AFRICA HABITAT REVIEW 13(1) (2019)

ISSN: 2524-1354 (Online), ISSN: 2519-7851 (Print)
Africa Habitat Review Journal
Volume 13 Issue 1 (December 2019)
http://journals.uonbi.ac.ke/index.php/afr/index

Evaluation of Property Rates Collection and Enforcement in Devolved Systems of Governance in Kenya:

A Case Study of Nairobi City County

*** Winnie Mwangi and Ayub O. Naburi**

Received on 27th July, 2019; received in revised form 25th October, 2019; accepted on 18th December, 2019.

Abstract

The paper evaluates property rates collection and enforcement in devolved systems of governance in Kenya with a specific focus on Nairobi City County. The study sought to establish the property rates Collection Ratio (CR) in Nairobi City County (NCC); identify and measure the effectiveness of property rates' collection and enforcement tools in NCC; and determine challenges faced by NCC in rates collection and enforcement. The study focused on property rates collection and enforcement in 20 zones within Nairobi City County. Rateable properties were sampled using stratified random sampling. The respondents included rateable property owners, chief accountant in charge of rates and land rates collection and enforcement officers (debt collection unit). The study involved the use of a semi-structured questionnaire for collection of primary data. Data analysis was done using SPSS and MS Excel. The study established that collection ratio has been reducing over the years; from 16.93 percent in 2011/2012 to 6.65 percent in 2014/2015. The property rates collection and enforcement tools utilized in Nairobi City County include provision of discounts and waivers on property rates interest; sanctions and penalties; and social pressure. The enforcement tools that were found to be effective in ensuring compliance in rates payment include provision of improved public services; operational debt recovery; sanctions and penalties; provision of discounts and waivers on interests & penalties. Some of the challenges hindering compliance in property rates payment in Nairobi City County include negative attitude of the public towards property rates and rates officials; unfair administration; discontentment with property rates administration; and complexities in understanding tax system and payment procedures. To improve on compliance, the study recommends provision of improved public services to boost the morale of rates' payers; use of an integrated computer assisted property rates administration system; and capacity building of the administrators.

Keywords: Collection ratio, compliance, enforcement tools, property rates, rates collection.

INTRODUCTION

Property rates administration involves various functions including the following: rateable property identification, base tax determination, tax assessment, appeals from assessment; determination of payable rates (product of tax rate and assessed value), collection, enforcement and public service provision. Rates collection entails preparation and issuance of rates' bills, collection of property rates and ensuring compliance. The amount of revenue collected depends on property rates enforcement against non-compliance.

Local governments advocate for full compliance in property rates payment in order to raise the projected revenue required in provision of public services. In order to achieve high collection ratio, the administrators should work to ensure that rateable property owners comply by making full and prompt payment of the amount due. This is achieved through various enforcement tools.

THEORY

This section reviews literature related to property rates' collection and enforcement. The section has a detailed analysis of rating legislation, importance and challenges of rating. In addition, property rates' enforcement tools have been adequately discussed.

The Rating Act, Chapter 267, (1964)

The Rating Act was enacted to entitle and empower

**Corresponding author:*
***Winnie Mwangi**, Senior Lecturer at the Department of Real Estate and Construction Management, University of Nairobi, Kenya.*
Email: wnyika@hotmail.com

AFRICA HABITAT REVIEW 13(1) (2019)

local authorities (city, municipal and county governments) to levy taxes on landed property in order to meet the rating authority's liabilities or establish a general reserve fund. The Act allows local authorities to project the expenditures on public services and mobilize the funds from property rates.

In Kenya, property rating adopts two forms (Article 4 of the Rating Act). They include area rating and agricultural rental value rating. Area rating can be done based on a flat rate, a graduated rate, a differential flat rate, an industrial rate or a residential rate.

The county governments are empowered to impose a rate on the unimproved land value for each financial year as provided by valuation roll. The county government can also impose a rate based on combination of site value rate and the assessment for improvement rate. However, this should not exceed 4.0% of the unimproved land value. Any rating authority is restricted from adopting more than one form of rating. The National Land Commission's approval is required for the rating form to be adopted (Government of Kenya, Revised in 2012).

Article 17 of the Rating Act provides that in case of default in payments, the county may cause a written demand to the rateable owner to settle the outstanding rates within fourteen days after service. Default in payment necessitates the county to seek redress in courts of law.

Importance of property rating

Property rating is a key source of revenue for devolved systems of governance. Boamah (2013) clearly notes that property rate is the most common, dependable and maintainable source of income for local authorities globally. The revenue is used to fund public goods and services including; road maintenance, garbage collection, street lighting, street cleaning and piped water, thus, directly leading to increases in property values.

Property rating ensures equality among the urban dwellers. Umar, Kasim and Martin (2012) insist that property taxation ensures that all rateable property owners within a certain category receive equal and rational treatment. Provision for exemptions and fair determination of taxation rate and market value help in ensuring equality. The taxation objectives at devolved government level aims to foster equity, fairness and transparency.

