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Public-Private Partnership on Implementation of Higher Education in Universities

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ABSTRACT

Partnerships or collaborations between Higher Educational Institutions (HEIs) and public or private entities are arrangements that have immensely contributed to improved service delivery in teaching and research in the universities. However, the mode of these partnerships sometimes derails the implementation of higher education in Kenya. The purpose of the study was to assess the impact of the Public-Private Partnership (PPP) reported on the implementation of university education in Kenya. The objectives of the study were to: establish the extent to which PPP impacts the implementation of university programs, determine the impact of PPP on research collaboration with the universities, and establish the effects of PPP on universities' infrastructural development. This study reviewed relevant empirical literature whose meta-analysis. The results showed that PPP is important in mitigating the financial gaps towards accomplishing necessary projects in universities. The study recommends the exploration of avenues to strengthen PPP as a means of improving the implementation of higher education.

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1. INTRODUCTION

The public-private partnerships (PPP) model as a way of transacting different businesses has been adopted in many countries of the world. Studies have been done on the effect of PPP and its effects on elevating societies. For example, a study on Public Use of Social Infrastructure: An Exploratory Example by [Leecy et al. \(2020\)](#) explored data from 50 states of the USA. The research looked at public universities' use of PPP for particular types of social infrastructure, enabling Legislation and Public universities' students' housing projects. A detailed look was done in four states of the USA namely California, Florida, Georgia, and Virginia. The study established that public universities in the USA had a 20-year history of using social infrastructure built using the PPP model for students' housing. That a relationship exists between social infrastructure PPP enabling legislation and increased public use of PPP for students' housing. It also found out that specific public universities' social infrastructure enables legislation to place decidedly different requirements in their use.

[Takmayzan et al. \(2019\)](#) reported on PPP as a tool for the development of educational infrastructure in Russia focused on the Russian Education system for the period 2019-2024 to achieve goals, tasks, and indicators, it is necessary to attract investors and competencies of the private sector based on the PPP Model. A mixed method design was adopted ranging from inductive and deductive analysis, systematic scientific analysis, and comparative grouping of tools of scientific research. The study established that. This paper also reported the Russian Regions need additional investments to create modern educational infrastructure and its maintenance, alongside the findings from the country's consolidated budget of the Russian Federation for kindergarten, vocational education, and demographic situation, based on the different levels of socioeconomic development of the regions. The study bears practical implications regarding the PPP's contribution toward the development of educational infrastructure in different regions of Russia. This PPP model is practically significant towards the attainment of the state-of-the-art educational infrastructure in Russia.

[Li and Akintoye \(2003\)](#) reported on an overview of PPP maintaining that governments of the modern societies globally have adopted the PPP Model in the improvement of public service deliveries. Many countries are today embracing the privatization of public corporations towards improvement in service delivery and efficiency in a re-engineered business approach. This happened in several nations including those of Eastern Europe and the developing nations in Latin American Countries, Southeast Asia, and Sub-Sahara Africa. The PPP model provides an opportunity for a sustained improved social infrastructure thereby enhancing the value of public assets and making a better use of public finances. The concept of PPP has been part and parcel of the USA and Europe over the years, with greater improvement in practice in the 1990s.

The purpose of the study is to assess the impact of PPP on the implementation of university education in Kenya. The objectives of the study were to: establish the impact of the extent of PPP on the implementation of university programs, determine the impact of PPP on research collaboration with the universities, and establish the effects of PPP on universities' infrastructural development. This study reviewed relevant empirical literature whose meta-analysis was guided by the work of [Ferrer \(1998\)](#).

The study is presented in the order of introduction, materials and methods, findings and discussions, conclusions, and implications of the findings

2. METHODS

2.1. Study Location

Below is a map showing how Kenyan infrastructure has been improved due to the partnership (see Figure 1).

