The current issue and full text archive of this journal is available on Emerald Insight at:
https://www.emerald.com/insight/0263-7472.htm

Valuation for compensation practices in Kenya: an evaluation

Erastus Kiita Museleku
Real Estate, University of Nairobi, Nairobi, Kenya

Received 11 September 2020
Revised 12 January 2021
Accepted 13 February 2021

Abstract

Purpose – The purpose of this paper is to evaluate the practices for valuation for compensation purposes in Kenya.

Design/methodology/approach – A qualitative survey design was used to sample the registered valuers using questionnaire/telephone interviews, in addition to review of some policy and legal documents. Content analysis and descriptive statistics was used to analyse the data.

Findings – The study revealed that the most ignored asset losses in valuation for compensation purposes in Kenya are assets of persons without legally recognizable rights, common property resources and social capital, among others, due to the existing legal provisions. Additionally, valuers often fail to apply the appropriate valuation concepts and methods.

Research limitations/implications – The findings of the study are specific to Kenya since valuations for compensation purposes are statutory in nature and hence the applicable legal frameworks are unique to a specific country, although professionalism issues cut across.

Practical implications – The study may help professional valuers to update their knowledge and apply the right valuation concepts and methods, and also help policymakers to review their policies appropriately to match the best practices.

Social implications – The findings of the study, if implemented, are likely to enhance acceptability of compensation amounts hence improving the working relationships between the public project implementers and the project affected persons, to the benefit of the both parties.

Originality/value – The study is of value to professional valuers, policymakers and land acquiring agencies to be more vigilant and professional in the process of acquiring interests in land.

Keywords Land acquisition, Compensation, Valuation, Methods, Practices, Kenya

Paper type Research paper

1. Introduction

The valuation for compensation in land acquisition is usually hinged on the theory of social justice; which requires equity, fairness and just terms of compensation to be observed (Bala, 2008; Rawls, 1971). Consequently, many financiers including the World Bank Group, the Asian Development Bank, the African Development Bank, among others, have developed resettlement policy frameworks which promote social justice and development in their funded projects. These frameworks are generally meant to minimize impoverishment of the project affected persons thus maintaining or improving the lives of the affected individuals, post the land acquisition process (Mahalingam and Vyas, 2011; Reddy, 2018). The quest for equitable, fair and just terms of compensation are also supported by other entities including the human development approaches, the United Nations human rights and the African ideals (Food and Agriculture Organization of the United Nations, 2009; Keith *et al.*, 2008; Munubi, 2016).

In furtherance of the social justice and development approaches, it is therefore acknowledged that the role of the valuer is paramount to identify, document and estimate the economic values of all the affected assets in a given land acquisition project, both tangible and intangible ones. Ideally, the valuation process should be participatory. It is assumed therefore that the valuation process will culminate in a valid, accurate and factual valuation report and assessment of all the necessary losses. That assumption, in some or most of the cases in Kenya and other countries world over, has been noted to be flawed (Mahalingam and Vyas, 2011). In Ghana, for instance, Larbi *et al.* (2004) observed that only some principles of

Property Management
Vol. 39 No. 4, 2021
pp. 479-492

0263-7472
DOI 10.1108/PM-09-2020-0058

compulsory land acquisition had been met and the process had resulted to adverse socio-economic consequences including landlessness, poverty and tension between the state and the affected communities. In addition, Larbi (2008) noted that customary rights and informal occupiers of land are not compensated in Ghana. Some losses have been ignored, particularly the intangible ones, and the valuation methodology has been questioned (African Development Bank, 2003; Asian Development Bank, 2007, 2014; Holtslag-Broekhof *et al.*, 2018; Munubi, 2016; Omar and Ismail, 2009; Rao *et al.*, 2017; World Bank, 2016). Similarly, Egbenta and Udoudoh (2018), Bello and Olanrele (2016) and Ige and Oladapo (2018) noted that most project affected persons were dissatisfied with the compensation amounts in Nigeria while lack of standardized valuation methods and procedures in Ethiopia have been found to contribute to unfair valuations and compensations (Alemu, 2013). Other existing studies have also shown that adopting statutory rather than market basis of valuation in land acquisition projects results to unfair compensations (Akujuru and Ruddock, 2015; Omar and Ismail, 2009). The processes of land acquisitions, mainly through compulsory acquisition, have also been noted to be unfair to the project affected persons due to inadequate representation, time delays, information asymmetry, among other factors (Keith *et al.*, 2008; Rao *et al.*, 2020).

The implications of the flawed valuation for compensation purposes have been noted to contribute to inadequate, unfair and unjust compensations thus promoting impoverishment of the project affected persons (World Bank, 2016). This outcome may consequently fuel bad blood between the locals or the project affected persons and the project implementers, costly litigations, project delays, among others (Alemu, 2013; Bugri and Kumi, 2018; Egbenta and Udoudoh, 2018; European Bank for Reconstruction and Development, 2017; Larbi, 2008; Larbi *et al.*, 2004; Lekgori *et al.*, 2020). In Kenya, for instance, the bone of contention has been on inadequate compensation amount, which have led to innumerable litigations (K'Akumu and Olima, 2018). We can thus advance that inconsistent and inaccurate valuation for compensation purposes affects both the project affected persons and the project itself.