Property rating helps in land use management. Akumu (1999) acknowledges that land taxation plays a key role as a strategic policy instrument for economic management in a given area. Land as a factor of production has great significance especially in developing economies. Fiscal control of land use through rating directly impacts the general trend of economic performance.

Challenges facing property rates collection

One of the biggest challenges facing policy makers globally is negative attitude of the public towards property rates and rates' officials. Negative cultural attitude including expectation of free services from the government hinders property tax collection (Barako and Shibia, 2015). Rateable property owners who have positive attitude about rating officials are more likely to comply.

Kelly (2013b) cites outdated or incomplete fiscal cadaster as a key hindrance to efficient and effective property tax productivity in developing countries. Cases of insufficient property information are rampant in developing countries in which most of relevant details have not been recorded or captured. Ahmad, Brosio and Pöschl (2014) noted that cadastral updates are expensive because of the required tools, highly skilled personnel and technology, fieldwork, surveys, valuation, and organized record-keeping. This can only be achieved with sophisticated tools, technology, and know-how, yet most local governments do not have the technical or human capacity.

Inadequate capacities of devolved governments to handle property rates related information is among the hindrances facing property tax collection. These include information on registration for the property tax; valuations, bills for property tax, collection and enforcement (Ahmad, Brosio and Pöschl, 2014). Some of the sub-national governments have inadequate capacity to fully execute property tax administration function starting from tax registration to collection and enforcement. Understaffed tax administration

system may not be able to accomplish its mandate. In some scenarios, authorities levy different tax burdens on properties which are similarly situated leading to suspicion. Inconsistencies between assessed and actual market value lead to unfairness in property tax administration. Values of ratable properties are exaggerated for tax purposes because of failure by local authorities to meet statutory requirements of maintaining updated market values through regular revaluations (Brunori et al., 2006). Unfair administration of property tax may lead to poor collection from rateable owners.

Brunori et al. (2006) attributes property tax revolutions of 1970s and 1980s in USA to public discontentment. The revolution led to substantial statutory and constitutional restrictions on the property tax. Public discontentment leads to poor tax payment resulting to lower collection ratio. If the tax payers lack faith in how the revenues are utilized, defaulting cases increase leading to poor collection (Barako and Shibia, 2015). Pitiable service delivery and rampant corruption negatively affect tax payers' perception leading to resistance incidences (Kelly, 2013a).

Poor enforcement leads to low compliance rates. The law allows the rating authority to take measures to ensure that outstanding taxes are paid accordingly. Enforcement measures differ depending on the country and property taxation legal framework. This includes penalties for defaulters and seeking legal redress through courts. Poor enforcement measures of property taxation system lead to poor collection (Kelly, 2013a). As Boamah (2013) rightly argues, low compliance is caused by poor enforcement.

Kelly (2013a) notes that difficulties in understanding rating system and tax payment procedures also hinder effective property rates collection. The penalties for defaulting in tax payment ought to be easily understandable and implementable (Syagga, 2015). The rating system and payment procedures should be easily understood to enable rateable property owners pay the due taxes.

In addition, lack of political will is key hindrance to rates collection and enforcement. Property rating attracts much public attention. This makes politicians to advocate for reduction in property tax. Politicians mostly take a negative view of property taxation, thus, end up designing policies that limit property tax (Brunori et al., 2006). Wealthy individuals who have political influence own the rateable properties and manipulate tax administration system despite having outstanding property taxes.

Property rates enforcement tools

In order to ensure compliance with property rates regulations and optimum collection ratio, the administration system should focus on encouraging voluntary compliance (Kelly, 2013b). This can be done by providing rates payment incentives. To ensure optimum tax collection ratio, maximum and timely property tax payment is paramount. This can be achieved through the following tools or strategies:

a) Improved public services offered by Local Government

The importance of linking property rates revenue collection to provision of public services does not need to be over-emphasized. Ahmad, Brosio and Pöschl (2014) highlighted that the establishing a link between property rates and public service provision works more effectively for devolved government than for central governments. Property rating can easily be linked to a specific local government's service (Kelly, 2013b). Rateable property owners ought to get a clear understanding of the property rating role as a benefit tax directly related to infrastructure and services provision.

b) Training on property rates structure

Provision of information on the property rates structure through taxpayers' education programs can help in ensuring compliance and improving the collection ratio. Trainings should incorporate various aspects of rating administration system (Kelly, 2013b). These trainings can help in lowering compliance costs and encourage voluntary tax compliance.

c) Reducing compliance costs

Lower compliance costs can be achieved by providing a simplified and easily accessible payment system (Kelly, 2013b). Reduction in administrative and compliance costs can be achieved by providing multiple and convenient

options for rates payment (Kelly, 2013b). Countries such as Greece, El Salvador, South Africa have linked the property rates to the payment of utilities such as electricity and water to ensure collection and enforcement.

