county. No repairs or replacement of faulty POSs is being done and neither is the vendor providing the necessary airtime bundles or accessories required for the POS's machines to operate.
- 7. No positive impact on revenue collection since automation.** The revenue collection system (RCS) has not helped the county achieve its revenue targets. With only two out of several revenue streams being automated, the system has not impacted revenue collection positively. The general feeling is the system is not doing what it was bought to do.

## **Recommendations**

- 1.** The system in Vihiga County needs to be interrogated further. Currently, there are two revenue streams that are operational though with minimal impact. This is inspite of the automation process costing the county Kshs. 23 million.
- 2.** The county government should undertake a review of the vendor to fully determine their solution's capability including the challenges associated with implementation and support within the county.

3. It is also advisable for the county government to terminate the existing service contract between it and the vendor on the simple account that the relationship is irreparably broken down.
4. The county government ought to carry out a comprehensive review and determination of its revenue streams before any additional commitments on the revenue collection front are undertaken.

### 4.3.Siaya County

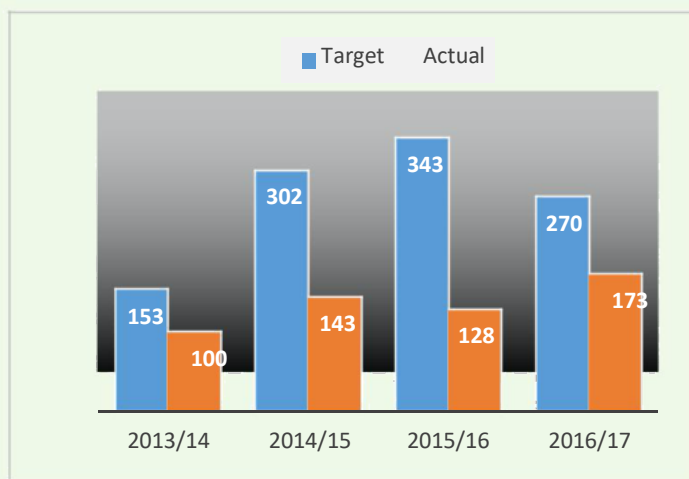


Figure 3 : Siaya County Revenue Analysis ( in KSH. Millions)

#### County Revenue Analysis (in “Kshs. Millions”)

Siaya County has automated its revenue collection through a system that has been running since 2016. Out of 38 revenue streams, 13 have been automated. Further, 7 out of 10 sub-county hospitals have also had their revenues streams automated though they are using a different independent system.

Even though the county has not attained its revenue targets, it is vital to note there has been a steady increase in realised revenue post the adoption of the automated systems.

**Cost of the System:** The cost of the system was **KES 20 million** for implementation.

**Revenue Share:** None

**Support & Maintenance:** A budget of KES 10 million per year is set aside for support and maintenance of the system. The county also mentioned they had set aside KES 25 million for an upgrade scheduled for end 2017 / early 2018

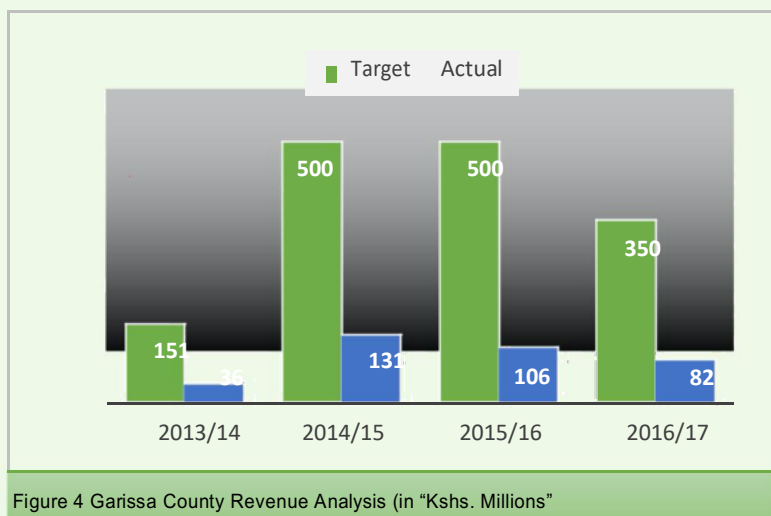
**Automated Revenue Streams:** Out of 38 revenue streams, 13 have been automated. These include market fees, fish cess, bus park, SBP, burial fees, house rent, quarry cess, promotion, hospital revenue, cattle auction, sale of seeds, sale of fertilizer

#### Report Findings:



- **Lack of Implementation Plan:** The county government did not have an implementation plan prior to the process of vendor selection. This was done after contracting, as a result, the revenue staff are not sure whether the system is still on test phase or not. Additionally, a staff re-shuffling also caused gaps during the implementation.
- **Unclear/ Collision of Roles:** The survey team found it quite anomalous that where all revenue heads are also revenue collectors thus creating confusion in the revenue department. Further, the ICT Director is the one with full access to the system and as such the revenue officer does not have independent access to data on revenue collections as is available under the system.
- **Poor Network connectivity:** This has resulted in frequent delays and difficulties in transmission of data and information that accrue from the automation process. Communication and information processing through the system is therefore bogged down.
- **Poor Enforcement:** The revenue enforcement system within the county is totally wanting and therefore largely incapable of compliance on the part of potential revenue defaulters. Within some of the markets, it was evident that the enforcement of penalties against vendors who fail to pay their market fees or ground fee, was absent.
- **Lack of change management training:** County staff are reluctant to change and embrace automation. It is unfortunate the county has not invested in change management for purposes of reorienting revenue officers towards the realities of devolution and their responsibilities thereto.
- **Budget and infrastructural constraints:** This has affected the procurement of new devices and machines. The POS's are breaking down frequently and not being replaced in good time or even at all. The county ought to resolve this.
- **Inadequate Training:** The revenue officers have not been taken through the training that adequately prepares them for the tasks associated with revenue collection. So far, the trainings are quite generic and do not specifically respond to the routine issues in the course of duty.

#### 4.4. Garissa County



approximately KES 100,000. Wednesdays are market days for livestock so the collections range between KES 130,000 to KES 150,000.

Garissa County is yet to automate any of its revenue streams though plans are underway for the following streams to be automated: Hospital, livestock, land rates, and single business permits. There are more than 100 revenue collectors in Garissa Township and their daily collections, though undertaken manually, amount to

During the survey, it emerged the county government is pushing for revenue automation and shall be setting aside a KES40 million budget to finance the quest for revenue automation. They are also keen on adopting the use of the CRA guidelines as the basis for their quest for automation including using the same guidelines for purposes of identifying a vendor with the best system.

#### **Report Findings:**

- **Understated Revenue (Livestock Market):** It is clear the county's performance on revenue collection is not at its peak. On one occasion, the CEC Finance did away with the revenue collectors from the market and replaced them with his office staff and by the end of that day, they were able to collect KES 426,000. This prompted him to set a minimum target of KES 400,000 every Wednesday yet prior to this incident, revenue collection from the markets largely stood at around the KES 150,000 mark. It was noted the collectors of revenue at times print their own receipts, which they subsequently issue during the process of collection. The impact of such actions is not difficult to fathom.
- **Livestock market:** It must be noted livestock is the biggest unstructured revenue earner for Garissa County though it is unfortunate the county has not conclusively invested in these markets including the provision of basic facilities that go with markets such as shades, water

or adequate/clean toilets. To boost the residents' ability to relate service delivery and the payment of market fees, it is critical the county government invests more in these markets.

- **Land Rates:** This is a major revenue stream that still remains untapped notwithstanding the fact that it is payable annually. Unfortunately, the county is yet to establish a systematic process of collecting this revenue and thus the residents of Garissa do not really feel compelled to pay rates. Only new registrations feel compelled to pay due to other considerations like banks loans etc.
- Additionally, it was clear a majority of the residents only pay rates when they want to construct or sell their plots or when survey officials are in the field. It is also true inadequate levels of enforcement on the part of the county government significantly contributes to noncompliance.
- **Single Business Permits:** From their estimation, the county affirms there are 25,000 developed plots. Thus, if the county can at a minimum collect KES 2,500 (the smallest charge for 50 for quarter an acre plot), that would easily translate to KES 62 million. One of the strategies they are considering is to have a Unified Business Permit. Unfortunately, it emerged there are cases of businesses being undervalued and consequently issued with licenses that you would otherwise be issued to kiosks, due to corruption.
- **Garissa Hospital:** The hospital has a Health Management Information System (HMIS) through which revenue is collected on a 24-hour basis. Daily collections are banked before 4pm though in the event of any delays or complications, remedial actions as is necessary, are taken. Generally, when the money is banked, the HMIS prints a receipt in support of that fact. The hospital receives KES 12 million a month and in return collects KES 3 million, an amount that is well below the intended target of KES 6 million a month.
- **Garissa Water & Sewerage Company (GAWASCO):** This company has a system called Promix, which is a software that automatically generates bills for GAWASCO customers. Promix is owned by Open Earth Systems. Interestingly, the county does not seem to trust the system, due to the fact that Open Earth has a database of all the customers and their balances and compliance status but is still unable to generate reports including levels of compliance.