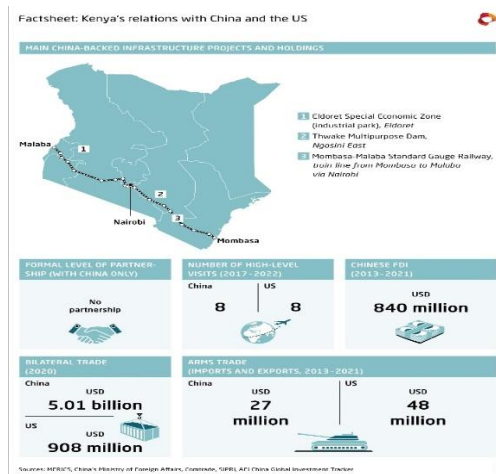


Figure 1. Showing kenyan partnership globally.

2.2. Summary of the Methods

The Figure 2 below shows Epidemiological Study Designs which formed part of the methodology in the study. Some of the methods used by various researchers whose work was analyzed include Descriptive survey design; Descriptive statistics and the Heckman Probit Model; Mixed method approach; Heckman Sample selective model; Focus group discussions; Participatory and Epidemiological methods; Consensus model; Qualitative and quantitative approaches and Literature review design.

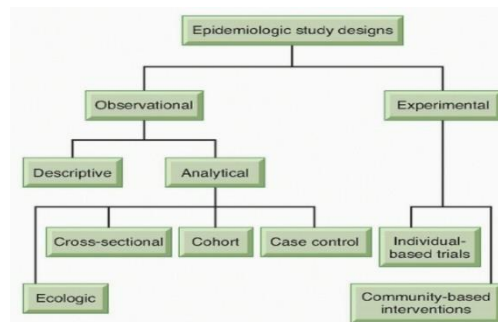


Figure 2. Showing epidemiological study designs.

The research methodology also involved the use of meta-analysis through which the data from several independent studies that used different tools and approaches but addressing the same theme were utilized to determine the overall trends. The main reason for using the meta-analysis technique is to help combine the results of several different reports addressing a single common theme to create a more precise estimate of an effect (Ferrer, 1998).

3. RESULTS AND DISCUSSION

3.1. On Establishing the Extent to which PPP Impacts on Implementation of University Programs

Asaknia et al. (2022) reported on financial innovation and adoption of PPP in Kenya Public Universities adopted a descriptive survey design in which 143 respondents were sampled for

the study and a questionnaire was administered to collect requisite data. The findings were that syndicated loans and innovation debt had a statistically significant effect on the adoption of PPP. Based on the study findings conclusion was that finance has a significant positive influence on the adoption of PPP in Kenyan Public Universities. Implications of the findings to the key stakeholders like the government to create an enabling environment for corporations to explore PPP as an alternative avenue towards the accomplishment of university projects including infrastructure and other requirements given the limited funding from the universities by the Exchequer hence the financial deficits in transacting accomplishments of essential projects with implications on quality of the university programs.

Muthoga (2019) reported on the Legal and institutional environment on implementation of PPP in Kenya adopted literary criticisms and agrees that PPP plays a significant role in bridging the financial gaps in financing projects where many times there are deficits given the small economies with generally small revenue collections which are barely enough to adequately finance all the state development initiatives in various forms. The PPP, therefore, provides alternative sources of funding for the completion of the projects therein. The completion of the projects through the PPP relationships helps towards the attainment of Kenya's Vision 2030 as given in the blueprint of the 17 Sustainable Development Goals crafted by the United Nations General Assembly in 2015 on a 15-year development plan Vision 2030 that needs to be accomplished by the UN member Countries by 2030.

Mukhwana *et al.* (2020) reported on Financing higher education in Africa. This paper also reports the case of Kenya utilizing empirical literature and acknowledges the rapidity in the expansion of tertiary education enrolment due to its high demand irrespective of the availability of infrastructure and manpower to cope with the expansion with net results on compromised quality of educational delivery. This expansion continues unabated a scenario calling for reforms in reviewing the spending towards the realization of equitable opportunities for funding the projects in Kenya.