d) Social pressure

Social pressure can be used as a tool of encouraging compliance in property rates payment. On one hand, countries such Philippines and Indonesia publicly acknowledges exceptional compliant rateable property owners by publishing their names. On the other hand, countries such as Kenya, Malawi and Tanzania publishes the names of the delinquent taxpayers as a form of negative publicity (Kelly, 2013b).

e) Provision of discounts and waivers on property rates interest

Provision of discounts helps in achieving voluntary property rates compliance. Discounts can be given to rateable owners who make timely and complete payments. Countries such as Philippines, Barbados and Ecuador offer discounts for prompt and complete payments to encourage compliance (Kelly, 2013b). Provision of waivers for accumulated interest on outstanding property rates can also be used as a tool of ensuring compliance. This is applied in most of the counties in Kenya. Some counties offer as high as 100 percent waiver on accumulated interests for rateable owners who clear their arrears within the stipulated time.

f) Sanctions and penalties

Sanctions and penalties are a form of stringent enforcement measure of ensuring prompt property rates payment. Sanctions and penalties take various forms including imposition of penalties for late payment, interest payments for outstanding property rates and censorship of public services (such building permits, title registration, business licensing and suspension of utilities) (Kelly, 2013b). Voluntary compliance to avoid sanctions and penalties can be achieved through strict enforcement against non-compliance. Countries such as Kenya, Bahamas and Indonesia imposes payment penalties for late payment to boost compliance by amassing the non- compliance costs. Kelly (2013b) proposes that government policies should make property tax interest payments to be done together with the key taxes including income taxes.

h) Operational tax debt recovery

Operational tax debt recovery helps in enforcement of late payment and interest penalties. Countries such as Philippines, Indonesia, US, Canada and Chile secure legal debt recovery through civil proceedings, garnering rents from the rateable property, seizure and sale of properties (Kelly, 2013b). This tool is the last resort employed by local authorities.

The extent of enforcement greatly affects property collection ratio. For instance, in North America, collection ratio of close to 100 percent is achieved through property seizure and auctions to enforce compliance (Kelly, 2013b). On contrary, developing countries rarely employ seizure and auctions as tools for enforcement leading to poor collection. Implementation of enforcement measures requires strong political will and technical capacity.

In summary, property rates enforcement tools include improved public services offered by local government; training on property tax structure; reducing compliance costs; social pressure; provision of discounts and waivers on property rates interest; sanctions and penalties; and operational tax debt recovery. One hundred percent compliance in property rates payment can be achieved through all these tools. However, the effectiveness of these tools in ensuring compliance vary substantially.

Compliance (C) is directly affected by the property rates enforcement tools. Compliance is therefore a dependent variable while enforcement tools are independent variables. Compliance is a function of improved public services (S); training on property rating structure (R); reducing compliance costs (CC); social pressure (SP); provision of discounts & waivers (D & W) on property rates interest; sanctions and penalties (S & P); and operational tax debt recovery (DR).

$$C=f\{S,R,CC,SP,D\&W,S\&P,DR\}$$

The level of compliance which is a dependent

variable improves with increased enforcement efforts facilitated by enforcement tools (independent variables).

RESEARCH METHODS

The section entails a detailed discussion of the study area and research methodology employed. It contains a description of the population, sampling techniques and data collection methods used by the researcher. The collected data is later used to test the study hypothesis as well as to meet the objectives of the study.

The study focused on property rates collection and enforcement in Nairobi City County which hosts Kenya's capital which is divided into 20 zones. Rateable properties were sampled using stratified random sampling. All rateable properties within the city boundaries were placed into groups (strata) depending on the zones. The researcher considered a sample of four zones consisting of two commercial zones (Central Business District [CBD] and Upper Hill) and two residential zones (Makadara and Buruburu; and South B, South C and Lang'ata) . A total of 40 samples were randomly selected from each of the four zones resulting into a total of 160 samples.

Other respondents included chief accountant in charge of rates and land rates collection and enforcement officers (debt collection unit). The chief accountant in charge of rates in conjunction with Nairobi City County treasury provided information on collections of property rates from 2010 to 2015. The land rates collection and enforcement officers (debt collection unit) responded to questions regarding challenges faced in rates collection and enforcement.

The primary units of analysis of this study include owners of rateable properties and rates administration officers who deal with rates collection and enforcement in Nairobi City County. Rateable property owners comply with payment of rates based on tools of enforcement employed by collection and rates enforcement officials.

In this study, compliance/collection ratio in property rates payment is a dependent variable, James and Alley (2004), who noted that compliance is assessed in terms of 'tax gap' which shows the variance of actual rates collected from the total tax liability. Total tax liability represents the amount that would be collected in the case of 100 percent compliance. Consequently, compliance/collection ratio can be summarized as follows:

$$Collection\ Ratio/Compliance, C = \frac{Actual\ Revenue\ Collected}{Total\ Tax\ Liability}\ X\ 100\%$$

The independent variables in this study were obtained from literature review on property rates enforcement tools in journals both published and unpublished by scholars from different countries. Enforcement tools that were considered for analysis included improvement on public services provision (S); training on property rating structure (R); reduction on compliance costs (CC); social pressure (SP); provision of discounts and waivers (D & W) on property rates interest; sanctions and penalties (S & P); and operational tax debt recovery (DR). These variables were subjected to the sampled respondents using structured or close end questionnaires in order to determine their effectiveness in ensuring fully compliance.