- Despite the discontent with the system, and even though there is no contract in place between the two parties, the county government still pays a monthly fee of KES 12,000 to Open Earth Systems. Failure to pay the amount usually leads to disruptions of GAWASCO activities simply because the vendor has perfected the art of holding the county at ransom.
- Undesirably, cash payments made at the GAWASCO cash office are insecure and not systemic with regards to deposits. This is due to the fact that monies collected at the GAWASCO cash office is deposited at the KCB county account at any time of the day every day.
- Lastly, monthly collections average KES 10 million though going with the county's projections, a figure of KES 50 million as monthly collection. The foregoing notwithstanding, GAWASCO is currently mired in a financial crunch and as such, is not able to sustain its workforce, is accumulating pending bills and even unable to buy water treating chemicals. In the interim, the county government was forced to intervene and has extended financial support to GAWASCO. Going forward, it is of utmost relevance to the county to ensure the company automates its revenue collection processes, as this shall go a long way in resolving the ongoing financial problems that has beset GAWASCO.

### **Recommendations:**

1. The county assembly needs to pass the legislative bills that have been pending from the last county government. The assembly should be able to pass legislations that are ideally aimed at regulating the revenue collection sector. The passing of these legislations shall go a long way in helping insulate the county from the numerous suits it is facing from the residents over the basis upon which it is levying revenue.
2. Carry out a review of the revenue earners and determine which ones should be automated and the automation phase within which the same should happen. Such a structured approach to revenue automation is bound to yield better results.
3. It shall be prudent for the county to implement a GIS based County Revenue Management System as an end-to-end system that has all the necessary controls from point of collection, enforcement, accounting, analysis and reporting.

## 4.5. Meru County

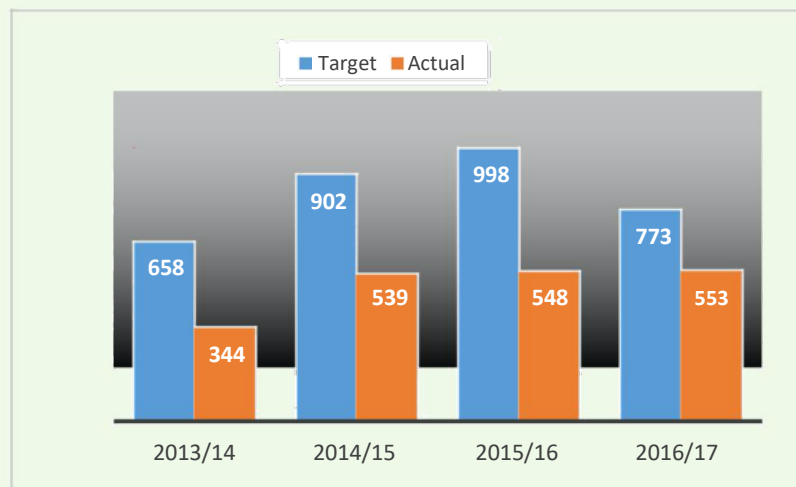


Figure 5 Meru County Revenue Analysis (in "Kshs. Millions")

The cost of the system was placed at KES 30 million. It was reported that KES 15 million had been paid as down payment.

It is noteworthy the county government had set aside KES 25 million for purposes of system upgrade which had been slotted for early 2018.

### Findings:

- An aging workforce in the revenue directorate makes succession planning difficult. Their levels of efficiency and work output is equally wanting.
- It was noted the revenue management system only reports aggregate data at every level of revenue collection per module, which limits the county's ability to fully analyse revenue performance.
- System security was a concern especially segregation of roles.
- Delayed payments of monies, due to network providers, is constantly responsible for disconnection of the county's revenue collection system from the network system.
- The county is still confronted with the fact that it collects and spends funds at source in total violation of the law; the Public Finance Management Act in this case.
- Also, the system only reports aggregate data at every level of revenue collection per module, which limits the county's analytical capacity of the system.
- During the rainy season, there is suppressed collection of CESS since the roads become impassable amounting to very low volumes of cars on the roads.

## 4.6. Murang'a County

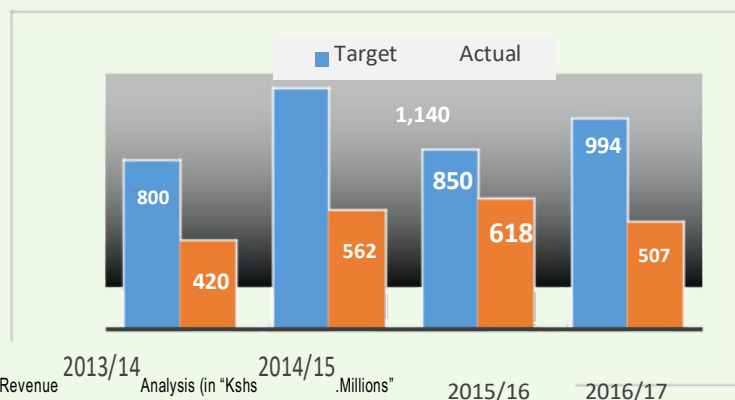


Figure 6 : Muranga County Revenue

Murang'a County set aside KES 20 million for acquisition of a revenue management system in 2014. The county floated an open tender where Safaricom, KCB, Compulynx, Pinnacle and many more put in bids. Safaricom successfully won the tender to provide

the revenue management system. The contract was for a revenue share model where Safaricom was to get 3% commission from all transactions. They, however, did not follow the work schedule originally agreed upon. A one-day training of the revenue team was conducted by Safaricom, which the county deemed insufficient.

The cloud-based system was used from August to October 2015. This period was however faced with challenges which the county raised in November the same year to be addressed by the vendor in a month's time but the vendor was unable to resolve the issues.

The county raised the issues again but they were not addressed, resulting in abandonment of the POS devices in the field. These devices are currently gathering dust in the county stores. Murang'a County officially stopped using the system on December 8, 2015. Nothing was paid to the vendor for the 3-month period the system was in operation. It is, however, not clear whether the contract stipulated penalties were actioned to the vendor for breach of contract. For the period the system was in use, the revenue streams automated had reported a decline in revenue collection.

**Cost of the System** – The cost of the system was **KES 20million** for implementation of a POC (proof of concept).

**Vendor:** KCB-Riverbank (2013)– A proof of concept that lasted 3 months before decommissioning. Safaricom (2015) with 3% Revenue Share used for 4 months and discontinued.

**Contract Duration:** KCB System – 2013 for 3 months, then Safaricom for another 4 months.

**Automated Revenue Streams:** Parking & Bus Park

## **Report Findings:**

- **Political Interference:** Choice and acquisition of the revenue management system was subjected to political pressure resulting to the fall out with the vendors and the users. This influence is also responsible for reduced revenue collection. For example, political figures influence the taxpayers, such as the youth and small business owners, not to pay taxes.
- **Lack of inclusivity in implementation:** - The project team did not include various critical departments during the process of system acquisition. The departments that were left out include: Audit, ICT, legal departments and the users. The lack of inclusion of the legal department probably explains why the kind of contract the county entered into never had penalty clauses on the part of defaulting vendors.
- **Personnel training:** The county personnel are yet to receive adequate training vital to the process of revenue enhancement due to (a) lack of a training plan by the relevant department(s) (b) inadequate numbers of skilled staff to be trained and (c) lack of county organization/attention. These inadequacies cumulatively undermine the ability to collect enhanced revenues by the county.
- **Connectivity issues:** Poor network coverage is experienced in several parts of the county impacting negatively on the operation and efficiency of the revenue collection system.
- **Power challenges:** Some county revenue collectors did not have access to electricity thus making it difficult to charge the POS devices. Some of these POS devices did not have (reasonably) long-lasting battery life.
- **Inadequate regulatory framework:** The legal and regulatory environment within the county is inadequate to support the revenue enhancement initiatives. The county should up its efforts of ensuring it has a robust legal environment that responds to the need for an enhanced revenue collection space.