Critical Success Factors (CSF) for PPP infrastructure and housing projects in Kenya show that despite the emergence of studies in CSFs for PPP implementation in LDCs there is a paucity of studies that examine CSF barriers within LDCs and more in SSA Kenya included. Perceptions of Kenyan Public and private stakeholders' concern of CSFs towards implementation of infrastructure and housing projects. A survey designed for 27 Kenyan stakeholders surveyed. Questionnaires were used to gather data. Findings were that support by the community of the PPP projects, project feasibility, the law regularities, and guidelines in place, availability of financial mkt, and having well organized committed public agency were highly rated CSFs in contrast, effective and enough resources allocation and management transparency and equity in procurement transactions and proper and efficient training of employees.

Darwinkel *et al.* (2022) reported on Rethinking County Health Sector PPP towards Sustainability adopts a critical literature review and agree that the nature of the economic development countries that are generally constrained towards initiating and accomplishing development issues, PPP provide alternative financial avenues towards the development concerns and health sector being a critical essential service in the society has to be considered within the framework of PPP infrastructural development funding initiatives within the health sector. That has shortened the PPP project procurement process and project management, implementation, monitoring, and evaluation towards making the initiative an alternative source of development funding for vital projects. This is a collaboration relationship in health projects' accomplishment through the PPP arrangement.

Khallat *et al.* (2022) reported on PPP for higher education in the USA using a survey design and accepted that PPP is a common project delivery renegeing from transport to social infrastructure. Previous studies have examined PPP for infrastructure, other social projects, and other non-social projects. Questionnaires were used for data. Findings showed an increase in trend in project size between 1994-2018 with most housing projects developing a smaller % for commercial utility projects by geographical representation demonstrating a large number of projects distributed in South and North Eastern, USA.

Gbadegesin and Aluko (2014) in investigating factors influencing the adoption of Finance Initiatives for infrastructural projects in Tertiary Institutions of Learning adopted a descriptive survey design in which questionnaires were formulated and administered to collect the requisite data. The study found that there were high levels of awareness of the PPP amongst the respondents and that project risk management and technical capacities are key influential issues in PPP consumption. There was a significant positive relationship between the respondents' years of experience and PPP and Technical capabilities. The study was limited to South Eastern Nigeria and more specifically to 4 selected tertiary institutions that embrace the PPP within the Geopolitical Space.

A study by Shabolova *et al.* (2018) reported on PPP in Housing and Communal Services and Housing Infrastructure of Kazakhstan established that expanding university infrastructure, especially concerning students' hostels in the named place has adopted the PPP model. This led to the construction of State-of-the-Art student Hostels in the area.

Verger *et al.* (2016) reported on What are the roles and impact of PPP in Education? A realistic Evaluation of the Chilean Education Quasi-Market underscores the assumptions held by the market mechanism of the PPP as a way of improving service delivery and hence attracting the consumers of the services delivered toward the attainment of education quality. The PPP is expected to boost the quality of services in education and improve efficiency that would meet the threshold of standard scale expected of the consumers. That PPP is largely being embraced as a way of elevating educational service delivery boost and meeting the expected standard frame, however with some limitations as wholesale expectations of the consumers may sometimes not be met 100% on the scorecard. However, other factors held constant, PPP has given a significantly elevated notch in supporting improved delivery of educational services and efficiency in the enterprise.

Osono *et al.* (2020) reported on the Impact of PPP on Private School Performance. This paper also reported Evidence from a randomized controlled Trial in Uganda that examines partial equilibrium on the impacts of the PPP program on the cost of private secondary schools in Uganda as part of the broader strategy of accommodating the swelling enrollment in schools. The study established the significant role played by the PPP model in improving access to schooling, service delivery, and efficiency in the secondary school sector in Uganda.

Kysiak (1986) reported on the Role of University in PPP underscoring the significance of this model within the various states of the USA towards the attainment of economic development goals more specifically in New Haven, Neticut, Evanston, and Illinois that have forged highly effective between city governments concerning infrastructure in the universities at the various faculties.

Osorio *et al.* (2012) reported on the role and impact of PPP in Education. The study establishes a strong positive relationship between properly framework PPP and improved infrastructural development and service delivery in the universities particularly on the significance of PPP on service delivery, particularly those served in the traditional method.