The study involved the use of a semi-structured questionnaire which contained open and close-ended questions for collection of primary data. The respondents were able to identify the collection and enforcement tools in Nairobi City County and rate them in a numeric scale in order to establish their effectiveness. Alreck and Settle (1985) in Murigu (2005) suggest that it is advisable to use a horizontal numeric scale in judging items on a single dimension or continuum. A numerical scale of 1 – 4 representing the two extremes of "not effective" and "very effective" was devised as follows: 1- Not Effective, 2 – Less Effective, 3 – Effective, 4– Very Effective.

Data analysis was done using Statistical Package for Social Sciences (SPSS) and MS Excel. Descriptive statistics was performed on the data to summarize the variable data, thus, enhancing its understanding. The descriptive statistics selected for this study included the mean, standard deviation, frequencies, maxima and minima. In addition, z-test was performed on the data in order to establish tools that are effective in rates collection and enforcement. Data collected was represented in form of tables, charts and

percentages.

Hypothesis testing

All the seven variables identified had two hypotheses. The null hypothesis (H_0) was that the enforcement tools are ineffective in ensuring compliance in payment of property rates. Alternative hypothesis (H_1) was that enforcement tools are effective in ensuring compliance in payment of property rates. Failing to accept the null hypothesis means that one accepts the alternative hypothesis. It was therefore important that a decision point is set, that is, a point at which to accept the null hypothesis based on population mean score. Since it was assumed that the characteristics of the sampled rateable properties are similar to that of the entire population of properties being studied. It was also assumed that since the population is to obey the normal distribution, the four possible scores of 1 - 4 in the devised numerical scale have an equal chance of occurring, therefore, the population mean score is 2.5 on the rating scale. This is a point higher than less significant on the decision scale and forms the decision point (Talukhaba, 1999). Consequently, any tool that achieved a mean score of above 2.5 was considered to be effective in ensuring property rates compliance.

To eliminate or minimize errors in identification of effective tools, there was need to set confidence level. Identification of effective tools was prone to type I error and type II error. In type I one error or alpha error the researcher concludes that a particular tool is effective when actually it is not. The researcher may therefore reject the null hypothesis when it is true. On the other hand, type II or beta error occurs when a researcher concludes that a certain variable is ineffective when it is actually effective. The null hypothesis is accepted when it is false.

Talukhaba (1999) argues that type I error can be avoided by setting a lower confidence level of 95% while type II error can be avoided by a higher confidence level of say 99%. In this study, committing type II error was considered less harmful than committing type II error.

Consequently, a higher confidence level of 99% was set in the Z-test analysis of the variables and the one-tail Z-test was selected in the analysis. Any score above the population mean score of 2.5 is already significant.

The Z-value for each variable (or tool) was calculated using the formula:

$$z=(\bar{x}-\mu)/(\delta/\sqrt{n})$$

Where:

z= calculated z-value;

$\bar{x}$ = mean variable score for each variable;

μ = population mean score which is 2.5 for the subject population; and

n = sample size.

The Z-value calculated for each variable was compared with Critical Z–value at the selected confidence level of 99% in a one tail Z–test which is 2.33 for this case. Mark (2006) provided critical values at various confidence levels as shown in **Table 1**.

Where the Z-value calculated for each variable is greater than critical z-value at the selected confidence level, the researcher will be confident that the particular variable (or tool) is effective in ensuring property rates compliance.

RESULTS AND DISCUSSION

This section presents and discusses the results obtained from the field study. The data collected was aimed at assessing the effectiveness of property rates collection and enforcement in Nairobi City County.

The field research was carried out in May and June 2017. A total of 160 questionnaires were administered in Nairobi CBD, Upper Hill, Makadara and Buruburu and South B, South C and Lang'ata. 128 completed questionnaires were obtained as shown in **Table 2**.

Compliance in payment of property rates in NCC from 2010 to 2015

Table 3 indicates the annual rates liability and collected amount in Nairobi City County from 2010 to 2015. The annual rates liability has been increasing over the years from a low of Kshs.

TABLE 1: Critical value of Z

Probability (level of significance)	One-tailed test	Two-tailed test
0.05 (95% confidence level)	1.65	1.96
0.01 (99% confidence level)	**2.33**	2.58
0.001 (99.9% confidence level)	3.09	3.29

Source: Mark 2006

TABLE 2: Response rate of the questionnaires administered

Zone	Targeted respondents	Actual respondents	Response rate (%)
Makadara and Buruburu	40	35	87.50
Upperhill	40	32	80.00
South B, South C and Lang'ata	40	31	77.50
Nairobi CBD	40	30	75.00
Average	**40**	**32**	**80.00**
Total	**160**	**128**	**80.00**

Source: Field survey 2017

12,349,722,000.00 in 2010/2011 to a high of Kshs. 39,038,481,000.00 in 2014/2015. Similarly, the total property rates collections per annum have been increasing over the period under review from Kshs. 1,792,597,000.00 in 2010/2011 to Kshs. 2,594,776,618.00 in 2014/2015. The results indicate that the annual rates liability has been growing faster than the amount collected per annum. The compliance rate is obtained by diving total property rates collected by the annual rates liability.

