

Full Length Research Paper

Provision of down market urban housing in Kenya through strategic application of public private partnerships

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Article 43 1 (b) of the constitution of Kenya (2010), alongside other international treaties which the country is party to, obligates the state to provide housing for all Kenyans. These instruments place a greater emphasis on the slums and informal settlements upgrading and development, key among which is down market urban housing. Down market urban housing is principally housing for the low income urban households, or low cost housing. There are many challenges on this endeavour in Kenya, key among them being the application of outdated technologies, inadequate innovation, inadequate financing and low application of efficiency, effectiveness and economy considerations. This situation has led to backlogs in housing supply. The State Department of Housing in Kenya puts the demand for housing at 250,000 units per year while the supply is 50,000 units, creating an annual deficit of 200,000 units. Stakeholders have therefore scouted for alternative methods of addressing these gaps and PPPs have been cited as one of the possible solution to address the undersupply of down market urban housing. This study utilized the Delphi method to gauge the prospects of providing down market urban housing through strategic application of PPPs. It was found out that there are high prospects for applying PPPs in housing delivery. The public sector should come up with PPP models which can work locally, it should incentivise the private sector and more so create enabling environment. It was concluded that PPPs are applicable in the provision of down market urban housing with the right structuring. The recommendations made for Kenya and developing countries are to adopt application of PPPs if the country were to reduce the huge backlogs in housing.

Key words: Public private partnerships (PPPs), down market urban housing, public and private sector, housing affordability/challenges and provision.

INTRODUCTION

Since time immemorial, housing has been recognized as a fundamental human need. The demand for housing has been on the rise due to the rapid pace of urbanization and high population growth in developing countries. The

huge demand for housing, especially quality, affordable, decent and accessible housing has remained a major challenge for most people and countries. The problem of housing provision is more acute for the down market

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urban households in many areas of the developing countries in the world and more specifically in Sub Saharan Africa (SSA) region. The problem of accessing housing is becoming unendurable. It has the potential for causing class and wider societal upheavals in the majority of informal settlements and neighbourhoods throughout the world (UN Habitat, 2016; Tipple, 1994). SSA African countries including Kenya have faced severe housing shortages, which has made its urban areas to be dotted with slums and informal settlements (Gbadegesin et al., 2016; Olotuah, 2000; UN Habitat, 2011; Achinine, 1993). Public entities have faced numerous challenges to deliver down market urban housing due to inadequate finances, land and other constraints associated with the government operations. The facilitation for construction of down market urban housing from the public sector has been dwindling over time. This is because the public pulse has been shrinking with time against the ever increasing demand for goods and services (Kutana, 2017; Mouraviev and Kakabadse, 2016; Brown et al., 2006). Governments have failed to leverage its many assets like land to provide down market urban housing. In the cases where public sector has attempted to develop housing, it has had mixed results, including inadequate quantities which excludes the poor from such housing projects, hence the need for down market urban housing or low cost housing (World Bank, 2015a; Brown et al., 2006).

Players involved in the provision of down market urban housing have been sourcing for alternative strategies to address the funding and delivery challenges highlighted above (Mohamed Abd-Elkawy, 2017; Achieng, 2010; Hope, 2010). This is because the high population growth, high urbanization rates, concentration of people in urban areas and corresponding demand for urban housing necessitates a change of strategy (Mohamed Abd-Elkawy, 2017; Muhammad and Ado, 2014; Brinkerhoff, 2000; Pessoa, 2008). The change in strategy is necessitated by the need for urban areas authorities to improve the quality of existing housing stock, which in most cases has been run down. The workable strategy must also lessen housing construction costs and time, which have a bearing on affordability to low income earners (Mohamed Abd-Elkawy, 2017; Pomeroy, 2001). Affordable housing discourse is gradually taking the central place across the world, for example in Kenya, it has been identified as one of the government's big four agenda for the next five years. One of the strategies which is being banked upon is the application of Public Private Partnerships (PPPs) in order to provide the necessary housing units (World Bank Group, 2015b; KPMG, 2015; Mutandwa, 2016).

The housing challenge in Kenya

The housing shortage in Kenya has been estimated at an accumulated 2 million units, and to close this gap,

approximately 250,000 units across many market segments must be provided per year. The current annual supply of such housing stands at 50,000 units, hence a deficit of 200,000 units annually (Republic of Kenya, 2015; Schmidt-Traub and Sachs, 2015). The rate of urbanization in the country has further complicated matters as demand for affordable and decent housing will keep increasing. The total country population is estimated to be 48 million, 27% of whom are already in urban areas; the urbanization rate remains 4.4% above the global average of 2.1% (Republic of Kenya, 2007). The high urbanization and high population growth has led to 61% of the Kenyan urban households living in slums and informal settlements. These areas have inadequate housing durability, insecure tenure and poor service provision. The proportion of the urban population is expected to be half the country's population by 2050. High urbanization rates bring incremental pressure on housing provision and construction. The challenge for housing supply is that the private sector has concentrated in the middle and upper income groups. On the other hand, the government of Kenya faces serious financial constraints including inability to raise debt for housing development. Provision of housing infrastructure is estimated to be between 30 - 40% of housing development. This means that even housing infrastructure, which would stimulate private entities into the sector, is lacking or is poorly developed (World Bank, 2017; Sabol and Puentes, 2014).

