

Full Length Research Paper

Evolution of the public private partnership (ppps) and its application in down market urban housing in Kenya

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The State Department of Housing in Kenya puts the housing demand in the country at 250,000 housing units per year, while actual supply is 50,000 units p.a. This demand for housing has accumulated to 1.85 million units as at 2018. This has led to the growing proliferation of slums and informal settlements, with the Department showing that there are over 500 such settlements. This state of affairs has been partly attributed to under-investment in low cost housing by both public and private entities. Stakeholders have therefore recommended the application of Public Private Partnerships (PPPs), which increases the role of the private entities in housing production beyond the traditional procurement method. Under PPPs, the public sector cedes the duty of actual housing development and concentrates on creating an enabling environment for the private party to effectively and efficiently perform the function of shelter provision. In addition to creating an enabling environment, the governments undertake monitoring, evaluation, creation of standards and enforcement. This study utilized secondary review of the literature on the evolution on PPPs and focused group discussion with selected officials at the State Department for Housing in Kenya. The purpose was to juxtapose the secondary literature review on how the concept of PPPs has been appreciated as an alternative to the traditional procurement methods. It was found out that private participation in infrastructure development has evolved over time, assuming many forms like: contracting out, privatization and lately PPPs. Kenya has been applying PPPs since the liberalization of the economy in 1994, though there are were earlier applications of the concept. The country has used PPPs in the hard infrastructure sectors like energy and transport, but little success has been recorded in housing development. It was concluded that PPPs are applicable in down market urban housing in Kenya since the concept has been successfully applied in other areas. Through PPPs, a sector like down market urban housing can access more capital resources, technology, innovation, efficiency and effectiveness. The implication of this finding is that more down market urban housing can be developed to address the huge gap witnessed in Kenya.

Key words:Public private partnerships, public sector/government, private sector/private parties, down market urban housing, low income urban households, evolution.

INTRODUCTION

All over the world, it has been noted that market forces have failed to deliver down market urban housing without

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some form of government support. The envisaged government support comes through a variety of methods which has not been forthcoming due to many constraints (Moskalyk, 2008). At the same time, direct government financing to the housing sector or application of subsidies to the down market urban housing has been found to be unsustainable. The unsustainability of direct financing or subsidies is attributed to the growing decline of the public pulse as a result of slow growth of the economy and increasing demand for services. The inherent failure by the public and private entities working separately to deliver housing has necessitated the application of Public Private Partnerships (PPPs). PPPs have been embraced and recognized as the best alternative currently for the effective provision of down market urban housing. The wide recognition and acceptance of PPPs results from the fact that it operationalizes strategic partnerships between government, private sector and non-profit organizations. Studies have proved that the concept is appropriate in coming up with models through which down market urban housing can be developed cost effectively. Through such well-structured partnerships, complementary goals and objectives can be achieved through the application of innovative funding and tenure maximization mechanisms. Its application leads to maximizing the available assets and resources, adopting best practices between the partners and leveraging the total sum of the investments owned by the entities. Through PPPs, there is adequate and effective risk identification, costing and sharing as per the abilities of the parties in a PPP. It is evident that contributions made by each party may be higher than in normal cases due to the complicated structuring of the partnership. Despite this, the benefits at the end of the project execution are greater, more diverse in delivering unique and affordable housing products to the low income urban households (Kutana, 2017; UN Habitat, 2011; Mathonsi, 2012; Kungu, 2009). PPP concept is therefore the right mix of the government and private sectors in developing housing for the low income urban households.

The realization of the existing weaknesses were the actors to act alone has necessitated the application of strategic partnerships in delivering down market urban housing through PPPs. PPP arrangement brings on board the best strengths of the public and private players to deliver down market urban housing. The public sector will undertake the regulatory, creating an enabling environment and monitoring and evaluation of the housing projects developments. Through PPP arrangements, government is pre-occupied with setting standards and criterion for developing down market urban housing. The public sector then lets the private developers to undertake the actual project development. The process of government leaving the private sector to take the lead in housing development is in line with the enabling markets to work strategy of the World Bank (1993). The greater involvement of the private sector in

such functions as down market urban housing has been the practice in other countries like: USA, Canada, UK, Egypt, South Africa, Malaysia, Singapore, South Korea and China, among others. In these countries, there is active engagement of the private entities in service and infrastructure delivery. The application of PPPs in down market urban housing is in line with the Kenya Vision 2030 development blue print, the myriad of legislations like Urban Areas and Cities Act (2011); County Governments Act (2012); National Urban Development Policy (2015) and the Sustainable Development Goals (SDGs, 2015). The private sector is endowed with managerial acumen, innovation, technology, resource mobilization and application of the three E's of economy, efficiency and economy in the construction of down market urban housing in Kenya and globally.

