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Solving the House Deficit Problem in Kinshasa by Building Affordable Houses Through the PPP Project Delivery



Solving the House Deficit Problem in Kinshasa by Building Affordable Houses Through the PPP Project Delivery

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Abstract

Purpose: The introduction of the Public-Private-Partnership (PPP) in the delivery of low-cost houses in Congo is a recent phenomenon. The article will investigate the factors behind this new strategy of building affordable houses and try to establish how PPP can contribute to better housing for the residents of the most populated city of Congo (Kinshasa). The study focuses on the factors contributing to the increasing demand for the Public-Private-Partnership in the construction of affordable housing projects introduced by the Government.

Methodology: For us to obtain the perspectives of key participants in the public sector dealing with the delivery of affordable housing projects in Kinshasa, an in-depth semi-structured interview and survey were conducted. This method combines qualitative and quantitative data collection techniques

Findings: The result of the analysis shows that there are four main reasons for this increment: The lack of public resources, the high demand for low-cost housing, the Lack of qualified construction workers, and the lack of the private sector's interest to invest in social housing.

Unique Contributions to Theory, Policy and Practice: The challenges of delivering low-cost house projects are numerous. The challenges are divided into different categories: political and economic, Governance, international forces, administration, financial resources, material resources, management practices, technical, and local external pressures, and natural forces are some of the issues that need to be addressed. While politics and governance, administration, financial and material resources, local external pressures, and environmental forces are all important, the performing organization faces external problems, as well as management and technical challenges.

Keywords: Public-Private-Partnership, Affordable housing, residential house projects, Kinshasa, D.R. Congo



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Background information

The Public-Private-Partnership is a new form of cooperation between the public and private sectors (African Development Bank. 2017). The main goal of this partnership all over the world is to actualize public construction projects with the full participation of the private sector. This has been adopted in D.R. Congo in the sector of residential buildings and Africa at large. Some factors that have contributed to the success of this partnership in D.R. Congo are:

- 1) The government has been able to build more than one million houses in just three years, which has not been achieved by any other country in Africa (Democratic Republic of Congo: 2013-2017 Country Strategy Paper, 2013).
- 2) The Population has gladly welcomed these new homes as they are better than their old ones.
- 3) PPPs have helped to create jobs and improve living conditions for many people who were living in poverty before.

The result of the implementation of PPP in Kinshasa has shown that the private sector can deliver services more efficiently than the public sector. PPP also helps governments to keep up with the increasing demand for social services and infrastructure. However, there are some risks associated with this form of partnership, such as corruption or lack of transparency.

Looking at the current residential sector where PPP has been implemented, we can boldly conclude that PPP has proven to provide a strategy that invests in the construction industry of D.R. Congo by providing financing, expertise, and services to help the country develop its infrastructure industry rapidly. The PPP model can be applied to any country that needs to develop its infrastructure quickly and efficiently (Ahmadabadi AA, Heravi G. 2019). Today, through the PPP model the construction industry in the Democratic Republic of Congo is booming. The government has made it a priority to improve the country's infrastructure and this has led to an increase in projects for construction companies. Nevertheless, several challenges have been preventing the industry from reaching its full potential. One of these is a lack of skilled labor in the construction sector. The construction industry is one of the sectors that has been most affected by the conflict in D.R. Congo. The country has an estimated annual need for \$5 billion worth of construction projects, but it is unable to finance them due to its economic situation and instability in the country. The public-private partnership (PPP) is a model that aims to attract private investment into infrastructure projects through a public-private partnership with the government and other stakeholders. This type of partnership aims to alleviate some of the burdens from the State's budget, which is not enough for such large investments. Because of the housing shortages that many countries confront (Asunka J. 2016), affordable residential initiatives have become essential. Housing deficits are substantially larger in developing countries, such as African countries (Acheampong E. O & Sayer J. 2018). Due to financial constraints, many governments have changed to private-public partnership (PPP) arrangements to address accommodation issues



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(Asang, G. & Sonia F. H., Lovleen B. 2012). Across many African nations, such as D.R. Congo, a public-private partnership (PPP) is seen as the only way to produce low-cost accommodation projects (Babatunde S. O & Perera S. 2017).

