# IOP Conference Series: Earth and Environmental Science

## PAPER • OPEN ACCESS

Appraising the Barriers to Public-Private Partnership as a Tool for Sustainable Development of Infrastructures in a Developing Economy

To cite this article: RA Ojelabi et al 2018 IOP Conf. Ser.: Earth Environ. Sci. 146 012016

View the <u>article online</u> for updates and enhancements.

## Related content

- New forms of public-private partnership for sustainable development of the fuel and energy sector E O Pakhomova, E V Goosen and S M Nikitenko
- <u>The problems and prospects of the</u> <u>public-private partnership in the Russian</u> <u>fuel and energy sector</u> SM Nikitenko and EV Goosen
- <u>Socio-economic development of territories</u> based on the principles of public-private partnership in the sphere of <u>comprehensive mineral exploration</u> S M Nikitenko and E V Goosen

**IOP** Publishing

# Appraising the Barriers to Public-Private Partnership as a Tool for Sustainable Development of Infrastructures in a **Developing Economy**

## RAOjelabi<sup>1</sup>, OI Fagbenle<sup>1</sup>, AO Afolabi<sup>1</sup>, PF Tunji-Olayeni<sup>1</sup> and LM Amusan<sup>1</sup>

<sup>1</sup>Covenant University, P.M.B 1023, Ota, Nigeria

rapheal.ojelabi@covenantuniversity.edu.ng

Abstract. The quest for sustainable development has been a subject discourse across the globe. Sustainable development has been deemed to be the pathway to all that is good and desirable in the society. Undoubtedly, social and economic infrastructure desirability in any economy is second-to-none and its sustainability needs to be prioritised. The worsened state of infrastructures and wide gap in its supply in developing economy have warranted this study. The study identified the sustainable tool (PPP) through which infrastructural supply can be enhanced and sustained and it revealed through literature review the major barriers to the tool performance in delivering infrastructures in developing country. Among the major challenges identified from literatures include inadequate consultation of stakeholders for greater acceptance of PPP, conflict of interest among PPP stakeholders, negative behaviour of the people towards PPP, lack of confidence and mistrust in PPP by stakeholders, poor enabling environment for PPP, weak or poor regulatory frameworks, law and regulation changes and weak and poor enabling policies. The barriers identified are due to more to the public than the private and the people. Therefore, the study recommends that beyond the need for stronger collaboration between the public and private sector, government should integrate the people in planning phase of the sustainable tool adoption for public infrastructures delivery. Also, government should build confidence and trust in the parties to PPP by creating enabling environment that can guarantee investors security.

#### 1. Introduction

It is no more news that the world is driving towards sustainability as the sustainability ideal is gaining prominence in the global economy.[1] asserted that there have been an increase in awareness and concern for sustainedsocial and economic growth across the globe. [2] also attested that the introduction of sustainability concept have witnessed a geometric increase in the awareness on sustainability development agenda across the globe. The world quest for sustainability is evidenced in the United Nations sustainable development goals which aim at making the world a better place. To make the world a better place, the idea of sustainability must gain prominence in all areas of life. The concept of sustainability is encompassing as it cut across every spheres of life. Its application include and not limited to the following sectors; medicine, construction, manufacturing, education and governance. The adaptation of sustainability concept in all walk of life have birthed different sustainable terms which include sustainable consumption, sustainable production, sustainable policy and sustainable development among others.

This paper will dwell on sustainable development as it relates to the construction industry in infrastructural provision. The term sustainability and sustainable development are two inseparable terms in which the latter is used to achieve the former. [3] affirmed that by describing sustainable

Content from this work may be used under the terms of the Creative Commons Attribution 3.0 licence. Any further distribution of this work must maintain attribution to the author(s) and the title of the work, journal citation and DOI. Published under licence by IOP Publishing Ltd 1

development as that kind of development that must be attained in a bid to achieve sustainability. The sustainable development idea like sustainability concept is not limited to any sector of the economy as it is applicable in any good and desirable part of the society. [4] attested that sustainable development is a pathway to all that is good and desirable in the environment. One of the good and desirable things in any society or environment is infrastructural development. The United Nations affirmed this by prioritizing infrastructures among the seventeen (17) sustainable development goals key to achieving sustainability of our environment. In a bid to achieve infrastructural provisions and other sustainable development goals, United Nations identified partnership as a vital tool crucial in achieving sustainable infrastructural development. Likewise, [5]admitted that Public-Private Partnership is an effective sustainable tool capable of achieving sustainable goals in the global world.