Rationale for the involvement of the private sector in down market urban housing

The private sector has participated in the infrastructure designing, financing, construction and operationalization, including the development of housing since the advent of civilization. The traditional relationship has worked in two disconnected ways, where first the government finances such construction through budgetary allocations and the private sector undertakes the actual construction, operations and maintenance of such infrastructure. Housing development has been faced by many challenges like inadequate financing by the government and low participation of the private sector due to the risks and low profitability in such categories. Studies by Ong (2002), Freut (2002) and UN Habitat (2011) have showed the importance of applying PPPs in housing. Research on housing financing globally shows that an investment by governments on the sector ranges between 2 and 8% of Gross National Product (GNP), while a further 5 and 10% of GNP is dedicated to the flow of housing services. The low investment in housing goes against established fact that the performance of housing sector is intertwined with the nation's economy, be it real, financial and fiscal circuits. Studies have documented that China spends 6% of its GDP on housing development (ADB, 2004) while India spends 4% (Planning Commission of India, 2002). Despite these spending on housing development, these countries face housing provision shortfalls (Mayo and Shlomo, 1993). The housing financing problem is therefore more pronounced in other countries with lower allocations for the sector, hence the growing proliferation of slums and informal settlements.

PPPs have been embraced over time as a strategic approach for the construction of down market urban housing, due to the fact that the public sector is unable to adequately meet its demand acting alone (Ibem, 2010). The thinking informing application of the concept has been supported by many prior studies, example those

conducted by Ibem (2010) and Adegun and Taiwo (2011). These studies concluded that, PPPs have been used in several areas starting with infrastructures management and provision of down market urban housing services. Further, Abdul-Aziz and Kassim (2011) showed that PPPs have been effectively utilized in delivery of housing in many countries of the world; Mexico, Pakistan, Egypt, India, South Africa, Bulgaria, Russia, Thailand and United Kingdom. Under the Kenya Vision 2030, the government aims to provide 200,000 housing units per year by the year 2020 (Republic of Kenya, 2007; Kenya Vision, 2030). Delivery of the targeted housing units will be undertaken through a mixture of incentives and initiatives for urban areas which includes the application of PPPs (Republic of Kenya, 2007; Kenya Vision, 2030). The National Urban Policy (2015) of Kenya recommends the promotion and application of PPPs to expand housing delivery in urban areas. PPPs approach leverages on the arising advantages from such partnerships where government uses its revenue bases and the private sector its capital base in place of inadequate state resources to provide down market urban housing (Mohamed, 2017; Rondinelli, 2003; Buckley and Kalarickal, 2005). PPPs have been seen as implying a more fundamental shift to the reliance of markets to provide traditional government services.

The emergence of the application of PPPs in down market urban housing is rooted in the enabling markets to work approach proposed by the international financial institutions in 1993, more specifically, the World Bank. This approach proposed the shifting of the provision of down market urban housing from the governments to the private entities. The approach advocates for the governments to play a regulatory role or enabler function while leaving the actual production of housing to the private entities. The primary focus of the enabling markets to work policy has been to focus on ways through which institutions working together with private players can improve their operating efficiencies for the delivery of down market urban housing. The public sector should also make efforts to remove all the inhibitors for efficient housing development by the private contractors and other stakeholders on the demand and supply sides of the market dynamics (Kutana, 2017; Kungu, 2009). Application of PPPs has grown over time but research has found that PPPs have existed in various forms since time immemorial. This paper takes a critical look at the evolution of PPPs and its applicability in bridging the housing supply deficiency, and in particular as an alternative to the financing of housing development in the world.