The realization of the prevailing incapacities of the public sector evidenced by its inability to mobilize resources, inadequate technological, innovation and efficiency constraints needed a rethink (World Bank, 1993). This state of affairs has prompted stakeholders and policy makers to seek alternative sources of addressing the challenges of the public sector in housing development. Application of Public Private Partnerships (PPPs) has been proposed as one of the policy and development alternatives to reduce the current housing backlogs (Ibem and Aduwo, 2012; Eadie et al., 2013; Birner and Wittmer, 2004; Hammani et al., 2006; Warner and Sullivan, 2017; Carroll and Steane, 2000). The major drive towards private sector participation in down market urban housing through PPPs is based on the fact that: Private sector is more flexible in terms of time, costs and ideological shift than the public sector, therefore its participation reduces the government financial burdens (Alexandru, 2015; Goldsmith, 2014; Botlhale, 2016; Ghobadian et al., 2004; Walker and Smith, 1995). Private sector possesses more skills, knowledge and technology with which it can be used to provide quality and superior facilities. PPPs offer many benefits when applied in infrastructural provision: they help to improve the overall quantity and quality of infrastructure; and are applicable across public sector infrastructural needs in areas of housing, hospitals and schools. PPPs have the ability to make projects complete on time and budget, but also governments retain strategic control of the

infrastructure asset and services derived from it (Bothale, 2016; International Project Finance Association, 2015; Olusola et al., 2012; World Bank, 2009).

Despite these benefits of applying PPPs, it must be pointed that the model is a complicated one and may require special capacities to structure and make it lead to a lowering of prices. The inadequate capacity in a country to structure PPPs may imply that well-structured models may not be activated meaning that the target group of low income urban households might be excluded from the completed housing units. The funds used in PPPs are borrowed through the private sector which might be more expensive than if the public sector accessed such funds. The usage of funds through private players may imply double taxation and also might lead to reduced competitiveness as only a few entities can engage in the process. The tendering process and the negotiation process take a long time to conclude alongside the fact that risk transfer to the private parties may be complicated and hence lead to an increase of consumer prices (International Institute for Sustainable Development, IISD, 2012; World Bank, 2012). The challenges faced in housing supply have led to the emergence of consensus on the need to stimulate the private sector participation in down market urban housing. This has been proposed to be undertaken through a variety of methods, forms and approaches key among them being PPPs (Wettenhall, 2007; Brown, Orr and Luo, 2006; Susilawati and Armitage, 2004). PPPs have developed more broadly since the 1990's and have been cited as having the potential to provide long term sustainable approach through which public funds can be utilized effectively (Kung'u, 2009; Brown, Orr and Luo, 2006). Through PPPs, partners pool their expertise, technologies, skills, managerial and capital resources together in a cooperative rather than competitive manner, which in turn improves levels of service delivery (UN Habitat, 2011; Moskalyk, 2008). Countries like Nigeria, Australia, Malaysia, China, UK, Singapore, US, Mexico, Egypt, India, Pakistan and Canada have used PPPs to provide down market urban housing (Kutana, 2017; Roosli and Al-Abed, 2014; Abdul-Aziz and Kassim, 2011). PPPs provide many benefits to the government, including addressing its budgetary deficits, alongside the need for application of greater efficiency, creativity, bridging the infrastructure and service supply gaps (Kutana, 2017; Mathonsi, 2013; UN Habitat, 2011). It has been argued that despite the allure of PPPs, there are many challenges which countries desirous of the model must address, including inadequate capacity and lengthy processes inherent in the approach (World Bank, 2015; IISD, 2012).

Successful PPPs application

Governments have embarked on the provision of down

market urban housing programmes, majority of which have not been completed successfully, even where PPPs are applied. It has since been agreed that countries desirous of using PPPs in developing down market urban housing should have inbuilt sound financing models. The model should consider that development of down market urban housing is faced by many risks like political, financial, construction, operation and maintenance, demand, legal and revenue generation, which have a cost element. The financing model for PPPs should have an appropriate mix of equity and debt ratios, adequate costing of the risks, and due considerations for the project's unique conditions and environment, alongside the need for public sector support (African Affordable Housing Institute, 2018; Sani et al., 2018; Kwak et al., 2009). Research has found out that successful application of PPPs requires favourable existence of political, legal, economic and commercial environments to allow optimum participation of the private sector in developing down market urban housing. The public sector should create enabling environments for private players' investment in public functions and services. The role of government as an enabler, facilitator, monitoring and evaluation agency is very key for successful PPPs (Mathonsi, 2013; Moszoro and Krzyzanowska, 2011).

Ismail (2013), Chang (2013) and Li and Akintoye (2003) have cited eighteen critical success factors for PPPs, The first one being the establishment of stable macro-economic conditions in the country. Secondly is the creation of favourable legal and regulatory frameworks. In Kenya, this is done through the PPP Act, 2013. Thirdly is the establishment of sound economic policies, which allow the private sector to thrive and hence participate in traditional government functions. Fourthly is the availability of financial markets to create sources of credit, debts and equity for PPP projects. Fifth is existence of multi-benefits objectives, which is done through adequate market sounding and stakeholders' buy in for national public projects. Sixth is the formulation of appropriate risk apportionment and sharing. The parties must share risks as per their abilities to maximize the same. Seventh, there should be commitments by the partners for the PPP transaction and the duration of the implementation. Eighth, there is need for the existence of capable, strong and efficient private sector, which can adequately raise capital and infuse new technology and innovation into the housing projects, elements which may not be available in traditional procurement. Ninth is the application of good governance principles because there are many parties involved in PPPs and hence there is need for good business ethos. Tenth the selected PPPs projects should be technically feasible, implying that they should be selected carefully. Eleventh is the need for shared decision making authority amongst the partners. Twelfth is the need for strong political support, which is able to mobilize the other aspects of PPP projects. This comes with social and community support, organized and

committed government entities. It leads to competitive procurement process, which ensures projects can attain value for money, affordability and bankability. Thirteenth is the need for adequate government guarantees. This should be done through thorough assessment of the costs and benefits (Affordable Housing Institute, 2018; Sani et al., 2018; Kutana, 2017; Ismail, 2013; Mathonsi, 2013; UN Habitat, 2011; Kwak et al., 2009).