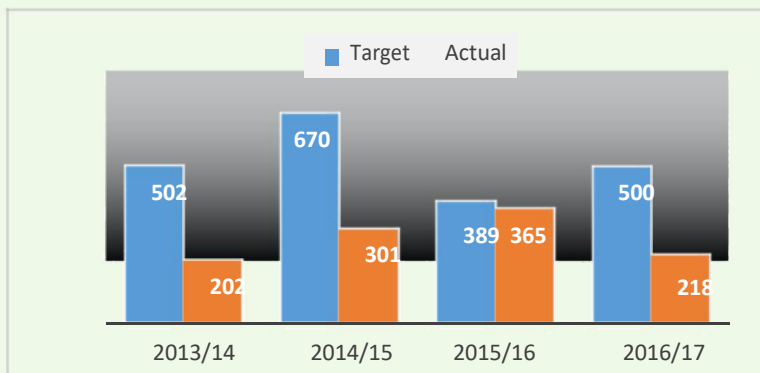
## **Recommendations:**

1. **Capacity Building:** The development and strengthening of human and institutional resources within the county is necessary for better deployment of the revenue enhancement systems and processes. The county government ought to create liaisons with all stakeholders as a way of ensuring this intention bears fruits.
2. **Project committee composition:** Due to the varied levels of expertise needed to oversee the process of streamlining and enhancing revenue collection, a properly capacitated projects team is vital. Therefore, at a minimum, the project committee should be staffed with the

following competencies at a minimum: Revenue, legal, ICT, procurement amongst other professional backgrounds.

- 3. Fully automate revenue:** Counties should fully automate all their revenue streams to see the benefits of automated revenue management systems. Even though the foregoing is desirable, it must be preceded by a well thought process of mapping and identification of revenue that are economically viable and ready for automation.

#### 4.7. TransNzoia County



#### County Revenue Analysis (in “Kshs. Millions”)

The JamboPay contract with Trans Nzoia County started in 2017 for a period of 5 years. The Trans Nzoia system was acquired at a cost of KES 79,112,598. The money was to be

paid in phases guided by level of implementation completion as stipulated in the contract between the county government and JamboPay. KES 49 million was to be paid on completion of Phase 1, which included automation of other revenue streams like single business permits and markets. An additional KES 29 million was to be paid on completion of Phase 2, which includes automation of health management systems.

So far, 70% of the acquisition cost has been paid to the vendor. Twenty percent was paid during the pilot period and 50% during the implementation period. It is, however, important to note the pilot only included only one revenue stream - parking fees.

**Vendor** – JamboPay – 5.2% Revenue Share (2 banks also deduct a percentage of this before the county portion is wired).

**Cost of the System** – The cost of the system was **KES 79,112,598 million** for implementation of a POC (proof of concept).

**Contract Duration** – 2017 to 2022

**Automated Revenues Streams**– Parking & Bus Park

#### Report Findings:

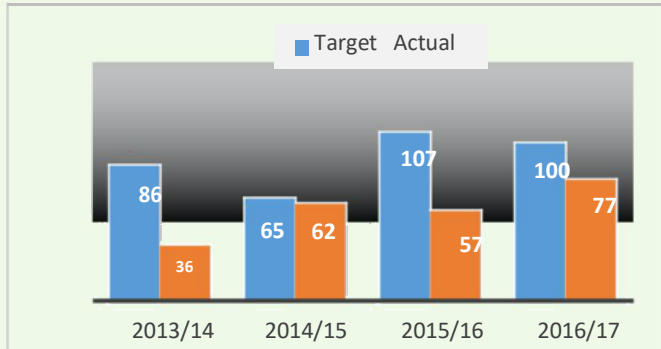


- JamboPay has a subsisting revenue management model with the county government, which violates the law in the sense that JamboPay directly deducts its money before the county funds.
- Political interference and lack of political goodwill in revenue collection has affected automation of revenue collection.
- The lack of inclusion of POS devices in the revenue collection has made the automation lose transparency as the mobile phones cannot issue receipts. The inclusion of POS machines need to be revisited and made part of the revenue enhancement venture that the county is pursuing.
- Value for Money is evidently not being realized given the cost of the system versus observed returns. So far, it is apparent that the county has spent more on the revenue collection system than it is getting back in the form of returns. The investment is definitely not making economic sense.
- The county does not have enough revenue officers and without the critical numbers as expected, the ability to adequately collect and enforce compliance with regards to revenue is undermined. Additionally, the county is experiencing problems revolving around inadequate work execution aids like offices, vehicles inter alia.

### **Recommendations:**

1. It is incumbent on the county and the vendor to agree on a working formula including regular interactions between them for purposes of keeping track of the progress and status of implementation of revenue automation.
2. As part of enhancing the legal and policy framework upon which revenue automation is based, it is vital for the county to pass legislations that offer necessary support for the enhancement of revenue collection within its borders.
3. It is quite prudent for the county to undertake an assessment on the potential revenue streams and the modalities of optimising the collection of this revenue.
4. Sensitise citizens by way of awareness creation and the county staff on the new technologies and systems being implemented in the county for purposes of greater appreciation and acceptance.
5. The county should also take a leading role in the deployment and management of the system. This must also include the county taking over from the vendor and managing the critical aspects of the system. As it stands, the vendor is running the show almost to the total exclusion of the county.

## 4.8. Lamu County



### County Revenue Analysis (in “Kshs. Millions”)

Lamu County has two revenue collection systems. It has Digital Divide Data (DDD) whose system is known as Cycom, and Obulex, whose system is known as Niamoja. Both systems came live on July 1, 2016.

They manage two different streams. They run parallel to each other.

The Niamoja system has property rates, market cess, public health, miscellaneous and livestock fees while Cycom system has all the other streams. The county systems are working together with several banks namely Equity, Kenya Commercial Bank, Diamond Trust Bank, and African Banking Corporation.

The County Government received Point-of-Sale (POS) devices from both Cycom and Niamoja. Each system provided 30 pieces. The POS devices are very modern and versatile. They are serviced by the two vendors who use Safaricom for data connectivity.

**Cost of the System** – The county government refused to divulge the cost of the system

**Automated Revenue Streams** – Niamoja has automated property rates, market cess, public health, MI, and Livestock fees while DDD has Single Business Permits, Fish Cess, Hospital Fees, Agricultural Equipment, Agricultural Produce, Open Air Market, Parking and Transport, Advertisement, Meat Inspection, Sale of Vaccines, Animal Movements, Artificial Insemination, and Land Rates

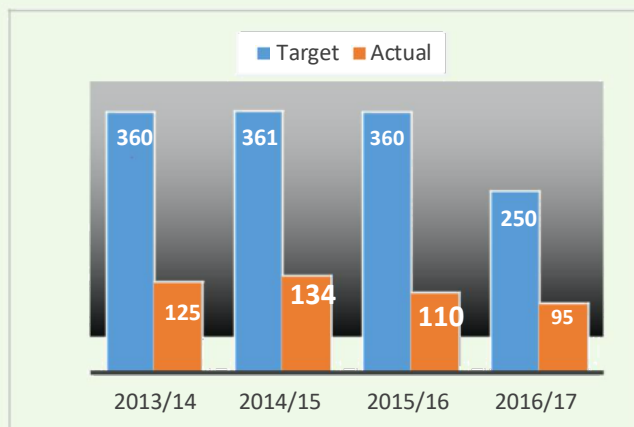
## **Report Findings:**

- **Data Recovery:** The county has no data recovery plan hence in the event of a disaster, all the data will be lost. This has happened recently and the county had no option but to acquire other servers and set up in another area. Luckily the system providers had some data.
- **Internet Connection:** Most of the far-flung sub counties do not have a stable internet connection and thus the need to upload data onto the system is greatly undermined. Part of the reason as to why the county is experiencing unstable internet connectivity is attributed to the terrorist attacks that the region experienced in the recent past.

## **Recommendations:**

1. There is very little information available on the terms of contracting and the responsibilities of the county and the vendor under the service contract. This ought to be reviewed especially in this era of enhanced access to information.
2. The county ought to review and formulate requisite legislations and policies in critical sectors such as trade, agriculture, fisheries and tourism. It is not in doubt such a structured and deliberate approach to revenue collection portends immense dividends for the county.
3. The county must also find ways of resolving the running dispute it has with Kenya Ports Authority on matters to do with maritime transport and the revenues accrue from the same.
4. It is unclear why the county is operating a dual system for revenue collection. It will immensely benefit the county to decommission one system.
5. The county's approach to enforcement ought to be improved. As it was observed in the course of this survey, there are plenty of rate payers who have defaulted on rate payments over the years with very little action from the county in that regard. This information is largely available to the county.
6. The danger of losing data is real and the county ought to consider hosting its system on cloud technology.

## 4.9. Isiolo County



### County Revenue Analysis (in “Kshs. Millions”)

Revenue collection has been automated in most parts of the county. The county contracted Niamoja Business Solutions as their system vendor, who again sub-contracted Obulex for the solution. The company supposedly supplied 62 Point of Sale (POS) devices. Isiolo has 5 revenue streams. All revenue streams are automated other than

single business permits and land rates.

Daily payment of fees or taxes is mostly done through cash with larger monthly payments paid through cheques written to Consolidated Bank. The county is discontented with the solution as revenue losses were reported with the introduction of the revenue collection and management system.

