CAPACITY BUILDING FOR TANZANIAN PUBLIC-PRIVATE PARTNERSHIPS (PPPS) PROJECTS: CHALLENGES AND ADVOCATED SOLUTIONS

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Despite the popularity of public-private partnerships (PPPs) as a means of alleviating social housing and infrastructural needs and improving service delivery in both developing and developed economies, the lack of capacity remains one of the major problems in implementing PPPs particularly in developing economies. Empirical studies around capacity building for PPPs are also limited. To address the identified knowledge gaps, this study seeks to examine the challenges impacting the capacity building for the Tanzanian PPP projects, as well as explore the strength of interactions between challenges. Questionnaire survey approach was used to collect data from 81 PPP Tanzanian practitioners who were purposely targeted. Response data was subjected to descriptive statistics, parametric and non-parametric tests to examine the differences in the perception of the identified capacity building challenges, and inherent relationships amongst them. Ensuing descriptive and empirical analysis demonstrated a disparity in the ranking of the 8 challenges among those with and without PPP experience, with 4 having statistically significant differences. Based on the overall sample, the highly ranked seven challenges (mean score > 3.50) in ascending order were: 1) limited local people with experience; 2) lack of resources; 3) lack of successful PPP projects; 4) lack of permanent PPP trainers; 5) higher costs in conducting PPP training, 6) lack of hands-on training; and 7) inadequate qualifications. The least ranked was lack of political will for promoting PPPs. The major finding from the correlation analysis was the existence of the strong and positive correlation between 'inadequate qualifications' and 'lack of hands-on training'. Suggested solutions were nested within the training and education, lessons learnt through PPP project exemplars, benchmarking of PPP projects through local and foreign visit categories. The results of this study foster a better understanding of the different mechanisms for overcoming the capacity building challenges.

Keywords: developing countries, Tanzania, capacity buildings, solutions, PPP

INTRODUCTION

According to the United Nations Development Programme, (UNDP), (2009), strong capacity, locally generated and sustained, is essential to the success of any development enterprise. However, despite the Tanzanian National Development

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Vision 2025 which encourages the Government to seek private sector investments in infrastructure and services development, a number of capacity-building related challenges continues to hamper the PPP implementation efforts by the Tanzanian stakeholders. Likewise, most Governments in developing countries, the Tanzanian government has established PPP Units and associated teams in the Ministry of Finance focusing on skills in PPPs with the public administration. Notwithstanding the importance of capacity building programs in developing countries, studies have shown that capacity building support tended to be directed more towards the countries with higher existing capacity (Umemiya *et al.,* 2020).

The World Bank report (2018) has also suggested that capacity building for other government entities must be undertaken by the PPP units. However, within the Tanzanian context, despite these units (PPP finance Unit, and PPP coordinating unit) being responsible for the assessment, approval as well as the coordination of all PPP projects, studies such as Kavishe *et al.,* (2018) have found these PPP units as being ineffective and underutilised.

This supports Mourgues and Kingombe, (2017) study that mere creation of PPP units is not enough to make them successful. More so, whilst PPPs have been suggested as a strategy to deliver infrastructure and affordable housing in emerging economies, its [PPPs] still a relatively new concept (World Bank, 2016), and lack of capacity particularly remains one of the major problems in implementing PPPs. However, the synergies and the role of capacity building in facilitating the PPP implementation success are acknowledged in literature (World Bank, 2016; Trebilcock and Rosenstock, 2015; Osei-Kyei and Chan, 2018). For instance, Trebilcock and Rosenstock (2015) identified institutional capacity as a key determinant of PPP success.

Capacity building and training have been acknowledged to enhance local practitioners' skills and knowledge in delivering PPPs projects (Osei-Kyei and Chan, 2018). There also been renewed calls and classification of 7 research themes for more research on PPP (Akintoye and Kumaraswamy, 2016), and Cui *et al.,* (2016) identified the need for more research on 'government supervision of PPP projects', and 'knowledge management methods for PPP projects' clearly indicates a need for more PPP empirical studies. The studies reviewed recommend further research on the identification of practical solutions to challenges affecting the capacity buildings around PPP housing projects.

