RELATIONSHIP BETWEEN COST FACTORS AND PERFORMANCE OF SMALL SCALE LOCAL GOVERNMENT CONTRACTORS IN NIGERIA

NURU GAMBO

UNIVERSITI SAINS MALAYSIA

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RELATIONSHIP BETWEEN COST FACTORS AND PERFORMANCE OF SMALL SCALE LOCAL GOVERNMENT CONTRACTORS IN NIGERIA

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NURU GAMBO

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LIST OF ABBREVIATIONS

Advpay	-	Advance Payment
AHP	-	Analytical Hierarchy Process
ANOVA	-	Analysis of Variance
APCI	-	Australian Performance Construction Index
AP	-	Average Performance
BRE	-	Building Research Establishment
BSC	-	Balanced Score Card
Casflo	-	Cash Flow
CBN	-	Central Bank of Nigeria
COD	-	Cash on Delivery
Conper	-	Contractor Performance
Cosfac	-	Cost Factors
D & B	-	Design and Built
EFQM	-	European Foundation of Quality Management
Envfac	-	Nature of Construction Environment
EVM	-	Earned Value Management
Finper	-	Financial Performance
FMI	-	Federal Ministry of Industry
Frapra	-	Fraudulent Practice
GDP	-	Growth Domestic Product

GA	-	Generic Algorithms
GNN	-	Generic-Neural Network
GoP	-	Global-Fit
HP	-	High Performance
I/D	-	Incentive/Disincentive
ILO	-	International Labour Organizations
ISO	-	International Standard Organizations
KPIs	-	Key Performance Indicators
KMO	-	Kaiser Meyer-Olkin
LGMEC	-	Local Government Monitoring and Evaluation
LR	-	Logistic Regression
LP	-	Low Performance
Manper	-	Management Performance
MDOT	-	Michigan Department of Transport
Metrec	-	Method of Recovery
MSA	-	Measure of Sampling Adequacy
NASSI	-	Nigerian Association of Small Scale Industries
NEDO	-	National Economic Development Office
NERFUND	-	National Economic Reconstruction Fund
NN	-	Neural Network
NPA	-	Nigerian Ports Authority

OCP	-	Overall Contractors' Performance
PCA	-	Principal Components Analysis
Perpay	-	Percentage Payment
PHCN	-	Power Holding Company of Nigeria
PLS-SEM	-	Partial Least Square-Structural Equation Modeling
PNA	-	Palestinian National Authority
R-Matrix	-	Correlation Matrix
SBA	-	Small Business Administration
Tecper	-	Technical Performance
Timpay	-	Time of Payment
TQM	-	Total Quality Management
TQC	-	Total Quality Control
UNCHS	-	United Nations Centre for Human Settlement
VBM	-	Value Based Management
VFM	-	Value for Money
VHP	-	Very High Performance
VLP	-	Very Low Performance

HUBUNGAN ANTARA FAKTOR KOS DAN PRESTASI KONTRAKTOR-KONTRAKTOR KERAJAAN TEMPATAN BERSKALA KECIL DI NIGERIA

ABSTRAK

Pengekalan prestasi yang lemah kontraktor-kontraktor kerajaan tempatan berskala kecil memberikan satu cabaran yang besar kepada pembangunan mampan industri pembinaan di negara-negara membangun seperti Nigeria. Prestasi yang lemah kontraktor-kontraktor berskala kecil kebanyakannya akibat daripada kesan faktor-faktor kos yang mempengaruhi prestasi projek. Perkara ini membawa kepada kos dan masa projek yang berlebihan untuk menghasilkan produk yang lemah dan pengabaian projek. Kajian ini bertujuan untuk membangunkan satu model hubungan antara faktor-faktor kos dan prestasi kontraktor-kontraktor kerajaan tempatan berskala kecil melalui pengenalan kepada sokongan pelanggan sebagai pengantara. Kajian ini meninjau prestasi kontraktor-kontraktor kerajaan tempatan berskala kecil di tiga zon geo-politik Nigeria. Kajian ini adalah menggunakan pendekatan kuantitatif; kajian ini mempunyai tiga konstruk dan sembilan dimensi. Konstruk terdiri daripada faktor-faktor kos, sokongan pelanggan dan prestasi kontraktor. Data untuk kajian ini diperolehi dengan menggunakan reka bentuk soal selidik yang baik strukturnya. Keseimbangan kaedah persampelan rawak berstrata telah digunakan untuk memilih responden yang terdiri daripada pihak-pihak berkepentingan utama (pelanggan, kontraktor dan perunding) dalam industri pembinaan Nigeria. IBM SPSS versi 21 telah digunakan untuk menganalisis data yang dikumpul. Statistik deskriptif, analisis Friedmans, analisis korelasi dan tiga pendekatan pengantaraan telah digunakan dalam kajian ini. Kajian ini mendapati bahawa faktor-faktor kos mempunyai kesan yang sangat teruk ke atas prestasi kontraktor-kontraktor kerajaan