This paper therefore examines the local valuation for compensation practices in Kenya, a statutory valuation, with view to determining how they compare with the "best practices". The paper recognizes however that the existing local legal provisions on valuation for compensation purpose may limit application of the appropriate valuation approaches and methods. In the reverse, it also appreciates that many projects are being funded by the international financiers like the World Bank who require preparation of comprehensive resettlement action plans and assessment of all the possible losses to enable adequate, fair and just compensations to restore or improve the livelihoods of the project affected persons (European Bank for Reconstruction and Development, 2017). These institutions consider, and rightly so, resettlement projects as opportunities to improve the lives of the affected persons – it is a development opportunity.

The paper is important because all professionals are assumed and expected, among other things, to be competent and promote the interests of their clients. As a result, professional valuers involved in land acquisition projects are expected to be competent and well versed with the valuation theory and methods. These assumptions, however, may not always hold hence the need for sustained investigations and improvements, to promote the clients' interests and professionalism in land acquisition projects.

2. Literature review

In order to understand and contextualize the valuation for compensation purposes, we need to review the principles, processes and methods used in the process. The emphasis of this paper however is on the valuation methods.

2.1 The principles of land acquisition

The principles provide for value to the owner, just and reasonable compensation (African Development Bank, 2003; Asian Development Bank, 2014; Mahalingam and Vyas, 2011;

World Bank, 2004, 2016). The value to the owner accounts for socio-economic considerations which may include value of land and improvements, both tangible and intangible assets, associated with the land. The assets, land and its improvements, should be assessed in both monetary and non-monetary terms. Land in this context therefore is understood to mean the physical Earth surface and anything else that is permanently fixed on it. Likewise, the Food and Agriculture Organization [FAO] of the United Nations (2009) and Keith *et al.* (2008) advocate for equity and equivalence; the affected project persons should not be enriched nor impoverished as a result of (compulsory) land acquisition projects. Other principles promoted by the FAO include flexibility, balance of interests between the projected affected persons and the public, fairness and transparency.

The objective of the principle of just compensation is to provide the project affected persons with economic parity after the project, usually through monetary means. Similarly, the principle of reasonable compensation is meant to ensure that the land acquisition and resettlement process should be based on financial transactions. This consideration may however ignore the intangible benefits associated with the land including cultural values (Mahalingam and Vyas, 2011). The principles of full, prompt and just terms of compensation, as we shall see later in the paper, are endorsed and provided for in the Kenyan policy and legal frameworks.

2.2 The processes of land acquisition

The processes are usually through compulsory land acquisition, negotiations or a mix of both compulsory acquisitions and negotiations (Food and Agriculture Organization of the United Nations, 2009). Negotiations have been noted to be better procedures than the compulsory acquisition due to involvement and consultations of the project affected persons (Lekgori *et al.*, 2020; Mahalingam and Vyas, 2011; World Bank, 2004, 2016). Kenya has in the past largely used the compulsory acquisition process to acquire land rights for public purposes. There are however many public projects including the Standard Gauge Railway line from Mombasa City to Naivasha Town, the proposed Special Economic Zone in Mombasa County and many other infrastructural projects spread across the country which are now applying negotiations by preparing resettlement action plans, as required by the international financiers.

2.3 Identification of losses and risks in land acquisition

The concept of total economic value is widely used to identify inherent values in natural resources such as land. It is based on the presumption that individuals can embrace multiple values for natural resources and is advanced for classifying these various multiple benefits. The framework is thus necessary to ensure that some components of value are not omitted in empirical analyses and that double counting of values does not occur when multiple valuation methods are employed. In any empirical application it is necessary to map various benefits and how they affect humans and then select appropriate valuation method(s).

Willingness to pay and willingness to accept are the basic concepts to value. Valuation methods for compensation purpose can thus be classified as either market and non-market techniques, suffice to note that both attempt to determine maximum willingness to pay and minimum willingness to accept, either through analysing revealed or stated preferences. The net sum of all the relevant willingness to pay and willingness to accept therefore defines the total economic value of any change in well-being due to a policy or land acquisition project (Emerton, 2016).

In valuation for compensation purpose therefore the valuers could apply the framework of total economic value to identify and document all the potential losses as a result of land acquisition. The important question is thus: are the valuers in Kenya competent to apply the framework to identify and document all the potential losses in a given land acquisition project? This question is important because if some losses are ignored in the valuation process that could potentially lead to inequitable, unfair and unjust compensations thus contributing to impoverishment of the project affected persons.

The existing research, both locally and internationally, has tried to identify and document the likely losses and risks in land acquisition projects. These have been noted to include landlessness, joblessness, homelessness and marginalization. Others include food insecurity, increased morbidity and mortality, loss of access to common property and services and livelihood restoration or social disarticulation (Cernia, 1999; World Bank, 2016 in Munubi, 2016; Larbi *et al.*, 2004; Keith *et al.*, 2008). Specifically, the probable losses would include land with its various forms of ownership, structures, infrastructure or site works and common property resources. Other assets would include crops, trees, cultural assets, community facilities or public structures and social capital. Environmental assets or environmental services, private enterprises or loss of income flows and plant and machinery are also likely to be affected (African Development Bank, 2003; Asian Development Bank, 2007, 2014; European Bank for Reconstruction and Development, 2017; International Finance Corporation, 2002; World Bank, 2004, 2016). The legal provisions for many countries, Kenya included, provide for other considerations in valuation for compensation purposes including injurious affection, severance, disturbance allowance and relocation costs, which vary from case to case in a given project (Food and Agriculture Organization of the United Nations, 2009).

