



EFFECT OF PUBLIC PROJECTS' FAILURE ON INFRASTRUCTURAL DEVELOPMENT IN ONDO STATE, NIGERIA

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ABSTRACT: *The primary concern of infrastructural development is to improve and raise both the standard and quality of life. However, the consistent and worrisome failure creates several effects on infrastructural development. In the current dispensation of the global economy, there is an indication that infrastructural development is fast becoming a central issue in the area of sustainable development. This is a sequel to the fact that infrastructural development is an indispensable factor in sustainable development goals in project management. Hence, investigating the effects of public projects' failure on infrastructural development is inevitable. In achieving the objectives of this work, a well-structured questionnaire was developed. One hundred and Twenty (120) copies of the questionnaire were distributed across the eighteen (18) Local Government Areas of the State. However, one hundred (110) copies of the questionnaire, representing 91.7%, were returned and found suitable for analysis. The respondents include Engineers, Community leaders, Civil servants and General Public. The data analysis used includes simple descriptive and inferential statistics. The results showed that economic deficit and poverty increased with a mean of 3.83, followed by lack of social amenities (3.78), poor standard of living (3.72), inability to meet citizen's needs (3.40), visual effects (3.14) was the effect of public projects poor performance on infrastructural development. Moreover, the results further showed an increase in security risk (2.97), an abode for criminal activities (2.97), and poor urban development (2.78) as an additional effect. The study recommends effective monitoring and proper evaluation of public projects. Policies that support infrastructural projects development continuity is also imperative and should be legislated to improve the infrastructural development in the study area and the nation.*

KEYWORDS: Project, Control and Evaluation, Public Projects, Project Management, Monitoring and Evaluation.



INTRODUCTION

Project can be any new structure, plant, process, system or software, large or small, or the replacement, refurbishing, renewal or removal of an existing one. Such project management requires applying knowledge, skill and techniques to carry it out more effectively and efficiently (Denise, 2002). Also, a project is a sequence of tasks bounded by time, and resources and requires results to achieve a particular aim (Baum & Tolbert, 1985). The development of public projects, especially infrastructure, is intended to provide new products and services to the community and at the same time lead to economic development. However, these advantages were unattained because of its continuous failures or underperformance (Ayodele & Alabi, 2011). The failure of public projects often leads to a loss of opportunity by the citizens not being able to benefit from the intended purpose. Chan, Scott & Lam (2002) opined that most projects failed and were probably abandoned for various reasons. The reasons include frequent changes of government; lack of contractors' competencies; a lack of client competencies; lack of finance and timing; a lack of the project team promise; a lack of understanding of risk and liability assessment; a lack of the end users' needs; and the end users imposed restrictions on the project development and high rate of corruption among the projects players. These variables were further supported by Efenudu (2010); Ihuah & Fortune (2013).

Furthermore, Onyekpere (2011) posited the effect of poor performance of some projects in terms of cost and schedule overruns on a nation's economy is enormous. Moreover, the new costs incurred, as a result of these factors would have been used for the development of other important projects for the overall benefit of the entire state and the nation. Besides, Ubani & Ononuju (2013) opined that, public projects that performed below the required objectives are the resultant effect of the consequence of renegeing on an already commissioned project by virtue of the factors that precipitated the failure. Failed projects, on a general note, are the act of giving up actions on such projects with the final intention of not resuming and not being able to meet the original required goals and objectives. When decisions on such projects are put on hold without any specific time to commence work, such projects are considered to be abandoned and on the pathway to failure (Hanachor, 2012). Incessant poor performances of most public projects are continuously posing serious challenges to the infrastructural development, stakeholders, the state and the nation at large. To a greater extent, the growth and development of any state, region or nation are determined by the quality and capability of its completed public projects for the benefit of its citizens, (Ubani & Ononuju, 2013). Regrettably, the inherent complexity, uncertainty and the state of most public projects created obvious problems of not achieving their initially stated objectives due to some factors, as opined by Munisi, Hawa, & Nusura (2022); Akhayere (2021).

In Ondo State, for example, a lot of factors contributed to public projects' poor performance on infrastructures, which eventually led to outright abandonment. Furthermore, the landscape is littered with failed and abandoned buildings, roads, rails and other infrastructural projects at all various levels of completion, from local government through the state government to the federal level. However, failed public projects such as in the construction and others projects were not only limited to the study area but also present in some other states and countries like Malaysia, the United States, Spain, Dubai, Saudi Arabia, Russia, and Abu Dhabi as opined by Hoe, (2013) and Ewa, (2013). Besides, Ewa (2013) maintained that, there are about 4000 uncompleted or abandoned public projects to the tune of about ₦300 trillion littered all over Nigeria and that it would take about 30 years to get them completed. These public projects failed because they could not meet the expected objectives for which they were established.



