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"Determinant Constraining Factors to Effective Management and Delivery of Public Sector Projects in Rivers State Nigeria"

Determinant Constraining Factors to Effective Management and Delivery of Public Sector Projects in Rivers State Nigeria

By

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### **Abstract**

This study investigates the determinant constraints affecting the effective management and delivery of public sector projects in Rivers State, Nigeria. Despite considerable investments in infrastructure and willingness of Government to drive development through such investment, public projects in the region are often plagued by inefficiencies, cost overruns, delays, and abandonment. Using a survey design and Principal Component Analysis (PCA), the study identified six major constraining factors: insufficient fund release, bureaucracy and weak institutional capacity, political interference, corruption and embezzlement, poor project conception and planning, and managerial inefficiency. These factors collectively account for approximately 70% of the variance in project performance outcomes. The study highlights the need for urgent reforms in public finance management, bureaucratic processes, institutional capacity building, and project governance. It recommended the enhancement of funding mechanisms, depoliticizing project execution, enforcing accountability, and building technical capacities among public project managers. The findings contribute valuable insights for policymakers and practitioners aiming to optimize public infrastructure and service delivery in Nigeria's public sector.

**Keywords:** Constraining,-Factors, effective-project-delivery, project-Management, Public, Sector Projects.



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#### 1.0Introduction

The public sector emerged in Nigeria as a result of the need to harness rationally the scarce resources to produce goods and services for economic improvement as well as for promotion of the welfare of the citizen. According to Aboyade (2004), the involvement of the public sector in Nigeria becomes significant within the period after independence. According to him, the railways were probably the first major example of public sector projects. Conceived in terms of colonial strategic and administrative needs, they quickly acquired the dimension of basic economic amenity for transportation of goods of international commerce like cocoa, groundnuts and palm products.

Nwoye (2007) opined that given the structural nature of the colonial private ownership and control of the railways in the metropolitan countries, it would hardly be expected that the Nigerian Railway Corporation could have been started as many other projects than as a public sector enterprise for such mass transportation. The colonial administration was the nucleus of necessary economic and social infrastructural facilities that private enterprises could not provide. These included railways, roads, bridges, electricity, harbors, water works, communication, education and health facilities. The emergence of the crude oil industry into the Nigeria economy with its associated boom intensified government involvement in production and control of the economy.

Yahaya (2009) stated that one major aim of government at the time was — to convert as much as possible of the growing oil revenue into social, physical and — economic infrastructural investment. The Nigerian Enterprises Promotion Decree (1992) provided a concrete basis for government's — extensive participation in the ownership and managing public sector projects. Given these developments, the projects spread across agriculture, energy, mining, banking, manufacturing, transport, commerce and other activities. Thus before, long, the range of Nigerian public sector projects stretched from farm organization to manufacturing, from housing to multipurpose power and from trading to banking and insurance. At the local government levels, public sector projects range from public health institutions, school buildings, bridges, culverts, road and other ancillary services.

The justification for establishment of public sector enterprises vis-à-vis Public sector projects includes development purposes, government intervention, political consideration, economic considerations, employment and infrastructural provisions. However, in managing public sector projects, a lot of constraints and problems are encountered. According to Obadan (2009), these problems range from political interference, delay in release of funds, bureaucracy, inconsistent policies and decisions, operational errors, rework, prolonged down time etc.

The focus of this research is to analyze of these inherent constraining factors that hinder effective management of the projects with a view to identifying the determinant factors constraining effective project delivery in Rivers State where different projects are on-going.



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This is because public sector projects play a vital role in driving socio-economic development, particularly in regions like Rivers State, Nigeria, where infrastructure and service delivery are critical to improving the quality of life. However, the successful execution of these projects is frequently undermined by various challenges, including cost overruns, schedule delays, poor quality outcomes, and in some cases project abandonment. Despite the presence of regulatory bodies, existing project management frameworks and substantial budgetary allocations, many public sector projects in Rivers State continue to fall short of expectations. Thus, the successful completion and execution of these projects most often becomes a mirage. Given this scenario, basic factors constraining management of these public sector projects are encountered.