Therefore, the expected losses in land acquisition projects are numerous and diverse. The framework of total economic value thus becomes useful in identifying all the possible losses and risks, to avoid omission or double counting. Failure to identify and document all the losses may result to inadequate and unfair compensations thus contributing to impoverishment of the project affected persons.

2.4 The valuation methods for compensation purposes

The valuation methods are diverse and are applicable in various situations. This paper briefly summarizes the applicable valuation methods for compensation purposes. The paper assumes that the valuers are conversant with the valuation theory and methods, because that is their core training and usual practice.

After the identification and documentation of all the applicable losses in a given land acquisition project, then the valuer has to select the appropriate valuation method(s) for each category of asset. The applicable valuation methods have been summarized in Table A1 (see Appendix 1). A brief description of the mostly used valuation methods is however presented below.

2.4.1 The sales comparison/market approach. This method is usually based on the economic principle of substitution and requires the valuer to obtain recent sales (at least three to five) of properties similar to the subject under valuation. Next, the valuer should determine the units of comparison, such as value per hectare or square metre, and compare with the subject property. There may be need for adjustments, to account for time and different property attributes, among other disparities (International Valuation Standards Council [IVSC], 2019; Scarrett, 2008).

The market approach, particularly where the property market is active, is assumed to be the most appropriate and transparent valuation method since it is efficient and the valuer can defend his or her figures (International Valuation Standards Council [IVSC], 2019). The approach however cannot capture passive or non-use and option values such as cultural benefits. In addition, each piece of land is unique and properties are heterogeneous thus it may fail to capture the market value of the subject property, particularly where the property market is inactive or inefficient.

The sales comparison or market approach can be used to value loss of land (for landowners with legal rights or titles and occupants in good faith/customary/communal rights) in land acquisition projects, particularly where land market is active, to assess the value of both the expropriated land and non-expropriated equivalent land in the vicinity. The valuer should then take the higher of two values as the market value of the affected land, after considering the highest and best use of the land (African Development Bank, 2003; Asian Development Bank, 2007, 2014; European Bank for Reconstruction and Development, 2017; Food and Agriculture Organization of the United Nations, 2009; Keith *et al.*, 2008; World Bank, 2004, 2016). For tenants, the method can be used to assess market rent, usually compensated at 3–6 months' rent. Valuation of loss of crops, trees and plant and machinery should be also carried out using the sales comparison method.

Substitute cost or prices of alternative goods, a slight modification of the direct market prices, can be used to estimate surrogate values for assets that may not have direct markets, but have close substitutes which can be bought and sold (World Bank, 2004). Substitute cost is particularly useful in valuation of natural resources such as fruit and fodder trees, firewood and timber woodlots and plantations.

2.4.2 The income capitalization or investment method. The method is based on the economic principle of anticipation and is used to value commercial and investment properties, income generating properties. The valuer capitalizes the net operating income expected to be earned by the property and bases the value on the present worth (International Valuation Standards Council [IVSC], 2019; Scarrett, 2008). The strength of the method lies in the fact that it is based on actual behaviour or revealed preference, as opposed to stated preference.

Where the land market is inactive, valuers should apply income capitalization approach to assess the value of expropriated land based on the best permissible use of the land. The income approach is usually used in valuation of loss of agricultural land and investment properties in land acquisition projects (European Bank for Reconstruction and Development, 2017; Food and Agriculture Organization of the United Nations, 2009; Mahalingam and Vyas, 2011; World Bank, 2016). The income capitalization method is also used to value loss of structures, if the structures are primarily for investment or income-producing purposes. In addition, loss of perennial crops and fruit trees should be valued using the income method, among other valuation methods.

2.4.3 The cost or contractors approach. This method is based on the principles of production and substitution. It assumes that an individual will not pay more for a property than it will cost him to acquire a similar one. A property is worth the cost of producing an alternative property of similar utility, replacement cost (International Valuation Standards Council [IVSC], 2019; Scarrett, 2008). Cost however is not always equal to value thus it may be misleading.

In order to achieve the principle of just and reasonable compensation in land acquisitions, the basis of compensation is usually the "replacement cost" where the transaction costs (for example the cost of preparing the host or alternative land, land transfer fees, land registration fees, and taxes) are added to the market value (determined using the various valuation methods, including the cost approach (African Development Bank, 2003; Asian Development Bank, 2007, 2014; European Bank for Reconstruction and Development, 2017; International Finance Corporation, 2002; Munubi, 2016; World Bank, 2004).

The preferred valuation method for structures, infrastructure and site works, young crops and trees, cultural assets, community facilities, social capital and plant and machinery is usually the replacement cost method, ignoring depreciation levels and salvage value. Professional valuers should develop a unit cost manual through sample appraisals or comparable basis, to determine unit cost per built up area such as rate of construction per square metre (Asian Development Bank, 2007; European Bank for Reconstruction and Development, 2017; International Finance Corporation, 2002; World Bank, 2004). The method has however been criticized for not helping valuers arrive at fair market value and adequate compensation in land acquisition projects in Nigeria (Egbenta and Udoudoh, 2018).

2.4.4 The profit method. The method is used for trading properties where evidence of rates is slight such as hotels, restaurants and old age homes. Usually, a three-year average of operating income (derived from the income statement) is capitalized using an appropriate yield (Scarrett, 2008). The method therefore is a modification of the investment approach. It can thus be used to estimate the value of lost investments or income-generating structures or businesses, perennial crops and fruit trees in land acquisition projects (World Bank, 2004, 2016).