tempatan berskala kecil di Nigeria. Kajian mendapati bahawa kontraktor-kontraktor kerajaan tempatan berskala kecil di Nigeria adalah berprestasi purata. Kajian ini juga mendapati bahawa terdapat hubungan yang lemah dan negatif yang signifikan di antara faktor-faktor kos dan prestasi kontraktor. Akhir sekali, kajian ini mendapati bahawa terdapat sedikit kesan pengantaraan yang signifikan terhadap sokongan pelanggan ke atas faktor-faktor kos yang memberi kesan kepada prestasi kontraktor-kontraktor kerajaan tempatan berskala kecil di Nigeria. Kajian ini berfungsi sebagai panggilan untuk bangun kepada kontraktor-kontraktor kerajaan tempatan berskala kecil di Nigeria. Ia juga menyediakan kriteria untuk penilaian kendiri dalam kalangan kontraktor-kontraktor berskala kecil dan pelanggan projek untuk membuat keputusan. Pengantara diperkenalkan dalam kajian ini dapat mengurangkan kesan faktor-faktor kos dan boleh dikatakan dapat dicapai melalui pengisytiharan undang-undang dengan memasukan sokongan pelanggan kepada kontraktor di dalam Borang Standard Kontrak Bangunan di Nigeria (SFBCN).

RELATIONSHIP BETWEEN COST FACTORS AND PERFORMANCE OF SMALL SCALE LOCAL GOVERNMENT CONTRACTORS IN NIGERIA

ABSTRACT

The persistence of poor performance of small scale local government contractors posed a challenge to the sustainable development of construction industry in developing countries like Nigeria. Poor performance of small scale contractors were mostly as a result of the effects of cost factors that affect performance of projects. This lead to project cost and time overruns substandard products and the abandonment of projects. This study is aimed at developing a model for the relationship between cost factors and performance of small scale local government contractors through introduction of client support as mediator. The study surveyed the performance of small scale local government contractors in the three geo-political zones of Nigeria. This research is quantitative in approach; the study had three constructs and nine dimensions. The constructs were cost factors, clients support and performance of contractors. The data for this study were collected by using well structured design questionnaire. A proportionate stratified random sampling method was used to select the respondents which comprised of major stakeholders (clients, contractors and consultants) in Nigerian construction industry. IBM SPSS version 21 was used to analyze the collected data. Descriptive statistics, Friedmans analysis, correlation analysis and three mediation approaches were used in this study. The study found that cost factors had a severe effect on the performance of small scale local government contractors in Nigeria. The study found that small scale local government contractors in Nigeria were average performers. The study also found that there were significant weak and negative relationship between cost factors and performance of the contractors. Lastly, the study found that there was a significant

little mediation effect of client support on the cost factors that affects performance of small scale local government contractors in Nigeria.This study serves as a wake-up call on small scale local government contractors in Nigeria. It also provided criteria for self evaluation among small scale contractors and project clients for decisions making. The mediator introduced in the study mitigated the effects of cost factors, and practically this would be achieved through promulgation of law for the inclusion of client support for the contractors in the Standard Forms of Building Contract in Nigeria (SFBCN).