Therefore, a need to explore the capacity building challenges and subsequent advocated solutions with PPP housing projects associated with developing countries such as Tanzania becomes relevant. The present study is aimed at filling the knowledge gap by conducting a survey among the Tanzanian PPP stakeholders. Its aims are twofold. Firstly, identify and rank the challenges impacting the capacity building for the Tanzania public-private partnerships (PPPs) projects. Secondly, it aims to propose ways of improving the PPP capacity building and offer some advocated solutions. The following is an overview of the conceptualisation of capacity building and capacity development. A brief summary of discussions is provided on the extant literature on the challenges affecting the capacity building for implementing PPPs, and the knowledge gap. This is followed by the methodological approach adopted, a discussion of the findings and implications of the study. Some advocated practical solutions for managing the challenges are also suggested. The final section concludes with recommendations and conclusions drawn.

Conceptualisation of Capacity Building and Capacity Development

To facilitate the examination of the challenges impacting the capacity building for the Tanzanian PPP projects, the concepts of "capacity building" and "capacity development" needs to be defined as a number of different definitions for capacity building exists (Ferrero *et al.,* 2019; UNDP, 2009) and contradictions or consensus over the actual definitions of "capacity building" or even "capacity" (Ridge *et al.,* 2018). According to Ferrero *et al.,* (2019), capacity building is defined as a multi-level learning process, and training is one of its components. In contrast the UNDP (2009) defines capacity building as "a process that supports only the initial stages of building or creating capacities and assumes that there are no existing capacities to start from" whereas 'capacity development' is defined as 'the process through which individuals, organizations and societies obtain, strengthen and maintain the capabilities to set and achieve their own development objectives over time. "Capacity" and "organizational readiness" have also been used in the same context (Spaulding *et al.,* 2017).

According to Manu *et al.,* (2018), capacity building and development is also conceptualised as having three strands of capacity - individual, organisational and national (i.e. enabling national environment). However, this study focuses more on issues pertaining to the individual and organisational facets. Other studies such as Nanfosso (2011) have conceptualised capacity as referring to an acquired or developed knowledge which enables an individual to succeed in a physical or intellectual activity. Within the context of Municipals capacity building, Plummer (2002, pg. 6) offers the following definition: The term 'capacity building' includes a broader understanding of capacity that includes human resource development, organisational development and the regulatory framework. 'Municipal capacity building' refers specifically to organisational and human resource development (HRD) issues, and those regulatory issues that are within the scope of municipal government. Therefore, drawing upon the review of the definitions as provided, and particularly, that of Nanfosso (2011) which further states that capacity building covers three activities: professional enhancement, procedures improvement and organisation strengthening, the exploration of the capacity building challenges for the Tanzanian PPPs projects, our study is designed to view those challenges from both the organisational and human resource development (HRD) issues, and the areas where capacity is expected to be grown such as an enabling environment, in organizations and within individuals (UNDP, 2009).

LITERATURE REVIEW

The identified studies were selected using a mini scoping review. According to Grant and Booth (2009), this type of review is used for preliminary assessment of potential size and scope of available research literature, with no formal quality assessment required. The SCOPUS database was used, and the following search string of TITLE-ABS-KEY was used: "Capacity building"; "Capacity development; "Public-private partnerships"; "PPPs"; AND developing; countries; housing; projects. This initial search retrieved 3923 articles for the subsequent refinement. These comprised 997 from open access and 2926 from other sources. The scope was further narrowed with the following revised string search: (TITLE-ABS-KEY ("Capacity building" AND challenges) AND PUBYEAR > 2008 AND PUBYEAR < 2020) AND (PPPs). This resulted in 18 document results with the final selected 11 studies identified through reading the abstracts with key focus on the identified keywords.

RESEARCH METHODS

To examine the challenges impacting the capacity building for the Tanzanian PPP projects, as well as explore the strength of interactions between challenges, and propose some practical solution for managing these challenges, an explanatory empirical research was undertaken in the study.