**Cost of the System** – KES 64,153,600 against an initial budget of KES 49 million

**Contract Duration** – Commissioned in 2016

**Automated Revenue Streams** – Parking, market, game park fees,

**Support & Maintenance** – Included in the initial cost

### Report Findings:

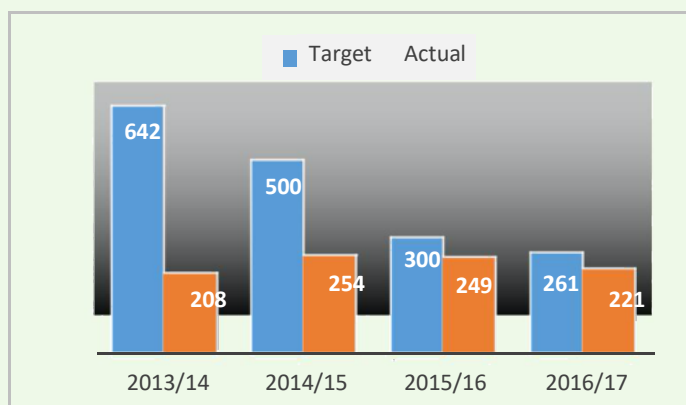
- **Revenue loss:** Isiolo County has experienced lower revenue collection since implementation of the system and this was attributed to the sharing of passwords by revenue collectors. Essentially, this means the county is yet to optimise its revenue collection potential.
- **Poor Support by Vendor:** Revenue officers communicate with the vendor through a mobile phone. In case of repairs or system breakdown, the person in-charge is given instructions by the vendor through the phone. The vendor does not have a support system within the county for purposes of assisting with solutions depending on problems realised in the course of system implementation.

- **Infrastructural challenges and inadequate budgetary allocation:** It is unfortunate that an aspect as critical and relevant as revenue collection and enhancement has received little support. The county has dedicated very minimal support for overall system implementation, maintenance and updates.
- **Staffing shortage:** There is a large staff capacity gap. There is only one ICT Officer and 4 revenue officers in the whole county who manage the entire setup for revenue collection and management.
- **Network and Internet connectivity challenges:** Constant network downtime in the remote areas has proved to be a major obstacle in the proper utilisation of the revenue collection system. These challenges delay the transmission of data to the servers. Further, the revenue offices also experience internet disconnection when the monthly internet subscriptions fee of KES 129,000 is not paid in good time to Safaricom. When such happens, monitoring and full deployment of the system is hampered.
- **Power connection challenge:** Power black outs are rare in the county. However, some homes do not have access to electricity therefore rendering a challenge to charge the POS devices when the clerks are off-work. This forces them to charge the devices in the morning when they report to work. This is lost time as they are supposed to be working at the time they are charging. Luckily, there is a power back-up generator on-site where the servers are.
- **Inadequate training:** The county has not invested in proper training of the revenue management personnel. Majority of the personnel have unfortunately learnt on the job and continue to do so.
- **Lack of citizen engagement and general participation:** There is minimal public participation and as such the citizenry is yet to wholesomely embrace the deployment of the revenue collection system.

## **Recommendations:**

1. There is an urgent need for capacity building of the revenue officers manning the various parts of the revenue collection chain.
2. It would benefit the county to review the system capabilities, its adaptation to the local circumstances and the challenges that have so far been experienced. Such an audit may yield greater returns in terms of informing the county on the most ideal aspects of the system that it ought to implement and benefit from including end-to-end automation of the system.
3. The county needs to adequately fund all aspects of revenue collection for greater realisation of the benefits.

### **4.10.Kwale County**



#### **County Revenue Analysis (in “Kshs. Millions”)**

Kwale County started implementing its RMS in 2016. The county is still in the testing phase but hoped to have fully implemented by the end of December 2017. At the end of 2017, both LAIFOMS and the revenue management system ran

concurrently therefore they can be used for comparison and reporting purposes. As LAIFOMS is still pegged on receipting, they intend to move away from it. The 1st phase looked at whether the systems specifications had matched the contract. The second phase would be after the implementation of the final product. In a nutshell, the county has not isolated any revenues and plan to roll out automation on all revenue streams.

Kwale did not want to buy a ready off-the-shelf system and neither were they keen on hiring the services of a bank to carry out the revenue collection function and this is why they went for a vendor to provide them with a system tailored to their needs. The system was therefore procured through an EOI and RFP process. Contracting took about one year and they have used the CRA guidelines to develop the system.

The county revenue team said getting the assembly to approve all the laws governing revenue collection and management has been difficult and as a result, the county has taken a long time to enact most of the laws.

### **Report Findings:**

- **Unclear definition of roles:** Internally, the Kwale County finance department is the business owner of the system, but it's to be managed by the ICT department. However, these roles are not clearly defined. This has resulted in the duplication of roles, functions, access and activities on the same systems. This is a major risk because multiple staff with duplicate roles have the same level of access. These anomalies have led to delays in completing the implementation of the project.
- **Firewall connection:** The hardware is in place, but the licenses are still in the process of being procured. There seems to be no urgency as the system has been down for almost three months now. It is also unclear when the procurement process will be completed.
- **Cash handling by revenue collectors:** This is a major concern as the collectors bring cash to the revenue office who then use the Revenue Management System to produce the e-slip after checking the POS before proceeding to bank the cash. This is a big gap as some sub-counties have to travel all the way to the county revenue offices to remit the monies collected and this is done every two weeks.
- **Ownership of the Revenue Management System:** According to the vendor, there is currently no contractual agreement to transfer the ownership of the system to Kwale County. Techno Brain avers that it owns the source code and as such the system is wholly owned by the vendor and not the county. The vendor also confirmed there are no ongoing discussions on transferring ownership to the county.
- **The system is in production environment:** Although the county staff mention the county is still testing the system, it is already in production and not running on a test environment. The POS in the field are proof the automation is operational at the front end.
- **Health Management of the RMS:** The ICT director is responsible for the health of the system. This includes managing the hardware space, public IP management, and ports management, periodic checks to ensure the systems and network stability. However, this is not being managed well as there are times the hardware space is completely utilised without the responsible party raising the alarm.

- **Lack of commitment from the Revenue team:** No one in the revenue team or ICT department seems to be able to take responsibility for decisions made around the Revenue Management System. This has led to unnecessary delays in getting things signed off as both departments keep going back and forth even with small items like tasks completed.
- **Project timelines are not adhered to:** There are various tasks that have slipped beyond agreed timelines and this lengthened the implementation process. The vendor confirms such delays results in additional costs that were not anticipated prior to the implementation of the solution. There are also concerns around the continuous change in scope of work that largely contributes to delayed implementation and conclusion of the project.

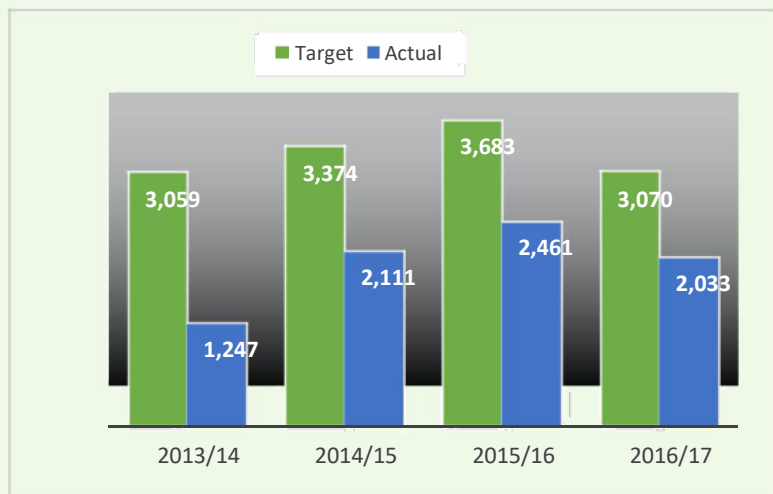
### **Recommendations:**

1. Generation of an IFMIS Application Programming Interface (API) by National Treasury is key as this is a requirement in the CRA and National Treasury guidelines
2. The county needs to review its policy and legal environment to ensure that there is enough legislative support to its aspirations for enhanced revenue collection.
3. Sensitise citizens and county staff on the new technologies and systems. Such awareness is vital for purposes of acceptance and monitoring by members of the public.
4. The county needs to review its engagement with the vendor as the process of development has taken 3 years, the system is yet to be commissioned and it seems to be unstable due to the numerous outages that it suffers.
5. The county needs a support and maintenance contract to ensure quick resolution to system issues.
6. Lack of capacity. Staff charged with operating and managing the system lack adequate knowledge and capacity to effectively run the RMS and are unable to identify or resolve system issues, which may impact on the revenue collection processes and create room for revenue loss. Skilled staff in the Revenue Management department are required.
7. Enforcement of revenue collection is poor and as such needs to be enhanced by the revenue department.
8. Carryout an impact assessment of the RMS as soon as possible.
9. Kwale County should complete the User Acceptance Tests process. This includes the configuration that needs to be done between the SSL and the server.
10. The disaster recovery site is important. The two servers should be procured even as the county is building the DR facility.