Their reoccurring issues point to deeper systemic constraints that hinder effective project management. Factors such as political interference, inadequate findings, lack of technical capacity, bureaucratic bottlenecks and poor stakeholder engagement may be contributing to their inefficiencies. Understanding the extent to which each of the identified factor constitute barriers is essential for prioritizing control measures and developing targeted strategies that can improve management and delivery of public projects.

Available studies seem to be in agreement that among the multiple constraints to effective execution and delivery of public sector projects in Nigeria's Niger Delta region, the inefficiency of Government team for Management of Public Sector Projects (MPSP), Procurement related delays (PRD), Insufficient Fund Release (IFR), Insecurity challenges and host community disruptions (ICHCD), excessive Bureaucracy and weakness of government institutions (BWGI), Political Interference (PI), Corruption and embezzlement (CE), Poor Planning and conception(PPC), and Incompetence and lack of capacity (ILC) stand out. This opinion need to be scientifically investigated to provide empirical evidence of to what extent these constitute constraining factors to effective management and delivery of public projects in the region.

In line with the above, the study x-rays the key factors constraining the effective management of public sector projects in Rivers State, with a view to identifying the determinant/significant factors which constitute the priority barriers that must be addressed in order to enhance project performance and governance in Rivers State. The study thus addressed the question of what constitute the determinant constraining factors to managing and delivering public sector projects in Rivers State.

### 2.0 LiteratureReview

In many developing countries, the private sector faces significant constraints, including limited access to finance, inadequate infrastructure, and weak institutional support, which hinder its ability to provide key goods and services (World Bank, 2020). In many African countries, development is closely associated with the provision of social services. Consequently, the performance of governments, in many of those countries is evaluated on the basis of its ability to provide different types of public services in areas where much service do not exist.

Kingombe (2011) opined that lack of public sector projects in most developing countries represents one of the most significant limitations to economic growth and achievement of the



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millennium development goals. According to him, in order to reach the 770 annual growth rate calculated to be required to meet the MDGs by 2015, it requires investment in this all important area (public sector projects). Myles (1995) asserts those infrastructures (Public sector projects) are public goods that carry a high degree of non-excludability, where no household can be excluded from using it and non-rivalry where no household can reduce another from enjoying it. According to him, they are natural monopolies, lead to externality, free ridership and spillover effects that distort perfect competition and market efficiency. According to Webster and Krinton (2006), effectively and efficiently management charge efforts are the only way organizations can survive and grow in this modern world. Joffre, (2006) asserts that the concept of project seems to have appeared in the fifteenth century and has its roots in architecture.

Boutinet (1990) suggests movement, a trajectory, a certain relationship in space and time and a possible separation of planning and performance project and implementation. Benjamin (1991) defined project as an instrument, that co-ordinate series of actions resulting from policy decision to diverge in reference combination and levels so as to contribute to the realization of the country's developmental objectives.

Juan (2007) opined that sound development plans require good projects, just as good projects require sound planning. Juan (2007) defined a project as a problem scheduled for solution. Nagarajan (2001) on his own part defined a project as an organized programme of predetermined group of activities that are non-routine in nature and that must be completed using available resources within the given time limit. Akpan and Chizea (2000) defined project as services of jobs that individually has to be completed in order for the system (project) to be satisfactorily consummated. They posit that a project connotes any unique activity, situation, process, task, programme, scheme, or any other human endeavor in which human (labor) time and other resources are utilized to achieve a predetermined and definite objective. Winter (2006) stressed the interplay between management and projects. Wirrick (2010) outlined the basic skills required for a public sector project manager which include understanding of government processes and political awareness and sensitivity; understanding the process and operating in an environment of high visibility, management conflict with internal and external stakeholders and adapting to the context of the project and its environment.

