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Received 7 May 2019
Revised 4 June 2019
Accepted 5 June 2019

An evaluation of property tax base in Nairobi city

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Abstract

Purpose – This study aims to evaluate the property tax base under the local government property taxation in Nairobi City and its implication on revenue adequacy of the city. Nairobi has grown both in population and in physical extent resulting to increased demand for urban services. The city faces challenges of adequate infrastructure service provision against increasing demand. Property taxation if fully exploited can be a major source of city government revenue, which has been dwindling.

Design/methodology/approach – Literature review of property tax bases in the world and examination of best practices was done to highlight the inadequacies of property tax base administration in Nairobi. Primary data were gathered through interviews of officers in Nairobi City involved in the land rating process. Secondary data were obtained through documentary search and field survey of the study area.

Findings – The study established that Nairobi relies on a dual system of taxation, namely, site value rating and area rating. Tax is on vacant land only and excludes improvements. There are many legal exemptions and administrative exclusions from the tax base. The property tax registers do not include all the taxable properties and there is no regular updating of the tax registers. Nairobi relies on an outdated valuation roll whose values have no relation to the current market values.

Research limitations/implications – These factors have resulted to a narrow tax base, which affects the revenue potential of the city and its ability to adequately provide infrastructure services.

Originality/value – This is an original research, which relied mainly on primary data. To establish the property tax bases and the exempt properties in Nairobi, the researchers interviewed the officers at the Nairobi city land valuation and property management directorate using structured questionnaires. To address the third objective on whether the property tax base is complete and all-inclusive, the research relied on primary data. The research population was residential properties in Buruburu, Kilimani and Riruta areas of Nairobi city. The sample data on property details were collected from the Ministry of Land and Physical Planning (MLPP). The researchers then examined the records at the Nairobi City to evaluate whether the properties, which are registered at the MLPP, are charged land rates at the city level and at what amounts. This included properties under site value rating and area rating.

Keywords Local government, Property taxation, Tax base

Paper type Research paper

1. Introduction

Property tax at the local government level is a recurrent annual tax, which is a major source of revenue for urban governments in major cities of the world (Roy and Johannes, 1992). In developed countries, it comprises a significant percentage of local governments own source revenue amounting to 37.7 per cent in Australia, 53.3 per cent in Canada and 33 per cent in the UK (Bird and Slack, 2005). In the developing counties, its contribution to own source revenue is lower, at 15 per cent in Kenya and 21 per cent in South Africa (Bird and Slack, 2005).

Property taxation has advantages over other local taxes because the land is immobile and it cannot relocate to other areas with lower tax rates, unlike tax on income where higher taxes can lead to relocation to lower tax jurisdictions. Property tax is argued to be a reliable

Journal of Financial Management of Property and Construction
Vol. 24 No. 2, 2019
pp. 184-199
© Emerald Publishing Limited
1366-4387
DOI 10.1108/JFMPC-05-2019-0043

source of local government revenue under decentralisation because the local government has the autonomy to decide on the tax base and the tax rate.

In 2012, Kenya adopted a devolved system of government whose aim was to transfer more power and resources to the devolved county governments including Nairobi City County. Property tax is one of the taxes that are assigned to the county governments under the constitution. It is a constitutional requirement for Nairobi City Government to provide urban infrastructure services such as roads, schools and hospitals. However, the city is facing financial challenges and is unable to generate adequate revenue. The city has high amounts of debt, which has been increasing from Kenya shillings (KSh) 63.5bn in 2013, KSh100.2bn in 2014 and 147.3bn in 2015 and up to 208.9bn by 30th June 2016. In the financial year 2015/2016, land rates accounted for 99.3 per cent of all the debt owed to the city government (Nairobi City County, 2016).

The city government has continued to rely heavily on transfers from the National government and has neglected to exploit own source revenue sources such as property taxation. Table I indicates that revenue allocation from the national government has been on an upward trajectory from 2013/2014 at KSh9.5bn to 15.4bn in 2017/2018, which was 5.29bn above the own source revenue and was 152.32 per cent of the own source revenue in 2017/2018. In contrast, revenue from property taxation has continued to decline as a percentage of own source revenue from 26.55 per cent in the financial year 2015/2016 to 18.50 per cent in 2017/2018.

Nairobi City has experienced rapid urbanisation because of increased population and an increase in spatial extent. The population of Nairobi was 2,025,724 in 1999 and grew by about 55 per cent in 10 years to 3,138,369 in 2009 and is projected to reach 5.05 million by 2022 (Republic of Kenya, 2002; Kenya National Bureau of Statistics, 2017; Republic of Kenya, 2008). This has put a strain on the infrastructure services in the city including roads, housing and water and sewerage services. Adequate provision of infrastructure is an indicator of efficiently managed cities (Asoka *et al.*, 2013). Inadequate provision of urban infrastructure has resulted in increased levels of poverty, which had risen from 26 per cent in 1992 to 50 per cent in 1997 (Un- Habitat, 2006).