Public-Private Partnership is considered as one of the sustainable route through which infrastructural development challenge can be resolved across the globe. The partnership identified has PPP has to do with public institutions and private bodies' collaboration in a bid to provide social and economic infrastructures. The demand for supply of social and economic infrastructures in developing economy is second to none as the gap in infrastructural strength in the region is very porous. [5] attested that countries from developing economy of the world falls at the bottom of the chart of countries in infrastructural strength. The necessity for adoption of the PPP tool lies in its capacity to close the existing gap in infrastructures supply among countries in the developing region. However, despite the contribution of the sustainable tool in developed world, its impact has not been significant in developing nations due to some perceived challenges confronting its adoption and implementation. The objective of this study is to identify the challenges to the adoption and implementation of the sustainable tool (PPP).

## 2. Public-Private Partnership as a Sustainable Tool

PPP is the trending household name in social and economic infrastructural provisions across the globe. The gap in infrastructural supply in different parts of the world has called for a sustainable medium through which the gap can be bridged. [6]asserted that Public-Private Partnership (PPP) is a sure and effective sustainable tool that can enhance and sustain infrastructural provisions. [7] revealed that government across the globe have found PPP as a sustainable tool through which their infrastructural deficit can be addressed. Public-Private Partnership according to [8] is described as a tool that allow for collaboration between the private sector and the public agencies (central, state and local governments) with the aim of delivering and sustaining public works and services with private sector resources and technical-know-how. It is evidenced that the call for sustainable development of infrastructures is beyond the reach of the governments alone, as the need for synergy with the private sector towards forming formidable sustainable development agents through the platform of PPP is very pivotal.

Prior to the introduction of Public Private Partnership tool, the government is saddled with the responsibility of infrastructural provision. The capacity of the government for continuous supply of infrastructures was threating in the face of global financial deficit which is key to infrastructural provision. The adoption of the Public-Private Partnership tool has helped boosts the supply of infrastructures during the cash crumb period. [9] revealed that the Public-Private Partnership tool has been instrumental in the successful delivery of 600 construction projects which ranges from hospitals, schools, prisons, bridges, roads and the likes. Likewise, [10] also reported that 1,121 PPP infrastructure projects were delivered between 1985 and 2004 across Europe, Asia and the Far East. It is evidenced from the forgoing that the Public-Private Partnership is a sustainable tool for infrastructural provisions when other tools failed.

## 2.1 Establishing the theory for adapting PPP as a Sustainable Tool for Infrastructural Provision

The quest for partnership in the 21<sup>st</sup> century is second-to-none due to the wide gap of needs which exceed the capacity of the individual organization, body or firm. Social partnership theory evolves to address the form of partnership that is birthed due to social and economic needs. Social partnership according to [11] is described as a form of partnership that solved social related problems through the synergy of organizations from more than one sector of the economy. [12] also defined social

## IC3E IOP Publishing IOP Conf. Series: Earth and Environmental Science **146** (2018) 012016 doi:10.1088/1755-1315/146/1/012016

partnership as a networks of parties including industry, government and local community toward solving a social problem in the local environment. [13] emphasised that social partnership is a form of partnership initiated to cause societal improvements. It is evidenced from theese descriptions that social partnership takes its root from the social economy which focuses on meeting the social needs of the people [14]. The basis for interaction among different social groups is evidenced in the social partnership model in Figure 1. The social partnership model proposed by [15]stressed the need for partnership among different social groups which include the government, private bodies and others in a bid to create a social project. The model distinguished the government position from the private counterpart. The government occupy the base of the pyramid due to their significance in any social relationship while the private body occupy the tip of the pyramid and the mid is the centre of the partnership deal. The paradigm shift from individualism to social partnership experienced globally is viewed by government and non-government agencies as a means capable of enhancing and achieving sustainable development ofinfrastructures. It is evidenced from the forgoing that Public-Private Partnership takes its root from social partnership theory.