2.4.5 The residual method. This method is used for properties ripe for development or redevelopment or for bare land only. The value of the highest and best use of land minus the cost of (re)development is assumed to be the current value or price of the property under valuation (Scarrett, 2008). The method is thus suitable in valuation for compensation purposes to determine the value of undeveloped land or land with structures (World Bank, 2004).

2.4.6 Contingent valuation method. The method is a stated preference approach and relies on a constructed or hypothetical market, which is presented to a random sample of respondents or in the case of land acquisition projects, to the project affected persons, in a questionnaire to state their maximum willingness to pay (WTP) or minimum willingness to accept (WTA). A big advantage of the stated preference methods is that we can obtain both the use and non-use values, thus we can capture the concept of total economic value. Essentially, the contingent valuation method can capture the use values, non-use values and option values hence it can be used in the valuation for compensation purposes to value environmental benefits such as cultural values, and other intangible assets or benefits (Emerton, 2016).

The Contingent Valuation Method has been proposed to be used to determine the market value of expropriated natural resources including land, common property resources, indigenous trees, cultural assets, community facilities, social capital, and environmental assets (African Development Bank, 2003; Asian Development Bank, 2007, 2014 International Finance Corporation, 2002; Mahalingam and Vyas, 2011; World Bank, 2004). Indeed, the method could be used to determine what Keith *et al.* (2008) termed as the “individual value” – the landowners’ estimation of the loss. In land acquisition projects, the hypothetical bias (one of the key weaknesses of the contingent valuation method) is reduced because the dislocation is real. Since it is a loss, willingness to accept (WTA) bids should be established.

2.4.7 Other valuation methods. Other valuation methods are applicable in valuation for compensation purposes including negotiated compensation rates or fair market value which have been applied in India (Asian Development Bank, 2007; Keith *et al.*, 2008). The opportunity cost approach would provide an estimate of the value of a lost asset based on the foregone income of the best alternative use of the asset. In the case of expropriated common property resources like land, for instance, the relevant opportunity costs will be the value of alternative land uses the project affected persons may prefer, such as farming or ranching.

From the preceding discussions, it is evident that each valuation method has got some inherent limitations and weaknesses. It is therefore advisable that valuers should combine all the applicable valuation methods for a particular asset, for triangulation purposes, to cater for the limitations. Failure to do so may mislead the professional judgement of the valuer in returning their valuation figures thus arriving at inaccurate compensation amounts.

2.5 Policy and legal framework for valuation for compensation purposes in Kenya

The policy and legal framework for valuation for compensation purposes in Kenya is mainly provided for in the National Land Policy of 2009 on socio-economic ideals for land reforms which include equity, justice, sustainability and poverty reduction (Republic of Kenya, 2009). Similarly, the principles of equity and sustainability are echoed by the National Land Use Policy of 2017 (Republic of Kenya, 2017). The Constitution of Kenya under Articles 10 on national values, 27 on non-discrimination, 40 on protection of right to property and 47 on fair administrative justice also promote fair, just and reasonable terms of compensation (Repulic of Kenya, 2010).

The Land Act No. 6 of 2012 under Sections 107 to 150 provide for the process of compulsory acquisition of interests in land for public purposes, one of the main processes of land acquisition in Kenya. Specifically, under Section 109 the Act provides for full, prompt and just compensation for damages caused during inspection of the land earmarked for compulsory acquisition while Section 111 provides for similar terms to be applied for the acquired land (Republic of Kenya, 2012). The Act grants the National Land Commission powers to make rules to regulate the assessment of just compensation. Subsequently, the Commission, under Legal Notice No. 283 of 2017 made such rules to include; market value (of land and improvements), damages as a result of severance and injurious affections, relocation costs, loss of profits and additional 15% of the market value for disturbance allowance (National Land Commission, 2017). The Rules however do not appreciate potential increase in value in the future nor do they specify what the types of asset losses to be considered by the valuer. The Act, under Section 117, also provides for grant of land *in lieu* of monetary award, and payment of interest where applicable under Section 119. Valuation for compensations for rights of way and analogous rights, as provided under Section 148, are to be prepared by a qualified valuer or to be determined by the Land and Environment Court, where the parties cannot agree on the amount or method of payment.

Recently, Kenya enacted the Land Value (Amendment) Act of 2019 to provide for the assessment of land value index in respect of compulsory acquisition of land. The Act reiterates and reinforces the provisions of the Land Act on compulsory acquisition; full, prompt and just or fair compensations. The national land value index shall be calculated by considering the declared value of the land for purposes of payment of rates, rents or stamp duty (Republic of Kenya, 2019). Elsewhere, such considerations have been noted to be flawed, as landowners have been noted to under-declare the value of their land for taxation purposes (European Bank for Reconstruction and Development, 2017; Food and Agriculture Organization of the United Nations, 2009; Mahalingam and Vyas, 2011). This may then lead to under-valuations, resulting to unjust or unfair compensations, and related consequences. The future potential or increase in land value is also ignored.