Kussel (2010) stressed that the whole essence of project management is to reduce project failure though it is hard to execute projects without some degree of failure. Kussel (2010) opined that projects continually fall behind schedules. Kussel (2010) stated that the story of failed projects is endless. According to him, cost overrun frequently occurs and that 60% projects in public sector are lagging behind schedule. Wirride (2009) stated that public sector projects fail because of some reasons. These include; failure to identify the needs of customers or users of the project, creation of overtly optimistic schedules, lack of resources to complete the project, no time for project planning, change in management priorities, obsolete technology, competing projects, make assumptions that are not validated, no experienced project managers, etc. Baker, Fisher and Barrezeele (2000) found four key areas that differentiated companies that delivered projects well which included effective project management, good project definition, supportive sponsorship and effective charge control. Meleod, Doolin, MacDonel(2012) argued that project success is a



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multi-dimensional construct that has to be understood from the perspective of individual project actions. Project planning requires the development of the plan in sufficient details, identification of relevant milestones and the application of available techniques to prepare, monitor and control the project Meleod et al (2012). According to Meleod et al (2012), planning is closely interrelated with control and feedback to ensure that the project conforms to time, budget and technical performance specifications.

Randol (2004) identified the major components of projects planning to include clarity and delegation of responsibilities, communicate plans to all involved, make resources available, establish contingencies, safety and regulatory measures, review and compare scope against new conditions and involve technical experts so as to improve plan. According to Randol (2004), to aid the management time, cost and quality of result, staff and external supplied project planning must cover design plan, resources plan, financial plan, quality plan, acceptance plan, communication plan, and procurement plan review and contact the suppliers.

Ogunde (2002) asserts that in the 80s, public sector projects as embarked by the government at different levels were complicated by the down turn in the socio-economic development in the country due to the global economic recession and collapse of the oil market. Humble (2005) said that project failure is normal and rampart. Accordingly, this is largely due to management skills that are lacking. To identify the key constrains managing public sector projects, certain fundamental questions must be asked. These include the available budget, specific cash flow requirement, minimum resources required, external resources, specialized equipment availability, consensus among senior management, legal and statutory requirements and statutory limitations. Yahaya (1991) outlined the basic problems facing projects that need maintenance activities and do not get the required attention. Taye and Dada (2012) enumerated the problems that hinder effective management of public sector projects. Saliminen (2000) defined projects success in two-dimensions - efficiency and effectiveness.

Cooller and Davis (2002) observed that success factors as those in parts to the management system that lead directly or indirectly to the success of the project. According to them, developing the project success is more difficult than delivering the project management success. Okon and Chukwu (2022) observed that rigid bureaucratic procedures, poor stakeholder engagement and limited transparency are key constraints affecting public sector project delivery in Rivers State while Afolabi&Nwankwo (2021) identified that systemic issues such as corruption, political interference and discriminatory practices significantly hinder the effective utilization of project managers in Nigeria's construction sector. These factors contribute to project delays and inefficiencies, emphasizing the need for institutional reforms to enhance project management practices.

Robins and Judge (2017) emphasized that effective management hinges on understanding individual and group behaviors within organizations. They advocate for evidence-based management, where decisions are grounded in systematic study and data analysis, enhancing organizational effectiveness. Studies by Obinna, (2020), Adeyemi and Olalekan (2019) and Muller et al (2020) are in agreement that funding gaps, bureaucracy and weak stakeholder input



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hinder public project success. The studies also found that that bureaucracy and poor stakeholder involvement hinder effective public project delivery, leading to delays and suboptimal outcomes. Muller, et al (2020) emphasized that balanced leadership enhances adaptability and shared responsibility in public project management.

Ojiako, U., et al. (2023) highlighted that effective public sector project management in Nigeria requires a balance between traditional administrative structures and adaptive leadership approaches to address evolving challenges while Alragabah and Ahmed (2024) emphasized that identifying and developing project management competencies within the public sector is essential for enhancing organizational objectives.

Alaloul et al. (2022) and NwinyokpugiabdBestman (2020) emphasized that integrating industry technologies into construction projects enhances efficiency and sustainability, yet challenges such as inadequate digital infrastructure and resistance to change hinder full adoption. They highlighted that inadequate project planning and insufficient stakeholder engagement are significant factors contributing to the under-performance of public sector projects in Nigeria.