Compliance in rates payment dropped from 16.93 percent in 2011/2012 to 6.65 percent in 2014/2015 as shown in **Figure 1**. The decline in compliance was most drastic between 2012/2013 and 2013/2014 (from 14.06 percent to 8.49 percent). In 2013, Nairobi City County amended Nairobi City County Finance Act to allow for a drastic increase of rating rate from 17 percent to 34 percent of Unimproved Site Value of land as it appears in 1982 Valuation Roll. The rateable property owners had to bear the burden of the increased rates. The decline in compliance can also be attributed to devolution which came into effect in 2013. Devolution led to increased funding of Nairobi City County from exchequer resulting into a drop in enforcement of property rates. The average compliance rate for the period under review is very low at 12.13 percent.

Contribution of property rates to Nairobi City County revenue

Reliance of Nairobi City County on property rates has been declining from 21.63 percent in 2011/2012 to 11.24 percent in 2014/2015 as illustrated in **Figure 2**. Between 2011/2012 and 2013/2014, contribution of property rates to the annual Nairobi City County income sharply declined from 21.63 percent to 11.33 percent. The decline can be associated with introduction of devolved governance in Kenya. Devolution led to increased funding of Nairobi City County from exchequer. The contribution of property rates to Nairobi City County annual revenue has been insignificant over the last five years due to low compliance among the rateable property owners.

Based on the field study as indicated in **Figure 3**, the contribution of property rates to annual Nairobi City County own source revenue declined from 31.99 percent in 2011/2012 to 22.73 percent in 2014/2015. The decline was most sudden between 2011/2012 and 2013/2014. Despite the decline, the contribution of property rates to annual Nairobi City County own source revenue remains significant.

Property rates' collection and enforcement tools in Nairobi City County

AFRICA HABITAT REVIEW 13(1) (2019)

TABLE 3: Annual property rates liability and collected amount

Year	Annual rates liability (Kshs)	Total property rates collected (Kshs)	Compliance rate (%)
2010/2011	12 349 722 000.00	1 792 597 000.00	14.52
2011/2012	13 127 242 000.00	2 221 855 000.00	16.93
2012/2013	13 381 180 389.00	1 881 180 389.00	14.06
2013/2014	26 762 360 778.00	2 273 133 460.00	8.49
2014/2015	39 038 481 000.00	2 594 776 618.00	6.65
Average	**20 931 797 233.40**	**2 152 708 493.40**	**12.13**

Source: Field survey 2017

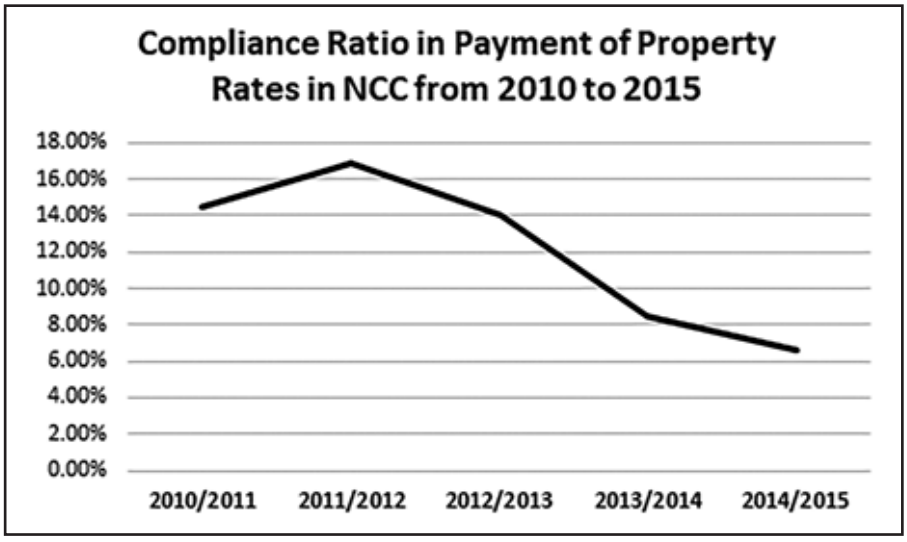

FIGURE 1
Compliance in payment of property rates in NCC from 2010 to 2015
Source: Field survey 2017