Table 1: Summary of supporting literature on capacity building challenges in PPP projects

No.	Challenge	Supporting literature
1.	Limited local people with experience	Chileshe and Kikwasi (2014); Danish Institute for International Studies (DIIS), (2015); World Bank (2016); Kikwasi and Escalante (2018)
2.	Lack of resources	UPND (2009); Ika and Donelly (2017)*; Mourgues and Kingombe, (2017)
3.	Lack of successful PPP projects	Plummer (2002); UNDP (2009)
4.	Lack of permanent PPP trainers	Plummer (2002), UNDP (2009); Danish Institute for International Studies (DIIS), (2015); World Bank (2018);
5.	Higher costs in conducting PPP training	Ika and Donelly (2017); Janssen *et al*. (2016),
6.	Lack of hands-on training	UNDP (2009); Osei-Kyei and Chan (2018); Ferrero et *al*. (2019); Mourgues and Kingombe, (2017)
7.	Inadequate qualifications	Plummer (2002), World Bank (2016)
8.	Lack of political will for promoting PPPs	Nanfosso (2011); Voordijk (2012); Danish Institute for International Studies (DIIS), (2015); Kwofie *et al*. (2016); World Bank (2016); Jansen *et al*. (2016); Ika and Donelly (2017): Almarri and Boussabaine (2017); Kavishe *et al*. (2018);UNDP (2009)

Notes: Drawing upon Umemiya *et al*. (2020), capacity building support in the context of this study means financial and technical assistance in the form of international development projects, aimed at building and strengthening the PPP implementation approaches capacity in developing countries, and using Tanzania as a case study; * Ika and Donelly (2017) identified financial resources among the structural conditions necessary for measuring capacity building.

Measurement instrument: The questionnaire was comprised of the following 2 distinct sections related to findings as: (1) demographics; and (2) challenges impacting the capacity building process. For section 2, the respondents were asked to rate their perceptions on the 8 challenges impacting PPP capacity building using a five-point Likert-scale (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree).

Survey administration: A cross-sectional research design was adopted whereby the targeted population included PPP consultants, local authority officers involved in PPP projects, World Bank PPP facilitators and private sector trainees who were attending PPP Training of Trainers (TOT) held from 7th -18th October 2019 at Bagamoyo Beach Hotel in Bagamoyo, Tanzania.

Population and data collection method: As acknowledged by Ferrero *et al.,* (2019), capacity building is a multi-level learning process, and training is one of its components. Therefore, to equip the Tanzanian stakeholders with PPP knowledge, a total of nearly 120 participants from various regions of the country attended the PPP training of trainers organized by the World Bank, Tanzania Country Office. A sample size of 100 potential respondents was estimated with questionnaires prepared and distributed to all the willing participants. Out of 100 distributed, a total of 81 questionnaires were returned on the same day at the end of the training session, of which one was incomplete thus resulting in 80 useable for the final data analysis.

Data analysis: Drawing on methodological justification, including rationale, explanation of null hypothesis of Kavishe *et al.,* (2018) study, quantitative data were analysed using the IBM Statistical Package for Social Sciences (SPSS) version 25. Four methods were employed: 1) Parametric tests were undertaken to measure the significance of the 'challenges'; 2) Descriptive statistics tests such as measures of

central tendencies and frequency analysis enabled further ranking analyses to obtain relative importance of the capacity building challenges; 3) Kendall's concordance analysis and 4) Pearson correlation analysis was used to examine the interaction, strength and direction of relationships among identified challenges.

RESULTS

Reliability analysis: The reliability and internal consistency of the survey instrument comprising the eight challenges as itemised in Table 1 were examined using the Cronbach's α's coefficient. According to Cronbach (1951), this is one of the most popular reliability statistics which is aimed at determining the internal consistency or average correlation of items in a survey instrument to gauge its reliability. The Cronbach α was found to be 0.807 (F-statistic = 5.261, sig = 0.000) for the challenges instrument thus indicating a high reliability of scales (Nunnally, 1978).