Tuoyo (2024) emphasized that Nigeria's formal sector, contributing significantly to the nations GDP and employment, demonstrates resilience through social capital, flexibility, and diversified income streams. He advocates for public sector recognition and integration of these attributes to enhance project sustainability and economic growth.

Obebe et al. (2024) and Akintola et al 92023) highlighted that the underutilization of project managers and inadequate application of project management tools contribute significantly to delays and inefficiencies in Nigeria's public sector projects. They identified that ineffective project management practices including poor planning and weak stakeholder engagement hinder public project performance in Nigeria.

While Echeme and Moneka (2016) identified scope creep as a significant factor leading to delays and cost overruns in large-scale public sector construction projects in Nigeria; Adeyiwka and Adewuni (2023) argued that weak stakeholder participation and poor oversite mechanisms are major obstacles to achieving timely and effective delivery of public sector projects in Nigeria.

Lastly, Streamsowers& Kohn (2024) emphasized that effective public sector governance in Nigeria hinges on transparency, accountability and adherence to ethical standards, as outlined in the Nigeria Public Sector Code of Corporate Governance 2023.

From the aforementioned, it is evident that available empirical literature has not addressed the challenges of prioritizing the constraining factors to effective public project delivery in South – South region of Nigeria with a view to developing effective strategies for eliminating the impacts of such factors to effective public project delivery in Rivers State Nigeria. The determinant constraining factors to effective public project delivery in Rivers State is unidentified. This is the major gaps which this study seeks to address by providing empirical evidence of determinant constraints to effective public project delivery in Nigeria.

### 3.0 Data and Methods

The study used survey research method in which oral interviews, site visits and administration of questionnaires were used as survey instruments to elicit the perceptions of the respondents on the



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extent to which the identified factors constitute constraints to the effective delivery of public projects in Rivers State Nigeria. This is with a view to generating empirical information on the significant constraints affecting the management of public sector projects in Rivers State. This design was chosen because it enables the collection of both quantitative and qualitative data from a broad range of respondents including government officials, project managers, contractors, and community stakeholder.

The study used use primary generated from the field survey detailing respondents ratings of the extents to which each identified constraints affect effective management and delivery of public sector projects in Rivers state.

### 3.1 Population and Sampling Technique

The population of the study comprises individuals directly involved in the planning, execution, supervision, and evaluation of public sector projects in Rivers State. Records from the Rivers State Ministry of Works indicate that there are about 120 individuals working at the supervisory levels in the Ministry and charged with the responsibility of planning, execution and supervision of major public projects in the State. This constitutes the population of experts which is of interest to the study. The study used purposive sampling technique. Since the population size is known, the study used Taro Yamane formula for known population to determine the sample size. The formula is given as:

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

Where:

n= sample size required for the survey

N =the population size

e = margin error (%)

Based on the formula the survey randomly sampled approximately 92respondents who are employees' of the Rivers State Ministry of works starting from the supervisory cadre. However, only 90 copies of the sample questionnaire distributed representing about 98% were returned.

### 3.2 Validity Test

Validity test is a measure and explanation of how well the collected data accurately covers the real purpose of the survey and/or investigation. The study tested the content validity of the survey instrument. The content validity test evaluated content of questionnaires (survey instruments) to ensure that only questions that are essential are allowed while undesirable questions and items are struck out. The study used a quantitative approach to test the validity of the survey instrument in which content validity questionnaires were sent out to professionals in public project planning and execution including the professors who supervised the study. The content validity ratio (CVR) was thus be determined by using Lawshe's (1975) method:

$$CVR = \frac{ne - (N/2)}{N/2}(2)$$



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Where CVR =content validity ratio,  $n_e$  = number of experts or panel members indicating essential, N is the total number of experts or panel members. The study used expert population between 5 and 10 to validate the content of the survey instrument.