Therefore, the current local policy and legal framework in Kenya provides for valuation of land market value (land and its permanent fixtures on it) and other assets, and other losses and assistance including severance, injurious affection and disturbance at 15% of the market value. In kind compensation, land-for-land compensation, prompt payment and interest on late payments are also provided for (Munubi, 2016). The current framework however does not provide for transaction costs (cost of land registration, property taxes, construction permits, conveyance cost, etc.), and more importantly stakeholder participation, through which methods like contingent valuation methods could be implemented. In addition, commercial value of assets, development value, betterment land value and solatium value or loss of comfort related to ownership and use of land and costs have been ignored (Munubi, 2016). The current policy and legal framework may thus be promoting unjust and unfair compensations in land acquisition projects in Kenya. The need to align respective local legal and institutional frameworks with the principles of land acquisition has been echoed in Ghana (Larbi *et al.*, 2004). Keith *et al.* (2008) have also advocated for responsive legislations for compensation processes for determining valuations and compensations. Elsewhere, it has been noted that adopting statutory rather than market basis in valuation for compensation purposes results to unfair compensation amounts (Akujuru and Ruddock, 2015; Egbenta and

Udoudoh, 2018). Different interpretations of the law have also been noted to contribute to this problem (Holtslag-Broekhof *et al.*, 2018; Lekgori *et al.*, 2020).

For donor funded projects, however, the valuer may be required to consider all the potential losses appropriately, as dictated by the best practice, notwithstanding the local policy and legal provisions. European Bank for Reconstruction and Development (2017), for instance, requires resettlement planners to understand how compensation is being calculated by professional valuers under the local national legislation and how the national legal framework relates to the bank's stipulation, to ensure that compensation for land and assets is at full replacement value. In addition, the bank calls the resettlement planners to cooperate with valuers on adapting their methodology and process, if necessary, to fulfil this requirement. The bank has provided a framework to help in identifying, documenting, measuring and valuing affected assets in land acquisition projects (see Figure A1).

3. Methodology

3.1 Research design

A cross-sectional qualitative survey design, using questionnaires, was utilized in this paper. Babbie (2015) suggests that survey design is probably the best method available for studying social phenomena because it permits researchers to gather original data for describing a population too large to observe directly. The use of the questionnaires was justified because several researchers have used this tool to investigate valuation for compensation practices including Alemu (2013), Bello and Olanrele (2016), Bonaya (2018), Bugri and Kumi (2018), among others. In comparison to interviews, questionnaires are more objective, can gather both qualitative and quantitative data, economical, and effective in that a higher response rate is possible (Young, 2016).

3.2 Target population, sample size and sampling techniques

The total target population in this study included all professional valuers in Kenya who were accessible at the period of the study. According to the Valuers Registration Board of Kenya, the body responsible for registering and regulating valuers in Kenya, there were about 414 registered valuers in Kenya as at 18th August, 2020 (Valuers Registration Board of Kenya, 2020).

Roscoe (as cited in Kieti, 2015), asserts that as a rule of thumb, sample sizes of between 30 and 500 are appropriate for most studies, or between 10–30% of the target population, provided that the resultant sample size is equal to or more than 30 cases. Other scholars have supported this view (Alreck and Settle, 1995; Mugenda and Mugenda, 1999; Young, 2016). The paper chose a sample size of 42 valuers, representing 10% of the total target population, which is above the recommended minimum sample size of 30 cases for most descriptive studies, due to logistical challenges of accessing the entire population.

The study used simple random sampling technique to access the selected sample respondents at the time of the field survey. Out of the 42 targeted valuers, 32 were responsive, resulting to a response rate of approximately 76% which was adequate for analysis and generalization purposes (Mugenda and Mugenda, 1999).

3.3 Data collection tools

The data sought in this study was mainly primary and secondary data. Primary data was sourced from the survey respondents who were professional valuers while secondary data was sourced from libraries, Internet and public or government offices. The tool that was used for primary data collection was a semi-structured online questionnaire, using the Google Forms, as movement and physical contact was restricted in Kenya due to the current Covid-19 pandemic. The questionnaire was prepared and reviewed by five experienced professional valuers before it was rolled out to the target sample respondents, after making the necessary amendments as pointed out by the reviewers.

The subject under study was simple and straightforward, with no complex and multifaceted constructs hence validity and reliability was ensured. In addition, proper sampling technique was used to ensure adequate representation of the target population while the respondents were all trained and experienced professional valuers/experts. Where the questions were structured and/or closed-ended, the questionnaire was flexible enough to allow the respondents to add additional data not provided (see Appendix 5). Where the answers received in the questionnaire were not clear, the particular respondents were interviewed through telephone to obtain in-depth answers, clarity and increase response rate.

3.4 Data analysis and presentation

The collected data was analysed using content analysis and descriptive statistics to determine frequencies and percentages of the various responses. Qualitative data was analysed and presented using themes, in line with the study objectives. The data was presented by use of figures (see Figures A2–A4). The central aim of the study was to determine the types of losses considered and the methods applied in valuation for compensation purposes by valuers in Kenya. The study also sought to find out what informs the valuers' approach in valuation for compensation purposes in Kenya.

4. Data analysis and results

Responses from professional valuers (see Figures A2–A4) who have been involved in valuation for compensation purposes in Kenya, mainly compulsory land acquisition projects (84.4%), show that majority would and or have considered loss of: land for landowners with legal rights or titles (100%), land for occupants in good faith/Customary rights/Communal rights (90.6%) and tenants (81.3%). Other types of assets considered by valuers in Kenya are; structures (96.9%), infrastructure or site works (96.9%), crops (96.9%), trees (96.9%), and cultural assets (90.6%). In addition, community or public structures (84.4%), environmental assets (75.0%), loss of income (87.5%) and fixed plant, machinery and equipment (93.8%) are considered by majority of valuers in valuation for compensation purposes in Kenya. Other matters, as provided by the local legislations, such as severance, injurious affection and disturbance allowance are also considered.