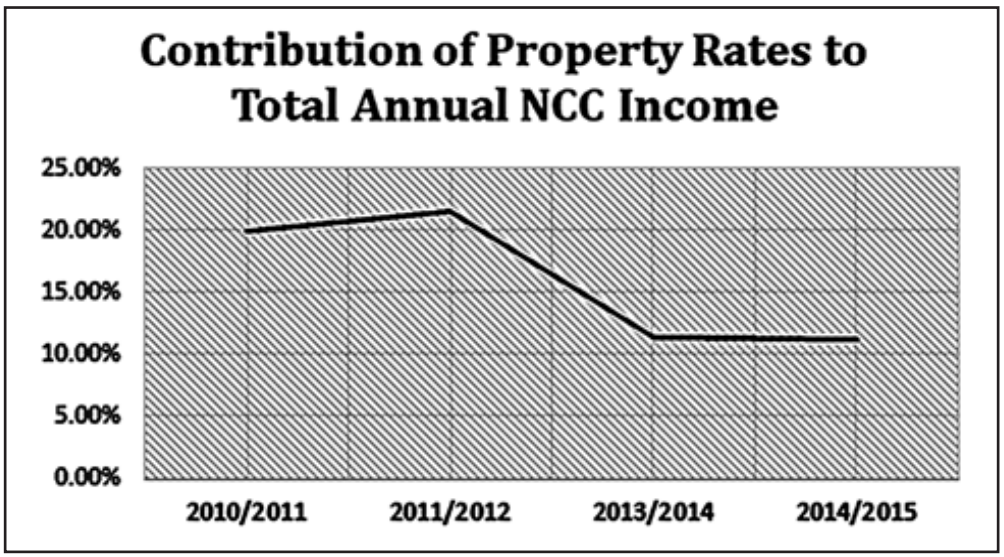

FIGURE 2
Contribution of property rates to total annual NCC income
Source: Field survey 2017

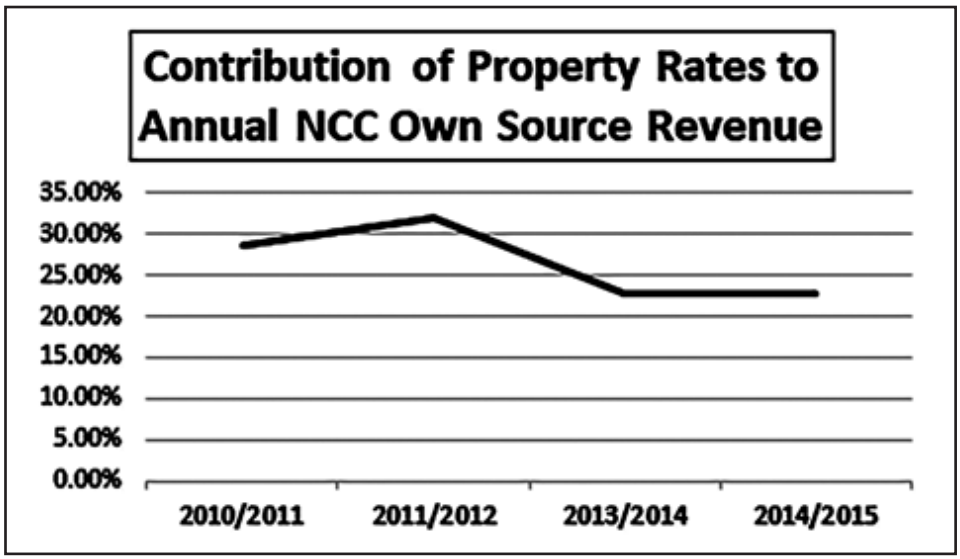

FIGURE 3
Contribution of property rates to annual NCC own source revenue
Source: Field survey 2017

160 respondents were identified in order to determine what property rates' collection and enforcement tools are applicable in Nairobi City County. The respondents identified the following tools of property rates collection and enforcement in Nairobi City County: Improved public services; Training on property rating structure; Reducing compliance costs; Social pressure; Provision of discounts and waivers on property rates interest; Sanctions and penalties; and Operational tax debt recovery.

The respondents were also required to rate the effectiveness of collection and enforcement tools on a 4-point horizontal numerical scale. **Table 4** checks the mean, mode, median, skewness, kurtosis and standard deviation of the enforcement tools (independent variables). It is evident that the values for the median and mean of the independent variable are equal or close to each other. In addition, the values of skewness and kurtosis are between -2.00 and +2.00. This indicates that the variable data obeys the symmetric or normal distribution.

The means of the value ratings were computed for each tool in order to rank them according to their effectiveness as shown in **Table 5**. The table shows the mean ranking of effectiveness of each tool, the minimum and maximum value score for each tool and the standard deviation. The maximum value indicates the highest possible score awarded for each enforcement tool by the respondents while the minimum value indicates the lowest score. The standard deviation indicates the variations of the value score for each tool.

Based on the findings presented in **Table 5**, respondents (rateable property owners) considered Improved public service ($\bar{x}$=3.45); Operational debt recovery ($\bar{x}$=3.26); Sanctions and penalties ($\bar{x}$=3.14); Provision of discounts and waivers on interests and penalties ($\bar{x}$=2.96); Social pressure e.g. publishing names of defaulters ($\bar{x}$=2.86) and Reducing compliance cost ($\bar{x}$=2.80) as effective tools of ensuring compliance in rates payment.