METHODOLOGY

This study adopted the Delphi method of research to gauge and forecast the prospects of the applicability of PPPs for down market urban housing in Kenya. The Delphi technique is named after the ancient Greek word "oracle". It is a qualitative method of research used where the issue under research has not been done before (Turoff, 1970). It is applied by combining expertise know-how in a given area of inquiry, with the aim of making predictions, forecasts and informed judgement. It involves extracting their opinions aimed at arriving at an informed group consensus on a complex problem like the housing provision through PPPs (Donohoe and Needham, 2009; Linstone and Turoff, 1975; Goeldner and Ritchie, 2007; Tynkkyinen, 2013; Moller, 1997; Weber and Ladkin, 2003; Duboff, 2007). According to Okoli and Pawlowski (2004), the method was perfected and developed arising from a series of studies conducted by the Rand Corporation, US, in the 1950's. The objective of such studies was to come up with a technique which would assist organizations to achieve the most reliable consensus and agreement from a group of experts in a given area of inquiry. The technology was developed by researchers Olaf Helmer, Nicholas Rescher and Norman Dalkey among others for the Rand Corporation (Somerville, 2008; Gordon, 1994). The Rand corporation was at the time developing ways in which the military exploits of the future would be carried out in terms of technology, political issues and complex wars involving many countries would be tackled. Delphi was found to be the method with which accurate predictions would be made (Turoff, 1971; Turoff, 1995), who opined that Delphi would deal with emerging technical issues. It would enable researchers to seek consensus among experts on a subject matter.

This study utilized the experts involved in the housing policy formulation, housing financing and housing development on the applicability of PPPs in developing down market urban housing. According to Kaynak et al. (1994), the Delphi technique has been used to make constructive and systematic application of informed intuitive judgment and decision making. It is built on the understanding that a group of experts, in this case the housing developers, housing financiers and housing practitioners, are better informed on the issues of inquiry than the non-experts (Eurodad, 2015). The common characteristic salient in a Delphi study is that the communication and engagement of the experts is structured in a group. This makes the process effective and allows a group of individuals to jointly deal with a complicated research inquiry matter. The feedback and contribution of individual information and knowledge is provided in a way that ensures that every opinion matters.

During the data collection process, individual experts were informed of what other experts said regarding a certain research inquiry. This necessitated them to change their stand on the issues under inquiry or restate their earlier positions, which was ranked and weighed. The anonymity of the expert's remains guaranteed and guarded such that names are not released to others, but known only by the researcher (Linstone and Turoff, 1975; Kaynak et al., 1994). Rowe and Wright (1999) pointed out that anonymity is a key consideration in a Delphi method. The researcher used

questionnaires in this study which were administered through emails or direct contact with the target groups. The aim was to gauge the group opinions and expertise knowledge on the applicability of PPPs in down market urban housing in Kenya.

Sampling frame

Kaynak et al. (1994) noted that the choice of the sampling frame depends on the nature, scope and importance attached to the study. It has been pointed out that the size of the Delphi panel can vary as much as is possible (Somerville, 2008). Clayton (1997) opined that a Delphi panel of 15 -30 persons is the ideal for a homogenous group of experts. On the other hand, Dalkey and Helmer (1969) proposed that 15 -20 respondents can participate meaningfully in a Delphi study. Ziglio (1996) proposed the utilization of 10 -15 persons in the Delphi process, and this seems to agree with Turoff (1995), who opined that 10 -50 persons can be used in a Delphi panels. Okoli and Pawlowski (2004) preferred the use of up to 3 panels of 10 -18 members in size. Seuring and Muller (2008), Okoli and Pawlowski (2004) and Martino (2003) have pointed out that the expertise possessed by the potential respondents is the most important criterion why such respondents may be used in the Delphi study. Sackman (1974) and Welty (1974) showed that high levels of expertise in a Delphi study are not necessarily required to qualify or to validate a Delphi study results. Three panels of 25 -30 persons per panel as proposed by Turoff (1995) and Gordon (1994) were used for this study. The wisdom in utilizing Delphi panels of the 25-30 persons per panel is based on the fact that many studies have found no relationship between the panel size and effectiveness and efficiency of data collected (Rowe and Wright, 1999).

Distribution and attributes of the panels

There were housing financiers who were 30 in number and all of who participated in the first, second and third Delphi rounds. 28 of them were males and 2 were females. They comprised employees of the banks which have been involved in the advancement of loans and mortgages for housing development in Kenya. The Banks were: Equity Bank, Kenya Commercial Bank (KCB), Commercial Bank of Africa (CBA), National Bank of Kenya (NBK), Cooperative Bank and the Jamii Bora Bank. All these banks were the ones available in Nairobi City County. All of them were graduates. The rationale for using the financiers was the fact that more finances were needed for housing financing under PPPs. The financiers would give indicative opinions on whether they would finance PPPs for down market urban housing among other considerations of applicability.

There were 28 housing developers after two of the target group dropped out in the second round Delphi. The housing developers were from the leading firms and construction companies dealing with housing development within Nairobi city. The researcher approached the Kenya Property Developers Association (KPSA) through email, upon which the membership of the association was emailed back. Some of the developers who responded to the questions were: Munchen general contractors, Axis Real developers, Nile developers, Daykio developers and real estate, PDM Kenya Ltd, Kelly Developers and Engineering Ltd, Cytonn real estate developers, Vimerc Ltd and Munthumbi developers among others. All the members of this panel were graduates. All the developers were those within Nairobi City County. The focus on developers was based on their experiences in the housing development and what would be their opinions on the applicability of PPPs in future. The third panel consisted of housing officers working in the Nairobi city county department of housing and urban

Table 1. The composition of the 3 Delphi panels.

Variable	Housing financiers	%	Housing developers	%	Housing practitioners	%
Gender						
Male	28		20		28	
Female	2		8		2	
Total	30	34.1%	28	31.8%	30	34.1%

All of the membership of the panels were graduates with at least a bachelor's degree in various fields: Engineering, Law, Geography, Construction management, Real Estate Management, Finance, Economics, Community development, Architecture, Planning, Urban Managers.