The findings, however, revealed that the most ignored assets or losses in valuation for compensation purposes are assets of persons without legally recognizable rights/claim to land (34.4%), common property resources (46.9%), and social capital (43.8%). The valuers also revealed that loss of movable plant, machinery and equipment (50.4%), is also largely ignored probably due to the fact that these items could be relocated.

The study revealed that the choice of losses to be considered in valuation for compensation purposes is largely informed by the local legal framework: The Land Act No. 6 of 2012 (100%) and the Constitution of Kenya, 2010 (87.5%). Other considerations were reported to include; The Land (Assessment of Just Compensation) Rules, 20 I 7 (81.3%), The Land Value (Amendment) Act No. 15 of 2019 (78.1%) and the World Bank Policies on Compensation for land acquisition (65.6%). The National Land Policy (46.9%), The African Development Bank Policies on Compensation for Land Acquisition (46.9%) and The National Land Use Policy, 2017 (40.6%) are also considered, but to a less extent.

On the choice of valuation methods to estimate the economic value of the various assets: valuation of land is mainly done by use of the sales comparison method (100%); valuation of structures by use of the cost method (93.8%), the valuation of infrastructure or site works by use of the cost method (96.9%) while the valuation of common property resources is or would be done by use of mixed valuation methods; contingent valuation method (37.5%) and opportunity cost (25%). Valuation of crops is mainly done through use of the investment method (56.3%) and profit method (34.4%). Similarly, valuation of trees is done through the use of investment method (46.9%), sales comparison method (28.1%), profit method (28.1%) and cost method (25%). Valuation of cultural assets is mostly done through use of the contingent valuation method (40.6%), cost method (31.3%) and opportunity cost (28.1%). Valuation of community facilities is done by use of the cost method (50%), and opportunity cost (25%). If the valuers were to consider the loss of social capital, the study revealed that they would choose contingent valuation method (34.4%) and opportunity cost (31.3%) to value the loss while majority of the valuers (59.4%) would use the contingent valuation method to value environmental assets. Valuers in Kenya usually use the profit method (59.4%) and the investment method (40.6%) to value the loss of income flows in land acquisition projects while majority use the cost method (65.6%) and the sales comparison method (53.1%) to value plant, machinery and equipment.

The least used, yet applicable, valuation methods for loss of land is investment method (6.3%), residual (18.8%) and contingent valuation method (3.1%). In the valuation of structures, the profit (6.25%), sales comparison method (25%) and the residual methods (3.1%) are least used. The use of the contingent valuation method (37.5%) and opportunity cost approach (25%) would be used to a less extent by the valuers in Kenya in valuation of common property resources. Majority of valuers in Kenya (53.1%), however, revealed that they do not consider this resource in their valuation for compensation purposes. In the valuation of loss of crops, the sales comparison method (28.1%) and profit method (34.4%) are only used by a few valuers in Kenya. All the applicable methods for valuation of loss of trees were ranked poorly by the respondents: substitute cost (0%), profit method (28.1%), investment method (46.9%), sales comparison method (75%), contingent valuation method (15.6%) and cost method (25%). The use of contingent valuation method (40.6%) and cost method (31.3%) to value cultural assets were also poorly ranked. Similarly, the use of the cost method (50%) and contingent valuation method (15.6%) in valuation of community facilities did not perform well.

Even though loss of social capital is not usually considered by majority of valuers (56.2%) in Kenya, the respondents revealed that they would apply contingent valuation method (34.4%) to value the loss. Cost method (3.1%) would be almost ignored altogether in the valuation of social capital. Correspondingly, use of the cost method (9.4%) and sales comparison method (12.5%) are not used to a great extent to estimate the market value of the loss of environmental benefits in land acquisition projects in Kenya. Use of the sales comparison method (18.8%) and the cost method (6.3%) are used to a less extent to determine the loss of income flows in land acquisition projects while only 53.1% of the respondents indicated that they use the sales comparison method to value loss of plant, machinery and equipment.

Interestingly, while majority of the valuers in Kenya (27 out of 32 or 84.4%) indicated that they know about the concept of total economic value, only a few (6 out of 32 or 18.8%) reported to have applied the concept in identifying asset losses in land acquisition projects. The reasons for this were revealed to be due to the assumption that the concept is purely theoretical, with no practical application in actual valuation practice (86.6%), and due to the limitations imposed by the existing policy and legal frameworks (13.3%).

5. Discussion

Ideally, and in line with the best practices, all the applicable loss of assets, particularly the fixed ones, should be considered in land acquisition projects. In a perfect situation, therefore, all the possible losses should have scored 100% responses from the sampled valuers, but some received less. Omission of possible losses in land acquisition projects by the valuers is likely to contribute to inaccurate valuation figures hence contributing to inequitable, inadequate and unjust compensations, with attendant consequences of impoverishment of the project affected persons, among others.

The main reasons as to why some assets are not considered in valuation for compensation purposes was reported to be due to the existing policy and legal frameworks, since the nature of these valuations are statutory and should be prepared strictly in line with the local legal provisions. Preferably, professional valuers should be well conversant with all the applicable policy and legal frameworks, and the best practices on valuation for compensation purposes. This would then inform their valuation approaches in land acquisition projects. Their awareness and knowledge on both the local and international policy and legal framework is thus paramount.