Evolution of PPPs and its applicability in down market urban housing in Kenya

Many infrastructural projects concepts were fronted,

tested and utilized by older civilizations. This was made possible through technological innovations invented to solve longstanding tasks confronting humanity as time progressed. One of the challenges which have confronted states for a long time has been the rapid pace of urbanization, which presents the demand of many services, key among them housing. Urbanization has obligated governments to provide municipal services, which included housing, making authorities to scout for alternative solutions for infrastructural growth and development. Urbanization is one of the greatest civilizations to have occurred to mankind, and is ranked as the first characteristic of all civilizations in the world. It affected all the major kingdoms to have formed on earth. Empires and kingdom brought about the advancement in the clustering of human settlements, hence the competition for resource. Authorities developed some instruments to maintain a competitive advantage or edge over others. By the time of Akkadian empire of king Sargon in 2250 BCE, cities and major urban conglomeration in the world had grown to become states. This necessitated codification of existing laws, norms and traditions to guide developments, example the Code of King Hammurabi in 1790 BCE. It addressed modern contract issues, land rights, right to access of services. This time saw the development of finance and debt concepts, key in project financing, through which rich merchants offered various form of loans which made urban areas to grow exponentially. The financing, construction and development of public infrastructure were done solely by the state for a long time, through taxation, with the military, supervising the construction of projects. Slavery and forced labour were used for the construction of the large infrastructural projects by states of the early to those of the modern times. The building of the Suez Canal in 1860's, heavily utilized the forced labour obtained from fishing villages along the Red and Mediterranean seas (Hugh, 2014; Bonin, 2010). Through the careful application of PPPs, states are able to effectively utilize citizens' taxes and contributions to national development.

Labour markets developed around urban areas where infrastructure projects were being developed. This made it possible for the development and installation of water supply and sanitation systems in the urban households, a system developed by the Achaemenid Empire. The technology moved water through qanats (a system of subterranean galleries, dug at an upward slope into the rock systems). Polybius, a Greek recorded the existence of a royal decree, which provided that any private individual that dug and maintained a qanat was granted the rights to all accruing profits for five generations. The utilization of this system forms a reference to the private parties financing of public infrastructural assets; such participation of private entities had time limit and risk sharing contracts with the state. Available literature therefore shows that since the early times, there were

attempts at regulating the participation of private parties in infrastructure development, such that for example, Greek laws required owners of private wells to maintain them in good conditions, so as to be used publicly in cases of war. Greek had a decree providing for sinking of water wells where public wells were not found within a distance of 710 meters, an early form of PPPs (Hugh, 2014; Adam, 2010; Koutsoyiannis and Angelakis, 2003; Lightfoot, 2000; Goblot, 1979). The fact that early government utilized private entities to extent coverage of services should be a learning point to modern states as well.

Public private contracts have been shown to have existed as far as 381 BCE between the independent city state of Eretria and a foreign contractor (Chairephanes). The contract involved the implementation of engineering works to drain Lake Ptechai. The contract had all features of modern project finance, risk identification and apportionment was clearly spelt out. The arrangement contractually provided that the contractor would bear works expenses, and also pay the city (contracting authority), a lump sum of thirty talents. The private contractor was incentivized through grant of exclusive rights over the fields for cultivations, retention of the products realized from the reclaimed land for ten years, and exemption from payment of taxes. The contract safeguards included extreme sanctions to anybody who tried to cancel the contract (a form of guarantee to the private party), a feature of modern concessions. Concession contracts developed in the Greek legal systems were embraced by the Romans in accomplishing public works, which was later utilized in France, for over 2000 years (Bezancon, 2004; Knoepfler, 2001). These frameworks were used in the construction of canals and bridges in the 16th and 17th centuries in Europe, and in the 19th century, for financing, development and construction of railway lines, metro, water and power infrastructures. Affermage concessions (a service concession under which a private entity is not required to undertake a major capital investment on an infrastructural asset), developed in France in 19th century. The framework later spread to motorways, urban transportation systems, lighting, waste management and district heating facilities in the 20th century. It utilized “user pays PPPs”, and the “government pay PPPs”, with the latter becoming dormant in the late 1980s and 90s. The fortunes for PPPs changed in the 2000s, where more of the government pays PPPs were utilized to fund some critical infrastructure. In the 19th century, railway companies in the UK and US were privately owned but served public interests (Hugh, 2014; Verma, 2013; European PPP expertise centre, 2012).