11. Recruit a system administrator immediately. Lack of a dedicated system is currently a big risk for the county. The current arrangement is unclear since the ICT director also doubles up as the system administrator for technical matters and the revenue director also partially acts as a system administrator.
12. Procure Firewall Licenses in full and not partial procurement. One license has been procured and others are in the process. It is unclear how long it will take to complete the procurement
13. Integration with IFMIS and banks should be completed during the UAT process or as soon as possible.
14. Support and maintenance contract with the vendor should be clear. The county government said there is a support contract that has been shared but not yet signed as they expect to sign it after the system has been launched as it will only kick in 90-days after launch.
15. Training for the staff should be carried out once the roles of each staff in the revenue management process has been clarified.
16. Cash Handling in Kwale County offices should be discontinued immediately. The revenue collectors in the field should bank the money in the bank and then bring the slips to the office for reconciliation with the POS reports. There should be no need for the revenue collectors to deliver the cash to the county revenue offices. This is a big gap since there is no integration between the banks and the POS's especially now that the back-end system is completely down and not functioning.

#### 4.11. Kiambu County



#### County Revenue Analysis (in “Kshs. Millions”)

Kiambu County has implemented two systems for revenue collection. One is County Pro (Strathmore) while the second is Zizi (KCB-Riverbank). These systems were installed as per the Kiambu County Finance Act 2014 and upgraded accordingly in tandem with the

demands of time. The Review Team confirmed the system implementation was informed by the National Treasury and CRA guidelines.

From launch to go-live it, took about one and a half years from April 2013 to September 2014. Both the systems have thus been operating for the past 3 years and are web based. The systems were acquired on a revenue share model.

The systems are not cashless as the collectors and cashiers handle cash, which they deposit to the bank at the close of each business day. The dashboards are accessible by the governor, head of revenue, county executive commissioner for finance, chief officer finance, ICT director, revenue officers and cashiers/billers and accountants. All these roles have a duty to play in revenue collection, monitoring and reconciliation of reports generated from the systems.

#### **Cost of the System – Full Revenue Share model**

**Vendor** – County Pro (Strathmore University) & Zizi (KCB-Riverbank)

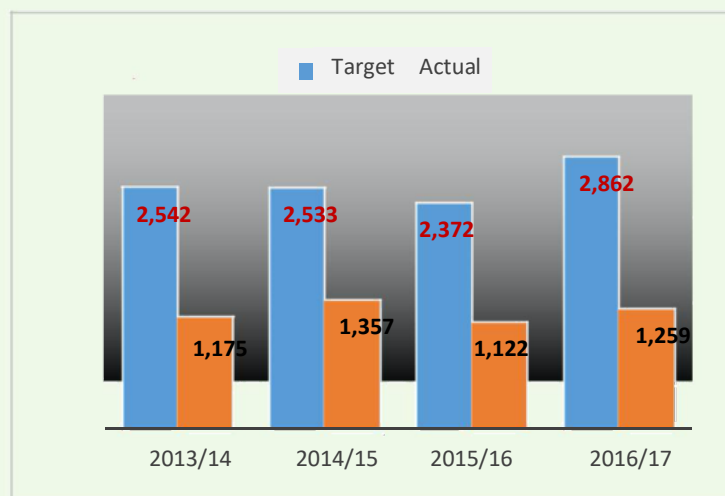
**Revenues Automated** – Property rates; House rents; Single Business permits (SBP); Credit note waivers; Planning fees; General billing, Market fees; Parking fees; Slaughter house fees; CESS – quarry and sand; Burial permits; Environmental charges. 638 POS's provided although only 358 are operational.

#### **Report Findings:**

- a.** The cost of maintaining the on-site server is high because the data center needs sophisticated equipment like coolers, fire extinguishers etc.
- b.** External access to County Pro requires the county to pay an extra cost.
- c.** Revenue loss from the market because of political incitement not to pay tax has affected collections especially in 2017.

## 4.12. Machakos County

### County Revenue Analysis (in “Kshs. Millions”)



Previously, the county had contracted BCX in 2014. The agreement between BCX and the county was a target-based revenue share model of around 3%-5% on additional revenue collected by the system. The county and the vendor set a target for revenue collection and if the target was passed then the additional revenue collected would be shared between the two entities. The county

did not pay the vendor for implementation of the system.

However, there were contractual and connectivity issues around the system and the county discontinued using the BCX system because it was not serving their purpose.

The county approached Safaricom in February 2017 for provision of Lipa Na M-Pesa paybill number. This is a cash collection service that allows collection of money on a regular basis from customers through M-Pesa, which is a mobile money transfer service.

#### **Report Findings:**

- **Change Management:** There was resistance from some taxpayers as they were used to paying cash. They raised issues with the mobile money transfer service as some did not have mobile phones. Some revenue clerks also resisted the change.
- **Reporting:** The M-Pesa system does not generate reports as the data from the totals of each Paybill number are exported to an excel sheet for report generation. This is what is consequently used for reporting.
- **LAIFOMS:** It does not define most revenue streams used at the county. Also, integration to third party applications under set ups, including IFMIS, remains a big challenge.
- **Business Intelligence:** The M-Pesa system lacks business analytical tools to assist in revenue forecasting and predictions and as such a great failing to the county.

#### **Recommendation:**

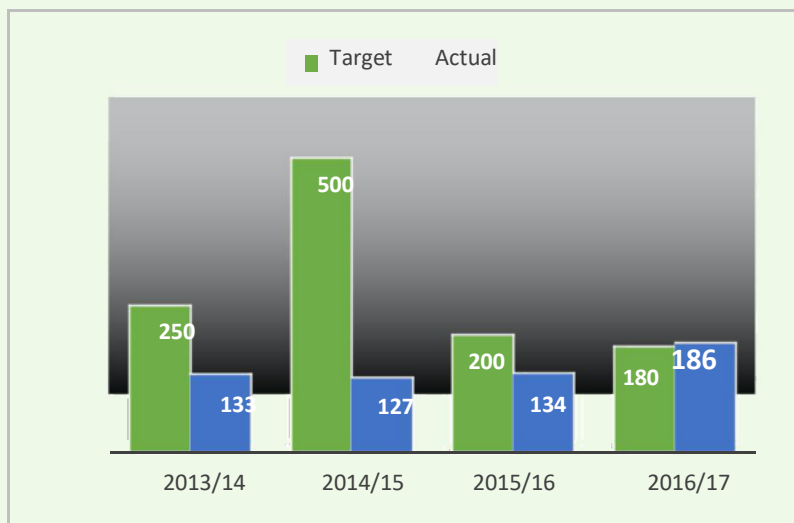
- 1. Revenue Management System:** The county should adopt a revenue management system of disciplined analytics that can predict and optimise revenue collection.

**System Cost:** The county only pays the transaction charges to Safaricom. There was no cost for implementation.

**Automated Revenue Streams:** Land rates & debt clearance certificates, single usiness permits, quarry, sand gravel, market fees, plot/stall rent, bus parks, house rent, refuse/conservancy fee, sign board & advertisement fee, fire-fighting & ambulance management unit, slaughter house fee/livestock, court fines, enforcement management unit, off street parking unit, building plan approval, cess, procurement unit, social services & sports management unit, water sales, Maruba park, house loan repayment, salary refunds/salary advance, motor vehicle/motorcycle registration, interest/penalties on stalls rent, health revenue account, liquor license, agricultural farm produce, tourism, noise pollution, weights & measures, tender account, Machakos County sand harvesting

#### 4.13. Turkana County

##### County Revenue Analysis (in “Kshs. Millions”)



Revenue collection has been automated in most parts of the county though power and network coverage pose big challenges to revenue collection. The county contracted Sense Networks to provide the system. Turkana has 14 revenue streams five of them fully automated.

Daily payment of fees or taxes is mostly done through cash and receipted with the POS devices with larger payments paid through bank deposits at Kenya Commercial Bank (KCB). Other than a few challenges, the county is content with the installed automation system, as it has led to general revenue improvement due to improved collection hence surpassing their 2016/2017 Financial Year revenue target by about KES 6 million.