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Mitigating poor performance of small scale local government contractors (SSLGCs) is one major way of fast-tracking developmental process through provision of social amenities in the developing countries like Nigeria. Performance of SSLGCs in developing countries is associated with poor delivery of capital projects, cost and time overruns, low quality products and mostly the abandonment of projects (Hodkinson, 2011). Small scale local government contractors whose population constitutes almost 90% of the construction markets in developing countries like Nigeria have been accused of poor delivery of construction projects (Mohammed & Obeleagu-Nzelibe, 2013). The contractors contribute substantially to the growth of country's gross domestic product (GDP), especially in the development of local government areas, and indeed the contractors have accounted for over 50% cost of all building materials consumptions and employed nearly 80% labour (Bilauet al. 2015). The performance of SSLGCs is accused world-wide regardless of the fact that the contractors serve as a means for employment generation, national growth, poverty alleviation and economic development (Mohammed & Obeleagu-Nzelibe, 2013).The performance of SSLGCs is accused possibly due to the effects of cost factorsthat affect the perrformance of the contractors (Bekoe et al. 2013).

An improve performance of contracto ris critical for the success of any construction project; it is the contractor who transfers designs into useful reality. An improve

performance of small scale contractors leads to clients satisfactions, increase productivity, value for money (*VFM),* increase profit, improve reputation of the contractors, enhance competitions in the industry and general economic development and national growth (Skaik & El-Hawary, 2014). The performance of SSLGCs has been criticized in many aspects in the last decades; this is due to the scarcity of blueprints for minimizing the effects of cost factors that affect performance of the contractors. An improve performance of contractors can be achieved through minimizing the effects of the main factors that affect performance of the contractors (Inuwa et al., 2015; Masrom, 2012). Krishna (2015) stated that improving performance of contractors should includes minimizing the effects of project cost factors which refer to the factors affecting cost of construction projects as well as the factors that influence the overall performance of the contractors, this would satisfy the interpersonal relations between employer and employee and among other stakeholders in the project team. Handfield et al. (2015) stated that the successful delivery of any construction project is for the contractor to complete the project on budgeted cost that satisfied clients' expectations and also meets project specifications through attaining good workmanship and minimize construction defects and project conflicts, and this would not be achieve if the contractor is financially, technically and managerially weak. Roslan et al. (2015) stated that an improve performance of a contractor is achieve by controlling major factors affecting cost through project client's support, project manager's satisfaction and also through transfer of technology and provisions of friendly environment. A project client financial support through short term loans is one of the major ways of minimizing financial, technical and management difficulties faced by SSLGCs.

The studies of Saunders et al. (2016) have pointed out the process of improving the safety and health performances of contractors through benchmarking of performance factors in the construction industry. Similarly, Woo et al. (2016) studied the method suppliers' communications capabilites and external green integration for green and financial performance in Korean construction industry while Ofori-Kuragu et al. (2016) listed and ranked the critical success factors for the improvement of performance for Ghanaian contractors and that of Iyeh and Banerjee (2016) measured and benchmarked managerial efficiency of project execution and schedule performance of contractors.

Thompson (2015) in Singapore came up with a set of key performance indicators (KPIs) like those used in manufacturing and service industries to improve performance of contractors in the Singaporean construction industry. The problem with the model developed is that the model is conceptual, most of the conceptual models are generally based on idea, and they do not focused on the real cause of the problems. Most of the KPIs are developed in the areas other than the major cost factors that affect performance of SSLGCs, such as project time, project quality, waste management, client satisfaction, project profitability, productivity and safety. The performance indicators (KPIs) are benchmarked to identify their position on the major factors that affect contractor performance (Thompson, 2015). Key performance indicators are generally aimed at minimizing wastage, rework and enhanced productivity, identify potential areas of growth and weaknesses and improve on the general contractor performance (May et al., 2015). Benchmarking of performance key indicators for improving contractor performance are generally confronted with short comings that it is usually very difficult to come out with

practical and generally agreed sets of indicators because of complex and diverse nature of construction industry. Generally, KPIs are confronted with the problems that some contractors would not give out relevant information that directly indicated the firm's short comings and also KPIs do not assure relevant and real improvement in the performance of contractors through minimizing the effects of main factors that affect their performance. To achieve improvement in the performance of SSLGCs, the desired for change must come from the major industrial research methodology of minimizing the effects of cost factors affecting cost of construction projects through identifying the factors and minimizing their effects on the performance of contractors by using intervening variable (Thompson, 2015).