The property tax base in Nairobi is currently on the unimproved land despite increased property development in the city. Kenya has experienced growth in the construction industry. Kenya National Bureau of Statistics (2017) indicates that the building and construction sector registered a growth of 13.9 per cent in 2015 and 9.2 per cent in 2016. The value of loans and advances to this sector also grew from 32.6 per cent in 2010 to 50.8 per cent in 2011, an increase of 55.8 per cent. Nairobi being the Capital City of Kenya is where most of this growth has occurred. The city has experienced unprecedented growth in property development and an increase in property prices. The value of approved building plans in Nairobi rose from 215.2bn in 2015 to KSh304bn in 2016, an increase of about 43 per

Financial year	Property tax (KSh)	Local revenue (KSh)	Equitable share (KSh)	% property tax to local revenue	% of equitable share to local revenue
2013/2014	2,582,000,000	9,327,000,000	9,500,000,000	27.68	101.85
2014/2015	2,593,000,000	11,582,000,000	11,370,000,000	22.38	98.61
2015/2016	3,110,000,000	11,710,000,000	13,000,000,000	26.55	111.06
2016/2017	2,253,000,000	10,930,000,000	14,030,000,000	20.61	128.36
2017/2018	1,871,000,000	10,110,000,000	15,400,000,000	18.50	152.32

Source: Compiled from: Nairobi City County (2018); and Republic of Kenya (2018, 2017, 2016, 2015, 2014)

Table I. Revenue contribution from land rates, own source local revenue and equitable share (national allocation) – 2013 to 2018

cent while the value of reported completed new buildings increased by 7.6 per cent from 2015 to 2016 to stand at KSh72.2bn (Kenya National Bureau of Statistics, 2017). In 2016, 300,000 square metres of commercial office space was delivered to the market in Nairobi against an average of about 150,000 square metres in the past years, while the delivered formal retail space was 100,000 square metres against about 50,000 square metres in the past years (Knight Frank Africa, 2017).

There has been a high increase in property values in Nairobi resulting from improved infrastructure and urbanisation. The asking prices of development land has increased on average at 6.3-fold from 2007 to 2018 (Hass consult Real Estate, 2018). Land values in the city centre increased by 2,566 per cent from 1982 to 2002 while values at Kilimani (Yaya centre) area increased by 4,900 per cent over the same period (Nzau, 2003). Increase in urban property values are mainly occasioned by public investments in infrastructure and service provision (Walter, 2012).

Kelly (1999) and Monkam (2010) note that property taxation is underuse in most developing countries and that Kenya is one of the countries underusing its property tax potential compared to other countries in the world. Under the taxation of properties in these countries is a major cause of inequity (Brautigam *et al.*, 2008). Kelly (1999) further adds that land rates, as a source of local government revenue in Kenya has not been productive mainly because land rates have declined in relative contribution to total recurrent revenue for local authorities and accounts for an average of 22 per cent of the revenue; have remained stagnant in inflation-adjusted real terms and; have declined as percentage of total government tax revenue at 1.3 per cent and 0.3 per cent of GDP.

Property taxation in Kenya faces challenges of administration; for instance, Nairobi uses a valuation roll of 1982, about 36 years old. The land values are out dated and do not reflect the current market situation. This hinders equity in property taxation (Olima, 2005). The under taxation of property in Kenya and other developing countries is a major cause for inequity in taxation (Brautigam *et al.*, 2008). Excluding properties from taxation is a way of legitimised exemptions. An official at the city government observed that of the 135,000 rateable properties in Nairobi County, only about 55 per cent pay rates regularly (Business Daily Africa, 2014). Majority of properties enjoying the public investments that contribute to increased property values are not contributing to the provision and maintenance of these services.

Done mainly in the pre-devolution era, past research studies on local property taxation in Kenya have taken a general and wide scope covering property tax administration in local authorities in the country and highlighting their inadequacies; also, these research studies were mainly done in the pre-devolution era (see, for instance, Kelly, 1999, 2003; Konyimbih, 2000; Olima, 2005). The studies have also dealt with the issue of increasing revenue collection by improvement in the property tax administration processes. McCluskey *et al.* (2017) examines property taxation in Kenya, giving a background of all land-related taxes. This includes property tax administration processes of the tax base, assessment, exemptions, tax rate, billing, collection and enforcement. They have highlighted the challenges of property taxation in Kenya, which include legal vacuum under the current system of devolution, incomplete survey and title registration processes, inadequate capacity, ineffective and poorly applied enforcement mechanism, lack of political will and lack of willingness to pay the tax. There has not been any empirical research done to evaluate the property tax base in Nairobi City.