Agreement and consistency of responses: To establish whether there were any agreement and consistency of responses around the eight challenges, Kendall's concordance analysis at a pre-defined test value of 0.05 was undertaken (Osei-Kyei and Chan, 2017, Kavishe and Chileshe, 2019). The results for the test statistics for Kendall's coefficient concordance showed that, the W value obtained for the "challenges" was 0.305, with significance values of 0.000. As suggested by Kavishe and Chileshe (2019), Osei-Kyei and Chan (2017), the $\chi 2$ was used for the pitfalls than the computed W values due to the number of attributes (i.e. challenges) exceeding seven. From the results obtained, the critical value of the $\chi 2$ was 14.08 and less than the computed value of 57.585 with degrees of freedom (df) of 7 thus confirming that there was agreement in the levels of consensus in the scoring of the challenges among the respondents.

Stage of PPP projects: The survey respondents were asked to indicate the stage of the current PPP projects that they were working on. Out of the 80 respondents, only 76.25% (n =61) responded to this question. The results showed that the majority 47 (70%) of the PPP practitioners were currently working on PPP projects which were in the feasibility stage, followed by identification and screening (11.3%, n = 9), procurement (3.8%, n = 3), and operational (2.5%, n = 2). The early stages of the PPP projects or life cycles have been identified as being prone to a number of challenges (Soomro and Zhang, 2013; Kavishe *et al.,* 2018; World Bank, 2018; Jayasuriya *et al.,* 2019). For example, Kavishe *et al.,* (2018) study aimed at identifying and ranking the challenges influencing the delivery of the housing public-private partnership (HPPP) in Tanzania established that the majority of these challenges were more prevalent in the "Procurement phase" followed by the "Preparation phase" with 6 (31.58 per cent). This highlights the need of building capacity around activities associated with these stages. Likewise, financial management challenges have been found to be associated with the early stage of the PPP projects (Soomro and Zhang, 2013; Jayasuriya *et al.,* 2019).

Table 2 presents the descriptive results of analysis for 8 challenges affecting the capacity building of PPPs in Tanzania. Table 2 also presents the results of one-sample t-tests of challenges affecting the capacity building of the PPP projects according to respondent's experience and will now be discussed in some further detail. As shown in Table 2, the mean scores for 8 challenges range from 4.32 (limited local people with experience) to 3.46 (lack of political will), suggesting differences amongst perception of respondents. The CoV of the challenges also ranged between 21.71 and 34.51 percent illustrating the different levels of agreement amongst the respondents.

Results show that the 4 highly ranked 'challenges' impacting the capacity building of the PPP housing projects are statistically significantly different ($p < 0.05$) in Tanzania. For ease of discussion, only the top quartile ranked significant challenges factors as well as the least ranked are included in these discussions.

Limited local people with experience: According to the UNDP (2009), the capacity building needs to be developed using the local knowledge, structure and processes. However, the lack of skill amongst the professions in development countries is well documented.

Table 2: Ranking of capacity building challenges

Code	Capacity building challenge	Test value ($\mu = 3.5$)	Sig. (2-tailed)	Mean[a]	Std. Dev	CoV	Rank
CBC1	Limited local people with experience	7.714	**.000***	4.32	.938	21.71	1
CBC2	Lack of resources	2.526	**.014***	4.12	1.131	27.45	2
CBC3	Lack of successful PPP projects	2.956	**.004***	3.86	1.060	27.46	3
CBC4	Lack of permanent PPP trainers	2.308	**.024***	3.80	1.143	30.08	4
CBC5	Higher costs in conducting PPP training	1.302	.197	3.65	1.120	30.68	5
CBC6	Lack of hands-on training	1.181	.241	3.59	1.116	31.09	6
CBC7	Inadequate qualifications	1.042	.301	3.53	1.208	34.22	7
CBC8	Lack of political will for promoting PPPs	-.288	.774	3.46	1.194	34.51	8