Source: Author (2019).

development. It also consisted of housing officers in the housing department of the Ministry of Transport, Infrastructure, Housing and Urban Development. The two groups of the housing practitioner's panel were graduates. These two groups of government officers were critical in measuring the future applicability of PPPs through the policies and regulations which would emanate from them. Table 1 for the illustration of panels for the study.

Data collection procedures under Delphi

Linstone and Turoff (2011), Seuring and Muller (2008) and Okoli and Pawlowski (2004) pointed out that ideally a Delphi study should be carried out to a level where no further insights or new discoveries emerge. This research utilized 3 rounds of Delphi process rounds which have been considered to be adequate to answer the underlying issues in the applicability of PPPs projections. Further explorations and questionnaires to legal officers within the three panels were used to validate data. Questionnaires were administered to the respondents at the first round when exploratory questions were asked. This stage involved the analysis and the careful management of the qualitative and quantitative data which were collected in the Delphi rounds. Data were collected through questionnaires in the 1st, 2nd and 3rd rounds. Data from the 1st round were qualitative in nature and were analyzed through content analysis techniques. It involved grouping similar issues and items together in a summarized form. Minimum editing of the issues as they came out from the respondents was applied such that what was provided in round one found its way in round two Delphi (Hasson et al., 2000; Pateman, 1998). During each stage, data obtained were analyzed and returned to the respondents to provide additional information or clarifications as would be necessary. During each proceeding round, the respondents were asked to change their opinions if they went against what was provided by the majority or stating reasons for sticking with their earlier statements. The Delphi method is based on the panelist achieving consensus on the matter of inquiry at hand. There is no standard way in which consensus can said to be achieved in such an area like the provision of down market urban housing. Most Delphi studies have used mean and standard deviations to measure the level of agreements between the experts. This study used mean and standard deviation to analyze the consensus of the panelist on the applicability of PPPs in down market urban housing. The mean shows the average of the consensus items while the standard deviation shows how far to the mean each value was. The more the value approached the value of 0.00, the more there was consensus on the item (Somerville, 2008; Hasson et al., 2000; Mitchell, 1991). The values were ranked based on the standard deviation values hence how far or close to zero the items were. Qualitative interpretation was given to the standard deviation values such that

0.00 -0.5 was assigned Highly important statement to show how close it was to 0; 0.51-0.70 was assigned Mild Important; 0.71-1.00 was assigned important; while 1.01 -2.00 was unimportant.

FINDINGS

The research was keen on getting the lessons learnt in the application of PPPs in down market urban housing. The housing financiers' first lesson was that there is need to identify champions and pace setters in application of PPPs. The champions would rally stakeholders into embracing the application of PPPs as an alternative financing model, bearing in mind the dwindling government finances. The pacesetters would be projects under PPPs for down market urban housing which are developed and become successful, upon which other projects would learn from. Housing financiers are interested in getting case studies of work works and which can be used for other potential projects. The second lesson was the need to reduce the bureaucracy in undertaking PPP projects. This is possible because a PPP project is not a normal contract but one that has many stakeholders. It should not be run on purely public sector principles, but must mix such with private sector ethos. Thirdly, it was felt that the country desirous of using PPPs should build local expertise in application of PPPs. There is need for more transaction advisors, a robust private sector and a public sector which can structure adequate PPPs to attract the right private entities.

Fourthly, stakeholders must structure PPPs that provide a win –win arrangement between the public and private entities. This is achieved by balancing the interests of the private party to make profits and hence get more business opportunities on one hand. It should also ensure that the public sector can be able to deliver public goods better and faster, while ensuring value for money in such transactions. Fifth, there is need for application and utilization of various models of PPPs in a country. The PPP Act of Kenya (2013) recognizes 11 PPP models, all of which are heavily tilted towards hard and physical infrastructure. International experience with

Table 2. Lessons learnt in applying PPPs for down market urban housing by housing financiers.

S/N	Lessons learnt in the application of PPPs	Mean	Standard deviation	Rank	Remarks
1	Need to identify champions, pace setters	1.23	0.35	1	Highly Important
2	PPP successful where bureaucracy is reduced	1.27	0.35	1	Highly Important
3	Build local expertise for PPP transactions	1.30	0.36	3	Highly Important
4	Need to structure win –win PPPs by balancing stakeholders interests	1.20	0.36	3	Highly Important
5	Need to use various forms of PPPs models	1.17	0.37	5	Highly Important
6	Need to develop standard manuals, procedures	1.13	0.38	6	Highly Important

Source: Author (2019).

Table 3. Lessons learnt in the application of PPPs by Housing Developers.

S/N	Lessons learnt in the application of PPPs	Mean	Standard deviation	Rank	Remarks
1	Need to use various forms of PPPs models	1.29	0.36	1	Highly Important
2	Need to structure win –win PPPs	1.32	0.36	1	Highly Important
3	Need to identify champions, pace setters	1.36	0.37	3	Highly Important
4	PPP successful where bureaucracy is reduced	1.39	0.39	4	Highly Important
5	Build local expertise for PPP transactions	1.43	0.40	5	Highly Important
6	Need to develop standard manuals, procedures	1.75	0.65	6	Mild important

Source: Author (2019).

application of PPPs shows that there is need for more models like joint ventures, cooperative models and more so advanced cases for land swap models. The country should be able to combine various aspects of models and come up with a model that can work locally. The sixth lesson was the rationale of developing manuals, guidelines and procedures for applying PPPs in down market urban housing. This will serve to reduce the time taken to prepare for PPPs and hence win the support of a wide range of investors. The manuals will act as capacity development instruments to counties and lower units of governments keen on using PPPs. Table 2 presents the lessons in PPPs application from housing financiers.