The inadequacy of revenue in Nairobi City necessitated this research. Kenya adopted a new constitution in 2010, which provided for the devolved structure of governance with two tiers of government, national and county government. The process involved the

transfer of functions, powers and resources to the county governments, which assume full responsibility and accountability (Mboga, 2009). Nairobi City is one of the 47 counties that came about after the 2013 general elections.

The main aim of this research, therefore, is to evaluate the property tax base and coverage in the city. The research endeavours to answer the following questions;

Q1. What are the different tax bases in property taxation?

Q2. What properties are exempted from taxation?

Q3. Is the tax base coverage complete and all-inclusive?

2. Literature review

The process is very important in the system of taxation because its effectiveness directly determines the amount of revenue generated and has an impact on equity and efficiency. Administration includes defining the tax base, determining the properties to be taxed and ensuring maximum coverage, the property valuation process, setting the tax rate, collection and enforcement of tax payment (Kelly, 1999; Bird and Slack, 2002). Poor administration may also lead to under-taxation. Under-taxation of property, on the other hand, results into increased investment in the property sector and increased demand, leading to increase in property prices, which benefit the current property owners but locks out prospective property owners (Lawton and Reed, 2013). Under taxation also encourages speculative buying and hoarding of land and promotes investment in the property market at the expense of the other sectors of the economy such as industry and business.

On administration of the tax base, the property taxation system should aim at broadening the tax base to capture all taxable properties in the taxing jurisdiction (Dillinger, 1992; Kelly, 1999). Any change in the property tax base affects the distribution of the tax burden and equity of the taxation system (Ulbrich, 2011).

Defining the tax base is usually a policy decision (UN Habitat, 2011; Kelly, 1999). Whether the base is on the land only or land and the improvements, is determined by the law governing property taxation, which also stipulates the properties that are taxable and the exempt properties. The tax base is an important element of tax policy because it influences how the tax burden is distributed (Dillinger, 1992).

There are about four systems of property taxation under local governments in the world depending on the tax base (Norregaard, 2013; Roy and Johannes, 1992). These are annual rental value, capital value, site value or land value and area-based systems. Under the capital value system, the tax base is the open market value of the property, which includes the land and improvements (Norregaard, 2013). There are divergent practices on this system where some countries have different tax rates for land and improvements in which the land element of the property is taxed at higher rates as practiced in Botswana and some cities in Brazil. The system is costly to administer because of the requirement for valuation of properties and difficulty in getting current data on market transactions, which affects the validity of the assessed market values. The system is argued to be more equitable because the property values reflect public investment in infrastructure provision, and therefore, adheres to the principle of the benefit received. Where revaluation of properties is done regularly, the property values reflect the market value resulting to more revenue generation.

Under the annual rental value, the basis of taxation is the estimated annual property rent that can be realised in a fair market transaction, not the market rent (Norregaard, 2013). Deductions made for expenses make the annual rents arbitrarily and subjective, and rent

controls by the central government place caps on rent increases thus affecting market rents and reduce the revenue collected (Roy and Johannes, 1992; Norregaard, 2013).

The basis of taxation under land or site value system is the market value of the unimproved site. This system is easy to administer, ensures a stable revenue, discourages speculative ownership of land and encourages development on land leading to densification and reduction of urban sprawl (UN Habitat, 2011; McCluskey *et al.*, 2007). Its main disadvantage is its failure to tax improvements on the land, which results to loss of revenue and increases inequity in property taxation. The system is currently used in former British colonies (Kenya Australia, New Zealand), Denmark, Estonia and Jamaica (Norregaard, 2013).

Under the area-based system, the tax base depends on the location and may be on the area of vacant land irrespective of the developments or on per unit area of buildings (Norregaard, 2013). Though this system is inexpensive to administer and easily understood by the taxpayers it does not adhere to the ability to pay principle, as the tax paid for the same size of land in each geographical area is the same, irrespective of its market value; and the tax base is limited, which affects revenue generation (Konyimbih, 2000).

For taxation purposes, the tax base should be identified according to the legal definition of the tax (Kelly, 2013). This is followed by an assessment and compilation of the rating roll that contains the property details (Kitchen, 2013). The roll number serves as the link between the tax assessment information, tax billing and property transfer records. The property coverage ratio should be upto date and close to a 100 per cent (Kelly, 1999). This is important to ensure equity and also adequacy in revenue generation.

The properties are captured in a fiscal cadastre, which forms the basis for an effective property taxation (Roy and Johannes, 1992). United Nations (2005) defines a cadastre as a set of records about the land that consists maps or plans showing the size and location of all land parcels and text records that describe the attributes of the land. The fiscal cadastre can be developed either through self-declaration or through government inventory (Dillinger, 1992; Kelly, 2013). Government invetory method is the most commonly used for constituting a fiscal cadastre although it is expensive and depends on officers to carry out field surveys. The taxing authority should rely on a partnership approach to gather and keep up to date data on the fiscal cadastre from government agencies, private sector and individuals handling property tax-related information (Kelly, 2013).