Training on property rating structure as tool of ensuring enforcement was found to be ineffective. The mean rating of effectiveness of training on property rating structure as tool of ensuring enforcement was found to be at 2.22. This is below the population mean (2.5). The study therefore established that all the tools are effective in ensuring compliance in rates payment, save for training on property rating structure.

The above analysis using the population mean score did not conclusively isolate the effective tools. There is need to set the confidence level in order to eliminate or minimize errors that might have occurred in the establishment of effectiveness of the tools. Two possible errors might have occurred

AFRICA HABITAT REVIEW 13(1) (2019)

TABLE 4: Descriptive statistics of the enforcement tools

		Improved public service	Training on property rating structure	Reducing compliance costs	Social pressure	Provision of discounts and waivers	Sanctions and penalties	Operational tax debt recovery
Sample size (N)	Valid	128	128	128	128	128	128	128
	Missing	0	0	0	0	0	0	0
Mean		3.45	2.22	2.80	2.86	2.96	3.14	3.26
Median		4.00	2.00	3.00	3.00	3.00	3.00	4.00
Mode		4	2	3	4	3	4	4
Std deviation		0.83	1.09	0.94	1.20	0.93	1.01	0.96
Skewness		(1.44)	0.43	(0.21)	(0.47)	(0.69)	(0.94)	(1.20)
Kurtosis		1.21	(1.11)	(0.94)	(1.37)	(0.31)	(0.27)	0.43
Minimum		1	1	1	1	1	1	1
Maximum		4	4	4	4	4	4	4

Source: Field survey 2017

TABLE 5: Mean rating of the effectiveness of enforcement tools in ensuring compliance

Enforcement tool	Mean rating of effectiveness (on a 4-point scale)	Minimum	Maximum	Standard deviation
Improved public services	3.45	1	4	0.83
Operational debt recovery	3.26	1	4	0.96
Sanctions and penalties	3.14	1	4	1.01
Provision of discounts and waivers on interests and penalties	2.96	1	4	0.93
Social pressure e.g. publishing names of defaulters	2.86	1	4	1.20
Reducing compliance cost	2.80	1	4	0.94
Training on property rating structure	2.22	1	4	1.09

Source: Field survey 2017

in the process. These are type I error and type II error. In type I error or alpha error the researcher concludes that the enforcement tools are effective in ensuring compliance when actually they are not. The researcher may therefore reject the null hypothesis when it is true. On the other hand, type II or beta errors occurs when a certain variable is considered ineffective when it is actually effective. The null hypothesis is accepted when it is false.

The Z-test analysis was used to conclusively accept or fail to accept the null hypothesis. A higher confidence level of 99% was set in the Z–test analysis of the variables and the one-tail Z-test selected. The Z-score was calculated for each variable as shown in **Table 6**.

The Z-score calculated for each variable was compared with Critical Z–value at the selected confidence level of 99% in a one tail Z–test which is 2.33 for this case. Where the Z-value calculated for each variable was greater than critical Z-value at the selected confidence level, the null hypothesis was rejected and conclusion made that enforcement tools are effective in ensuring compliance in rates payment as indicated in **Table**

7.

From the above analysis, six enforcement tools had their calculated Z-scores being statistically greater than the Critical Z-value at the specified confidence level i.e. 99%. In all these tools, the null hypothesis (H_0) was rejected. A conclusion was made that the six enforcement tools are effective in ensuring compliance in rates payment.

Challenges hindering compliance in property rates payment in NCC

The study further established the challenges hindering compliance in property rates payment in Nairobi City County. On one hand, owners of rateable properties identified the following challenges that hinder compliance in property rates payment: negative attitude of the public towards property rates and rates officials; unfair administration; discontentment with

TABLE 6: The calculated Z-score

Enforcement tool	Mean rating of importance (on a 4-point scale)	Population mean	Standard deviation	Sample size	Z score
Improved public services	3.45	2.50	0.83	128.00	12.95
Operational debt recovery	3.26	2.50	0.96	128.00	8.96
Sanctions and penalties	3.14	2.50	1.01	128.00	7.17
Provision of discounts and waivers on interests and penalties	2.96	2.50	0.93	128.00	5.60
Social pressure e.g. publishing names of defaulters	2.86	2.50	1.20	128.00	3.39
Reducing compliance cost	2.80	2.50	0.94	128.00	3.61

Source: Field survey 2017

TABLE 7: Z-test of statistical significance

Enforcement tool	Critical Z-value at 99% confidence level (one-tail)	Calculated Z-value	Hypothesis testing	Remarks
Improved public services	2.33	12.95	Fail to accept null hypothesis	Enforcement tool is effective in ensuring compliance
Operational debt recovery	2.33	8.96	Fail to accept null hypothesis	Enforcement tool is effective in ensuring compliance
Sanctions and penalties	2.33	7.17	Fail to accept null hypothesis	Enforcement tool is effective in ensuring compliance
Provision of discounts and waivers on interests and penalties	2.33	5.60	Fail to accept null hypothesis	Enforcement tool is effective in ensuring compliance
Social pressure e.g. publishing names of defaulters	2.33	3.39	Fail to accept null hypothesis	Enforcement tool is effective in ensuring compliance
Reducing compliance cost	2.33	3.61	Fail to accept null hypothesis	Enforcement tool is effective in ensuring compliance