The housing developers major lesson was the need to utilize various models of PPPs and which are suitable for the local environment. The developers are keen on getting the local models which have been heavily influenced by international practice, but which mixes and blends with the local situation. The second lesson was the rationale for structuring win –win PPP arrangements. This means that the partnership proposed aligns the interests of the parties to such a contract and makes sure they can have their interests secured. Win –win PPPs imply that they are bankable hence can attract private players; they are affordable and present value for money for the users and the public sector. Thirdly, the stakeholders must identify champions and pace setters who can act as a catalyst for accelerated application of

PPPs in down market urban housing. This will serve as an example and a learning point so that stakeholders are not discouraged from venturing into PPPs. Fourth, PPPs application requires that bureaucracy is reduced and projects run using expertise of the partners. Fifth, the country should build local expertise, such that developers and financiers can understand the process and participate in it. The participation by local stakeholders addresses many issues like cheap financing and acting as a development strategy for local parties. Sixth lesson is that the country should have standard manuals, procedures and designs for down market urban housing, which makes the process of utilizing PPPs easier. Table 3 illustrates the lessons in PPPs application from housing developers' point of view.

The housing practitioners seemed to agree with the housing financiers in the first lesson of having to identify champions and pace setters for PPPs application to succeed. From a public sector perspective, it is necessary to set up a few demonstration projects under PPPs for down market urban housing which serves as flagship projects. Once these are successful, lower structures in the country can borrow from such and actualize the idea of housing the low income urban households throughout the country. Secondly was the need to reduce bureaucracy in implementing PPP projects. On the side of government, this bureaucracy has been associated with official secrecy, but which

Table 4. lessons learnt in the application of PPPs by Housing practitioners.

S/N	Lessons learnt in the application of PPPs	Mean	Standard deviation	Rank	Remarks
1	Need to identify champions, pace setters	1.23	0.35	1	Highly Important
2	PPP successful where bureaucracy is reduced	1.30	0.36	2	Highly Important
3	Need to structure win –win PPPs	1.17	0.37	3	Highly Important
4	Build local expertise for PPP transactions	1.33	0.37	3	Highly Important
5	Need to use various forms of PPPs models	1.07	0.41	5	Highly Important
6	Need to develop standard manuals, procedures	1.73	0.64	6	Mild important

Source: Author (2019).

cannot be acceptable under PPP arrangements. Thirdly, there is need to come up with PPPs which have aligned interest of private and public parties. This will make the arrangement to be accepted in a wide range of actors and hence increase its success rates.

Fourth, there is need to build the local expertise in PPPs application. This can be done through capacity building of institutions and players interested in utilizing the model. The public sector has the obligation to train private entities on how they can form strategic partnerships which excel inside and outside the country on matters PPPs. Fifth, there is need to utilize various PPP models allowed under the PPP Act 2013 and also mixing that with evolving approaches. The joint venture approach is one model which is most suited for Kenya, such that when it is combined by the cooperative model, it can deliver excellent results for housing. Sixth, manuals, procedures and housing designs for down market urban housing PPPs can be developed for ease of uptake by low income urban households. These households may not have the financial capacity to pay for such services hence they can be assisted by standardizing designs and procedures. Table 4 illustrates the lessons learnt in PPPs application by Housing practitioners.

To compare the panels and rank the lessons in a better way, the opinions were cross referenced. First, they pointed out the need to build local expertise to undertake the PPP transactions, customize PPPs to the local Kenyan context to make its applicable. The country should use the Saccos method of saving money over long periods of time and later developing the land such organized groups have or providing housing infrastructure for such groups. Secondly, it was pointed out that PPP is a workable and bankable development model for the development of down market urban housing in Kenya. The concept should be explored further and bureaucracy which slows down the utilization of such models should be reduced over time. The country should develop an appropriate legal and regulatory framework for the application of PPPs. In the process of making PPPs applicable, many opportunities for the public and private sectors are created, some to create more jobs, grow the

economy, access stable contacts and long term ones which guarantee stable income for some times and also accelerate the development of the country.

Thirdly, there should be the development of standard PPP procurement, structuring and development manuals, which also provide adequate procedures and processes to be followed in the PPP development concept. The public sector can tie this with the development of housing typologies and designs for down market urban housing which serves to reduce the cost of designing, a cost element mostly borne by low income urban households. The development of these standard procedures offers an opportunity to all stakeholders who can either make money or also accelerate the national development through construction of down market urban housing to address the huge demand. Fourthly, there is need to structure, negotiate, construct and come up with workable PPP transactions and programmes through balancing the stakeholders needs and interest. It has been established that once all the parties have their concerns addressed in a PPP programme, they are able to come on board and deliver the much needed housing units. Balancing the interests of parties provides another opportunity in developing down market urban housing and also providing stable incomes, contracts and opportunities for the private entities over a long period of time.

Fifth, there is need to identify PPP champions, pace setters, workable case studies and at the same time establish key performance indicators for all emerging PPPs in down market urban housing amongst other issues. There is need to set clear roles and functions of all parties to such a contract. The process of identifying the champions and pace setters has the effect of arousing more interest in PPPs and hence creating more opportunities for financing and developing down market urban housing; which in turn jumpstarts the economy through creating backward and forward linkages. Sixth, it was noted that the application of PPPs should follow and utilize various PPP models and approaches like the joint ventures, turnkey, land swaps and a mixture of PPP models all of which creates more opportunities for partnering between the public and private entities in the

Table 5. Combined lessons learnt in the application of PPPs for down market urban housing.