In developed countries, for example Xiao and Proverbs (2003) attempted to compare the performance of contractors in Japan, United Kingdom and United State of America. The study revealed that comparing performance of contractors provide a robust yardstick for measuring and improving performance of contractors in different countries this helps in identifying ways of improving performance of contractors. Overall contractor performance (OCP) embraced construction cost as the main factor for construction industry sustainable development. The OCP is relied on the previous cost performance of past projects; project contractor's commitments to lifetime employment; contractor's perceived importance of project cost performance; contractor's relationship with other stakeholders and the frequency of design variations during constructions. To improve contractors overall performance, contractors should focus on project cost by reducing cost overruns and establish good partnership with subcontractors (Xiao & Proverbs, 2003). Value for money should be main objective of any project client; this could not be achieved unless contractors

have sound financial, technical and managerial resources (Xia et al., 2015). Contractors' previous performance is one of the most important determinants for predicting performance of contractor; those that successfully completed projects based on specifications are more likely to achieve project targets in future (Li et al., 2015). Poor performance of SSLGCs in the construction industry has been a source of concern to the stakeholders in the industry. The problem of cost overrun is widely prevalent in construction sites. However, little or no efforts was done to minimize the phenomenon as a result of the effects of cash flow problems, fraudulent practices and nature of construction environments (Amusa, 2009).

In a study of factors affecting contractor performance in India, the paper revealed that the evaluation of performance of contractors in any project in terms of success or failure of a project looks easy but in fact it is very complex process. Many building constructions small in size are usually multi-disciplinary and required involvement of contractors, subcontractors, consultants, specialist and managers, each participant has different objective in the project. However, due to the complexity and multi-disciplinary nature of a construction project it adversely affected by some cost factors like cash flow problems, effects of fraudulent practices and effects of the nature of construction environments (Iyer & Jha 2005).

Minimizing the effects of factors affecting cost of construction projects the macro, micro and intervening variables has to be taken into consideration. For example in Malaysia, Othman et al. (2015) compared the contributions of cost factors on projects by linking it with procurement and non procurement related variables and

then introduced an intervening variable (mediator) that is project complexity representative value to enhance performance of contractors. The problem here is that previous developed models focused most on pre-contract stage to predict performance of contractors regardless of the main factors that affect performance of the contractors during construction stage. In the same vein, the problems of poor performance of contractors in MARA large projects area of Malaysia is mostly associated with cash flow problems, fluctuations in prices of labour and materials and the contractors financial difficulties, shortages of site workers, lack of proper communication channel among the parties to a contract, poor contractor planning and scheduling, poor contractor site management and supervision are the most important factors that affect contractors performance (Memon et al., 2012). Similarly, in the southern and central Regions of Peninsular in Malaysia, the main problems that affect performance of contractors are cost factors that include: cash flow problems, effects of fraudulent practices and effects of the nature of construction environments. The study found that 11% of respondents agreed that their projects are completed on budgeted cost and 89% of the respondents agreed that their projects exceeded budget. Furthermore, the study identified that cash flow problems, effects of the nature of construction environment and the effects of fraudulent practices are the most important factors that affects performance of contractors (Rahman et al., 2012). An in-depth empirical survey of the factors that affect contractor performance based on appropriate strategy would contribute significantly to successful delivery of a construction project and enhance performance of SSLGCs (Ng et al., 2002). Therefore, it can be deduced that cost factors are the main factors that affect the performance of small scale contractors in developing countries and there is need to

minimize the effect of cost factors on the performance of small scale contractor by all means. This could only be achieved through client support.

1.2 Nigerian Construction Industry and Local Government Projects

1.2.1 Nigerian Construction Industry

Construction industry is extremely significant in the economic growth of any country particularly in growing economy like Nigeria (Oyewobi et al., 2011). Performance of contractors contributes to the national growth because construction industry is one of the major contributor to the the GDP of any country (Oyewobi & Ogunsemi, 2011). The contribution of Nigerian construction industry to nation's GDP declined in previous years which was 1.72 in year 2007 (Federal Bureau of Statistics, 2010). Aminudin (2006) stated that about 30% of the projects executed by SSLGCs in Nigeria faced the problems of reworks. The labour is utilized at only 40%-60% of potential efficiency and at least 10% of materials are usually wasted. The study indicated that about 60% of the total projects are usually ended up as abandoned projects. It is hypothesized that the effects of cost of reworks is significantly higher than initial estimates in developing countries including Nigeria (Love & Smith, 2002).