**System Cost:** KES 35,930,979

**Vendor:** Sense Networks

**Support & Maintenance:** 5%, 10% and 15% over 3-year period – Expiry 2019

**Automated Revenue Streams:** Single Business Permits, Royalties, CESS, Market Fees and Slaughter/Auction Fees.

### **Findings:**

- **Network coverage challenges:** Constant network downtime and poor coverage in the remote areas has proven to be a major issue leading to delays in transmission of data to the servers. The POS devices cannot also be used when this is experienced, thus they opt for manual receipting.
- **Insecurity:** The county experiences insecurity in areas like Kapedo. This is a big challenge in revenue collection as the safety of the collector is not guaranteed hence their ability to fully dedicate their time towards revenue collection is stifled.
- **Power Challenges:** Constant power failures are experienced within the county and this grossly affects the usability of the system. The county has stepped up efforts to minimise the power interruptions and the risk associated with the same through the purchase of Uninterrupted Power Supplies (UPS), stand-by generator for power back-up and solar panels at the headquarters and ward offices.
- **Network coverage challenges:** Constant network downtime and poor coverage in the remote areas has proven to be a major issue leading to delays in transmission of data to the servers. The POS devices cannot also be used when this is experienced and this results to the adoption of manual receipting.
- **No visibility rights:** A lot of information is held by the vendor, as they view the back-end of the system. County users only view the front-end. This is highly undesirable and ought to be expeditiously reviewed.
- **Reports:** POS devices cannot print reports when the network connection is down. It is therefore difficult for reconciliation, considering the county experiences major network connectivity issues. The system cannot also generate reports as the users only have access to the front end.
- **Weak enforcement:** No law or enforcement is in place for those who defy the process of revenue collection. For example, there are no penalties for one who fails to pay their market fees or ground fee.

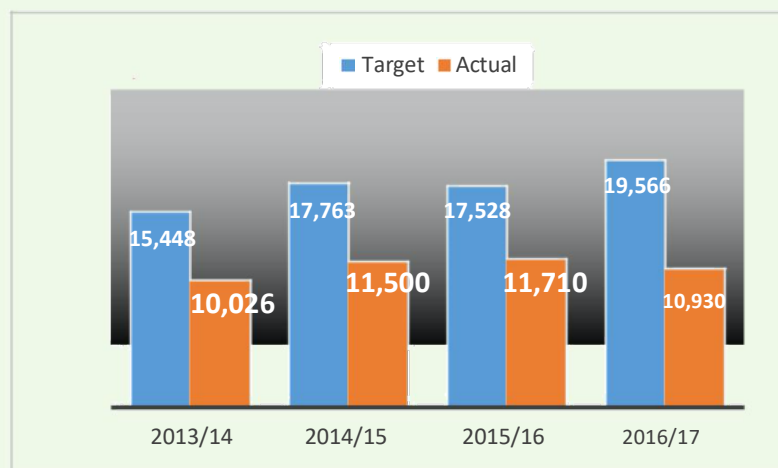
- **Funds & facilitation:** Budget and infrastructural constraints affecting the procurement of new devices and machines.
- **Road networks:** The county lacks efficient road network. It proves difficult for some revenue clerks to access deep areas where revenue needs to be collected.

### **Recommendations:**

1. **Solar Solution:** Turkana County experiences high temperatures and long hours of sunlight. They should consider acquiring solar panels across the county as some kind of back up to their power needs.
2. **Data centre:** The county ought to set up a data centre so that it is able to integrate all the systems.
3. **Enforcement:** Introduction of an Inspectorate and Enforcement Law to add on to the enforcement officers would adequately implement revenue collection.

#### 4.14. Nairobi County

##### County Revenue Analysis (in “Kshs. Millions”)



Automation of the Nairobi County Revenue Collection System has been implemented by JamboPay, which is an online payment gateway owned by Web Tribe Limited, which implemented the Revenue Collection System known as e-JijiPay for Nairobi City County.

It is noteworthy the county is currently using the 2013 Nairobi City County Finance Act as the basis for the rates and charges that it is levying.

Also, as at the time of writing this report, approximately 200 of the cash office personnel were under suspension. Consequently, JamboPay personnel are the one's manning the revenue offices.

**Cost of the System: 23 million.**

**Automated Revenue Streams:** Single Business Permits, Royalties, CESS, Market Fees and Slaughter/Auction Fees.

**Contract Duration: 2015 to 2019**

**Support and Maintenance:** Included in the JamboPay Revenue Share of 6.2%

##### Report Findings:

- **Opaque flow of money:** The revenue collected through the electronic/automated process is first directed to PKF International (previously known as Pannell Kerr Forster) Trust Fund before being remitted back to the County Revenue Fund with the vendor fees already deducted. It must be noted this arrangement runs contrary to the provisions of the Public Finance Management Act.
- The County Valuation Roll is not updated.

- Sub-counties have not been connected to the revenue management system.
- Over-dependence on Safaricom as the ISP has created a lot of downtime issues since all collections are real time. The county therefore believes some revenue data gets lost during the frequent downtime periods
- The county is unable to determine the specific revenue streams collected and from which administrative locations.

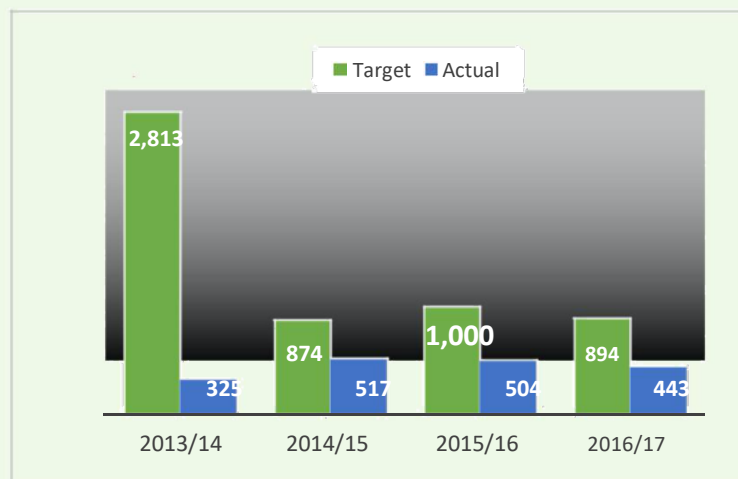
### **Recommendations:**

1. There is need to decentralise the Revenue Collection System from City Hall to the sub counties for greater convenience and benefit to the county. Since only CBD is automated, all sub-counties are still operating manually and most revenue streams still require payments to be made at City Hall
2. Create new codes for all revenue streams. Some sub-revenues have no codes, resulting in them being bundled in the ‘miscellaneous’ category.
3. Sensitise citizens and build the capacity of the county staff on the new technologies and systems being implemented with respect to revenue collection.
4. The county should invest in data collection and scrutiny; this is necessary for research and informed decisions on revenue automation.
5. Constant change management and awareness training. The county workforce should understand and appreciate new technology and positively embrace these changes. It is also incumbent on the county to forestall fears of job loss as a result of automation.
6. Local hosting at the county and employ staff to manage the county’s databases and system information.
7. Proper training and structure for the enforcement team needs to be done.
8. Review the JamboPay system entirely as JamboPay is in full control of the system and even have their staff at City Hall manning the revenue collection which is very risky.



## 4.15. Kakamega County

### County Revenue Analysis (in “Kshs. Millions”)



The Public-Sector Revenue Management (PSRM) System began with the undertaking of a gap analysis in the current business processes and the development of the PSRM was undertaken on the basis of this report, and consequently went live on 6th March 2017.

The automated PSRM system focuses on structured revenue streams which are: Single business permit, property rates, land rates, and licenses. (These are the only streams that are currently automated).

The sub-counties of Lugari and Shinyalu use the LAIFOMS whilst the remaining sub-counties are manual.

**Cost of the System** – KES 7 million monthly (no set up costs)

**Automated Revenues Streams** – Single business permit, property rates, land rates, and licenses.

**Contract Duration:** 4 yrs (2017-2021)

**Support & Maintenance** – Included in the monthly fees

### **Findings:**

- The original objective was to implement the Public-Sector Revenue Management (PSRM) system consisting of 5 modules. Only a part of the 1st module of revenue management has been implemented in Kakamega township only. The unstructured revenue streams in the township, plus the system’s full roll out in Mumias township, and the other 12 sub-counties have not been rolled out.
- The other objective of the revenue management system is to create a cashless system of revenue collection. Kakamega County as a whole still collects its revenue in cash.

- Lack of requisite infrastructure at the sub-county level continues to undermine the system rollout and thus poses a major challenge.
- The county suffers the problems associated with an aging workforce, which cannot adequately keep up with the versatilities of revenue collection.
- It was also discernible the electioneering process of last year immensely interfered with the rollout of the Revenue Management System.

### **Recommendations:**

1. The oracle-based Public-Sector Revenue Management (PSRM) system implementation should be hastened to enable its full use.
2. The payment of the monthly fee of KES 7,000,000 should be tied to specific deliverables, which should be assessed on a monthly basis to determine the viability of the fees Vis-a-Vis revenue growth.
3. The establishment and launching of the Kakamega County Revenue Agency should be carried out as a matter of urgency.
4. A continuous training program should be developed so that regular skills upgrading is carried out.

## 5. Observations

Generally, county governments are permitted four administrative arrangements for revenue collection and management, but there are no guidelines on how to select the most suitable. The four are:

- Internal revenue administration, which is currently in use by most counties;
- Establishment of an autonomous revenue authority (or County Corporation);
- Contracting Kenya Revenue Authority; or,
- Contracting a private firm or other agent.