The main challenges facing property identification process in developing countries according to Roy and Johannes (1992), Bird and Slack (2002) and McCluskey *et al.* (2013) include: poor updating of the property tax base, uncoordinated information on the fiscal cadastre, the problem of informal settlements and poor monitoring and recording of property transfers data. Manual systems of property records affect the accuracy of property taxation, which erodes the fairness of the property taxation system. These challenges result to incomplete property taxation registers, which impedes equity in property taxation and reduces the revenue adequacy of the local authority.

The property tax base is also affected by exemptions and preferential treatment of properties. Exemption from taxation is an important component of property taxation whose objective is to promote social justice, reduce administrative and collection costs by exempting low yielding properties and exempting properties that provide, either directly or indirectly, services that are considered public goods (Prakash *et al.*, 2009). Exemptions are based on property ownership, use and characteristics of the property owner such as properties used for religious, education, diplomatic and health purposes (Kelly, 2013).

Exemptions are either legally provided or given through local discretion and administrative practices. (Franzsen and McCluskey, 2013). Exemptions have an adverse effect on property taxation and result to a narrow tax base, it is a discriminatory and unfair practice that can promote land uses that would be different were all the properties treated equally, it affects revenue adequacy, impacts on property tax equity and efficiency leading to distortion in location and economic decisions of firms (Kitchen, 2013; De cesare, 2012; Kelly, 2013). Property tax experts recommend that all exempt properties should be included in the tax register together with their full assessment value. This enables to the taxing authority to quantify the full extent of the exemptions in monetary value (Kitchen, 2013).

Once the property tax base has been identified, assessment of the tax base is done depending on the legal definition say capital value, annual rental value or site value. The property tax assessment process should be uniform within the taxing jurisdiction to ensure that the burden of the local government is shared equitably among the taxpayers (Bird and Slack, 2002). In addition, to enhance equity in taxation, revaluations should be carried out regularly to ensure that the assessed values are almost a true reflection of the market value. Revaluation cycles should be short usually after three to five years. Where regular revaluations are not possible especially in developing countries facing constraint in market valuation, McCluskey *et al.* (2002) recommends the value banding system. The banding system is currently used in the UK and is described as a system that relies on the "concept of dividing properties into different categories according to an estimate of their capital value for the purposes of determining a property tax bill" (Davis *et al.*, 2004, p. 51). McCluskey *et al.* (2017) further recommends adoption of self-declared values, outsourcing of valuation services to the private sector and indexation of values, which raises the property values according to an annual inflation factor.

There have been reforms in property taxation in some countries especially in the context of abandoning of pure land value taxation (McCluskey, 2007). This has happened in South Africa, New Zealand and Australia. Kenya is the only country in the world that currently uses pure site value taxation. The main objectives of the shift have been a political desire to tax wealth and improvements; to have more uniformity in policies; and lack of credible sales data on vacant land in urban areas (Dye and England, 2010).

South Africa just like Kenya, had inherited a property tax system from the British Colonialists where there was an option of choosing between three property tax bases; site value, improvement rating or area rating (Franzsen, 2017). In 2004, South Africa adopted the Local Government Municipal Property Rates Act (MPRA), which provides for capital value as the only basis of property taxation and extended property taxation to rural areas (RSA, 2004). The property tax base was broadened to include public infrastructure such as roads and railway lines. Monitoring and control of property tax processes is under the Ministry of Local Government against Franzsen's (2017) recommendation that it should be under a technical entity according to international practice as property valuation is a technical process. The MPRA gives clear provisions on the properties that should be exempted or given rebates. In the City of Johannesburg exemptions, tax reductions and rebates are provided for in the rates policy and are for specified property ownership and use (City of Johannesburg, 2017). The law also provides for mass valuation of properties and revaluation is done after every four years with an option of one-year extension (Franzsen, 2017).

3. Research design

This study was carried out in Nairobi City and relied on survey method for data collection. Nairobi City was chosen for the study because it is the capital of Kenya and aims at becoming a globally competitive city by 2030 (Republic of Kenya, 2008). To attain this status, the city requires adequate revenue to provide the requisite infrastructure services.

Data collection were done for eight months between June 2016 and February 2017. The study population was residential properties in Nairobi within three case study areas, Buruburu and Kilimani that were under site value rating, and Riruta that was under area rating.