D.R. Congo, a third-world country with public-sector rental housing challenges, is the subject of the research. Available research indicates that D.R. Congo, like most developing countries in Africa, has a housing deficit, which is growing especially in Kinshasa. The accommodation crisis is predicted to be more than one million units, culminating in many citizens sleeping in kiosks, tents, containers, storefronts, offices, and streets, particularly in the urban city of Kinshasa, and Lubumbashi (Dunia Z. & Francois B. 2007). The available houses are mostly held by private individuals and housing estate businesses (World Bank 2017); as a fact, they are really out of reach for the general public. However, other West African nations like Ghana where residential property development projects are being implemented through public-private partnerships (PPPs) (Kwofie T.E & Afram S., Botchway E. 2016), have experienced several obstacles, including entire, complete disengagement, cancellations, budget overruns, and investor discontent (Osei-Kyei R, Chan APC., Dansoh A. 2017). Nevertheless, little of it is known about the development's unique issues, which have resulted in losses (temporary or permanent discontinuation, delays, cost overruns, and shareholder unhappiness). Furthermore, we believe that the situation in these West African countries is a representation of the situation in Central Africa and several emerging economies engaged in comparable projects. As a consequence, these conclusions will then have ramifications for not just the researchers, professionals, and policymakers engaging in residential projects in Congo, but for neighboring emerging economies confronting comparable issues.

Research Method

This research uses a mixed-methods approach to data collection that includes semi-structured interviews and questionnaires. This method combines qualitative and quantitative data collection techniques (Osei-Kyei R., Chan APC. Dansoh A. 2017). The assumption is that since they are directly involved in the delivery processes, they will be able to offer direct and rich data sources, which will improve data reliability. Since this is a specific project (affordable housing) being delivered by specific contractors or organizations, all the employees and employers of the organizations were targeted. After following all the protocols, the individuals were invited to participate in the processes by the HR departments of the various organizations, through an official letter from the Ministry of Labour and Employment. By repeating and rephrasing the questions numerous times, interviewees were asked about the obstacles they experience in the construction of affordable housing. Sixteen (16) categories of people were approached thus: four (4) PMPs, four (4) Contractors, and Four (4) Government officials were among the interviewees, and only those with the necessary knowledge were solicited.

Table 1 Government officials/ Clients Interviewee profile

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Participants	Age	Number of years in the present position	Number of years in project delivery	Sector Operation	of
Director of Projects: G1	55	5	20	Public Private	&
Project Coordinate: G2	45	3	10	Public	
Facility Manager: G3	42	3	9	Public	
Consultant: G4	55	23	32	Public Private	&

Table 2 Project Managers (PMPs) Interviewee profile

Participants	Age	Number of years in the present position	Number of years in project delivery	Sector of Operation
Project Consultant: P1	60	15	32	Public & Private
Architect: P2	40	10	15	Public
Civil Engineers: P3	57	20	30	Public
Quantity Surveyors: P4	55	30	30	



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		Public Private	&

Table 3 Contractors

Participants	Age	Number of years in the present position	Number of years in project delivery	Sector Operation	of
CEO: C1	64	36	36	Public Private	&
Administrative Directors: C2	52	15	20	Public Private	&
Office Managers: C3	35	7	5	Public Private	&
Director of Projects: C4	45	10	20	Public Private	&

The interviews were performed using a thematic data analysis strategy, with Braun and Clarke (2012) recommending a six-stage approach for this study. At the end of each day, each interview



was transcribed and entered into NVivo12, where the challenges reported by the participants were assessed. The researchers read the text line by line to ensure that no crucial information was overlooked during the coding process. The node/code that best expresses the information in the evaluation was then assigned by the authors. This ensured that identical concepts and statements were coded in the same way and assigned to the same codes. The NVivo program was used to highlight keywords and phrases. The themes were checked numerous times to ensure that the data patterns were consistent. Each author did their review, and if there were any disagreements about which codes should come under which subject, each author had to meet to resolve the issue. The semi-structured interview segment of this study outlines the key obstacles faced by the Congolese public sector in providing affordable housing in Kinshasa through public-private partnerships (PPPs). A survey with the highlighted issues as factors on a 5-point Likert Scale was conducted. Individual challenges reported by respondents were used to generate the scale items (variables). Through gatekeepers and professional survey enumerators, 500 questionnaires were sent to persons within the participating audience, with 400 usable beings returned for study. This took a very long time, due to the covid-19 outbreak at the time, most companies were struggling to keep up with their personnel, and the gathering of the data took over 28 weeks, from September 2021 to April 2022. The participants were asked to rank the issues in order of importance based on their previous experience with the affordable home development project in Kinshasa. The goal of the survey was to compare the most important categories of difficulties highlighted in the in-depth semi-structured interview to reinforce our qualitative data. To do so, a descriptive analysis was performed on the usable returned survey using IBM SPSS Version 20.0, as shown in Table 4. This was done to compare the most important issues among the nine linked challenges