### 3.3 Testing Reliability

To measure the reliability and internal consistency of the survey instrument, the study used the Cronbach Alpha coefficient. It was determined after administering the survey instrument once to overcome the problems associated with testing over multiple time periods. Reliability was thus determined using the slit-half reliability index and the Cronbach Alpha index. The split-half estimate will be done by dividing up the test into two parts first half of the items/second half of the items), administering the two forms to the same group of individuals in the population and correlating the responses. To estimate coefficient alpha (a), the study used:

$$a = n/(n-1)[1 - \text{Sum Var}(Y_i)/\text{Var}(X)]$$
(3)

Where n = Number of items

Sum  $Var(Y_i) = Sum of item variances$ 

Var(X) = Composite variance.

The result shows a correlation coefficient of 0.84 which shows that the data is 84% highly reliable.

### 3.4 Method of Data Analysis

### 3.4.1 Principal Component Analysis (PCA)

It is important to mention that the available empirical literature discussed in previous sections identified multiple constraining factors to effective management and delivery of public projects in Nigeria. These include:

Table1: Identified Constraints to Effective Public Project management and Delivery

s/n	Factors constraints/Variables
1	Management of Public Sector Project (MPSP)
2	Procurement related delays (PRD)
3	Insufficient Fund Release (IFR)
4	Insecurity challenges and host community disruptions (ICHCD)
5	Bureaucracy and weakness of government institutions (BWGI)
6	Political Interference (PI)
7	Corruption and embezzlement (CE)
8	Poor Planning and conception(PPC)
9	Incompetence and lack of capacity (ILC)

Source: Adapted by the author from Empirical literature sources

The respondents' ratings and perceptions of the extent of influence of the above identified factors constraints were evaluated to reveal the significant/determinant factor constraints using the PCA



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methods. The Principal Component factor Analysis (PCA) was thus used to determine the significances of the identified constraining factors to effective public project management and delivery in Rivers state Nigeria.

### 4.0 Results and Discussion of Findings

**Table-2: Determinant Factor Constraints to Effective Management and Delivery of Public Projects in Rivers State** 

	Mean	Std. Deviation	Analysis N
MPSP	16.2857	4.90241	90
PRD	12.8571	4.58349	90
IFR	13.4286	4.81594	90
ICHCD	12.2857	4.26043	90
BWGI	14.8571	5.17093	90
PI	15.1429	5.07093	90
CE	15.5429	4.71093	90
PP	10.8571	4.10984	90
ILC	13.1429	5.15719	90

**Total Variance Explained** 

Componen	Initial Eigenvalues			Extrac	ction Sums of Square	ed Loadings
t	Total	% of	Cumulative	Total	% of Variance	Cumulative %
		Variance	%			
1	2.098	23.314	23.314	2.098	23.314	23.314
2	1.614	17.929	41.243	1.614	17.929	41.243
3	1.458	16.204	57.447	1.458	16.204	57.447
4	1.113	12.371	69.817	1.113	12.371	69.817
5	.999	11.097	80.915			
6	.716	7.956	88.870			
7	.623	6.926	95.797			
8	.378	4.203	100.000			
9	-1.143E- 016	-1.270E-015	100.000			

Component Matrix<sup>a</sup>

	Component			
	1	2	3	4
MPSP	.535	.328	.313	.047
PRD	.228	.465	428	443
IFR	756	.162	.140	074
ICHCD	.093	564	432	163
BWGI	327	.140	626	.089
PI	744	.148	.544	345



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CE	.154	732	.377	.117
PP	.419	.593	.142	.213
ILC	193	125	.348	.286

Source: prepared by the author

Table-2 shows the result of the PCA implemented to identify the significant factor constraints to effective management and delivery of public projects in River State Nigeria. This becomes necessary since some of the constraint factors may be positively correlated such that they increase or decrease in the same direction. As a result, the PCA will reduce the number constraint factors to only significant factors constraints in order that the public project managers and planning authorities in Rivers state can prioritize the elimination of the constraints to effective management and delivery of public projects in the state starting with the determinant constraint factors.