Primary data on the sampled properties comprised of the land parcels numbers, land size, unimproved site value and land rates payable were obtained from the city government and MLPP. To come up with market values as at 2017, the researchers obtained comparable sales of vacant land from MLPP for 2016. In the absence of such sales, the values used by the government values for stamp duty valuation purposes were adapted. Field inspection was done on sample properties in Kilimani and Buruburu areas to verify the type of development on the plots. Secondary data were also collected by documentary search on legislation, statistical data, policy documents and newspapers. Semi-structured interview schedules were used to obtain information on the administration of the property tax base from officers in the Directorate of Land valuation of Nairobi City.

The sample size comprised of 70 properties in Kilimani and 50 properties each in Buruburu and Riruta areas. The data attributes of the properties included the land/parcel number, area, location, type of development, vacant, developed, number of units, unimproved site value (USV) as assessed by the county and market value of land as assessed by the researchers. The maps of the study areas were obtained from the Survey Department, MLPP and were used for physical inspection of properties in Kilimani and Buruburu areas.

Thematic analysis was applied on the qualitative data. Analyses were done on the land in the city that is included in the tax register for taxation purpose and the land that is exempt. The sample areas of Buruburu, Kilimani and Riruta were analysed to determine whether all the properties in the sample were included in the tax register. The aim was to show whether the tax base coverage is comprehensive and whether there are exemptions and omissions of some properties. Comparison with other countries tax system was be done to establish the best practices in property taxation.

Quantitative data were analysed using statistical package for social science (SPSS) software. The arithmetic mean, which is a measure of central tendency was used to analyse the distribution of the land values under unimproved site value used for taxation in Nairobi against the estimated market value as estimated by the researchers. The mean also was used to analyse land development for the sample plots in Buruburu and Kilimani areas.

4. Research findings and discussions

4.1 The property tax base in Nairobi city

The property tax base comprises of site value rating and area rating systems. The use of dual systems of rating has resulted to inequity in property taxation in Nairobi, which reduces the potential of the city to generate adequate revenue. The law provides for property taxation on the basis of improvement value, site value rate and flat area rating. The laws do not stipulate where each different rating system may be applied, thereby allowing the local government to apply discretion upon deciding on what tax base to use.

Site value rating was initially adopted for areas that were provided with urban services and had approved development plans to guide development. Area rating was adopted for

areas, which were previously located in the peripheries of the city that and were not provided with urban services or were under agricultural use. With time and urbanisation, these areas have been provided with urban services and the land has been converted to residential, commercial and industrial activities. There are four zones under area rating and including; the Northern zone, which covers Kamuthi Farmers, Jua Kali (Kahawa West), Kamae, Githieko, Githurai, Drumvale Company, Rui; Eastern Zone that covers Buruburu Farmers, Kamulu, Ngundu Farmers, Embakasi Ranching company, Mihango; South Eastern Zone covering areas adjoining Jomo Kenyatta International Airport and Western Zone, which covers Dagoretti Division. Graduated flat area rates are charged according to the size of land.

The annual land rate for residential plots below 0.1 Hectare is KSh1000 while commercial and industrial plots are charged at KSh1,500. As shown in Table II, area rating has, therefore, no relation to the value of the land and minimal difference for land under different uses. The study established that average residential land values in Riruta areas as at 2017 were at KSh12,355 per square metre or about KSh50m per acre. If the site value rating was used instead of area rating, the city would be able to increase revenue from property taxation.

4.2 The rateable owner

The legal definition of who pays the property tax is wide and includes properties that do not have formally registered titles. This definition is broad and if implemented it would capture many properties in the city. However, the fiscal cadastre only included land that has a registered freehold or leasehold title. The county has not followed the legal guidelines on rateable owner and has left out many properties from taxation through administrative processes.

The Valuation for Rating Act (VRA) defines a rateable property owner as: any owner owning a freehold or leasehold title for a period above 25 years; or owner of land in any jurisdiction where no certificate of ownership has been registered under the Land Titles Act (Cap 282), but who is in possession or is in receipt of rents and profits from such a property; and lessee from the Local Authority with a registered lease of not less than 10 years.

4.3 Exemptions to property tax

The legal exemptions are broad covering land under different uses, with no clear guidelines on who qualifies resulting to many exemption from property taxation. The exemptions are also spread in various laws, which makes the process of reforming them a technical, institutional and political challenge (Kelly, 2013). Under VRA valuation is not done for properties that are used directly and exclusively for purposes of public religious worship; cemeteries, crematoria and burial/burning grounds; hospitals, educational institutions; charitable institutions, museums and libraries; outdoor sports; national parks and national

Table II. Area rates in Nairobi city as at first January, 2017

Land size (Ha)	Annual rate (KSh)	Analysis rate (KSh) per m^2 on the upper limit plot size
0.1	1,000 per plot	1
0.1-0.2	1,200 per plot	1.66
0.2-0.4	1,500 per plot	2.66
Above 0.4	1,700 per acre	0.42

Source: Constructed from information from Nairobi City

reserves. The exemption does not apply to properties used for profit except for schools and religious use. The exempt properties may appear in the valuation roll but no value is assigned to them making it difficult to quantify their total value and subsequently the revenue amount of the exemptions.