Even though the existing local policy and legal frameworks may dictate the consideration of the types of losses to taken into account by valuers in land acquisition projects, they however do not dictate the choice of valuation methods to be used, particularly in Kenya. It is assumed that a qualified valuer should be conversant and competent enough to apply the appropriate valuation methods and approaches in their practice. The study, however, has revealed that this assumption may not be correct, as some of the valuers revealed that they do not use all the right valuation methods for various loss of assets. It should be noted that all the valuation methods have inherent weaknesses, and thus it is always advisable to apply all the applicable methods for a particular asset before the valuer returning a certain figure, after applying their professional judgement. Omission in this respect could affect the valuer's final professional judgement, hence resulting to inaccurate valuation reports and compensation amounts. European Bank for Reconstruction and Development (2017), for instance, has emphasized this point. Further, the Food and Agriculture Organization of the United Nations (2009) calls for the legislations on (compulsory) land acquisition to be specific but at the same time flexible since legislators may not foresee all the possible scenarios.

6. Conclusion

The local legal framework, particularly the Land Act No. 6 of 2012, laws of Kenya places directly, and rightly so, the responsibility of valuation for compensation purposes on the qualified valuers. It is up to the professional valuer to apply the right valuation theory in their practice, including consulting and adopting the best practices. Consequently, there is need for valuers to keep updating and developing their skills and knowledge. In addition, the local legal framework on valuation for compensation purposes should be reviewed to match the best practices.

In particular, the valuers should be well acquainted with the best practice to enable them identify and document all the applicable loss of assets in land acquisition projects. The concept of total economic value could help in this process. In addition, they should be able to apply all the appropriate valuation approaches and methods, for each particular loss of an asset in line with the best practices. This therefore may call for a continuous training and professional development of valuers to keep abreast with the emerging valuation methods and advancements in the profession.

All professionals are assumed and expected, among other things, to be competent and promote the interests of their clients. As a result, professional valuers involved in land acquisition projects are expected to be competent and well versed with the valuation theory and methods. This paper, however, has served as an eye-opener that the professionals, particularly valuers, involved in the land acquisition projects could actually be contributing to the "suffering" of the project affected persons and their antagonism with the land acquiring authorities hence affecting development projects negatively. This predicament could be widespread, particularly in the developing economies, hence the need to be continuously investigated and addressed. Some assumptions and expectations may not hold.

References

African Development Bank (2003), *Involuntary Resettlement Policy*, African Development Bank, Abidjan.

Akujuru, V.A. and Ruddock, L. (2015), "Dichotomising compulsory land acquisition and land contamination valuations", *International Journal of Disaster Resilience in the Built Environment*, Vol. 6 No. 3, pp. 268-288.

Alemu, B.Y. (2013), "Expropriation, valuation and compensation practice in Ethiopia: the case of Bahir Dar city and surrounding", *Property Management*, Vol. 31 No. 2, pp. 132-158.

Alreck, P.L. and Settle, R.B. (1995), *The Survey Research Handbook*, 2nd ed., Irwin, Chicago.

Asian Development Bank (2007), *Compensation and Valuation in Resettlement: Cambodia, People's Republic of China, and India*, Asian Development Bank, Manila.

Asian Development Bank (2014), *Lose to Gain: Is Involuntary Resettlement a Development Opportunity?*, Asian Development Bank, Mandaluyong.

Babbie, E. (2015), *The Practice of Social Research*, 14th ed., Wadsworth Publishing Company, California.

Bala, M. (2008), "Theory of social justice and involuntary resettlement: evidence from India", *Indian Journal of Human Development*, Vol. 2 No. 2, pp. 325-338.

Bello, N.A. and Olanrele, O.O. (2016), "Value gap in Nigerian property compensation practice: measurement and economic effects", *Pacific Rim Property Research Journal*, Vol. 22 No. 2, pp. 101-113.

Bonaya, A.G. (2018), *Compulsory Acquisition and the Right to Property: The Gaps in the Legal Framework, Prcatices and Possible Solutions*, Nairobi, Unpublished Research Project Report.

Bugri, J.T. and Kumi, S. (2018), "Dynamics of community perceptions, common resources and compensation practices in mining the case of Newmont Ghana Gold Ltd at Ahafo", *International Journal of the Commons*, Vol. 12 No. 1, pp. 1-25.

Cernea, M.M. (1999), *The Economics of Involuntary: Resettlement: Questions and Challenges*, World Bank, Washington DC.

Egbenta, I.R. and Udoudoh, F.P. (2018), "Compensation for land and building compulsorily acquired in Nigeria: a critique of the valuation technique", *Property Management*, Vol. 36 No. 4, pp. 446-460.

Emerton, L. (2016), "Economic valuation of wetlands: total economic value", in Finlayson, C.M., Everard, M., Irvine, K., McInnes, R.J. and Middleton, B.A. (Eds), *The Wetland Book*, Springer, pp. 1-6.

European Bank for Reconstruction and Development (2017), *Resettlement Guidance and Good Practice*, European Bank for Reconstruction and Development, London.

Food and Agriculture Organization of the United Nations (2009), *FAO Land Tenure Studies 10: Compulsory Acquisition of Land and Compensation*, Food and Agriculture Organization of the United Nations, Rome.

Holtslag-Broekhof, S., Beunen, R., Marwijk, R.V. and Wiskerke, J.S. (2018), "Exploring the valuation of compulsory purchase compensation", *Journal of European Real Estate Research*, Vol. 11 No. 2, pp. 187-201.