The success of the private financing and development of infrastructure continued in other civilizations. Poor people living in Roman cities were provided with a wide array of public goods and services, like public baths, public squares, parks and forums. Toll roads and bridges

which were privately financed and operated as evidenced by the writings attributed to Greek Historian and Philosopher, Strabo (63 BC to 21 AD), in Geographical, showing Caesar Augustus ordering for operationalization of tolls on Little Saint Barnard Pass. The Roman Empire consuls like Julius Caesar used their own resources to maintain roads under their areas of jurisdiction, a form of PPP. Available documents show that citizens of Roman Empire offered gifts to fund the financing and construction of infrastructure like bridges or public buildings, while the popes funded the rebuilding of Rome’s aqueducts. Major reforms in the infrastructural management and construction were introduced by Caesar Augustus and in the water and sewerage services. Through these reforms, private entities contributed some incomes through their water and sewer connections to add to the revenues from taxation for public works functions. The empire also had private citizens who carried postal mails through the state roads, all of which are forms of PPPs. Urbanization rates increased greatly during the Roman Empire with about 14% of the people in the Italian peninsula living in urban areas by the year 150 BCE. The urbanization rates in the empire compares to the measured degree of urbanization in the year 1800. Universal urbanization rates remained below 20% until after the 1850s which increased the demand for services. The increased demand for services from the public sector necessitated the need to look for alternative ways of funding the same (Hugh, 2014; Verma, 2013; De Luca and Lorenzi, 2013; ECK, 2000). Authorities have had to experiment and test various models of service delivery. Most of the models have involved the state and private entities working together in some agreed arrangements.

Around 1000 CE, Europe started undergoing a shift in urbanization with new and old cities in Italy and Flanders developing beyond the imagination of authorities. The city of Venice used the proceeds of trading with the east including China, to build an extra ordinary city in the middle of a lagoon. The city used the method of land reclamation projects which utilized dykes and drainage infrastructure, which made more capital accumulation possible, and making a new merchant class to grow (Pirrene, 1956). Toll collection (teloneum) on the roads and canals was re-introduced in cities for urban areas revenue, and this private and public wealth was instrumental in construction of public infrastructure and great cathedrals of Europe which flourished in the 12th to 16th centuries, a form of PPPs. The English Crown in 1299 financed from their own sources the construction and development of the Devon silver mines, because the various European sovereigns had from 16th and 17th centuries granted that various and diverse public works services and projects like in areas of public transport, waste collection, roads construction and paving, public lighting programmes, canals construction to be done through privately financed methods to relieve the

government of the financial burdens to do so. The construction of the London's Great conduit undertaken in 1237 relied on some grant of land and springs from the king and some contributions from wealthy merchants, while merchants in cities like Amiens contributed in the building of conduits and in return, were accorded some privileges, with the town councils of cities like Paris, Dublin and Southampton using partnerships with local monks to develop their water supply systems, hence earliest forms of PPPs (Gandhinagar, 2015; Hugh, 2014; European Commission, 2010; Alabama University Transportation Centre, 2010; Magnusson, 2003).

From the 1500s onwards, private investments as compared with public funding started to play an important role in the infrastructure financing and development world over, which has since been actively undertaken for more than 100 years. The UN has pointed out that many public facilities which includes harbours, public baths and markets were developed in the ancient times (Gandhinagar, 2015). The private sector in the Great Britain undertook a major leading role in infrastructure financing and construction, a role which was emulated by other private entities in other countries. This greater role for private entities coincided with the age of the European voyages, and the period saw the formation of the earliest known joint shareholding corporations in the world, for trade with the East Indies and beyond. The New River Company formed in 1619 utilized adventures shares from private capital for the building of a 60 km canal to carry and supply additional fresh water to the city and thereafter distribute it through wooden pipes, the Royal Charter made it easier for such companies by appropriating land for water projects and establishing monopolies to deal with water supply in the city, hence these were PPP projects. Tolls were set through an Act of Parliament in 1776 and remained unchanged for over 200 years, but were eventually removed in 1950 due to many factors which played against their continued application. France used similar methods like tolls for the financing and construction of bridges and other infrastructure before and after its revolution in the year 1789. The agrarian revolution in Britain created another system of financial and institutional innovative tool called the turnpikes, which enabled the creation of financing, maintenance and improvement of roads, predecessor of the industrial revolution. Turnpike Act came into effect in the year 1663 for turn-piking forty-eight kilometers of the Great North Road in Huntingdonshire, turnpikes allowed private parties to promote a new trust for public projects, because trustees using the turn-pike, seen as "the gate which blocked the road till tolls were paid", bought property along tolled roads to either widen or make diversions on the existing roads, with permission to borrow funds against future toll revenue projections. Independent privately owned companies used their capital to build a network of canals (6400 km) through piecemeal construction in what became known as "canal mania" between the years 1793 and 1820. Ports also