Each option has its strengths, and the counties have a responsibility to identify the administrative arrangement through which revenue can be enhanced.

Nevertheless, the baseline study reveals that even though counties have adopted the use of automated revenue management systems, the levels of commitment still remain very low and thus may easily leave one with the impression that automation is more of a formality than a real desire to shore up county finances with commensurate levels of accountability. Large sums of money have been spent to acquire these management systems but unfortunately, it looks like the proximate equivalent in terms of returns is still far from being attained.

It is therefore important the following be looked into and adequate efforts applied towards their resolution.

### **a. Sourcing of the Revenue Systems:**

One of the most important components of any revenue collection system is accurate and timely reporting. Ideally, county governments need a revenue management software or system that is efficient, effective and accurate in terms of revenue collection and reporting.

We are also alive to the fact that ICT administration projects are complex, expensive and take time to realise the benefits and savings. But, we are equally convinced these 'off-the-shelf' systems may not be suitable for they do not meet the true intentions of revenue collection at county level. Also, do the revenue management systems currently adopted by the counties comply with the

guidelines issued by the Commission on Revenue Allocation? You would expect that the counties would be guided by the following considerations inter alia:

- Choosing the best technology and making sure it is adapted to local capacity and needs;
- Being able to verify or tell with a fair degree of certainty whether or not the components of the sourced technology is useful or otherwise, considering local circumstances;
- Be wary of the kind of mistakes they need to avoid and the key action areas that guarantee SMART projects implementation;
- Designing an adequate and enabling environment for automation to thrive in and realise its benefits.

Going with some of the revelations pointed out in the baseline survey, it is clear counties have not been able to source and or deploy the most suited Revenue Collection Management System that responds in the most ideal manner to their local circumstances. The revenue systems have not been inherently optimised or designed for purposes of ensuring revenue productivity.

The following critical issues are yet to be incorporated into the county revenue collection processes by way of the adopted systems:

- Management of all the risks and accountability concerns that are associated with the physical collection of revenue through the cash system;
- Accounting for revenue collected into the government accounting system;
- Ensuring safe and secure arrangements for handling cash and transfer to county revenue fund.

#### **b. Cost factor and Revenue Management Systems Acquisition:**

The cost of these systems is a source of concern. The cost differentiation of the systems with same capabilities from same vendors across the counties is disturbing. Even though it is largely a free market, it behoves the CRA together with other relevant players to examine this matter and find possible solutions.

Coupled with the above is the need to verify the cost escalations of these systems between the points of contractual agreement and the time of implementation.

Being a procurement issue, the counties must be reminded of the ideals of procurement to wit; transparency, accountability and most importantly, the need to attain value for money. The Constitution already stipulates these ideals at articles 201 and 227.

Article 201:

**201.** The following principles shall guide all aspects of public finance in the Republic –

**a.** there shall be openness and accountability, including public participation in financial matters;

**d.** public money shall be used in a prudent and responsible way; Article 227:

**227.** (1) When a State organ or any other public entity contracts for goods or services, it shall do so in accordance with a system that is fair, equitable, transparent, competitive and cost-effective

Lastly, the county officials ought to bear in mind the statement of the law on matters to do with wasteful expenditure. “Wasteful expenditure” means any expenditure incurred which could have been avoided had due care and diligence been exercised.

Section 197 of the PFMA:

**197.** (1)(i) A public officer employed by the national government or a national government entity commits an offence of financial misconduct if, without lawful authority, the officer— (i) incurs wasteful expenditure on behalf of that government or entity;

### **c. Spending of Revenue at Source:**

It is deductible from the report that a majority of counties are spending revenue they collect, whether through automation or not, directly at source.

Section 109(2) of the PFMA provides that:

109 (2) The County Treasury for each county government shall ensure that all money raised or received by or on behalf of the county government is paid into the County Revenue Fund, except money that—

(a) is excluded from payment into that Fund because of a provision of this Act or another Act of Parliament, and is payable into another county public fund established for a specific purpose;

(b) may, in accordance with other legislation, this Act or County legislation, be retained by the county government entity which received it for the purposes of defraying its expenses; or

(c) is reasonably excluded by an Act of Parliament as provided in Article 207 of the Constitution.

Of critical concern is the fact that these funds that are collected and spent at source without the approval of the Controller of Budget, is a violation of the law.

Some concerns that come to the fore include:

- A possibility that the collections that are spent at source could in effect be much higher than what is reported? We must be wary of the fact that revenue spending at source allows for “creative accounting” and as such production of reports or returns that are not a true reflection of collected revenues.
- Inability to verify whether the revenue collected and spent at source is a true reflection of the funds as collected since this information may not accurately be available to the Controller of Budget for verification and additional safeguards that are input into the law.
- Even for Appropriations in Aid (AIA), has automation enhanced accurate reporting of collections in that regard? The exceptions upon which AIA are allowable, should only be as defined under the law and not through preference or any other ulterior motive.

#### **d. Contract Implementation and Governance:**

The essence of contracting including the responsibilities of the parties thereunder must be adhered to at all times. The report by the consultant is replete with instances where it is clearly noticeable the counties, whether deliberately or otherwise, are at the mercy of the Revenue Automation Systems service providers, who are largely not fully complying with their contractual obligations, and at very detrimental costs to the county governments.

- It is critical that the counties enforce their rights under these contracts with the intention of ensuring the parties under these LSA’s totally fulfil their obligations and responsibilities.
- Maintenance fees is a very costly affair to the counties and is payable even within the first year of technology deployment.
- In Kisumu, it is interesting that there is no support agreement between the parties yet when it comes to revenue share, there is a support and maintenance component to it. Contractually and legally, how is this possible?

#### **e. Contract Duration:**

The contract should not exceed the term of the current regime in which it was procured to give room for review but with yearly review of performance.

#### **f. Vendor violation of the law/malpractices:**

The signed contracts between vendors and the county should be based on the existing laws especially the public procurement and PFM laws.

The terms of the agreement should be strictly followed and enforceable where there is breach of the terms.

#### **g. Technology Deployment, Upgrade and Security:**

At the root of a good revenue system lies the fact that it ought to be cost effective and capable of efficient and economical administration including low levels of compliance costs.

The commission on revenue allocation had issued guidelines for revenue automation that outlined all process of revenue enhancement to be automated. It is still not clear whether all the guidelines have been adhered to.

In fact, what the baseline report brings to the fore is an unfortunate picture which is inter alia, is defined by the following:

- Even though these revenue management systems are purchased for purposes of enhancing revenue collection amongst several streams across the counties, unfortunately, at implementation level, it is emerging only a handful of the intended streams are actually implemented or realised from the revenue collections efforts of the county governments.
- At whose cost should the software upgrade be undertaken? And even if the same is a county responsibility, are there time limits within which the same should happen?
- It is equally in bad taste that some counties are acquiring technology that is not backed with reasonable levels of security and thus may be prone to attacks and infiltration.
- A number of the counties were not able to demonstrate the security backup systems for the technology they have. Even for the counties that have the same, they are mainly solely under the control of the vendor with very little reference to the county governments. This is a very undesirable set of circumstances and ought to be revised with immediate effect.

Essentially, the baseline survey confirms a rather undesirable state of affairs which inter alia include lack of comprehensive database of ratable property or realisable revenue; insufficient control system or mechanism in the collection chain; inadequate deployment of ICT; and lack of collaboration between the county and the common mwananchi, which ideally should be a

relationship founded on partnerships and cooperation.

Lastly, some of the Revenue Management Systems are still afflicted with problems of full-proof receipting; evasion by rate-payers; collusion between rate-payers and collectors; inadequate information on rate-payers and all these experienced because the counties are still insisting on a combination of manual and automated systems.

#### **h. Software Integration with IFMIS:**

The survey report points out 13 out of the 14 counties who had their systems reviewed were still adopting the use of LAIFOMS (Local Authorities Integrated Financial Operations Management System) as opposed to IFMIS and thus in violation of the Public Finance Management Act (2012). Such fragmented ICT approaches hinder the ability of the counties to effectively consolidate and generate accurate reports on revenue performance. With such practices continuing, it means the counties continue to be susceptible to revenue leakages or loss and especially at source.

The Draft National Policy on Enhancement of County Own Source Revenue makes it clear on the need for seamless integration with IFMIS including the design and structure of the system being based on the Government Standard Chart of Accounts.