The mean values of the constraint factors range from 10.86 (PP: poor planning) to 16.29 (MPSP: management of public sector project), indicating that some variables have higher central tendencies. The result indicate that while management of public sector project (MPSP) as a constraining factor has a mean score of 16.29 with standard deviation of 4.90, poor project planning (PP) has a mean score of 10.86 with standard deviation of 4.11. procurement related delays (PRD) and Insufficient Fund Release (IFR) as constraining factors to effective management and delivery of public projects in Rivers State have mean scores of 12.86 and 13.43 with standard deviations of 4..58 and 4.82 respectively.

Similarly, Insecurity challenges and host community disruptions (ICHCD) has mean score of 12.29 with standard deviation of 4.21 while Bureaucracy and weakness of government institutions (BWGI) has a mean score of 14.86 with standard deviation of 5.07. Identified barriers such as Political Interference (PI), Corruption and embezzlement (CE) and Incompetence and lack of capacity (ILC) have respective mean scores of 15.14, 15.54 and 13.14 with standard deviations of 5.07, 4.71 and 5.16 respectively.

The result also indicates that four 4 principal components with each having Eigen values greater than 1 were extracted. The explained variance ratio indicate that the first principal component which relates to funding gaps explains about 23.31% of the variances while the second principal component which relates to bureaucracy and weak government institutions explains about 17.93% variances in the constraining factors. The third principal component which relates to political interference and political insatiability explain about 16.20% of the variances while the fourth principal component related to corruption and embezzlement explains about 12.37% of the variances with each of the first, second, third and fourth principal components having respective Eigen values of 2.1, 1.61, 1.46 and 1.11. Jointly, the four principal components explained about 70% total variances in the identified constraining factors. The screen plot of the extracted components based on the Eigen values is shown in figure-1 below.

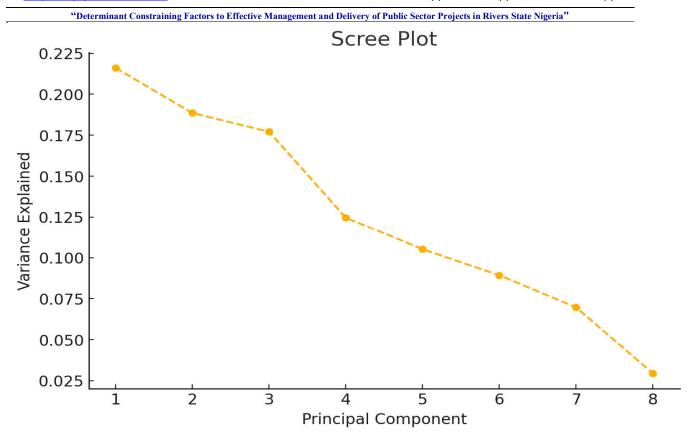


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Source: prepared by the author

However, the objective is to identify the determinant constraint factors that form the significant constraints to effective management and delivery of public projects in Rivers State Nigeria. From the factor loadings table, we can determine which variables contribute most to each principal component that form the determinant factors that constitute significant constraints. A constraint factor is considered a significant or determinant influencer if its absolute loading is  $\geq 0.5$ . Based on the factor loadings, the extracted significant/determinant variables (significant constraints factors) with absolute values  $\geq 0.5$ ) for the various principal component are Insufficient Fund Release (IFR) (0.756>0.5); Bureaucracy and weakness of government institutions (BWGI) (0.626>0.5); Political Interference (PI) (0.744>0.5); Corruption and embezzlement (CE) (0.732>0.5); Management of Public Sector Project (MPSP) (0.535>0.5); and Poor Planning (PP) and conception (0.593>0.5). These constitute the significant constraint factors to effective management and delivery of public sector projects in Rivers State Nigeria. Therefore, to ensure effective management and delivery of public sector projects in Rivers State, project developers, planners and executioners must prioritize addressing Insufficient Fund Release (IFR) to project developers, Bureaucracy and weakness of government institutions with responsibility to ensure effective project supervision (BWGI), Political Interference (PI) in project execution, Corruption and embezzlement (CE) of funds meant for project execution,



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"Determinant Constraining Factors to Effective Management and Delivery of Public Sector Projects in Rivers State Nigeria" inefficiency of Management/Supervisory team of Public Sector Project (MPSP), and Poor

Planning and conception (PPC) of projects. If these determinant constraint factors are addressed as priorities, the management and delivery of public projects in Rivers State will be effective and efficient.