Source: [15]

## 2.2 Public-Private Partnership in Developing Economy

The world 'developing economy' is a pointer to a need gap awaiting development. [16] affirmed that developing economy is one that is searching for means of enhancing public infrastructures and services due to measurable underdevelopment within her territory. [5] also identify developing economy as such that is weak in infrastructure strength. [17] estimated that the cost of maintaining existing infrastructures and building new ones in developing economies in capital is around 7 percent of their GDP, however, the spending capacity of the developing economies for public infrastructures is about 3 percent which shows a clear gap in infrastructural supply. It is evidenced that the infrastructural state of the developing economy is such that is beyond the capacity of the government, therefore, there is a need for partnership in this environment.

The introduction of Public-Private Partnership is a blessing to the developing country due to its capacity to meet the environment needs. [16] revealed that PPP tool has wide range of application which include construction of physical infrastructures, provision of health and social services among others which are in short supply and high demand in developing countries. [18] however revealed that the private investment garnered from collaboration with the public sector in Africa which is one of the region with high numbers of developing countries is 2 percent despite the massive demand for more private investment in this region. [6] asserted that the low numbers of private investment in the region is due to some challenges or perceived risk discouraging investors in collaborating with the government under the platform of PPP.

## 2.3 Challenges of PPP Adoption and Implementation in Developing Economy

The need for adoption of PPP tool for infrastructural supply in developing country is of high essence. However, its adoption and successful implementation cannot be compared to the developed region of the world. [19] report revealed the wide gap in PPP adoption for infrastructural provisions between the developed and developing economies. [20] however questioned the wide gap in the adoption of the sustainable tool (PPP) between the developed and developing economies. The slow adoption of PPP in the developing country can be attributed to some inherent challenges due to the peculiar nature of the environment.

[21] asserted that one the most significant challenges confronting PPP adoption in developing economy especially in Africa is inadequate consultation of stakeholders for greater acceptance of the tool. The adaptation and successful implementation of any tool for public benefit without doubt require deep consultation among the concerned stakeholders and the public at large. The need for this is for the acceptability and support of the public at large. Negligence in consulting stakeholders and different interest group will no doubt spell doom for the adoption of the sustainable tool (PPP) because its implementation is beyond personal or private control.

[22, 23] likewise identified conflict of interest among stakeholders as a barrier to PPP growth in developing economy. Disagreement among the stakeholders have contributed to the issues with PPP tool adoption in the developing country especially in Africa. [8] further recognized the negative behaviour of the people towards PPP as a challenge militating against the sustainable tool adoption. The position of the people under PPP arrangement cannot be silenced as their role is highly significant. The people are also stakeholder in any PPP arrangement as such, their opinion should be sorted before implementation of PPP for infrastructural provisions. Isolation of the people in developing economy in the planning process of the sustainable tool adoption has caused the people to develop a thick skin towards the implementation of the tool due to their negative perception that have not been addressed.

In the same vein, [24] also identified public disapproval or public resistance as one of the significant barriers to the use of PPP for sustainable development of infrastructures. This can be traced to the lack of trust between the government and the public in the developing economy. In the same vein, [25] revealed that lack of confidence and mistrust in PPP by stakeholders has impacted the adoption of the sustainable tool negatively. The lack of confidence and mistrust are however due to weak and poor enabling policies [26], weak or poor regulatory frameworks [27], law and regulation changes [28] and poor enabling environment [29]. It is evidenced from the foregoing that these challenges are interrelated and are under the government jurisdiction and the private sector. However, the challenges are more in the government territory. The government as a public custodian are charged with the responsibility of adoption of sustainable public tool (PPP) for sustainable development of infrastructures. [30, 31] also attested that the government and private parties are not all together equal in PPP adoption, as such, the successful adoption and implementation of PPP tool is more of her responsibility. However, [32] revealed that political interference in the process of PPP adoption from the government has contributed to the dwindling state of the sustainable tool in the developing economy. The aggregate of the challenges identified have all contributed to the slow adoption of the sustainable tool (PPP) in developing economy despite its urgent need in the region as a result of worsening or widening infrastructural gap.