attracted private financing because when the commercial interests in shipping industry grew rapidly in the 18th century, it enticed private individuals and companies with a motive of raising additional private financing for commercial ports and harbours through listings in the London stock exchange. Railway construction in the 17th century in UK and later Argentina, Uruguay and Brazil were privately built by developers from Britain and France, with toll roads being developed in the USA from 1780 to 1900 through private funding. And at the beginning of the 19th century, all major water projects in the US and also electricity infrastructure in the countries of Chile, Brazil and Mexico were privately funded (Department of Economic and Social Affairs, 2016; Gandhinagar, 2015; Hugh, 2014).

The importance of the private capital in fuelling infrastructural growth was expounded further in the 19th century. This was because of the prevailing policies of laissez faire, emerging societal changes, rapid urbanization and the expansion of the markets. Urban authorities were the major players in service provision though and they did sometimes used concessions. In the 19th century, the concept of municipalisation reverted the private led delivery of services to the urban authorities or the public sector. It was driven by the emergence of socialist movements, where it was thought that some goods and services were either too profitable or too critical to be left to the private hands. This thinking was also supported because the century saw the rise of many wars and economic recessions, making a case for strong national ownership of assets and facilities, alongside stronger regulation. Between 1914 and 1945 two major world wars led some countries to come up with the anti-trust laws and the hyperinflation occasioned by the great recession of 1929 made many private companies bankrupt. This slowed private expansion plans and hence forcing governments to intervene. This led to nationalization of critical assets and services, in the same length other government control and initiatives were embraced. The unwillingness of countries to increase tariffs and the unacceptance of foreign investments, led to state provision of goods and services to become the dominant model, leading to led to emergence of natural monopolies. The US under President Roosevelt came up with the "New Deal strategy" to stimulate infrastructural development, bring more investments, create a positive jump to the measures necessary to bring more jobs to the economy, catalysing more of growth and prosperity. After the World War II, the Marshall plan was critical in rebuilding the shattered infrastructural assets of Europe, which was a form of PPPs. Nationalization and stronger regulations failed miserably, leading to a reverse to privatization and PPPs in many countries in the 1970's and 80's (Ribeiro and Dantas, n.d; Hugh, 2014; Verma, 2013; Millward, 2005; Friedlander, 1996; Klein and Roger, 1994).

From 1945, provision of infrastructure including housing was solely run and operated by the state. This however

changed in the 1980s with the United Kingdom (UK) being in the lead. This reversed the role of the public sector from being infrastructure assets owner to a regulator and a contracting authority. The public sector devised new systems of regulations which came with incentives, which made it possible for increased investments in infrastructure, better management and improved quality of services. It resulted in more efficiency gains occasioned by increased competition and effective regulations in service delivery. The building of the mobile phone networks, through private sector financing in 1973, Hounslow Heath Aerodrome in London, success, later saw Britain's airports privatized in 1987. The greatest private capital investments in infrastructure have been undertaken in the roads construction either through direct state construction and development or through the concessions (Ragazzi and Rothengatter, 2005). Since 1924, public motorway started in Italy, with 40 kilometers which was privately funded using tolls, because the Italian government had a privatization policy (Bel, 2011). Germany followed Italy in privately funding roads construction and completed the first road between Cologne and Bonn in 1932 and by 1939, which were privately. Between 1957 and 2010, a total of 68,000 km of roads had been done in Europe, mostly through private financing of infrastructure. It has since been the duty of countries to experiment on various forms of PPPs arrangement, since the 1990's, in the financing of roads and other connected infrastructure, a model which has since become very popular across the world. This is because of the inadequate financing from governments, which resort to PPPs to fund more projects. This has been highlighted by the fact that 662 transport related projects, valued at US\$ 135 billion between 1990 to 2001, were delivered through PPPs (Ribeiro and Dantas, n.d; Hugh, 2014; Parker, 2012; World Bank, 2002; Newbery, 2002).