However, in Ondo States, Nigeria, this problem has gone on long enough and thereby deserves more urgent project management attention.

Public Projects Success Benchmark (PPSBm)

Samart & Wutthipong (2016) unveiled the significance and importance of critical success factors (CSFs) in the management of public projects, both locally and internationally. According to Samart & Wutthipong (2016), researchers and professionals seem to have little agreement on CSFs. Notwithstanding, more research works are still going on in the area. Chua, Kog & Loh (1999) stated that some success factors were identified and categorised into four main project aspects. The study's outcome showed various sets of CSFs for different public projects depending on their objectives. The most significant factors affecting a public project's development success include effective planning and specifications, unwavering commitment and efficient involvement of the project manager, motivation and well-defined objectives. Nguyen, Ogunlana & Lan (2004) likewise outlined CSFs into five categories for successful public project completion. These important critical success factors (CSFs) are listed as follows: suitable project manager, sufficient budget, qualified and competent project team, adequate provision of resources and commitment to the project. However, Nipin (2015) described CSFs as the main factors that are needed to achieve the purposeful objectives and expectations of the stakeholders in Public Projects. The realisation of these assertions, as stated by Nipin (2015), is to understand the end result and then state the deliverables of the public project.

The success benchmark of public projects in response to different professions differs from project to project. This depends on the participants, extent of services, project size, design complexity, technological implications, etc. Besides, there is a common thread relating to success criteria benchmarks, especially in public projects across the nation, as we relate success to the perceptions and expectations of the stakeholders. A public project is executed through a series of events and interactions, planned or unplanned. Paulo, Osvaldo, Luis, Eduardo & Sergio (2014) opined that the principle and the process of project management concerning public projects are a great challenge to project managers even from the beginning. For example, the nature of any project, simple or complex, requires its manager to have the capability to handle different issues relating to human, finance, environmental, administration, and technical skills, as well as good communication. In view of this, there is the need for a prompt or timely response to difficult tasks by the project managers, considering that the jobs are often characterised by overwork and a hysterical way. Paulo *et al.* (2014) further stated that scholars such as Kerzner (1987), Munns & Bjeirmi (1996) noted that the results of an organisation's strategic planning guide are to execute projects that can contribute immensely to its strategic goals and objectives.

Moreover, improving performance, maximizing the possibility of success, and minimizing the chance of failure is the priority of an organisation that always engage in dynamic project management. Paulo *et al.* (2014) and Kerzner (1987) suggested that an organisation's primary goals may not be realised if the concentration is not on critical aspects of management factors of either public or private. These factors are the complexity of the project, scope variations or changes, organisational restructuring, project risks, technological advancement, financial planning and so on. All these factors position project management in a strategic situation within organisations and can reach their strategic goals and attain the best possible results. Albert, Chan, Ada & Chan (2004) researched construction projects and discovered factors affecting their success. The success benchmark factors (SBFs) and CSFs, according to Albert *et al.*

(2004), were thereby defined as those factors determining the success of the project(s) of either public or private. It is therefore believed that some of the factors that affect the success of either public or private projects under execution could as well be the actual determinants of failure.

Moreover, Albert *et al.* (2004) also agreed with other scholars on critical success factors (CSFs) of public projects, which can be classified into five main categories. These include the following factors: project-related, human-related, project management, external environmental and procurement related. However, political factors, technological advancement and other factors could contribute to public project management's success, as shown in figure 1.