S/N	Lessons learnt in the application of PPPs	Mean	Standard Deviation	Rank	Remarks
1	Build local expertise for PPP transactions	1.57	0.30	1	Highly Important
2	Reduce bureaucracy reduced, binding contracts	1.34	0.32	2	Highly Important
3	Develop standard manuals, procedures	2.28	0.36	3	Highly Important
4	Structuring of win –win PPPs	1.16	0.37	4	Highly Important
5	Identify PPP champions, pace setters	1.11	0.41	5	Highly Important
6	Utilize various forms of PPPs	2.24	0.65	6	Mildly Important

Source: Author (2019).

country. It has been pointed out that in developing down market urban housing through PPPs, the country should not be limited to the conventional PPP types but can craft and customize international models to suit the local situation. It was for example found out that the savings and credit cooperative societies can be used as an example of local PPPs and a method which can be used going forward to develop housing units for low income urban households.

The panelists provided six major observations, suggestions and way forward on the application of PPPs for down market urban housing; which if well taken care of, can provide more opportunities in the application of PPPs for down market urban housing. The first suggestion was the fact that PPPs is an idea which should be given the requisite attention and it is a sure way of meeting the housing demand in the country. Secondly, there is need to simplify the PPP procedures and processes while developing standard housing typologies and designs, formulating adequate PPP financing models, standards, guidelines and manuals for the application of the concept. Thirdly, it was pointed out the need to address the inherent challenges which face the application of PPPs in down market urban housing. The existing laws and regulations should be amended and some created afresh to address the unique nature of down market urban housing; there is need to set up a housing fund which will finance down market urban housing, act as an off taker and aggregator of the demand and supply sides of the down market urban housing. Fourth, it was pointed out that there is need for heavy government involvement and engagement in providing social and physical infrastructure which acts as incentives for the developers. The developers are left with undertaking actual housing construction without having to factor in housing infrastructure installation. The involvement of public sector in the promotion of the application of PPPs is central to realization of enhanced use of the concept.

Fifth, it was noted that there is need to come up with down market urban housing PPP models which can work locally. There is need to utilize the Saccos method of delivering down market urban housing through government providing social and physical infrastructure to

organized Saccos and accelerating the development of down market urban housing. The government can finance partly such housing cooperatives, provide guarantees to developers and amend the building codes to allow for utilization of local building materials in construction of down market urban housing. Sixth, the panelists noted that there was need for the government to incentivize the private entities to attract them to the construction of down market urban housing. The incentives should be structured in such a way that they address financial, legal, construction and materials, which have been found to be a great issue in construction of down market urban housing. The incentives should include creating an enabling environment in terms of financial, capacity, political, legal and regulatory environments and hence providing more opportunities for the economy in the construction of down market urban housing. Table 5 illustrates the combined lessons from the three panels in application of PPPs.

To conclude the applicability issue, the panels delved into the suggestions that they would make for the application of PPPs in down market urban housing. The housing financiers arranged them like: need to incentivize the private sector through financial and other enabling environments for their optimal performance; enactment of adequate laws and setting up requisite institutions; PPPs is a sure way of meeting the prevailing housing demand in the country ; need to simplify the PPP procedures and also develop standard designs, manuals for the procurement and operationalization and for financing purposes of the PPP process; the role of the government is central in operationalization of PPPs, there must be heavy government presence in a PPP for it to succeed; and formulate and apply suitable local PPP models. Table 6 shows the suggestions made on the application of PPPs by housing financiers.

Housing developers noted that the first suggestion is that PPPs is one of the surest ways through which the adequate housing supply can be attained in Kenya; there is need for heavy government involvement if the PPPs in down market urban housing is to succeed; need for formulating adequate laws and institutions; government must offer incentives alongside creation of an enabling environment for optimal private sector performance;

Table 6. Suggestions on the applicability of PPPs by housing financiers.

S/N	Suggestions on the applicability of PPPs	Mean	Standard deviation	Rank	Remarks
1	Incentivize and create enabling environment by govt	1.27	0.35	1	Highly important
2	Enacting adequate laws and setting adequate institutions	1.33	0.37	2	Highly important
3	PPP is a sure way of meeting demanded housing units	1.37	0.38	3	Highly important
4	Simplify procedures and develop standards designs, models	1.13	0.38	3	Highly important
5	Need for heavy government investment	1.40	0.39	5	Highly important
6	Formulate and apply suitable local models of PPPs	1.67	0.58	6	Mild important

Source: Author (2019).

Table 7. Suggestions on the applicability of PPPs by housing developers.

S/N	Suggestions, on the applicability of PPPs	Mean	Standard deviation	Rank	Remarks
1	PPP is one way of meeting demanded housing units	1.25	0.35	1	Highly important
2	Need for heavy government investment	1.21	0.36	2	Highly important
3	Enacting adequate laws and setting adequate institutions	1.14	0.37	3	Highly important
4	Incentivize and create enabling environment	1.11	0.39	4	Highly important
5	Simplify procedures and develop standards designs, models	1.07	0.40	5	Highly important

Source: Author (2019).

Table 8. The suggestions on the applicability of PPPs by housing practitioners.

S/N	Suggestions, on the applicability of PPPs	Mean	Standard Deviation	Rank	Remarks
1	Incentivize and create enabling environment	1.23	0.35	1	Highly important
2	Enacting adequate laws and setting adequate institutions	1.20	0.36	2	Highly important
3	Simplify procedures and develop standards designs, models	1.30	0.36	2	Highly important
4	Need for heavy government investment	1.17	0.37	4	Highly important
5	PPP is one way of meeting demanded housing units	1.13	0.38	5	Highly important
6	Formulate and apply suitable local models of PPPs	1.10	0.39	6	Highly important

simplify the procedures for the application of PPPs and also the need to develop standard designs, procurement and financing guidelines; need for formulating and applying suitable models of PPPs in the local context. Table 7 illustrates the suggestions from housing developers on PPPs application.

Housing practitioners agreed with the housing financiers by noting that the public sector must incentivize the private sector and create enabling environment for their optimal operation; need to enact adequate laws and setting up requisite institutions to handle PPPs; need to simplify the PPP procedures and at the same time develop manuals for the procurement, finance and financing models; the government must be heavily involved in the PPP process in one way or the other for it to succeed; PPP is recognized as one way through which the housing deficit can be met; and need to formulate and

apply PPP models which can fit in the local situation. Table 8 illustrates these suggestions.