Ekambaram (2006) said that, poor quality of works influence productivity of construction industry in a negative direction, this is as a result of major factors affecting cost of construction projects that led to project time and cost overruns (Oyewobi et al., 2011). Ekambaram (2006) stated that in Nigeria, the professionals and contractors agreed on the major factors affecting local government contractors'

performance are usually the cost factors which includes: cash flow problems, effects of fraudulent practices and effects of the nature of construction environments. The factors are originally emanated from economic environment and the activities of project clients. There are common problems associated with the performance of SSLGCs in most developing countries, and these are the uncertainties in supplies and prices of materials, difficulties in obtaining interim payments, problems of accessibility to regular jobs, difficulties in obtaining loans from commercial banks on low interest rate, effects of fraudulent practices in the industry and poor rate of investment in construction plant and equipment. Professionals in the construction industry have indicated that the problems which emanated from poor management practices of contractors have devastating damage on the general performance of contractors. Contractors have highlighted the modest impact made by shortcomings in the professionals' actions during the construction process. Stakeholders in the construction industry agreed that the most important intervention required in mitigating the effects of the constraints is primarily to enhance contractors'access to regular works, as well as provision of basic resources such as financial support when necessary, and provisions of materials and machinery that are necessary to implement a job. There is an agreement on the effects of delays in payment for approved and valued works that lead to poor performance of small scale contractors. This circumstances required urgent consideration to minimize the difficulties faced by small scale contractors. The effects of the problems would be significantly minimized if project clients intervene and support contractors with advance payments to enhance the performance of contractors (Ekambaram, 2006).

Inuwa et al. (2015) said constant training of contractors is needed to achieve good performance, by having good training, contractor's performance could be improved. Proper training guarantees more objective appraisal of contractors' performance problems and needs. The proposed intervention programmes could be used satisfactorily to resolve the problems identified. Previous efforts to provide favorable operating environments for SSLGCs in Nigeria have not been successful. Future development programmes for Nigerian contractors lay emphasis on the provision of suitable fiscal support and training programmes to allow contractors learn how to transact effectively with up-and-coming problems in construction business environments. The study conclusively stated that there is general dislike among stakeholders for the establishment of an institution for controlling of contractors' performance, such as the situation in many developing countries. This is properly absent in the national construction policy. The effects of ineffectual condition of contract and poor procurement process are seen as the major constraints to contractors' good performance. The need for critical analysis in the current system and practice is emphasized. The study of Adam (1993) indicated that fresh group of contractors are up-and-coming in Nigeria. The contractors are not `crisis contractors', as they have appropriate professional education and training in construction. The contractors have the possibilities of becoming superior and efficient construction firms if appropriate fiscal supports are provided. The contractors would possibly be more devoted to utilizing supports provided efficiently and effectively to improve on firms' performance (Inuwa et al., 2015)

The deficiencies of SSLGCs capacities in developing countries have resulted in a large and unpleasant reliance on foreign inputs which includes construction

materials, construction machineries and experience manpower needed to implement much-needed infrastructures for economic development and improving living standard of citizens. Foreign construction companies control the construction industry in majority of developing countries by executing approximately and entirely major construction works (Babatunde & Low, 2015; Inuwa et al., 2015). Various international development agencies, such as the World Bank (1984), the United Nations Centre for Human Settlement (UNCHS, 1984) and the (ILO, 1987) have shown a substantial interest and have made important contributions towards the development of local construction firms in developing countries. The inflexible foreign debt and the problems with balance-of-payments in most developing countries have severely reduced the import capability, economic development and infrastructure improvement programmes. Babatunde and Low (2015) warned on the need for developing economies to focus on development of performance of local small scale construction capacity as the only way to minimize foreign-exchange earnings and international economic recession. This would limit the importation of capital goods needed to improve economic development in developing countries.