The draft policy also underscores the need for a standard template to be developed for use by all counties and the following 12 core processes incorporated into the same:

- 1.** Revenue sources management, which includes identification of revenue sources, classification of revenue sources, and segmentation and optimisation of revenue sources;
- 2.** Revenue forecasting;
- 3.** Requesting for disbursements from National Government;
- 4.** Revenue collection, which includes invoicing (or billing) and receipting;
- 5.** Receiving and processing payments through multiple e-payments including mobile money, direct bank debits, credit and debit card and e-wallet;
- 6.** Cash and bank reconciliation, including monitoring cash position;
- 7.** Credit control and debt management;
- 8.** Management of revenue collectors by registering internal collection staff and external collection agents against revenue sources;
- 9.** Customer management or the clustering of customers into unique segments based on predefined parameters;
- 10.** Work flow management;



- 11. Reporting and auditing (as per county and national requirements); and,**
- 12. Integration with IFMIS and other existing technologies**

## 6. Recommendations

### 1. **Integrated Revenue Management System:**

In the quest to grow Own Source Revenues, counties have acquired various stand-alone systems from multiple vendors. These systems have been implemented and operate independent of each other across sectors resulting in the inability of county executives to have one view of the revenue collection and management. An example is hospitals have independent systems, water & sewerage companies have a different system.

Counties, in consultation with CRA, National Government and other stakeholders, need to work towards developing a standard Integrated County Revenue Management System.

### 2. **Revenue Administration Process:**

Automation needs to be a holistic process spanning the whole revenue cycle end-to-end and covering all aspects of revenue collection and revenue administration processes. The current focus on collection is narrow in scope and needs to be expanded to incorporate the entire range of revenue administration including utilisation of revenue chart of accounts; revenue enhancement support services including customer relationship management and seamless integration with other mission critical systems including IFMIS. Efficient and cost-effective realisation of these key attributes at scale, can be achieved by developing single universal solution that is customisable to county specific needs and that is cloud-based, taking advantage of economies of scale while minimise need and costs of local hosting and localised maintenance.

### 3. **Infrastructure:**

Poor infrastructure has remained a major challenge in the implementation and utilisation of revenue management systems in counties. Counties should address the infrastructural gaps through budgeting and capacity to support the effective deployment of the revenue systems.

Counties need to explore other alternatives to host their systems and data away from the vendor data centers to address the issue of data ownership and system availability.

#### **4. Legal and Regulatory Policy Framework:**

Incorporating provisions for a regulator of automation of revenue systems in the existing legal and policy regulatory framework may give the automation of revenue sub-sector the order that its currently needs. Most critical is the need for a payments systems regulator to provide regulatory specifications / standards for work performed by automation vendors. This will address risks and protect consumers of automation services, including county governments, from losing large sums of money to unscrupulous vendors as is the case now.

#### **5. Cost of Revenue Administration:**

Optimisation of revenue productivity against costs of administration remain a major concern as county governments develop revenue management systems and proceed to automate them. Consequently, county governments need to identify the revenue streams upon which marginal expenditure will produce the greatest benefit. System development and automation efforts should follow this logic in deviation from the current haphazard trend.

#### **6. Legal and Regulatory Policy Framework:**

Counties need to invest in policy priorities that advance stronger local financial management in the following key areas:

- a. Strengthening systems and processes;
- b. Improving transparency and accountability;
- c. Enhancing monitoring and oversight; and
- d. Capacity building.

Further, counties ought to adopt segmented legislation for local taxes (property taxes, business licenses) as this enables effective collection of local taxes and allow for lower collection costs. The commission has already formulated model laws for the various taxes and fees the county governments are, by law, assigned to impose.

All of the above areas are interlinked, and, as such, it is critical that legal and policy formulation happens in a coordinated and sequenced manner for enhanced outcomes.

## **7. Institutional and Personnel Capacity Building:**

Revenue administrators and collectors need to be facilitated through regular capacity building on new and emerging trends in order to keep abreast with the new ways and systems as well as international standards. It must be noted the presence of an effective, strong, and implementable law and policy framework is not an end in itself in promoting success on the revenue collection and management front. It is also fundamental that the capacity of county government officials to achieve coordinated governance and execute policy, law, and constitutional mandates is fundamentally necessary, and at times difficult to achieve. The county governments must nonetheless commit to ensuring capacity building is effectively undertaken and that it bears fruits.

Remuneration of revenue staff must be commensurate with the risk of revenue loss they portend to the county government. Once remuneration is set sufficiently high, well trained staff with good reputation needs will be attracted. This is a workable pathway to curbing staff corruption.

Lastly, it has been established weak internal controls within county government's revenue department encourage collusion to fraud, loss of revenue and embezzlement of funds. It has also been proven that internal controls do function although with hiccups, and that there is a significant effect between internal controls and enhanced revenue collections.

## **8. Revenue Base Diversification:**

There must be a consistent effort to explore new revenue sources as well as ensure a proper and integrated revenue management system that guarantees the collection of all potential revenue in a manner that is efficient, effective and accountable. It is important counties appreciate the diversity that comes with them to the extent that they also concentrate their revenue raising efforts on sources that bring the most revenue whilst taking into account the provisions of articles 209 (5) of the Constitution.

## **9. Revenue Budget Cycles:**

There is need to design revenue budget cycles that sufficiently cover Local Revenue Mobilisation processes; i.e. registration, assessment, collection, enforcement and sensitisation.

The main key aspects in managing these cycles is ability to project future revenue sources to avoid fiscal deficit, control of the overestimate assumptions on revenue levels, political dynamics during budget approval, effectiveness of collection and operating within the county's capacity to generate revenue.

#### 10. **Restructuring Revenue Department:**

There is need to improve the organisational structure of the revenue administration agencies. This should equally incorporate development of cultural change strategies, standard operating procedures and conduct of baseline customer satisfaction survey.

In order to encourage professionalism in revenue administration, improve revenue performance, encourage compliance and arrest tax evasion within the counties, county governments should consider establishing respective county revenue administration entities separate from the county treasury but limited to the county revenue raising power as prescribed under Article 209(3).

It is also incumbent on the county governments to evaluate and proceed to establish most appropriate organisational structure for revenue collection and management. Additionally, there is need to promote professionalism and eradicate corruption amongst county revenue employee by paying adequate salaries that enables the institution to attract and retain competent professionals of integrity.

#### 11. **Adoption of Regulatory Frameworks for County Level Payment Systems:**

A payment system is the whole combination of instruments and infrastructure through which money moves from one point to another in order to effect payments. Under the National Payment Systems Act, 2011, a payment system is defined as:

**“A system or arrangement that enables payments to be effected between a payer and a beneficiary, or facilitates the circulation of money, and includes any instruments and procedures that relate to the system”**

The effect of payment systems is the fact that they have enabled the transfer of money from one person or area to another. Additionally, efficient payment systems promote and support regional flows by increasing speed, convenience, reducing cost, lowering payment risks and ensuring a high degree of finality when it comes to the movement of money from one person

or place to another. In this regard, some of the payment systems that come to the fore include Electronic funds transfers (EFT), Real Time Gross Settlement (RTGS), and the mobile money transfer offered by commercial banks, mobile phone companies, inter alia.

Based on the successes realised by the National Government in regulating the national payment systems environment and considering the need for the same to be attained at the county level, it is advisable there be the adoption of a county law mirrored along the objectives for the regulation of national payments for purposes of regulating payment systems and attainment of uniformity and standardisation, at county government level. It is also incumbent on the counties to assess these methods with the intention of determining their effectiveness and consequently developing an appropriate policy as the circumstances may warrant.

Regulation of county level payments system is of value to the extent that it realises the following objectives:

- The regulation and supervision of payment systems and payment service providers and related concerns;
- That county governments have a recourse in law against the systemic risks that some of the revenue management systems they adopt, pose. The systemic integrity of the payment and collections systems that the counties have adopted cannot be over emphasised.
- The interests of the public in so far as the payment systems in use at the county level must always be protected.

## **12. Establishment of County Revenue Databases:**

With the challenges of revenue administration, enforcement and reporting, there is need for counties to do proper revenue mapping to guide in the establishment revenue databases. This will help in revenue forecasting, accounting and reporting. Such databases include, but not limited to, taxpayers, valuation rolls and business registers.

## **13. Revenue Systems Acquisition Process:**

Counties are adopting systems off-the-shelf without conducting proper needs assessment resulting to having systems that; (i) do not meet their specific revenue enhancement needs; (ii) the total cost of ownership is high; (iii) the return on investment is very low and (iv) no meaningful growth in revenue.

Counties should actively engage all the stakeholders in the needs assessment, acquisition and implementation of the system. Needless to say, counties need to standardise their systems and processes by adhering to CRA and National Treasury county revenue automation guidelines and the procurement laws.

#### **14. Governance of Revenue Management Systems:**

Counties need to establish governance frameworks for revenue management systems that cover project management, monitoring and evaluation, acquisition process, risk management, stakeholder management, change management and cyber security.

## **7. Way Forward**

1. The Commission on Revenue Allocation to establish a stakeholder committee that comprises of Governors, Ministry of ICT, Council of Governors and County Assemblies Forum to review, adopt and implement the recommendations.
2. The commission in consultation with the National Treasury, county governments and other agencies to review and publish county revenue automation guidelines.
3. The csommission to engage devolution partners to support implementation of the recommendations.
4. CRA and stakeholders to develop a common framework for adoption of an integrated county revenue management system.

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