3.2. On determining the Impact of PPP on Research Collaboration with the Universities

Wanjau *et al.* (2023) reported on Exploring PPP for sustainable growth and corporate governance in Kenyan universities adopted a survey study design and are cognizant of the rapidness in the expansion of Kenya's higher education amidst dwindling Exchequer funding and towards ensuring global standards explore PPP as for Sustainable goals and corporate governance in Kenya. The study was underpinned by dependency and resources theory. 96 people were drawn from the universities targeted from 35 universities in Kenya getting a sample size of 777 participated in the study. Findings showed that universities were using joint venture partnership's special purpose vehicle arrangements, build transfer, and operate and contract PPP arrangements in the financing of infrastructure projects. Respondents were little satisfied with the use of green building design architecture, conservation of energy practices, preservation of water, and operational practice in PPP. Lastly, they were moderately satisfied with the financial and implementation of operation practices within the focus of corporate governance in Kenyan universities. That leveraging on innovation technology in strategic practices toward sustainable development should take center stage

Asaknia (2021) reported on the Cost of capital and adoption of PPP in Kenyan Public Universities. adopted an empirical literature approach and agreed that recently there has been witnessed generalized expenditure needed to provide for new infrastructure facilities forcing them to rethink new funding (Beyene, 2015). There is a mismatch between the government's ability to generate resources and the expansion has resulted in great financial deficits especially in less developed nations (Kamau, 2016). This has prompted the governments to rethink innovative ways of bringing the infrastructural needs. In a bid to bridge the funding gaps, the leadership of most less developed countries has sought the participation of the private sector in development partnership arrangements. The agreement is designed between the private and public sector achievement through the adoption of PPP. This is an agreement between the public and private sector firms that fund, design implement, and operate infrastructure using certain set standard thresholds in a period (Sani *et al.*, 2018). According to Xiong and Zhang (2014), the use of private enterprise funds plays a significant role in the capital structure of industry. Generally, there is an attainment of optimal structure cases and a reduction in the overall cost of capital that leads to maximizing the project network. Implications for a need to reduce the cost of capital in a particular project that may motivate the public to uptake the PPP initiatives.

A study by Jumakulov (2022) reported on the Implementation of PPP in Higher Educational Institutions in Uzbekistan focused on an analysis of the financial conditions of HEIs and the need to attract investments based on PPP in university education. The findings of the study were that PPP plays a critical role in service delivery on university education and infrastructure and improved efficiency in enterprises.

Cui *et al.* (2018) reported on the role of the PPP in Education maintaining the significant role of the PPP in improved service delivery and improved financing of education and learning outcomes.

Barnes and Charelott (2010) reported on PPP. This paper also reported a trojan horse for higher education. They underscore the significance of PPP in improving service delivery to the various faculties of higher educational institutions, supporting infrastructure, human resource development, and efficiency in the essential service required of the universities.

Dunn-Cavelty and Suter (2009) reported on PPP in Education. This paper also reported new actors and models of governance around the globe maintain that PPP is a response to the new mode of governance that ranges from covert support of the private sector vouchers to overt collaborative corporate support in the rapidly expanding enrolment in the HEIs. This is

an indicator of the key position played by the PPP program in ensuring improvement in the education sector in terms of services, infrastructure, and quality of education while enhancing the theory of international relations.

Shiji (2014) reported on PPP and Indian Higher Education looks at the reality of the poverty-stricken Indian communities and the essence of the PPP model as a way of improving access to education amongst the vulnerable and lauds it for elevating educational service and infrastructure in higher education of India. Thus, PPP as a relationship has become more apparent in the improvement of faculty services and infrastructure that comes with it to ensure the smooth running of the universities.

Byrd (2013) reported on PPP for higher educational infrastructure. This paper also reported a multiple case study of PPP Models maintains that these models create employment opportunities for example at Clemson International Center for Automobile Research, The University of Washington/South Lake Union Research Complex, and Louisiana State Union. The PPP guarantees collaborative arrangements that also strengthen international relations. The study established that PPP created jobs.