Background Information

Males made up the bulk of survey respondents (181), accounting for 70.4 percent of all construction workers, with the majority being between the ages of 30 and 55. The full background information, as well as the findings of the Ipsos MORI interviews, are detailed in Table 4.

Table 4 Descriptive analysis was performed on the usable returned survey using IBM SPSS Version 20.0

Variables	Frequency	Percentage
<u>Gender</u>		
Male	290	72.5
Female	110	27.5
Age group		
Less than 30		



30-40	137	34.25
41-50	200	50
51 and above	63	15.75
Region		
Gombe	120	30
Ngaliema	170	42.5
Lemba	2	0.5
Limete	80	20
Matete	8	2
Tshangu	3	0.75
Ndjili	1	0.25
Mont Ngafula	4	1
Kintambo	3	0.75
Kasavubu	2	0.5
Kinshasa	7	1.75
Position at work		
Directors	10	2.5
Senior Managers	90	22.5
Junior Managers	200	50
Supervisors	70	17.5
Subordinates	30	7.5
Category of Respondent		
Governments/Clients	260	65
Project Managers	100	25
Contractors	40	10
Years of experience in current position		
1-5 years	30	7.5
6-10 years	110	27.5

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11-15 years	20	5
16-20 years	40	10
21-25 years	200	50
Years of experience in the construction industry		
1-5 years	20	5
6-10 years	229	57.25
11-20 years	140	35
21-25 years	31	77.5
Total		
	400	100

Result and Discussion

The result shows that the main factors causing the increasing use of PPP in the delivery of affordable houses in the D.R. Congo can be categorized into eight (8) different factors which are:

- ➤ Political and administrative issues
- ➤ Non-compliance to Contract agreement/ International external factors
- > Administration
- > Financial Support
- > Management Practices
- > Technical factors
- ➤ Local external factors
- Natural factors

Table 5 Descriptive analysis and Reliability

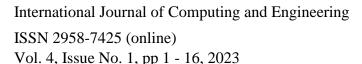
Variable	Mean	SD
Political and Governance (α = 0.853, Mean= 4.367, SD =0.063)		
Lack of government commitment to the project	4.475	0.805
ineffective political leadership	4.393	0.732
political interference	4.366	0.775
lack of continuity by successive governments	4.409	0.791



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starting more projects than available funds	4.307	0.807
<u>Administrative</u> (α=0.727, Mean=3.962, SD=0.800)		
Lack of transparency in procurement processes	3.611	0.958
Lack feasibility studies	4.226	0.827
Poor communication among stakeholders	4.202	0.804
Bureaucracy	4.113	0.809
Lack of transparency in project monitoring	4.191	0.909
Political delays	3.767	1.031
Political corruption	3.619	1.010
<u>Local external forces</u> (α =0.737, Mean =3.357, SD=0.081)		
Lack of user involvement	3.339	1.071
Opposition from pressure groups	3.339	1.030
Resistance from the local community	3.280	1.062
Court injunction or legal suit and land litigation	3.471	1.020
International forces (α =0.699, Mean=4.276, SD=0.020)		
Private partner withdrawal	4.265	0.820
Withdrawal of project funding by private international partners	4.269	0.787
Conditions set by foreign partners	4.296	0.814
Management (α=0.668, Mean=3.477, SD=0.062		
Lack of planning	3.525	1.057
Lack of monitoring	3.494	1.016
Lack of supervision	3.502	1.108
Inadequately skilled labor	3.385	1.150
<u>Technical</u> (α=0.617, Mean=3.374, SD=0.043)		
Scope change	3.385	1.005
Wrong project management technic/framework/models	3.360	1.043
Adapting to the PPPs model	3.420	1.028
Inadequate use of modern technology and innovation	3.315	1.35