Source: Field survey 2017

property rates administration; complexities in understanding tax system and payment procedures; and lack of public participation in the process of drafting policy and regulations on property rates. On the other hand, land rates collection and enforcement officers (debt collection unit) cited the following challenges which hinder compliance and collection of outstanding property rates in Nairobi City County: outdated or incomplete fiscal cadastre; inadequate capacity; the incentives given to investors by county and national governments which exempts them from paying property rates end up discouraging rateable property owners from complying; poor enforcement measures; lack of political goodwill; and hostility from rateable property owners.

CONCLUSION AND RECOMMENDATIONS

The study revealed that the level of compliance in payment of rates is very low. The rate of compliance has been declining over the last couple of years. It is evident that the enforcement tools being applied in ensuring that property rates are paid promptly and fully continue to be ineffective. Over reliance of devolved systems of governance on transfers from the national government is evidenced by poor property rates collection and enforcement. The level of compliance in rates payment is worrying, therefore, necessitating the need to consider effective tools of property rates collection and enforcement.

The research established that the most common tools of property rates' collection and enforcement in Nairobi City County include provision of discounts and waivers on property rates interest; social pressure, for example, publishing names of defaulters; sanctions and penalties; and provision of interest free period from January to March every year. These tools are reactive. Even though the enforcement tools currently being utilized by Nairobi City County are effective, the findings indicate that they are not the best in ensuring enforcement. The study established that provision of improved public services and operational debt recovery are the most effective in ensuring compliance in rates payment.

It is clear that Nairobi City County government is partly to be blamed for poor rate of compliance. It is vital to encourage the use of most effective enforcement tools in order to improve the property rates collection ratio. High compliance ensures that resources required for provision of public services are readily available. Provision of public services improves demand and value for properties, thus, benefiting the rateable property owners.

In order to improve compliance in rates payment from the 178,280 rateable properties, the study recommends the following: provision of improved public services to boost rateable property owners' morale; use of an integrated computer assisted property rates administration system; capacity building of the administrators; and elimination of political intervention in the administration process.

CITED REFERENCES

Ahmad, E., Brosio, G. and Pöschl, C. (2014). Local property taxation and benefits in developing countries - Overcoming political resistance? *Asia Research Centre (ARC), United Kingdom*.

Akumu, O.A.K (1999). *Land Taxation Policy in Kenya.* N airobi: Department of Lands.

Barako, D.J. and Shibia, A.G. (2015). *Fiscal decentralization and determinants of property tax performance in Kenya: Cross-county analysis.* Nairobi: Kenya Institute for Public Policy Research and Analysis.

Boamah, N.A. (2013). Constraints on property rating in the Offinso South Municipality of Ghana. *Commonwealth Journal of Local Governance.* 13/14: November 2013, Page 77-89.

Brunori, D. et al. (2006). *The property tax: Its role and significance in funding State and Local Government Services.* George Washington Institute of Public Policy (GWIPP), Working Paper Number 27, George Washington University.

Government of Kenya. (2010). *The Constitution of Kenya.* Nairobi: Government Printer.

Government of Kenya. (rev2012). *Rating Act, Chapter 267 of the Laws of Kenya.* Nairobi:

Government Printer.

Government of Kenya. (2016). *Economic Survey 2016. Kenya National Bureau of Statistics.* Nairobi: Government Printer.

James and Alley (2004). Tax Compliance, Self-Assessment and Tax Administration. *Journal of Finance and Management in Public Services*. 2(2).

Kelly, R. (2013a). *Property tax collection and enforcement in a primer on property tax administration and policy.* West Sussex: Blackwell Publishers Ltd.

Kelly, R. (2013b). *Making the property tax work.* pp. 141-171. International Center for Public Policy. Working Paper 13-11.

Mark, S.R. (2006). *Statistics for social sciences* (3rd ed.). London: Sage Publications.

Murigu, J. (2005). *An analysis of the decision-making criteria for investing in commercial real estate in Kenya* (PhD thesis). University of Nairobi, Nairobi.

NCC. (2015). *Nairobi City County Finance Act.* Nairobi: Nairobi County.

Syagga, P.M. (2015, September). Property taxation in Kenya. In National Conference on County Own Source National Conference on County Own Revenue Enhancement, Kenya.

Talukhaba, A. (1999). *An investigation into the factors causing construction projects delays in Kenya* (Unpublished PhD thesis). University of Nairobi, Nairobi.

Umar, A.M., Kasim, R and Martin, D. (2012, December). *An overview of property tax collection as a tool for a sustainable Local Government reform in Malaysia.* Proceedings International Conference of Technology Management, Business and Entrepreneurship, Malaysia.