A study by Khallat *et al.* (2022) reported on PPP for HEIs in the USA maintains that PPP presents a method of delivering diverse projects including transport, education, and health amongst others. The study found that the trend in project size between 1994–2018 with the majority being housing projects was realized through the PPP model, given the states' funding cuts to higher education.

Valcheva and Valkov (2020) reported on European national measures in support of PPP in Higher Education underscoring the role played by the PPP arrangement on educational programs including research and its contribution toward the realization of economic growth and hence the need for institutions of higher learning considering PPP in their mainstream programs and infrastructural development. Exchange programs vested in the PPP. University management needs to be cognizant of the development opportunities presented in the PPP towards the achievement of improved services and enhanced access to and quality of university education.

3.3. On Establishing the Effects of PPP on Universities' Infrastructural Development

Kendagor (2023) reported on an Investigation into the PPP success as a procurement method for infrastructural development in Kenya. The paper focused on a case study of public universities in Nairobi County, Kenya, which adopted a survey design and is cognizant that infrastructural investments are at the center of achieving economic growth and sustainable development. However inadequate funding and ever-emerging complex procurement procedures are an impediment to adopting PPP as a means of leveraging private sector investment and Bridget significant government's budget gaps. 105 people were selected to participate in the study. Findings indicated that financial factors exit position in favor of successful implementation Projects in the public sector. Findings that success, and legal framework impact negatively on project implementation up implementation of projects are Exerted by funding. Political, legal, and political play critical roles in guaranteeing the successful implementation of PPP projects in Kenya.

Mungai (2020) reported on the PPP and project performance of commercial state corporations. The manager of supplier relationships challenges PPP funding with the right partners and the right shared problem, right timing, level of resources as well as collaboration across institutions cultures, and processes all move which makes partnerships mountainous to achieve. In addition, creativity and maintaining partnerships between state core portions is time-consuming and characterized by uncertain pay-off. 102 people have participated. The

questionnaire was administered to gather data. Findings from correlational analysis demonstrate that technical skills, financial contributions, risk mitigation, and technical skills were key determinants of project performance. Correlational studies show the association between project performance and finance, risk mitigation, and accountability. State corporations in Kenya have put in place financial contributions, risk mitigation, and accountability measures that impact project performance.

Suchman *et al.* (2018) reported on PPP in Practice relating to collaboration and improvement of health Finance Policy in Ghana and Kenya. This report used a survey study design in which an interview was administered to the National Health Insurance officials in Kenya and Ghana as well as with staff from several interviewees from NGOs to facilitate responsible social franchise private accreditation. Finding interviewees initially had incomplete knowledge about the potential for cross-sector synergy but were motivated towards common goals.

Duijin *et al.* (2023) reported on PPP PPP to rapidly strengthen and scale COVID-19 response in Western Kenya adopted practical laboratory techniques towards data collection on testing Codi-19 and are cognizant that in Africa almost half of the healthcare services are delivered through private sectors towards supporting public health service providers. That COVID-19 diagnostic testing formed the basis for a PPP between the Kenya Medical Research Institute (KEMRI) and the Department of Health of Kisumu County. They carried out testing for COVID-19 Based on Public-Private Sector arrangements.

Makua and Kimutai (2019) reported on Monitoring and evaluation systems and the performance of PPP projects in Nairobi City, Kenya adopted a survey design in which 26 projects, 10 county Government workers, and 125 respondents participated in the study on the influence of M&E Systems on the performance of PPP Projects in Nairobi City Kenya. The study was underpinned by Theories of Change and Performance. The questionnaire was administered to gather data. The Chi-Square (X^2) test was administered to establish a relationship between the variables in the sample and Cramers V was also calculated to determine the strength of the relationship between the X^2 tests. Findings showed that most staff in PPP did not have requisite training towards project planning band management and measurement and evaluation since they had stayed long in their positions of service. Most decisions in the PPP projects were not informed by evidence on what was working and hence negative influence on project performance.