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Financial Resources (α=0.605, Mean=3.593, SD=0.008)	3.315	1.314
Inadequate support from local financial institutions		
Inadequate support from international Financial Institutions	3.588	1.058
Material resources (α =1.000, Mean =3.572, SD=0.990)	3.599	1.100
Inadequate materials and equipment		
Natural forces (α=0.718, Mean=3.058, SD=0.137)	3.572	0.990
Bad climate		
Flooding	2.961	1.265
	3.156	1.271

Descriptive statistics and reliability

Table 5 shows the reliability and descriptive data for the questionnaire that was given out. Cronbach's alphas were higher than 0.6 in all nine thematic categories, which is recommended for exploratory research (Feng, Zhang Y., Zhang S., Song J. 2018). Individual Means were calculated by adding up each respondent's ranks for each question and dividing by the total number of respondents.

For politics and governance, international forces, administration, financial resources, and material resources, a mean of about 4 (agree) was found in Table 3. Management, technical, local external factors, and natural forces difficulties all received lower scores.

Discussions and Implications of the result (Policy suggestions)

Challenges facing the Congolese affordable housing projects

According to the findings, the affordable housing project delivery sector faces twenty problems. External issues include those dealing with politics and government, administration, financial resources, materials resources, local external pressures, and natural factors, whereas internal challenges include those connected to management and technology.

Kinshasa's affordable housing project is a public-sector initiative with direct government engagement, as the project's success could determine the government's political future. In Africa, as in many other developing nations, direct government intermediary responsibility for public sector project execution exists (Janssen R., Graaf RD., Smit M., Voordijk H. 2016.).

The politicization of projects has become commonplace in developing nations (Heidi P. 2008.), and this could pose a barrier (or an opportunity) for project implementation. Because the affordable housing project is being delivered through a public-private partnership, direct political



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participation in the implementation phase is likely to be low. The findings, on the other hand, reveal that the government is not only involved in the project's inception but also interferes with its execution.

Other studies in Nigeria, Ghana, and Malaysia have found that politics has an impact on the abandonment of PPP building projects (Kavishe N., Jefferson I., Chileshe N. 2019). This has immediate repercussions for performing organizations, as they develop the requisite political and diplomatic abilities to deal with governance issues (Rahimian FP., Goulding J., Akintoye A., Kolo S. 2017).

As indicated by the interview and survey data, local opposition to projects, legal and land litigation, and pressure from pressure organizations were not considered serious impediments. Similar external variables that impact building project execution have been discovered in previous African research (Njoroge R., 2018). This conclusion is unexpected because previous research has shown that project implementation benefits local populations significantly.

Stakeholders in D.R. Congo do not view public-private partnerships (PPPs) as a big problem, but they should be taken seriously if they arise since they might disrupt a project's timeline. Similar research in other countries, such as China (Meng Q., Lu Z. 2017), suggests that one of the major hazards of PPP arrangements of affordable housing in different countries is the private partners' incapacity to comprehend the local context. Even while inclement weather and flooding are relatively infrequent and modest in contrast, the study concluded that they pose a hurdle to the implementation of such projects.

Conclusions

A variety of problems obstruct the realization of affordable home development projects in D.R. Congo utilizing the PPP model of execution. Because the majority of these difficulties are external to the performing companies (contractor(s), the performing organizations must acquire the appropriate capabilities to solve them. The implementation of affordable housing building projects must be handled with caution, as they may turn into major issues.

Government policies are frequently converted into programs and initiatives, and the housing sector is one of the areas where such policies are executed. According to existing literature, numerous governments throughout the world adopt the PPP model in the implementation of public sector building projects (Janssen R, Graaf RD., Smit M., Voordijk H., 2016). The problems of delivering such buildings in D.R. Congo particularly are numerous; nonetheless, scholars have devoted little attention to this field.

Limitation and Recommendation

This paper focuses on the investment and operation of PPPs in urban infrastructure. According to Hart's boundary theory of cooperative relationships and, the PPP model is not a 'panacea' and has



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its own applicable boundary and objective conditions. As a result, in industries that are unsuitable for development,

The financing platform of the PPP model for affordable houses should be standardized, so that it can borrow moderately within the scope of compensating for market failure and reducing local governments' reliance on the debt of the financing platform, thereby preventing debt risk and stabilizing economic development. Therefore, there is a need to research on standardized financial modeling for PPP affordable house projects to overcome the current challenges.

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