It can be seen that the provision of infrastructure including housing development has evolved over many years. This has been made possible through the creation of institutions to operationalize the legal and contractual obligations in financing and management, creation of the concepts of rights of way and public land. It has further been propelled by the acceptance of necessity to pay for services offered and ensuring that contracts are honoured. Throughout history, the role of the state as a regulator, contracting authority and major investor in the provision of infrastructure and services has not been in dispute. It has also been shown never the less that private sector involvement in infrastructure has in some instances slowed down but also, it has been critical in bringing the much sought innovation, risk taking and maximization. This has made the sector acts as a catalyst for efficiency and effectiveness in service and infrastructure delivery. Its role in funding down market urban housing and associated infrastructure has been growing since urbanization started to grow. There is need for the development of a model which would fit private

parties' participation in the financing and development of infrastructure, and this model has been privatization and PPPs. By 20th century, the concept of PPPs was widely accepted. It has been learnt throughout the evolution that improvement and expansion of urban infrastructure including housing is premised on three issues: putting in place mechanisms which brings improved governance and resource mobilization strategies for financing the housing requirements. This can be done effectively through mobilization of private sector financial capabilities. There is need to improve the efficiency of government investments and utilization of the resources resident in a country and utilization of strategies which can focus on the citizen's service delivery measures to guarantee maximum benefits. PPPs have been broadly accepted as being able to meet the three issues key to revitalizing the global ability to finance infrastructure and service delivery, vital in addressing the prevailing huge housing deficits. The US invoked such partnerships to address low income household's development by working with the private sector in the 1960's (Gandhinagar, 2015; Hugh, 2014; Mela, 2012; Moszoro and Magdalena, 2011; OECD, 2008).

In the 1980's, many public sector bodies used two options as means of private sector participation in the management and development of infrastructure facilities. One was through total privatization of public facilities while the other was the PPPs arrangements method (Ford and Zussman, 1997). Application of PPPs gained traction over privatization which involved heavy subsidy from the public coffers raised through taxes. The application of subsidies for the low income earners was politically contentious and incorrect. Many governments were cautious not to subject some facilities and services to privatization, citing reasons like national security considerations. This state of affairs made PPPs more popular option for countries as compared to privatization (ACCA, 2012; Abdul, 2007; Gunawansa, 2000; Savas, 2000). In the African continent, utilization of PPPs as a development financing strategy and approach started in the 1990s, though with mixed results. The strategy has worked in sectors like: telecommunications, electricity and water. With this success it has been expanding to other areas like social infrastructure including health, education, garbage collection and agricultural extension. South Africa leads in its application with over fifty such partnerships programmes. It has applied PPPs in developing and or implementing projects at national and devolved units, with over three hundred projects having attained a financial close between 1994 and 2005 (Ong'olo, 2006, Saila, 2005).

Figure 1 shows the spectrum of the public and private sector participation in infrastructure, with each level showing increased level of private sector participation.

METHODOLOGY

The paper adopted secondary review of the existing literature on

Public Private Partnership context

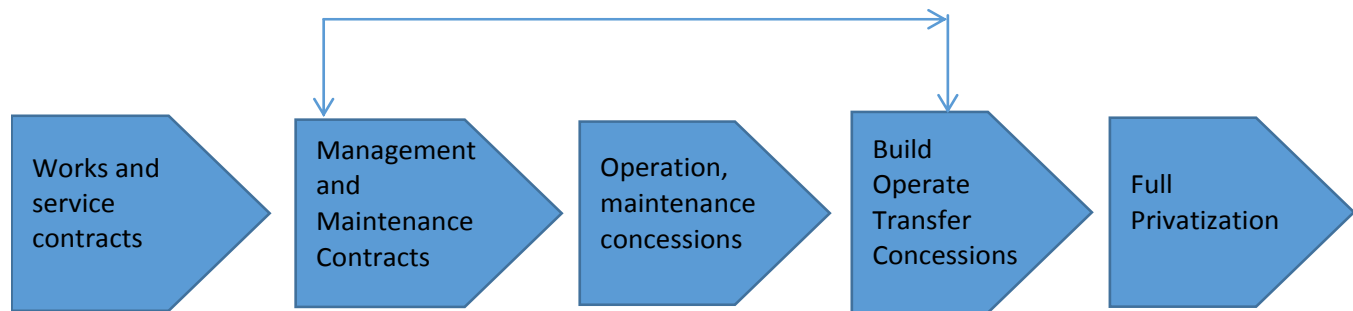


Figure 1. The extent of the private sector participation in PPP projects for down market urban housing
Source: Author (2019) with adaptation from Gandhinagar, 2015.