When the panelists were combined and weighted, it was found out that six major suggestions and way forward on the application of PPPs for down market urban housing were highlighted. The first suggestion was the fact that PPPs is one of the ways of meeting the housing demand in the country. This makes the application of PPPs in the construction and development of down market urban housing a big opportunity for the country going forward, through aligning the interests of the public and private players as required. Secondly, there is need to simplify the PPP procedures and processes while developing standard housing typologies and designs, coming up with adequate PPP financing models, standards, guidelines and manuals for the application of the concept. This provides an opportunity

Table 9. Suggestions on the application of PPPs by the combined panels.

S/N	Suggestion in the PPPs application	Mean	Standard Deviation	Rank	Remarks
1	PPPs one of the ways of meeting housing demand	0.41	0.18	1	Highly Important
2	Simplify the PPP procedures and processes, models	1.38	0.31	2	Highly Important
3	Heavy government investment is key	1.26	0.35	3	Highly Important
4	Enacting adequate laws and institutions	1.23	0.35	3	Highly Important
5	Formulate workable local PPP models	1.13	0.38	5	Highly Important
6	Incentivize private sector , enabling environment	2.00	0.68	6	Mildly Important

Source: Author (2019).

for institutions of higher learning in developing the manuals and the public sector in implementing the same, through which the private entities will finally get an opportunity to construct and develop down market urban housing.

Thirdly, it was pointed out the need for heavy government investment in the development of PPPs for down market urban housing. This can be done through laws, regulations, setting up institutions, construction of social and physical trunk infrastructure, provision of various guarantees, setting up a housing fund which will finance down market urban housing, act as an off taker and aggregator of the demand and supply sides of the down market urban housing. Fourth, it was pointed out that there is need for the enactment of adequate laws, regulations and setting up institutions. This will create room for innovative project design and setting up of the housing fund as envisaged under item 3 above, it will eliminate inhibiting laws and constraints which are legal in nature, while establishing institutions which can fast track the development of down market urban housing in Kenya.

Fifth, it was noted that there is need to come up with down market urban housing PPP models which can work locally. There is need to utilize the Saccos method of delivering down market urban housing through government providing social and physical infrastructure to organized Saccos and accelerating the development of urban housing. The government can finance partly such housing cooperatives, provide guarantees to developers and amend the building codes to allow for utilization of local building materials in construction of down market urban housing. Sixth, the panelists noted that there was need for the government to incentivize the private entities to attract them to the construction of down market urban housing. The incentives should be structured in such a way that they address financial, legal, construction and materials, which have been found to be a great issue in construction of down market urban housing. The incentives should include creating an enabling environment in terms of financial, capacity, political, legal and regulatory environments and hence providing more opportunities for the economy in the construction of down

market urban housing. Table 9 illustrates the suggestions on PPPs application by the combined panels.

DISCUSSION

Available literature and findings of this research shows that PPPs are applicable in the development of down market urban housing in Kenya. The constitution of Kenya (2010) makes housing provision a right for Kenyans despite the many financial implications involved in the process. This is because many studies have been undertaken on the extent of applicability of PPPs in policy making, provision of educational infrastructure and projects, though such ventures may require detailed scrutiny (Kimani et al, 2015; Hatcher and Colton, 2006; Ball, 2007; Constantz, 2016). Researchers have agreed to the assertion that PPPs bring new approaches of project implementation, execution and enhanced role of the private sector in housing delivery. PPPs have been taken by other studies to imply innovative methods of housing financing. This has the potential of drawing the best of the two worlds of public and private sectors, in the process addressing the long standing challenges in housing development. The innovative financing strategies of down market urban housing help to address access, quality and equity in down market urban housing (Kimani, 2016; Robertson and Verger, 2012; Hatcher and Colton, 2006).

The country must therefore address the hindrances to PPPs application in down market urban housing by undertaking several measures. First, it should build local expertise to undertake PPP transactions in all the sectors of the economy; and the country should customize PPPs models that have worked in other parts of the world to the local Kenyan context to make its applicable. The country should use the Saccos method of saving money over long periods of time and later developing the land such organized groups have or providing housing infrastructure for such groups. There are many Saccos in the country, estimated at over 77,000, which have accumulated over 1 trillion Kenya shillings and assets worth billions of shillings. PPP is a workable and bankable development

model for the development of down market urban housing in Kenya, and hence it should be explored further. The application of such a new but noble concept could be hampered by the existing bureaucracy which should be reduced over time. Some of the challenges which might inhibit its application can be addressed through development of appropriate legal and regulatory framework, which acts as a stable foundation upon which private money and technologies can be invested in public functions. Existence of enabling laws and regulations has the effect of reducing the perceived risks in the sector through providing clear guidelines, processes to follow in cases of default by the partners and uptake and off take mechanisms of the developed housing units.

Laws will touch on the financing, operational and maintenance structures of a project, which are major sources of conflicts. Kenya has the PPP Unit established through the PPP Act (2013), which has been charged with the responsibility of creating awareness on PPPs and also advising contracting authorities on the process. The country should develop standard PPP procurement, structuring and development manuals, which also provide adequate procedures and processes to be followed in the PPP development concept. The government is in process of developing a harmonized PPP Manual (2015) draft which will simplify the practice of PPPs in the country for the national and county governments. The public sector can tie this with the development of housing typologies and designs for down market urban housing which serves to reduce the cost of designing and hence making the low income urban households to have lower pricing of the finished product. Kenya should structure, negotiate and come up with workable PPP transactions and programmes through balancing the stakeholders needs and interest. Private entities are interested in bankable projects which have well laid down structures for entry and exit. They are keen on projects which can deliver profits at the end of the project development. The public sector on the other hand is vested with the responsibility of developing affordable and decent housing for citizens as per article 43 1 (b) of the 2010 constitution. Government then contracts the private sector to the development of down market urban housing and provides incentives and enabling environment for optimal performance, which makes them deliver and obtain their profits, while the public has a well housed nation. The Government Support Measures Policy (2018) seeks to establish by law, various incentives and support activities which will attract more private players in the development of infrastructure, which has faced a huge deficiency over time.