Asaknia *et al.* (2022) reported on financial innovation and adoption of PPP in Kenya Public Universities adopted a descriptive survey design in which 143 respondents were sampled for the study and a questionnaire was administered to collect requisite data. The findings were that syndicated loans and innovation debt had statistically significant effects on the adoption of PPP. Based on the study findings conclusion was that finance has a significant positive influence on the adoption of PPP in Kenyan Public Universities. Implications of the findings to the key stakeholders like the government to create an enabling environment for corporations to explore PPP as an alternative avenue towards the accomplishment of university projects including infrastructure and other requirements given the limited funding from the universities by the Exchequer hence the financial deficits in transacting accomplishments of essential projects with implications on quality of the university programs.

Vertakova and Plotnikov (2014) reported on the PPP and the Specifics of their Implementation in Vocational Education maintaining that the Russian Education sector has embraced the PPP model for the improvement of the services, infrastructure, and even access to many citizens. The relationships in the PPP would also help mitigate the gap in manpower in the education sector.

A study by Odekunle and Babalola (2008) underscores the role of PPP in financing education in Nigeria. These assist in developing manpower in the education sector, establishing modern educational infrastructure, and enhancing access, service delivery, and efficiency in the sector.

Migaiwa and Poncian (2016) reported on PPP in Higher Education in Tanzania. This paper also reported implications for access and quality of education and established strong relationships between PPP and educational access HEIs. However, PPP has no significant impact on the quality of higher education in Tanzanian Private universities. Enrolment for higher education is higher in public universities than in private universities.

Ogunode and Edinoh (2023) reported on the PPP Model and implementation of the Tertiary Education program in Nigeria using an exploratory study. The study established that PPP enhances the implementation of Tertiary education programs in Nigeria.

A study by Lee (2008) reported on Restructuring Higher Education. This paper also reported PPP carried out in the Asia-Pacific Region underscores the greater role played by PPP engagement in the implementation of higher education as a public good in the region. PPP affects access and the establishment of infrastructure.

Tilak (2010) reported on PPP Education in India and maintained that PPP enhances access, research, infrastructure, and general service delivery in higher education. This engagement enhances access, especially in Public Universities and more specifically to the socio-economically vulnerable students.

Lanroque (2008) reported on PPP in Education. This paper also reported an international Review presents management initiatives in education through PPP's funding of educational projects such as infrastructure, manpower development, payment of students' fees, and research. The study underscores the significant role played by the PPP arrangement in funding educational projects with a high degree of success and accountability while looking at education as both a public and private good.

A study by Kimani (2016) reported on Re-engineering students' accommodation in Public Universities through PPP in Kenya underscores the significance of student accommodation as an investment in the economy. The quantity and quality of the accommodation established through PPP are examined at Karatina University. The study focused on establishing the factors determining the choice of the PPP model in funding public university students' Accommodation in Kenya and establishing how PPP bridges funding gaps in students' accommodation in Kenya's Public universities. The survey design was adopted in the study with a sample of 157 participants. The study established that PPP bridges funding gaps in establishing students' accommodation in Public Universities in Kenya and that this arrangement in the funding becomes handy especially now that there is a government reduction in funding of such ventures due to competing priorities for the scarce revenue in the developing nations the caliber of Kenya.

4. CONCLUSION

The study established that the PPP arrangement has existed over the centuries in the developed world as compared to developing countries where it is a relatively new phenomenon but quite handy due to the general revenue gaps that characterize such countries hence finding PPP handy in meeting financial gaps in funding various projects. That the PPP projects have proved successful in any of their investment ventures. The PPP model has become the order of accomplishment of projects across the globe including educational ones. PPP investments have tended to improve services in the various faculties/schools in

higher educational institutions, given that generally the governments tend to make budget cuts towards funding various projects in higher educational institutions, due to the scarcity of financial resources and competing priorities from the consolidated funds. The PPP has enabled the bridging of funding gaps by the various governments toward higher educational enterprises. The PPP model has enabled improvement in universities' infrastructure, manpower development, payment of students' fees to the less fortunate, and establishment of physical, social, ICT, research, and other requirements of university infrastructure. That PPP are quite handy in mitigating the financial gaps towards accomplishing necessary projects in the universities. Some university management especially in developing countries has not focally explored the opportunity presented by the PPP Model even amidst the governments' funding budgetary cuts towards higher education, consequently, such institutions suffer from amongst others infrastructural gaps, and research funding gaps.