the evolution of PPPs and also used focused group discussion with officials of the State Department of Housing in Kenya. This was instrumental in looking into how the concept of private sector involvement in the development of infrastructure, including down market urban housing. A focused group discussion with 22 officials was done against the backdrop of the secondary data on how PPPs have evolved over time. This group explored the benefits, challenges and opportunities presented by the PPP mode of procurement in the country. A review of the Kenyan PPP legal and regulatory environment was also looked at alongside the global and local picture of the applicability of PPPs. This review showed that the country has joined the rest of the world in accepting done the applicability of PPPs in the development of infrastructure, including down market urban housing.

RESULTS AND DISCUSSION

It was found out that 81% of the officials comprising the focused group discussion were aware of the benefits and opportunities brought about by PPPs. They observed that these could be extended to the construction of down market urban housing in Kenya. They observed that the State Department has attempted to use PPPs in the construction of civil servants housing schemes in Nairobi since 2013. The government has also committed to use PPPs in housing construction in the Vision 2030 and under the Big four agenda items (2017 to 2022). They noted that the application of PPPs has evolved in the country to a point where it is highly relied upon in other sectors of the economy, hence the same should be true for housing. The government has created an enabling environment for application of PPPs. This was started by the enacted the enactment of the PPP Policy, 2011, which established the grand vision of the state in utilization of PPPs. This gave room for the enactment of the PPP Act in 2013, which established key institutions like PPP unit, PPP committee of cabinet and the procedures for its application. It gave the developers and stakeholders clarity in applying PPPs and hence the confidence in the system. Kenya has since increased its uptake of PPP projects with the passage of these laws

and other regulations. This has largely been driven by the huge demands for infrastructure and socio-economic political development envisioned under Vision 2030 development blue print.

The PPP unit in Kenya data base shows that twenty-five PPP projects with a total investment commitment of US\$ 9.3 billion attained a financial closure between the year 1990 and 2014. This is supported by the fact that currently; the country has 76 projects categorized as national priority which have been approved by the PPP committee established under the PPP Act, 2013. The projects will keep increasing as others attain the necessary approvals as per the Act and procedures, the majority of the projects so far lined are in transport, energy, education, housing and health (PPP unit Disclosure Portal, 2019). The illustration of projects under PPPs in various stages in Kenya is given in Table 1.

The growing evolution of the applicability of PPPs in the development of infrastructure, including down market urban housing in Kenya is evidenced by the fact that the 2018/2019 budget statement for Kenya, heavily proposed to utilize PPPs to deliver a variety of infrastructure. The country is desirous to use PPPs in the development of roads through the annuity programmes, Lamu coal power, Geothermal power in Menengai and the university hostels programmes in Kenyatta University, Embu, South Eastern, Moi among other projects under PPPs. The Ministry of Transport, Infrastructure, Housing and Urban Development is in the process of developing 10,000 housing units in Nairobi city county through PPPs, and some 4,500 police housing units through privately initiated PPP process. This shows that PPPs in down market urban housing too can benefit from this financing framework with some adjustments and structuring going forward (Republic of Kenya, 2018). This assertion was supported by focused group discussion which showed that 71% of the institutions in the Nairobi Metropolitan region (comprising of 5 counties surrounding Nairobi) was actively using PPPs to deliver a range of services. 90.5% of the members of the focused group discussion

Table 1. PPP projects at various stages after the PPP laws were established.

No.	Stage of the PPP project	No. of national government projects	No. of county government projects	Total number of projects per stage
1	Projects at financial close (construction stage) example Lot 33 of road annuity programme, development of the Lamu – Garissa – Isiolo highway	1	0	1
2	Projects at commercial close (PPP contracts signed) example Likoni cable car	6	0	6
3	Projects at contract negotiations (contract not yet signed) example the construction of 4,685 police housing units; Moi University, Embu university, South Eastern Kenya University student's accommodation hostels with a combined bed capacity of 24,400.	10	0	10
4	Projects in tender/procurement example Nairobi- Nakuru –Mau summit road	6	1	7
5	Projects ready for tender example Nairobi Mombasa dual carriageway toll road project	4	1	5
6	Projects with completed feasibility studies reports, pending submission for approval example development of Murang'a water supply project	2	1	3
7	Projects at feasibility study stage (ongoing studies) development of the 300 bed capacity hospital at KU	13	1	14
8	Projects at proposal stage example the University of Nairobi student hostels	18	7 example the Nairobi city county solid waste management project; and the development of Muguga Agri-city by Kiambu county	25
9	Projects awaiting guidance from contracting authority example Nairobi Bulk water supply	5	0	5
Total		65	11	76

Source: Kenyan PPP unit portal, 2019 (www.pppunit.go.ke).

noted that PPPs is a critical concept for accelerating development going forward.