Development of PPPs may require the identification of PPP champions, pace setters, workable case studies and at the same time establish key performance indicators for all emerging PPPs in down market urban housing amongst other issues. The process of identifying the champions and pace setters has the effect of arousing

more interest in PPPs and hence creating more opportunities for financing and developing down market urban housing; which in turn jumpstarts the economy through creating backward and forward linkages. Parties should have clear roles and functions, which are evaluated and ranked on a timely basis. Application of PPPs should be done through various workable models and approaches like the joint ventures, turnkey, land swaps and a mixture of models all of which creates more opportunities for partnering between the public and private entities in the country. The country should not be limited to the conventional PPP types but can craft and customize international models to suit the local situation. Savings and credit cooperative societies can be used as an example of local PPPs arrangement where the land and savings owned by these groups can be leveraged through provision of housing infrastructure for enhanced housing outcomes. The PPP Act (2013) recognizes the need to apply many models which suit specific conditions in developing infrastructure in Kenya.

PPP is an idea which should be given the requisite attention and it is a sure way of meeting the housing demand in the country, given the many challenges associated with the public sector led housing development over the years. Since 1960's for example, the State Department for Housing Kenya has only produced 48,000 housing units, which means 872 housing units per year, against a demand of 250,000 housing units (Republic of Kenya, Ministry of Lands and Housing, 2015). There is need to simplify the PPP procedures and processes while developing standard housing typologies and designs, formulating adequate PPP financing models, standards, guidelines and manuals for the application of the concept. This will make it easier for citizens to adopt such standards and procedures for their own housing construction. Inherent challenges which face the application of PPPs in down market urban housing should be analyzed and adequate solutions found to make the concept applicable going forward. The existing laws and regulations should be amended and some created afresh to address the unique nature of down market urban housing; there is need to set up a housing fund which will finance down market urban housing, act as an off taker and aggregator of the demand and supply sides of the down market urban housing. Fourth, it was pointed out that there is need for heavy government involvement and engagement in providing social and physical infrastructure which acts as incentives for the developers. The developers are left with undertaking actual housing construction without having to factor in housing infrastructure installation. The involvement of public sector in the promotion of the application of PPPs is central to realization of enhanced use of the concept.

The country should identify down market urban housing PPP models which can work locally and make the sector achieve the ambitious targets under the New Urban

Agenda (2016), the Constitution of Kenya (2010), the Kenya Vision 2030 (2007) among other policy and international documents. There is need to utilize the Saccos method of delivering down market urban housing through government providing social and physical infrastructure to organized Saccos and accelerating the development of down market urban housing. The government can finance partly such housing cooperatives, provide guarantees to developers and amend the building codes to allow for utilization of local building materials in construction of down market urban housing. Sixth, the panelists noted that there was need for the government to incentivize the private entities to attract them to the construction of down market urban housing. The incentives should be structured in such a way that they address financial, legal, construction and materials, which have been found to be a great issue in construction of down market urban housing. the incentives should include creating an enabling environment in terms of financial, capacity, political, legal and regulatory environments and hence providing more opportunities for the economy in the construction of down market urban housing. The Kenyan government has enacted the Government Support Measures Policy (2018) to act as a framework through which incentives can be provided in the economy for optimum working of the private sector.

Conclusion

Based on the lessons and suggestions made in the application of PPPs in down market urban housing, it has been concluded that PPPs models are indeed applicable in housing. This is because PPPs have been shown to be more collaborative in combining the best of the public and private entities to develop down market urban housing. Applicability of PPPs is possible where government undertakes legal, regulatory, institutional and economic reforms to create an enabling environment for their application of PPPs. The application of PPPs addresses the huge backlog in the housing supply in Kenya. With the existence of PPP Act, 2013, regulations to favour the development of down market urban housing through PPPs; and adequate incentives structures for the private entities should be actualized. Provision of down market urban housing through PPPs makes partners to leverage the capabilities of each other while minimizing their weaknesses. This helps in delivering superior and quality housing units for the low income urban households. Many countries have been attracted to the application of PPPs in development sectors. According to the African Affordable Housing Institute (2018), many governments are abandoning the direct or government provider approach in housing development in favour of private sector led approach. The most viable and agreed upon strategy for private sector participation in infrastructure has been PPPs.

RECOMMENDATION

In line with the government of Kenya's big four agenda which includes housing development, the paper recommends that application of PPPs to meet the growing demand. The government will be expected to play a big role in promoting the application of PPPs through legal, policy and institutional arrangements. It must be willing to go beyond the laws and regulations already in place like the PPP Act 2013 to releasing strategic assets to the private sector for housing development. The public sector in Kenya for example controls a lot of land under which joint ventures and land swap models of PPPs for housing development can be done. The public sector must come up with adequate measures to incentive the private sector to perform the role of housing delivery to the citizens. The public sector can avail quality serviced land in appropriate locations which can be used for developing down market urban housing. The government in Ivory Coast allocated such land and saw housing units sell at US\$ 25,000; while Cameroon saw the houses developed under such appropriated land selling at under US\$ 40,000 (Affordable Housing Institute, 2018). The government should undertake adequate structuring, assessment and detailed contractual engagements with those private entities in the development of down market urban housing through PPPs. It should create an enabling environment for PPPs application for example through making PPP laws be responsible to down market urban housing PPPs. The existing laws can be amended and new ones created to address any implementation gaps.

CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

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