## 3. Conclusion

This paper focused on challenges to the adoption of sustainable tool like PPP in developing economy. It identified the major challenges causing the slow adoption of PPP option for infrastructural supply or sustainable development in the developing region like Africa. Among the major challenges identified confronting the sustainable tool adoption and implementation include inadequate consultation of stakeholders for greater acceptance of PPP, conflict of interest among PPP stakeholders, negative behaviour of the people towards PPP, lack of confidence and mistrust in PPP by stakeholders, poor enabling environment for PPP, weak or poor regulatory frameworks, law and regulation changes and weak and poor enabling policies. Majority of the identified challenges are under government jurisdiction, therefore, the study recommended that the government should specifically address these challenges in the developing regions. The government should ensure that all the stakeholders including the people are well engaged prior to the adoption and implementation of the sustainable tool. Likewise, government need build confidence and trust in the PPP parties by creating enabling environment that can guarantee the security of the parties.

## Appreciation

The authors are grateful to Covenant University for sponsorship

IOP Conf. Series: Earth and Environmental Science 146 (2018) 012016 doi:10.1088/1755-1315/146/1/012016

#### References

- [1]Oyedepo, S.O. (2014). Towards achieving energy for sustainable development in Nigeria. *Renewable and Sustainable Energy Review*, 34, 255-272.
- [2]Abidin, Z.A. (2010). Investigating the awareness and application of sustainable construction and concept by Malaysian developers. *Habitat International*, *34 (421-426)*.
- [3]Du Plessis, C. (2002). Agenda 21<sup>st</sup> for sustainable construction in developing countries. Capture press, Pretoria, South Africa.
- [4]Holden, E., Linnerud, K and Banister, D. (2014). Sustainable Development: Our Common F Future Revisited. *Global Environmental Change*, *26*, *130-139*.
- [5]World Economic Forum, (2016). The global competitiveness report 2016-2017. Available at www.weforum.org/gcr.
- [6]Hamilton, G., and Holcomb V. (2013). Public Private Partnership for sustainable development. Retrieved 3 February, 2016, from http//www.commonwealthministers.com/articles/publicprivate partnerships for sustainable development/
- [7]Ibem, E.O. (2010). Assessment of the role of government agencies in Public-Private Partnerships in housing delivery. *Journal of Construction in Developing Countries*, 15(2), 23-48.
- [8]Gunnigan, L and Rajput, R. (2010). Comparison of Indian PPP Construction Industry and European PPP Construction Industry: Process, Threshold and Implementation. *Proceedings of CIB World Congress*, Salford, May 10<sup>th</sup>-13<sup>th</sup>.
- [9]Treasury HM. (2013). Public-Private Partnership signed project list. Available at http://www..hm-treasury.gov.uk/ppp\_stats.htm
- [10]Sambrani, V.N. (2013). PPP for Asia and African perspective towards infrastructure development: A case study of Greenfield Bangalore international airport, India. Social and Behavioral Sciences, 157, 285-295.
- [11]Waddock. S. (1989). Understanding social partnerships: An evolutionary model of partnership organizations. *Administration and Society*, 2(1), 78-100.
- [12]Seddon, T and Billet, S. (2004). Social partnership in vocational education: building community capacity. NCVER, Adelaide.
- [13]Flyvberg, B., Bruzelius, N., & Rothengatter, W. (2003). Megaprojects and risk: An anatomy of ambition. Cambridge, UK: Cambridge University Press.
- [14]Evans, M., & Syrett, S. (2007). Generating Social Capital? The Social Economy and Local Economic Development. European Urban and Regional Studies, 14(1), 55–74.
- [15]Parthasarathy, V.S. (2016). Making India future ready for technology innovation. Available at: http://computer.expressbpd.com/features/making-india-future-ready-for-technologyinnovation/19836/
- [16]Pessoa, A. (2006). Public-Private Sector Partnerships in Developing Countries: Prospects and Drawbacks. Being a presented at the 11<sup>th</sup> International Conference on Public-Private Partnerships: Enhancing Sustainable Development in Romania, 25<sup>th</sup> -28<sup>th</sup> May.
- [17]Kateja, A. (2012). Building Infrastructure: Private Participation in Emerging Economies. *Procedia-Social and Behavioural Sciences*, 37, 368-378.
- [18]Sanni A.O., and Hashim, M. (2014). Building infrastructure through public private partnership in Sub-Saharan Africa. *Procedia-Social Behavioral Sciences*, 143, 133-138.
- [19]Organization for Economic Commission Development (2012). Public Governance of Public-Private Partnerships. Available at: www.oecd.org/governance/budgeting/PPP-Recommendation.pdf.
- [20]Babatunde, S.O., Perera, S., Zhou, L., and Udeaja, C. (2015). Barriers to Public Private Partnership projects in developing countries: A case of Nigeria. *Engineering, Construction and Architectural Management,* 22(6), 669-691.
- [21]Chen,C. (2007), "Institutional barrierstoprivate participation in infrastructure: the case of electronic collection in Taiwan", Proceedings of 23rd Annual ARCOM Conference, Belfast, 3-5September.