Nairobi is an international hub with many international private schools, which are on large pieces of land with Hillcrest Preparatory School located on 52 acres. There has been an influx of foreign investment in international schools in Nairobi. Hillcrest Preparatory School was acquired by the Dubai based GEMS Education in 2015 for KSh2.6bn while Brookhouse school was bought by the UK based PE fund Educas for KSh3.6bn (Business Daily Africa, 2019). The fees charged in these schools cannot compare to those in the public schools in Kenya. Tuition fees for year 12-13 in 2017- 2018 for Brookhouse School was KSh1,980,000 per year while fees for public national schools in Kenya are about KSh100,000 per year including tuition and boarding.

Kenya is a signatory to international laws, which exempts diplomatic missions and some international institutions from taxation. There are currently 81 embassies and high commissions in Kenya based in Nairobi whose land, whether owned or leased is exempt from taxation. The Convention of Privileges and Immunities of the United Nation (UN)(2005) exempts from direct taxes assets, income and property owned by the UN. The UN offices in Nairobi, Gigiri area is on about 140 acres of land, which was donated by the Kenya Government.

The legal exemptions should, therefore, be reduced to exclude private educational institutions with fees beyond a certain threshold, exempted properties should be valued and included in the property tax register, the discretion of giving exemptions should also be removed so that there are clear guidelines on which properties qualify.

4.4 Incomplete fiscal cadastre

The property tax register is incomplete due to administrative omissions leading to inequities in property taxation. Under the VRA, where no land registration has occurred, the person in occupation or receiving rent or profits from the land is liable for property taxation. This definition is broad and if implemented would capture many properties and widen the tax base. However, the city only taxes land that has registered title and omits; land with no formal title registration, land under share certificates, and land registered under subleases. These properties do not appear in the property tax register and it is, therefore, not possible to quantify the magnitude of the lost revenue and inequities through these omissions.

Land in the informal settlements in the city is not charged land rates. The informal ownership is through allotment letters from the national or local government or share certificates from the original owners (Syagga, 2011). According to CCN (2006), the informal settlements in Nairobi cover an area of about 1,052.97 Hectare (2,601.88 Acres).

The city government has allocated land through allotment letters in Umoja, Dandora, Kayole and Embakasi areas without formal registration of titles. The city charges the properties annual land rents and these records can be used to charge land rates. All the development approvals in Nairobi are approved by the city development control department. This include approvals for sub-division, change of use and development of land. Land under informal settlements and share certificates is usually developed with approval from the city yet the taxing authority does not apply rates on them.

Land registered under sub-leases is also excluded from taxation though the law allows taxation of properties held under sub-leases for more than 25 years. The Land Registration Act No. 3 of 2012 allows for registration of sub-leases while the Sectional Properties Act No.

20 of 1987 allows for ownership of properties and buildings in common and it became operational in 1990, about 28 years ago. The city, therefore, has a legal basis for including properties under sub-lease ownership in the tax register. Before registration of a sub-lease against the main title, the MLPP requests for approval from city government, which can include the property for taxation before giving approval.

The taxing authority should aim at ensuring that all the taxable properties are included in the tax register with a coverage of a 100 per cent. The property tax register in Nairobi is incomplete and is not regularly update.

There was an increase in the number of properties in the rating register from 121,000 properties in March 2013; 155,165 properties in June 2016 and 165,000 properties by June 2017. The city has a draft valuation roll that was prepared in 2016, which has aimed to captured a total of 250,000 properties. The tax register, therefore, would include about 62 per cent coverage based on the properties that have been captured in the draft valuation roll. However, the draft valuation roll is also not comprehensive and has not yet been implemented. It excludes properties that are not surveyed, registered sub-leases, and excludes development on the land.

As indicated in Table III, the study established that in Buruburu area, all the properties in the sample were included in the tax register indicating a coverage of 100 per cent. The residential estate was developed in 1975 after the land was surveyed and sub-divided. The titles were registered in 1975 and records are therefore available at MLPP and were therefore captured in the 1982s valuation roll.

In Kilimani area, of the 70 properties sampled from MLPP, only 49 were in the city tax register, a coverage of 70 per cent. In the Riruta area, out of the sample of 50 properties, only 23 properties were included, a coverage of 46 per cent. Kilimani and Riruta areas had undergone random changes in land use and sub divisions. The city has, therefore, not been updating the fiscal cadastre to keep up with these changes.

The updating of the property rates register is usually done through the property owners' initiative when seeking development approval. The approving authorities' requests for land rates clearance certificate and the property is then be captured in the property rates register if it was not in the records. For the approval of sub division of land, the resulting sub-titles are only included in the tax register after they are registered with the MLPP.