### 4.2 Discussion of Findings and policy implications

The results from the Principal Component Analysis (PCA) revealed six key determinant constraints hindering the effective management and delivery of public sector projects in Rivers State, Nigeria. These constraints include: Insufficient Fund Release (IFR), Bureaucracy and Weakness of Government Institutions (BWGI), Political Interference (PI), Corruption and Embezzlement (CE), Management Inefficiency of Public Sector Projects (MPSP), and Poor Planning and Conception (PPC). This corroborates the findings of Akintola et al (2023) who identified constraining factors to effective project execution and delivery in Nigeria. The dominance of funding-related constraints (IFR) suggests a critical need for more predictable and transparent budgetary processes. Delays or shortfalls in fund disbursement lead to project abandonment, cost escalation, and compromised quality, ultimately eroding public trust in government.

Bureaucratic inefficiencies and institutional weaknesses emerge as systemic barriers. Excessive administrative processes delay approvals, hinder coordination among departments, and weaken project oversight mechanisms. Similarly, political interference undermines professional project management by disrupting continuity, overriding technical decisions, and redirecting project priorities for political gain.

Corruption and embezzlement were also significant, confirming concerns over financial mismanagement in Nigeria's public sector. These malpractices result in inflated project costs and delivery failures, necessitating stronger transparency and accountability frameworks. Management inefficiency (MPSP) reflects poor project execution capacity among government personnel. Many lack the project management expertise needed to lead complex infrastructure or service-delivery projects. Coupled with poor planning (PPC), which includes inadequate feasibility studies and unrealistic timelines, these constraints significantly derail successful project implementation. This is in line with the findings of Echeme and Moneka (2016)who identified corruption in Nigeria's public sector as a critical factor impeding successful project delivery.

The findings underscore the need for comprehensive policy and institutional reforms to improve project outcomes in the public sector. For example, the findings of the study suggest the need for policy development aimed at strengthening budget planning and financial disbursement frameworks.it also supports the need for policies aimed at reforming bureaucratic procedures to reduce red tape.

The findings of the study reveal the urgent need for public policies aimed at institutionalizing



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mechanisms that shield public projects from political interference; enhancing transparency and accountability; capacity building for public project managers; and mandating project charters and feasibility studies for approvals.

### 5.0 Conclusion

This study investigated the determinant constraints to effective management and delivery of public sector projects in Rivers State, Nigeria. Using a combination of primary survey data and Principal Component Analysis (PCA), the research identified six critical constraints that significantly hinder project performance: insufficient fund release, bureaucratic inefficiencies, political interference, corruption, weak management, and poor planning.

The findings demonstrate that addressing these systemic issues is essential to improve the effectiveness of public project execution in the region. Notably, the convergence of funding and governance-related challenges signals the urgent need for structural reforms, capacity enhancement, and stronger governance frameworks. Tackling these root causes can lead to more sustainable, cost-effective, and timely delivery of public projects that directly impact citizens' quality of life.

#### 6.0 Recommendations

It is recommended in line with the findings and conclusions of this study that:

- (i) Government should improve public finance management and establish dedicated project funding mechanisms.
- (ii) The responsible authority should streamline bureaucratic processes and simplify administrative procedures related to public sector project execution, management and delivery.
- (iii). There is need to strengthen institutional capacity and upgrade project management offices with trained professionals.
- (iv). Government should establish independent project implementation units and reduce political influence.
- (v). Promote Evidence-Based Project Planning should be promoted and feasibility studies and stakeholder engagement should be made mandatory.

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