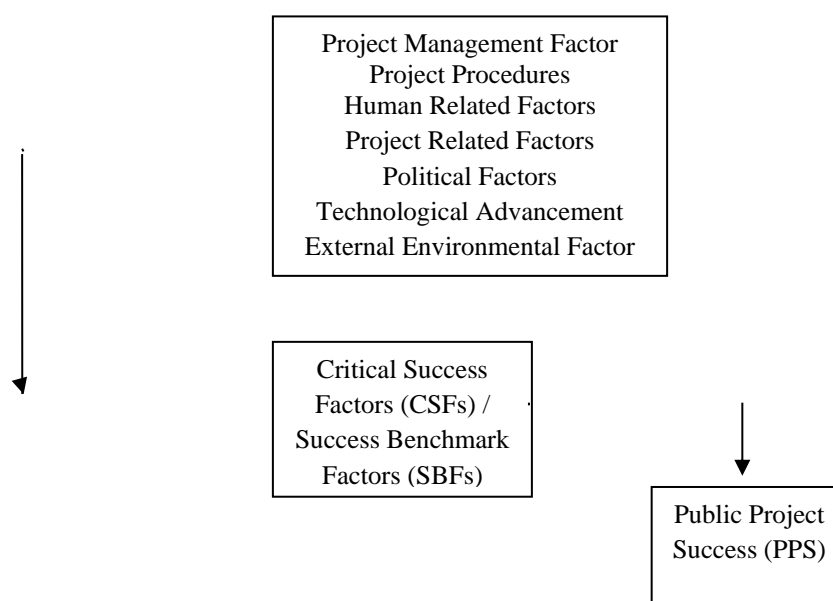


Figure 1: Public Project Success Benchmark Conceptual frameworks (PPSBCFs)

Public Project Management (PPM) starts from the definition of such a project and implies some form of control over the planned process of specific change (Denise, 2002). Hubbard (1990) viewed project management to be an action or factor for successful execution. Besides, Jaselskis & Ashley (1991) opined that by using management tools, project managers could plan and execute their projects to maximise the opportunities for success. However, the variables in public project management (PPM) include control mechanisms, adequate communication, good feedback capabilities, effective coordination, appropriate decision-making, effective monitoring and control, project organisation structure, efficient and effective planning and scheduling and related previous management experience (Belout, 1998; Walker & Vines, 2000). Meanwhile, Walker & Vines (2000) maintained that there are a number of factors that have resulted from an ineffective project manager, such as problems in the communication system, ineffective monitoring and control mechanism, feedback incapability, organisational structure, safety and quality assurance program problem, inappropriate project planning and scheduling, control of subcontractors work and finally, the overall managerial actions.

Moreover, Griffith & Watson (2004) stated that planning in project management, especially in public projects, should be coupled with programming. Nevertheless, planning should involve determining, analysing, devising and organising the resources required for a given project.



Meanwhile, programming deals with the sequencing of those resources. However, inappropriate project planning and scheduling, according to Frimpong, Oluwoye & Crawford (2003), can result in the high frequency of scheduling variations or adjustments as agreed by Dissanayaka & Kumaraswamy (1999), ineffective utilisation of modern technology (Akhayere, 2021). In addition, monitoring and control mechanisms should compare performance or feedback on costs, the progress of the work, the quality of materials and workmanship or project execution with a plan. Control and monitoring also involve charting, evaluation and review at appropriate and regular meetings (Munisi, Hawa & Nusura, 2022; Griffith & Watson, 2004). The problem of project control, such as time and cost control, may cause delays and cost overruns (Frimpong *et al.*, 2003). Hence, Harris, McCaffer & Edum - Fortwe (2006) concluded that a cost control system should enable a project manager to observe current cost levels, compare them with a standard plan, and provide the needed corrective measures to keep costs within acceptable bounds.

Statement of the Research Problem

The failure or poor performance of public projects on infrastructural development in Ondo State, Nigeria, has resulted in many adverse effects in the area. Although, there have been researched works on abandoned construction, drainage projects and housing units (Hoe, 2013), rural electrifications (Munisi, Hawa & Nusura, 2022) and small-scale public projects (Akhayere, 2021). Many authors have identified the factors responsible for construction project failure and abandonment (Olapade & Anthony, 2012; Ubani & Ononuju, 2013; Hoe, 2013; Ayodele & Alabi, 2011). However, there needs to be more attention to the effect of public project (PPs) failure on the infrastructural development in the study area as required in the project management critical success factors (CSFs). It is in light of these assertions this study intends to assess the causes and the effect of public project failure on the infrastructural development in Ondo State, Nigeria and to provide possible measures to reduce the effect in relation to CSFs. Therefore, the study aims to investigate the causes and effects of public project (PPs) performance. In contrast, the specific objective assessed the effect on the infrastructural development in Ondo State, Nigeria.

Research Hypotheses

For the purpose of this research, the null and alternate hypotheses were formulated;

H₀: There was no significant effect of the public projects (PPs) failure on the infrastructural development in Ondo State, Nigeria.