The study of this magnitude to the effect of PPP on the implementation of university programs in Kenya is of pertinent concern as this viable relationship in the global practice with the potential to bridge development gaps is scanty in the empirical stint. The study will go along addressing study gap in the area and will inform policymakers and key stakeholders to explore it as a potential alternative avenue towards funding universities' development projects and teaching and research as the core businesses of the universities in a nation like Kenya where funding of the university by Exchequer is ever on the decline in the recent years.

PPP is a critical transactional arrangement that is quite handy in the accomplishment of projects, especially in developing nations. PPP is useful for funding university infrastructure and other necessary funding. It provides an alternative route worth exploring towards development projects in a society.

5. AUTHORS' NOTE

The authors declare that there is no conflict of interest regarding the publication of this article. Authors confirmed that the paper was free of plagiarism.

6. REFERENCES

- Asaknia, F. M. (2021). Cost of capital and the adoption of public private partnerships in kenyan public universities. *Newzealand in Africa's Development*, 248(6), 201-213.
- Asaknia, F. M., Gregory, S., and Sakwa, N. M. (2022). Financial innovation and adoption of public private partnerships in kenyan public universities. *Newzealand in Africa's Development*, 247(3), 233-245.
- Barnes, L., and Charelott (2010). Public-private partnerships: A Trojan horse for higher education? *Journal of Computing Higher Education*, 22(3), 153-161.
- Byrd, M. C. (2013). PPP for higher educational infrastructure: A multiple case study of ppp models virginia technical. *Journal of Computing Higher Education*, 25(1), 100-113.
- Chileshe, N., Wambui, C. N., Kibichii, B. K., and Macharia, L. N. (2022). Public Private on implementation of higher education in Kenya. *Newzealand in Africa's Development* 247(4), 15-27.

- Cui, C., Liu, Y., Hope, A., and Wang, J. (2018). Review of studies on the public–private partnerships (PPP) for infrastructure projects. *International Journal of Project Management*, 36(5), 773-794.
- Darwinkel, M., Kyalo, I., and Kamau, C. (2022). Rethinking county health sector public private sector towards sustainability. *Frontiers in Public Health*, 9(1) 23-35
- Duijin, S. V., Barsosio, H. C., Omollo, M., and Milimo, E. (2023). Public private partnerships to rapidly strengthen and scale covid-19 response in western Kenya. *Frontiers in Public Health*, 10(2) 123-131.
- Dunn-Cavelty, M., and Suter, M. (2009). Public–Private Partnerships are no silver bullet: An expanded governance model for critical infrastructure protection. *International Journal of Critical Infrastructure Protection*, 2(4), 179-187.
- Gbadgeson, T. J., and Aluko, T. B. (2014). Investigating factors influencing adoption of private finance initiatives (PFIs). *Built Environment Project Asset Management*, 4(2), 199-215.
- Jumakulov, I. Z. (2022). Implementation of PPP in higher education in Uzbekistan. *Gospodarka I innowacje*, 30(2), 104-108.
- Khallat, R., Kang, K., Hastak, M., and Othman. (2022). PPP for higher education in the USA. *Buildings*, 12(110), 1888-1898.
- Kimani, W. B. (2016). Re-engineering students' accommodation in public university through PPP in Kenya Karatina University. *Built Environment Project Asset Management*, 6(1), 21-33.
- Kysiak, C. R. (1986). The role of the University in PPP. *Proceedings of the Academy of Political Science*, 36(2), 47-59.
- LanRocque, N. (2008). Public-private partnership: An international review. *Journal of Asian Public Policy*, 1(2), 76-89.
- Lee, M. N. N. (2008). Restructuring higher education: Public-private partnerships. *Journal of Asian Public Policy*, 1(2), 188-198.
- Leecy, L. R., Corriors, W. A., and Martin, L. L. (2020). Public use of social infrastructure through PPP: An exploratory example. *Public Works Management and Policy*, 25(3), 295-311.
- Li, B., and Akintoye, A. (2003). An overview of Public-Private Partnerships. *Public-Private Partnerships: Managing Risks and Opportunities*, 5(1), 3-30.
- Mgaiwa, J. S., and Poncian, J. (2016). Public-private partnerships in higher education in Tanzania: Implications for access and quality education. *Bandung: Journal of the Global South*, 3(1), 1-21.
- Mokua, C., and Kimutai. (2019). Monitoring and evaluation systems and performance of public private partnership projects in Nairobi city, Kenya. *International Journal of Current Aspects*, 3(6), 124-148.
- Mukhwana, E. J., Knadie, A., and Too, N. L. (2020). Financing higher education in Africa: The case of Kenya. *African Journal of Rural Development*, 5(2), 16-25.