IOP Conf. Series: Earth and Environmental Science 146 (2018) 012016 doi:10.1088/1755-1315/146/1/012016

- [22]Akintoye,A.,Hardcastle,C., Beck,M., Chinyio,E.andAsenova,D.(2003). Achievingbest valueinprivatefinanceinitiativeprojectprocurement. *ConstructionManagementand Economics*, 21(5), 461-470.
- [23]Afolabi, A., Emeghe, I., Oyeyipo, O. and Ojelabi, R. (2016). Professionals' preference for migrant craftsmen in Lagos State. *Mediterranean Journal of Social Sciences*, 7 (1), 501-508.
- [24]Gibson,H.andDavies,B.(2008).Theimpactofpublicprivatepartnershipsoneducation: acase studyofSewellGroupPlc.andVictoriaDockprimaryschool.*InternationalJournalof EducationalManagement,22(1), 74-89.*
- [25]Mahalingam, A. (2010).PPP experiencesinIndian cities: barriers, enablers and the wayforward. Journal of Construction Engineering and Management, 136(4), 419-429.
- [26]UnitedNationsEconomicandSocialCommissionforAsiaandthePacific(UNESCAP). (2007). Public-PrivatePartnershipsforinfrastructuredevelopment:anintroductiontoissuesfrom different perspectives.TheHigh-levelExpert Group MeetingJointlyOrganized byUNESCAPandtheMinistryofPlanningandBudget,Seoul,2-4October.
- [27] AsianBusiness(1996). Special reportonAsia'sinfrastructureboom. AsianBusiness, 60-69.
- [28]Yang,J.B.,Yang,C.C and Kao,C.K.(2010). Evaluatingscheduledelaycausesforprivate participatingpublicconstructionworksunderthebuild-operate-transfer model.*InternationalJournalof ProjectManagement*,28, 569-579.
- [29]Akampurira, E.,Root,D.and Shakantu, W. (2006). Stakeholderperceptionsinthefactors constrainingthedevelopmentandimplementationofpublicprivatepartnerships in the Ugandanelectricitysector. *JournalofEnergyinSouthernAfrica*,20(2),2-9.
- [30]Namblard, A. (2000). In favour of pragmatic approach towards Public-Private Partnership, In Perrot, J.Y and Chatelus G. Financing of major infrastructure and public service projects: Public Private Partnership, presses points.
- [31]Oyeyipo, O., Odusami, K. T., Ojelabi, R. and Afolabi, A. (2016). Factors Affecting Contractors' Bidding Decisions for Construction Projects in Nigeria. *Journal of Construction in Developing Countries*, 21 (2), 21-35.
- [32]Gidado, K. (2010). PFI implementation and evaluation model for developing economies: example of Nigeria, Proceedings of the 2010 International Conference on Engineering, Project and Production Management. National Pingtung University of Science and Technology, Pingtung, Taiwan.