According to the PPP Unit of Kenya, the major models which have evolved over time in the application of PPPs includes: Concessions, management contracts, land swaps, output based performance contracts, Build Own Operate and Transfer (BOOT), Build Operate and Transfer (BOT) or in some cases, models were mixed to

achieve desired results. These models are backed by the PPP Act of Kenya, 2013 and are based on the sector and the specific needs of the contracting agencies. Concessions were found to be the oldest models of PPPs, which were more applicable in the roads and energy sectors of the economy. The evolution of the applicability of PPPs has made the country to develop appropriate institutions to manage PPPs like the PPP unit

based at the National Treasury, which acts as a technical advisor of contracting authorities, the PPP committee made of the cabinet members who approve PPP projects, the PPP nodes based in the contracting authorities, who prepare and submit PPP projects for consideration by the PPP unit and PPP committee (PPP Act, 2013). Kenya has made the right steps in the application of PPPs in down market urban housing though some steps needs to be taken for the concept to be more appropriate for the sector. The existing PPP laws may need to be amended to make them fit the sector, more housing regulations will need to be enacted to create housing funds, housing PPP guidelines and procurement of down market urban housing as a special good through PPPs.

According to the focused group discussion, the development of down market urban housing should use diversified models, or a mixture of such models. These include land swap, cooperative model or the joint venture approach to developing housing for low income urban households. They noted that Kenyan public institutions and the government have large tracts of land which can be used under a land swap deal to develop housing units. A developer can be allocated land on which to develop low income urban housing units in exchange for highly priced land in other areas through which they can recoup their investment. The government can also undertake a joint venture with well-financed private entity, where the public sector contributes land and the developer brings in capital and expertise for housing development. The well entrenched cooperative model can also be used where low income urban households can join hands to save some money, contribute labour and uptake of completed housing units. The government can undertake installation of housing infrastructure-sewer, water lines, access roads and electricity connection and part financing of the project to deliver down market urban housing. A private developer can be brought on board to undertake construction of the housing units. The developer should undertake this exercise while applying new technologies in housing development, efficiency, effectiveness and innovative housing designs and construction methods, possible under a PPP.

Conclusion

Participation of the private players in the development of infrastructure has been shown to have been preceded by such sectors which had the necessary resources. Engagement of the private sector in the development of infrastructure is an age old practice which has since evolved to cover many sectors of the economy. Private players in Kenya have the necessary qualifications and capabilities through which they can undertake the construction of down market urban housing, if well facilitated by the public sector. The application of the

targeted incentives, necessary legislation, enabling environment and setting of standards by the government as has been done since times immemorial. The enabling environment greatly motivates the private entities to partner with government in developing housing for low income urban households. The public sector should cede the role of actual provision of down market urban housing as it has been shown throughout history that it has performed poorly on this score. Public sector is best in setting standards, regulations, laws and monitoring the implementation and compliance, functions which it must be left with under a PPP framework.

The paper recommends the application of PPPs in down market urban development in Kenya, which has experienced huge backlogs, which cannot be addressed by public sector alone. Application of PPPs will bring about capital, technology, innovation, effectiveness, efficiency and economy in the production and development of housing units to cater for the low income urban households. The governments all over the world have huge unutilized assets like land and old estates, which can be redeveloped or new houses constructed on such invaluable assets. Compared to the traditional approaches of procurement where project activities are given out to contractors at each stage, PPPs bundle the services related in developing housing units into one and allocated such activities to a developer. This has the effect of invoking whole life cycle concept into projects. The developer will devise ways of making profits through savings, which becomes the single most motivation for innovation and efficiency in asset utilization and project development. Development and construction of housing units require the most up to date technologies and innovations in terms of capital mobilizations, design, construction, maintenance and operationalization attributes which can be realized through private sector working together with public entities in a well-structured PPP programme.

CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

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