The City government is required under the VRA to carry out an annual supplementary valuation roll to update property changes that occur for properties in the valuation roll under site value rating. However, this is not done regularly and was last done in 2012 about six years ago. This affects the completeness of the property tax register leading to exclusion of some properties and consequent loss of revenue. There is no legal provision for updating of the property tax register under area rating and currently updating is done on an *ad hoc* basis with no set time frames.

Exclusion of certain properties from the tax register increases inequity in property tax. It is also unfair for the owners whose properties are in the register to carry the burden of the owners of the excluded properties. The failure to include properties for taxation, which

Area	Type of rating	Sample size	Properties in NCC register	Excluded properties	% of excluded properties	Coverage (%)
Buruburu	USV	50	50	0	0	100
Kilimani	USV	70	49	21	30	70
Riruta	Area rating	50	23	27	54	46

Table III. Percentage of properties that are excluded from the tax register

continue to draw from urban services, has resulted to a narrow tax base, an unfair system of taxation and have reduced the revenue potential of the city, which has a negative impact on the provision of urban services.

4.5 Failure to use capital value basis of valuation

The capital value basis of property taxation would increase the revenue potential of the city because most of the land is developed. The researchers carried out a site survey of the sample properties in Kilimani and Buruburu areas. Buruburu area is a residential estate where all sample plots were developed. Table IV indicates that in Kilimani area only 19 per cent of the sample plots were vacant land while 81 per cent were developed. About 27 per cent of the sample had above 20 residential units per plot. The city is, therefore, not exploiting the revenue potential that is in the developed properties.

4.6 Valuation of the tax base

Valuation of the tax base ensures that property taxation is on the current market value capturing the benefits in urban infrastructure services that are capitalized in the property values. The basis of valuation as defined by VRA is the market value of the unimproved land. This is arrived at by sales comparison of similar land that has been sold in the neighbourhood. The challenge with this method is that most of the land in Nairobi city is developed. In Buruburu Estate, all the plots were developed with residential houses. In the Kilimani area, only 19 per cent of the sample plots were vacant while 40 per cent of the sample plots had one to five units per plot as shown in Table IV. There is also a challenge of getting sales comparables for vacant land in the developed parts of Nairobi. Using vacant land as the basis of comparison for developed land is not a true reflection of the condition of the developed properties. Therefore, the valuer ends up making a subjective judgement and the value arrived at can be challenged on appeal.

Frequent revaluations of the property tax base will capture the increase in property values resulting to an increase in property tax revenue and reducing inequity in property taxation. However, Nairobi has not successfully carried out frequent revaluations and is using an outdated valuation roll that was prepared in 1982 over 35 years ago. The city has been raising the tax rate to counteract the low site values. For instance, the rate used was 25 per cent of the site value for all properties under different uses as at 2016.

The VRA requires the for valuation roll to be used for a period of 10 years but allows for extension beyond the 10 years. This is the provision that has allowed the city to use obsolete and out-dated valuation roll. Revaluations had been done in 2001 and 2005 but there were numerous litigations from the residents due to failure to adhere to the legal provisions, and subsequently, the valuation rolls were not implemented. The land values in the property

No. of housing units per plot	Total no. of plots	% of the total sample
Vacant plot	13	19
1-5	28	40
6-10	2	3
11-15	3	4
16-20	5	7
Above 20	19	27
Total	*70*	*100*

Table IV.
Summary of development in Kilimani area

register in use by the city are out-dated and do not relate to the current market values as shown in Table V.

Riruta area is under area rating, and therefore, the land rates charged are not related to the value of the land. Kilimani and Buruburu areas are under site value rating with the values in the valuation roll being far below the market values.

In Buruburu a sampled plot of 176 square meters had USV of KSh17,000, at 386,000 per acre and annual rates of KSh4,250 in 2017. The estimated market value in 2016 was KSh3,040,000, at about KSh70,000,000 per acre. Assuming tax assessment at 0.05 per cent of the market value, the city government would get KSh15,200 per year, which is 28 per cent more than the current tax amount charged. In the Kilimani area, a sampled plot of 6,460 square meters had USV of KSh190,500 at KSh118,338 per acre and annual rates of KSh47,625 in 2017. The estimated market value in 2016 was KSh555,000,000 at KSh347,000,000 per acre. Assuming tax assessment at 0.05 per cent of the market value, the city government would get KSh277,500, which is 17 per cent more than the tax charged. The city government is, therefore, losing out on revenue that can be captured by updating the valuation tax register to the current market values.