Notes: [a]Mean score based on valid n =76 (list wise), [b] MS = mean score of capacity building challenge where 5= strongly agree; 4=agree; 3=neutral; 2= disagree; 1= strongly disagree. The higher the mean score the more critical the challenge; COV = Coefficient of variation; R = Rank, *df = degrees of freedom,* *Significant at the 95 per cent level ($p < 0.05$)

Using Tanzania as an example, Chileshe and Kikwasi, (2014) identified project management skills as faced by the contractors, clients and consultants. Likewise, Kikwasi and Escalante (2018) identified 'inadequate management and human resource skills' among the number of challenges facing contractors. From the responses, the challenge 'Limited local people with experience' (mean = 4.32) was the highest ranked challenge based on the overall sample (mean = 4.70). The lower value of standard deviation (std. dev = 0.938) further reinforces the consensus among respondents in ranking this challenge highly. This challenge was also statistically significant ($t(76) = 7.714$, $p = 0.000 < 0.05$). The findings are consistent with literature on PPPs. For instance, the World Bank (2016) acknowledges that Tanzania has significant experiences with PPPs, although these have so far produced mixed results.

Lack of resources: "Lack of resources' (mean = 4.12) was ranked second most critical challenge affecting the capacity building in PPP projects in Tanzania. The higher value of standard deviation (std. dev = 1.131) further reinforces the lack of consensus among respondents despite the higher ranking of this challenge. Further examination of Table 2 also shows that this challenge was statistically significant ($t(75) = 2.526$, $p = 0.0140 < 0.05$). The higher ranking of this challenge is further evidenced by the large mean difference of 1.013. The findings are also consistent with a few earlier studies. Other studies such as UNDP (2009) offer some contradictory viewpoints with the assertion that availability of input resources does not guarantee their contribution to development objectives.

Lack of successful PPP projects: The third overall ranked challenge affecting the capacity building in PPP projects was that of lack of successful PPP projects, (mean = 3.86). Despite the higher value of the standard deviation (SD = 1.060) suggesting the respondents' lack of consensus around the higher ranking of this challenge, it was nevertheless statistically significant ($t(76) = 2.956$, $p = 0.004 < 0.05$) and had a

positive mean difference of .3571. Some ways of improving the capacity building were suggested by the survey respondents. Examples and advocated solutions include usage of PPP projects from countries which have similar enabling environment such as Tanzania. This finding is also consistent with the UNDP (2009) which recommended 'experience sharing' through promoting exchange of information and best practices among the countries as a pathway to successful project. Accordingly, the Tanzanian practitioners are of the view that this could be used as case studies for easy understanding and to show how they are successful.

Lack of permanent PPP trainers: According to Plummer (2002), a capacity building strategy should address both skills development and organisational capacity. The World Bank (2016, pg. XV) further acknowledges that a solid training program and public outreach campaign plays an important role in enabling government staff, local governments and the public to understand the rationale for P Likewise, the UNDP (2009) has identified 'expertise on training and learning methodologies' among the indicative activities of capacity building programmes. However, the issue of skilled workforce, and lack of qualified PPP trainers is a significant challenge affecting the emerging economies, and Tanzania is no exception. This further demonstrates why the challenge of 'Lack of permanent PPP trainers' was ranked fourth (mean = 3.80) and assessed as statistically significant ($t(76) = 2.308$, $p = 0.024 < 0.05$) and had a positive mean difference of .3026. Previous studies further support this finding. For example, the Danish Institute for International Studies (DIIS), (2015), noted that the skills required to identify, assess, procure and implement PPP projects are advanced and in high demand in government and, especially, in the private sector.