International Finance Corporation [IFC] (2002), *Handbook for Preparing a Resettlement Action Plan*, International Finance Corporation, Washington DC.

Ige, V.O. and Oladapo, R.A. (2018), "Variation in compensation for compulsory property acquisition: ondo State, Nigeria experience", *Pacific Rim Property Research Journal*, Vol. 24 No. 2, pp. 139-148.

International Valuation Standards Council [IVSC] (2019), *International Valuation Standards*, International Valuation Standards, London.

Keith, S., McAuslan, P., Knight, R., Lindsay, J., Munro-Faure, P., Palmer, D. and Spannenberg, L. (2008), *Compulsory Acquisition of Land and Compensation*, Food and Agriculture Organization, Rome.

Kieti, R.M. (2015), *Urban Housing Affordability in Kenya*, A case study of the mortgage housing sector in Nairobi, Nairobi, Unpublished PhD Thesis Report.

K'Akumu, O.A. and Olima, W.H. (2018), "Challenges in compulsory acquisition of land in Kenya", *Routledge Handbook of Contemporary Issues in Expropriation*, Routledge, London, p. 506.

Larbi, W.O. (2008), *Compulsory Land Acquisition and Compensation in Ghana: Searching for Alternative Policies and Strategies*, FIG, Verona.

Larbi, W.O., Antwi, A. and Olomolaiye, P. (2004), "Compulsory land acquisition in Ghana—policy and praxis", *Land Use Policy*, Vol. 21 No. 2, pp. 115-127.

Lekgori, N., Paradza, P. and Chirisa, I. (2020), "Nuances of compulsory land acquisition and compensation in Botswana", The Case of the Pitsane-Tlhareseleele Road Project, *Journal of African Real Estate Research*, Vol. 5 No. 1, pp. 1-15.

Mahalingam, A. and Vyas, A. (2011), "Comparative evaluation of land acquisition and compensation processes across the world", *Economic and Political Weekly*, Vol. 46 No. 32, pp. 94-102.

Mugenda, O.M. and Mugenda, A.G. (1999), *Research Methods: Quantitative and Qualitative Approaches*, Acts Press, Nairobi.

Munubi, S.L. (2016), *Quest for 'Just Terms of Compensation' in Involuntary Resettlement Policy and Praxis in Kenya: A Case Study of Nairobi-Thika Highway*, Nairobi, Unpublished PhD Thesis Report.

National Land Commission (2017), *The Land (Assessment of Just Compensation) Rules, 20 I 7*, Government Printer, Nairobi.

Omar, I. and Ismail, M. (2009), "Kotaka's Model in land acquisition for infrastructure provision in Malaysia", *Journal of Financial Management of Property and Construction*, Vol. 14 No. 3, pp. 194-207.

Rao, J., Tiwari, P. and Hutchison, N.E. (2017), "Capability approach to compulsory purchase compensation: evidence of the functionings of land identified by affected landowners in Scotland", *Journal of Property Research*, Vol. 34 No. 4, pp. 305-324.

Rao, J., Hutchison, N. and Tiwari, P. (2020), "Analysing the process of compulsory acquisition of land through the lens of procedural fairness: evidence from Scotland", *Journal of Property Research*, Vol. 37 No. 1, pp. 62-84.

Rawls, J. (1971), *A Theory of Justice*, Belknap Press of Havard University, Cambridge, The Belknap Press of Harvard University.

Reddy, A.A. (2018), "Involuntary resettlement as an opportunity for development: the case of urban resettlers of the New Tehri Town", *Journal of Land and Rural Studies*, Vol. 6 No. 2, pp. 1-25.

Republic of Kenya (2009), *Sessional Paper No. 3 of 2009 on National Land Policy*, Government Printer, Nairobi.

Republic of Kenya (2012), *Land Act No. 6 of 2012*, Government Printer, Nairobi.

Republic of Kenya (2017), *Sessional Paper, No. 1 of 2017 on National Land Use Policy*, Government Printer, Nairobi.

Republic of Kenya (2019), *The Land Value (Amendment) Act No. 15 of 2019*, Government Printer, Nairobi.

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

Scarrett, D. (2008), *Property Valuation: The Five Methods*, 2nd ed., Routledge, London.

Valuers Registration Board of Kenya (2020), "Valuers registration board", available at: https://valuersregistrationboard.or.ke/Valuers.

World Bank (2004), *Involuntary Resettlement Sourcebook: Planning and Implementation in Development Projects*, World Bank Group, Washington DC.

World Bank (2016), *Involuntary Resettlement: Emerging Lessons Series No. 1*, World Bank, Washington DC.

Young, T.J. (2016), *Questionnaires and Surveys in Research Methods in Intercultural Communication: A Practical Guide*, Zhu Hua (Ed.), Wiley, Oxford.

Further reading

Cotula, L. and Schwartz, B. (2018), *Towards Fair and Effective Legislation on Compulsory Land Acquisition in Cameroon*, International Institute for Environment and Development, London.

Hage, S., Ayala, E. and Wilcox, M. (2011), *Social Justice Theory*, ResearchGate, Springer, New York, pp. 2794-2801.

International Finance Corporation [IFC] (2012), *Guidance Note 5: Land Acquisition and Involuntary Resettlement*, International Finance Corporation, Washington DC.

Appendix

The Appendix available online for this article.

Corresponding author

Erastus Kiita Museleku can be contacted at: ekiita85@gmail.com