H₁: There was a significant effect of the public projects (PPs) failure significantly affecting the infrastructural development in Ondo State, Nigeria.

The study was carried out in all the eighteen LGAs of Ondo State. The state has three senatorial districts, namely: Ondo Central (Ondo West, Ondo East, Akure South, Akure North and Owena); Ondo North Senatorial District (Akoko North East, Akoko South West, Akoko North West, Akoko South East, Ose, Owo) while Ondo South Senatorial District consists of Okitipupa, Odigbo, Ileoluji/Okeigbo, Irele, Ilaje, and Ese - Odo. The state was selected because of the various public projects that were predominantly available.



Figure 2: Map of Ondo State showing the Eighteen Local Government Areas (www.researchgate.net)

METHODOLOGY

Sample Technique and Sample Size for the study.

The sample size was obtained using Yamane's formula. The mathematically derived Yamane's Formula (1967) is given as in equation (1):

$$n = \frac{N}{[1+N(e)^2]} \quad n = \frac{N}{[1+N(e)^2]} \quad (1)$$

where: n = required responses; N = total population size; e = level of significance at 5% is also the error margin.



Putting $N = 150$ (purposively selected from the State public projects as obtained from Ministry of Works, Akure, 2019),

$e = 5\% = 0.05$ into equation (1) gives:

$$n = \frac{150}{[1 + 150(0.05)^2]} = 109.1$$

A sample size of 120 was purposively considered suitable in order to obtain the required responses. The study employed the use of both primary and secondary data; One hundred and twenty (120) questionnaires were distributed to the respondents, out of which one hundred and ten (110), which represent (91.7%), were returned. The respondents who were purposively selected include Engineers (34), Community Leaders (20), Civil servants (40), and General Public (16) to ensure a comprehensive view or to obtain relevant information on the public projects in Ondo State, Nigeria. The questionnaire comprises nine (9) potential determinant factors and eight (8) known effects of public projects on infrastructural development in the study area. The respondents were asked to tick in the appropriate columns to indicate how much they agreed with the factors affecting public projects on infrastructural development on a five-point Likert scale, i.e. strongly disagree, disagree, fairly agree, agree and strongly agree. The data analysis used simple descriptive statistical techniques (frequencies, percentages, mean and standard deviation) and inferential statistics (Chi-Square) to test the hypotheses).

RESULTS AND DISCUSSION

The demographic information of the respondents as employed in this study is shown in Table 1. The Table revealed the respondents' professions, such that 36.36%; 30.91%; 18.18%; and 14.55% of the respondents are civil servants, engineers, community leaders and the general public, respectively. Table 1 also indicates the respondents' years of relevant work experience in public projects. 50% of the respondents had 21 years and above, 23.64% of the respondents had 16-20 years of experience, 11-15 years of experience with 13.63%, 9.09% of the respondents had 6-10 years' experience while 3.64% of the respondents had 0-5 years experience.

Table 1: Demographic Information of the Respondents

Demography Information	Frequency	%
Respondents' Profession		
Civil Servants	40	36.36
Engineers	34	30.91
Community Leaders	20	18.18
General Public	16	14.55
Total	110	100.00
Respondents' Professional Experience		
0-5 years	4	03.64
6-10 years	10	09.09
11-15 years	15	13.63



16-20 years	26	23.64
21 years and above	55	50.00
Total	110	100.00

Source: Author's Field Work (2020)

Table 2 showed the major factors affecting public projects performance on infrastructure in the study area. The respective mean values of respondents varied from 2.79 to 4.20. Thus, continuity policy implementation has the highest mean value of 4.20, followed by project monitoring & evaluation (4.01). Fraudulent practices and briberies (3.74), project budgeting (3.51), project materials and equipment (3.45) and economic conditions (3.43) were rated moderately. Project feasibility studies (2.97), site workers or staff (2.96), and project consultants (2.79) were rated lowly. The result put continuity policy implementation, projects monitoring & evaluation and fraudulent practices and briberies to be the major determinant factors of public projects performance, as acknowledged and supported by the views of Ayodele & Alabi, (2011) and Munisi, Hawa & Nusura, (2022), on the factors that determine public projects' failures and poor performance.