4.7 Use of manual land records

The city uses the manual land information system. The land records at the MLPP are manual and though there has been an on-going digitisation programme, only scanning of the title deeds has been done. The valuation section at City Hall has an officer who is assigned to get manual information from the MLPP on title searches, sub-divisions and any other changes that occur on the properties that may require alteration of the property tax register. There is no geographic information system (GIS) to link the survey data to the land registration details. The data gathering is, therefore, cumbersome and prone to omission.

In Kenya, the Department of Survey under MLPP is responsible for surveying of land in the Country. MLPP should, therefore, come up with a GIS map of Nairobi, which the city government can then use to develop a GIS-based valuation system.

The city has not partnered with other agencies such as Kenya Revenue Authority, Kenya Power Company and Nairobi City Water and Sewerage Company, which is under the city government to get information that can be used to keep the property tax register updated. Partnerships with these agencies can be beneficial to the city especially for properties, which do not have formal title documents, yet benefit from the provision of urban services. This can assist in widening the tax base to cover areas that have been left out of the tax bracket and increase the revenue potential for the city.

4.8 In adequate legal provisions

The property tax base relies on national laws that were enacted in the 1960s with minor amendments done over the years. The VRA (Chapter 266 of the Laws of Kenya) commenced in 1956 while the Rating Act (RA) (Chapter 267 of the Laws of Kenya) commenced in 1963. These laws were enacted in the pre-devolution era when local authorities had to get

Study area	Land value in KSh per sq. m. in the valuation roll (1982)	Land value in KSh per sq. m. as assessed in 2017	% increase
Buruburu	95	17,297	18,107
Kilimani	80	86,500	108,025
Riruta	–	12,355	–

Table V. Average land values in the study areas

approval from the minister of local government on most of the property tax administration processes such as adopting any form of rating, preparation of the valuation roll and raising the tax rate to above 4 per cent of the site value. The laws have not been amended to reflect the new dispensation. Therefore, is there is a legal lacuna especially when they refer to approval being given by the Minister for Local governments, a position that is currently nonexistent.

Other issues that should be addressed in a revamped legal framework include the use of mass valuation methods, use of geographical land information system, the establishment of monitoring of the property taxation process to ensure uniformity and maintenance of standards, reduction of the time between revaluation cycles to below five years with no option for extension. The capital value as the basis of property taxation should be adopted for areas with the city, municipal or town status as provided for in the urban areas and Cities Act (Republic of Kenya, 2016).

The two national laws on property taxation should be repealed and combined into one law to guide property taxation for local governments in Kenya. The county governments should not come up with their own laws but should only come up with guidelines on how to implement the national law. Currently, counties are coming up with their own property taxation laws because the national laws are inadequate. For instance, the city has the draft Nairobi City County Valuation and Rating Bill that was prepared in 2015 but has not been approved by the County Assembly.

5. Conclusion

This study set out to evaluate the property tax base in Nairobi city and its implication on revenue adequacy of the city and subsequently the capacity of the city to provide infrastructure services for its citizens. The study established that the city uses a dual system of property taxation, namely, site value and flat area rating on vacant land. Site value rating was introduced in Nairobi in 1928 with the aim of widening the tax base and discouraging holding of idle land. Most of the land was not developed, and therefore, the taxation was aimed at encouraging land development. Since 99 years, the introduction of the rating regime, it has not been changed or modified despite increased property development. The area rating system has no relation to the market value of land and the property use. The use of these rating systems has increased inequities in property taxation.

The property tax coverage is not complete and all-inclusive with numerous legal exemptions and administrative omissions leading to a narrow tax base. Updating of the property tax base is done on an *ad hoc* basis with no set guidelines, which has resulted to a narrow tax base and exclusion of many properties This transmits the burden of revenue generation and service provision to only a few properties in the tax register, which erodes equity in property taxation.

Regular revaluation of the tax base is not carried out and historical land values are used instead, which have a minimal relationship to the current market values. The practice of excluding the development on the land from taxation leads to a lack of equity in property taxation, which reduces the capacity of the city to generate revenue.

For Nairobi city to fully exploit the revenue potential in property taxation, there is need to revise the national laws on property taxation to reduce the legal exemptions and determine the market values of properties within the city. The city should only use the capital value system of taxation to capture the values emanating from increased property developments. The time lag between revaluations should be reduced to a maximum five years with supplementary valuation done every year.

The city government should formulate a property tax policy that provides for monitoring and evaluation of the property tax base and ensures uniformity in property taxation. A GIS-based property valuation process should be adopted that links the location characteristics of the property to the title details and information on the tax register.

The city government should work in collaboration with the national government to ensure that all the land in its jurisdiction is surveyed and have registered titles. This will reduce the uncertainty of taxing land with informal title documents.

The property tax base in Nairobi city, if fully exploited has the potential of generating adequate revenue for the city, reducing the city's reliance of national government revenue transfers, and increasing the capacity of the city government to provide infrastructure service.

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