- Mungai, P. (2020). Public private partnerships and project reforms of commercial state corporations in Kenya. *African Journal of Rural Development*, 5(2), 34-42.
- Muthoga, M. M. (2019). The legal and institutional evaluation on implementation of public private partnerships in Kenya. *International Journal of Aspects*, 3(6), 198-209.
- Odenkunle, K., and Babalola, J. B. (2008). Impact of PPP on quality assurance in management of higher education in Nigeria. *East African Journal of Research and Policy*, 2(1), 20-30.
- Ogunode, J. N., Edinoh, K., and Okolie, C. R. (2023). PPP model and implementation of tertiary education program in Nigeria. *American Journal of Science Integration and Human Development*, 1(6), 1-12.
- Opara, M., Elloumi, F., Okafor., and Warsane, H. (2017). Effects of institutional environments on PPP projects: Evidence from Canada. *Accounting Forum*, 41(2), 77-95.
- Osono, B. F., De Galbert, P., Habyarimana, J., and Sabarnal, S. (2020). The impact of PPP on private school performance: Evidence from a controlled randomized trial in Uganda. *Economic Development and Cultural Change*, 68(2), 429-460.
- Osono, B. F., Guaqueta, J., and Patrinos, A. H. (2012). The role of PPP in Education. *Public Private Partnerships in Education*, 201(5), 40-55.
- Shabolova, U. Zh., Shikabayeva, Z., Kenzeghaliyeva, Z., and Kim, E. (2018). Public-private partnerships and communal services through housing infrastructure of Kazakhstan. *Public –Private Partnerships: Managing Risks and Opportunities*, 10(2), 59-67.
- Shiji, O. (2014). Public-private partnerships and Indian higher education. *Higher Education for the Future*, 1(2), 139-153.
- Suchman, L., Hart, E., and Montegu, D. (2018). The Public private partnerships in practice: Collaborating to improve health finance in Ghana and Kenya. *Public-Private Partnerships: Managing Risks and Opportunities*, 10(2), 100-111.
- Takmayzyan, S. A., Rukina, N. S., Samoylova, N. K., and Gerasimova, A. K. (2019). Public-Private partnerships as a tool for the development of education institutional infrastructure in Russia. *Elftherios Thalsinos*, 5(2), 18-28.
- Tilak, J. B. G. (2010). Public-private partnerships in education. *Comparative Education Review*, 53(1), 25-36.
- Valcheva, K., and Valkov, I. A. (2020). European national measure of PPP in higher education. *Strategic for Policy in Sciences and Education via obraucleluata, I Nauchnuata Politick*, 28(3), 100-111.
- Verger, A., Bonal, X., and Zancajo, A. (2016). What are the roles and impacts of public-private partnerships in education? a realistic evaluation of chilean education quasi-market. *Comparative Education Review*, 60(2), 223-248.
- Vertakova, J., and Plotnikov, V. (2014). The PPP and the specifics of their implementation in the vocational education in Russia. *Procedia: Economics and Finance*, 16(2), 24-33.
- Wanjau, J., and Maguta, A. (2023). Exploring sustainable growth and corporate governance in Kenyan Universities. *Journal of Frontiers of Humanities and Social Science*, 2(10), 41-50.