Table 2: Factors Affecting Public Projects (PPs) Performance on Infrastructure in Ondo State, Nigeria

S/N	Factors	Mean	SD
i.	Continuity policy implementation	4.20	0.920
ii.	Projects monitoring & evaluation	4.01	0.900
iii.	Fraudulent practices and briberies	3.74	1.049
iv.	Project Budgeting	3.51	1.170
v.	Project Materials and Equipment	3.45	1.204
vi.	Economic conditions	3.43	1.070
vii.	Project Feasibility Studies	2.97	1.187
viii.	Site workers or staff	2.96	1.256
Ix	Project Consultants	2.79	1.187

Source: Author's Field Work (2020)

Table 3 presented the effects of public projects (PPs) performance on the infrastructural development in Ondo State, Nigeria. The mean values of the respondents varied from 2.78 to 3.38. However, Table 3 showed that public projects failure or poor performance led to the economic deficit and poverty increase with a mean value of 3.83, followed by inadequate social amenities (3.78), poor standard of living (3.72), inability to meet citizen's needs (3.40) and visual effects (3.14). However, public projects' poor performance on infrastructural development (ID) leads to an increase in security risk (2.97), an abode for criminal activities (2.97), and poor urban development (2.78). The study's results proved that economic deficit and poverty increase with the highest mean, 3.83, to be the significant effect among others.



Table 3: Effect of Public Projects (PPs) Poor Performance on the Infrastructural Development in Ondo State, Nigeria.

S/N	Effect	Mean	SD
i.	i. Economic deficit and poverty increase	3.83	0.890
ii.	ii. Inadequate social amenities	3.78	1.189
iii.	iii. Poor standard of living	3.72	0.937
iv.	iv. Inability to meet citizen's needs	3.40	1.156
v.	v. Visual effects	3.14	1.090
vi.	vi. Increase in security risk	2.97	1.256
vii.	vii. Abode for criminal activities	2.97	1.256
viii	viii. Poor urban development	2.78	1.170

Source: Author's Field Work (2020)

Hypothesis Testing using Chi-Square

The Hypothesis

H_0 : There was no significant effect of public projects (PPs) failure on the infrastructural development (ID) in Ondo State, Nigeria.

H_1 : There was a significant effect of public projects (PPs) failure on the infrastructural development (ID) in Ondo State, Nigeria. **Test Statistics**

Effect of public projects (PPs) on the infrastructural development	
Chi-Square	33.1
Df	2
Asymp. Sig.	.000

$$\text{Empirical value } (x^2) = \sum [(OF-EF)^2]$$

$$EF = 33.1$$

$$OF = (5-1)-(3-1)$$

$$OF = 2$$

The level of significance is 0.05%. The Table value is 15.51

From the calculations, it is shown that since the Chi-square calculated value of 33.1 is greater than the Table value of 15.51, the null hypothesis (H_0) was rejected, while the alternative hypothesis (H_1) was accepted. Therefore, since the empirical value (x^2) = 33.1 falls outside the



acceptable region, this analysis showed that the facts contained in the data collected are correct and enough to prove that there are effects of public projects (PPs) failure on the infrastructural development in Ondo State, Nigeria.

CONCLUSION AND RECOMMENDATIONS

This study has assessed the effect of public project (PPs) failure on the infrastructural development (ID) in Ondo State, Nigeria. The result showed that economic deficit and poverty increase, inadequate social amenities and poor standard of living were the major effect of public projects, followed by the inability to meet citizens' needs and visual effects on infrastructural development in the study area. The results obtained from this study would, in no small measure, be of benefit as additional project management critical success factors determining the success or failure of public projects. However, the outcome of this work would also assist project managers, consultants, engineers, contractors, community leaders and other professionals in government agencies, especially monitoring and evaluation (M&E) experts, to forestall failure and subsequent abandonment of public projects. This study will help to forecast the expected effective performance of public projects even before implementation.

The following recommendations were made based on the findings from the study. (1) Policies that support infrastructural project development continuity are imperative and should be legislated. This will improve the infrastructures and socio-economic development of the Ondo State, Nigeria as a whole and the nation; (2). There should be proper planning, budgeting, controlling, effective monitoring and evaluation (M&E) of public projects; (3). There should be a complete overhauling of the public projects in Ondo State, Nigeria, for effective performance; and (4) Stakeholders' involvement is highly imperative as this will help in averting the consequent failure of public projects.

Future Research

The author suggests further research on this article that the scope of this research should be extended to other states in Nigeria and to other African countries. This will invariably contribute immensely to both theoretical and empirical project management success principles in Africa on infrastructural development.

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