Lack of political will for promoting PPPs: According to Mahalingam *et al.,* (2011 *et al.,* cited in Voordijk, 2012), political willingness is a key factor to determining the evolution of the institutional environment. In the lower quartile, "lack of political will for promoting PPPs" was the least ranked (8^{th}) with mean score of 3.46. This challenge was also not statistically significant ($t(76) = --.288$, $p = .774 > 0.05$) with mean difference of -.0395. The need of an enabling PPP environment and government support as a catalyst for PPP implementation and capacity building is well documented in earlier studies. For instance, Janssen *et al.,* (2016) established that the application of PPPs required local governments to adapt their current working methods. Most functioning of local government in developing countries is associated with the particular Government of the day (or in power), hence any lack of political will would cascade to the functioning of the local government. Similarly, other studies such in developed (Danish Institute for International Studies, 2015); and developing countries (Kwofie *et al.,* 2016; Almarri and Boussabaine, 2017; Kavishe *et al.,* 2018) have identified government commitment as an enabler of PPP implementation process, and 'political support' as a critical success factor which was a good predictor for PPP project performance. For instance, UNDP (2009) Singaporean study demonstrated how strong political will to combat corruption through the introduction of stringent administrative and legal measures to support the anticorruption law could promote capacity building initiatives.

Pearson's correlation coefficient and the coefficient of determination were computed for the eight challenges affecting capacity building for the PPP in Tanzania. As observed by Janssen *et al.,* (2016), the application of PPPs requires local governments to adapt their current working methods, which accordingly amounts to a large impediment to local governments applying PPPs. The results (not shown here) further illustrated the criticality of the challenge of 'lack of resources' as it had a number of

positive, medium and low levels of relationships that has with other challenges such as 'lack of successful PPP projects' (r = 0.305); 'lack of permanent PPP trainers' (r = 0.245), 'higher costs in conducting PPP training' (r = 0.245), 'lack of hands-on training' (r = 0.237) and 'lack of political will for promoting PPPs' (r = 0.232). The results further revealed that that none of the correlations were of large strength (r = 0.50 to 1.0 or r = -0.50 to -1.0) as defined by Cohen (1988 cited in Pallant, 2005). In addition, the results also revealed that 15 (53.57 per cent) out of the 28 correlations were significant at $p < 0.01$ and $p < 0.05$ levels with 'inadequate qualifications' and 'lack of hands on training' showing medium strength positive correlations ($r = 0.447$, $n = 71$, $p = 0.000 < 0.01$).

CONCLUSION

In order to gain insights into the Tanzanian stakeholders on the challenges impacting the capacity building for the PPP projects, as well as propose some practical solution for managing these challenges, a quantitative approach comprising questionnaire survey was adopted. Based on the overall sample, the most highly ranked seven challenges in ascending order were: 1) limited local people with experience; 2) lack of resources; 3) lack of successful PPP projects; 4) lack of permanent PPP trainers; 5) higher costs in conducting PPP training, 6) lack of hands-on training; and 7) inadequate qualifications. The least ranked was lack of political will for promoting PPPs. The findings further established that the majority of these challenges were more prevalent in the "Procurement phase" followed by the "Preparation phase". The major finding from the correlation analysis was the existence of the strong and positive correlation between 'inadequate qualifications' and 'lack of hands-on training'. The majority of the advocated solutions were nested within within the training and education, lessons learnt through PPP project exemplars, benchmarking of PPP projects through local and foreign visit categories. This study is significant as it is among the first within the Tanzanian construction and housing-specific empirical studies on the challenges affecting the capacity building for PPPs.

The following important implications are suggested. For government and policy makers, the identification of the 'capacity building' challenges would provide them with an opportunity for the development of appropriate local strategies and coping mechanism specifically conducive for the Tanzanian environment. More so, limited local people with PPP experience and lack of resources ranked 1st and 2nd agrees with Mourgues and Kingombe, (2017) and implies that, the practical local training approach is considered lengthy and leads into another problem of higher costs in conducting PPP training, therefore, the government through the PPP units to design and tailor specific training initiatives associated with capacity building programmes. Secondly, similar to Kavishe *et al.,* (2018), and Plummer (2002) suggestions, the key stakeholders would take part in-house PPP training programmes and enabling environments. The following limitations are acknowledged: Firstly, the survey sample consisted of organisations and PPP stakeholders from one country, namely Tanzania. Evidently, findings may not generalize to other developing countries. Secondly, this study focuses more on issues pertaining to the individual and organisational facets of capacity building, and not the national (i.e. enabling national environment). Therefore, future studies should be extended to empirical coverage of capacity at national level and also in other developing countries.

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