Blankson et al. (2015) stated that following the introduction of structural adjustment programmes SAP by the government of Ghana. The programme brought additional intensive effort towards improving performance of SSLGCs through minimizing dependence on foreign capacity in the provision of much-needed infrastructures required for development. ILO (1987) stated that to improve contractors' business performance a measure should be adopted in improving contractors access to finance, such as the provision of advances, reduction in the percentage of retention fees, prompt payment for approved and valued works and other measures such as

provision of loan schemes to reduce high demand for working capital. Other vital measures include improving small scale contractors' quick access to materials, plant and equipment. It has been observed that the ailments of the construction industry in developing countries are only sign of the fundamental problems of weak enterprise management (World Bank, 1984). Even though training is not prescribed as the only solution to all problems facing contractors in developing countries, it is often as a second behind adequate financing (ILO, 1987). Very little achievement has been recorded in most contractor-training programmes on improving performance (Blanksonet al., 2015), though few successful programmes have been reported (Inuwa et al., 2015). Bilau et al. (2015) noted that initiating a contractor performance development programme is becoming almost identical with establishment of a contractor-support agency. The package of support measures available varies from one agency to another and usually includes those aforementioned. Most of these agencies have made little impact or had only slight success (Ikediashi & Ogunlana, 2015). The institutions are in most instances government-sponsored institutions with a bureaucratic structure that frustrates their efficiency and effectiveness. Small scale contractors are also expected and supported to rally themselves into a strong association for self-help activities (Bilau et al., 2015).

Bilau et al. (2015) recommended the formulation of contractors' association that would be vigorously involved in the setting-up contractor development policies. The ILO (1987) advocated that a contractors' association could take on some of the functions and services of a contractor development agencies. Ikediashi and Ogunlana (2015) and Bilau et al. (2015) further recommended that the contractors associations should gradually take over the management of the agencies. There is,

however, little proof that small scale contractors are vigorously involved in the formulation of policies that would enhance performance in most developing countries. Other issues have possibly contributed to failures of previous policies in particular, the effects of lack of motivation for training (Inuwa et al., 2015). In addition; most attempts to improve contractor performance have achieved little because they are usually based on policies that worked in the industrialized countries. The programmes also are concentrated on the signs and symptoms not the root causes (Bilau et al., 2015). Studies have confirmed that the problems of small scale contractors in developing countries cannot be generalized at the same level of severity, though similar problems exist in most countries (Inuwa et al., 2015). This underscore the importance of intensive analysis to detect the specific needs of the particular industry rather than prescriptive contractor development programmes.

1.2.2 Local Government Projects in Nigeria

The performance of SSLGCs in Nigeria is affected by project delays, cost and time overruns and project abandonments (Ezeh, 2013; LGMEC, 2009). Igbokwe-Ibeto, (2012) stated that the 1999 constitution of Federal Republic of Nigeria as Amended explicitly spelt out the responsibilities of local governments in Nigeria as follows:

i. Construction of housing estates, rural feeder roads, waterways, bridges, culverts, etc.
ii. Provision of transport services like mass transit programmes, motor cycle transit/hire purchase services, ferry services, jetties etc.
iii. Construction of petrol stations.

iv. Building of cottage industries e.g. Palm kernel, soap making centers, bakery etc.

v. Construction of markets and motor parks.

vi. Building of schools and services like nursery, primary, libraries etc.

vii. Establishment of poultry farms and fish ponds.

viii. Provision of pharmaceutical services.

ix. Provision of rental/entertainment services.

x. Provision of community banking services.

xi. Provision of recreation centers like stadium, viewing centers etc.

Local government in Nigeria is the third tier of government that is closer to the people at grass roots but yet its responsibilities are not achieved. The people at local government tier of governance did not reap the benefit of decentralization of power due to the poor level of performance of SSLGCs. The level of performance of SSLGCs in Nigeria poses a challenge to the sustainable development of local government areas of Nigeria in terms of local government growth, poverty alleviation and economic development (Mohammed & Obeleagu-Nzelibe, 2013). The performance level of SSLGCs is critical to the development of local governments' in Nigeria in general and successful completion of any construction projects in particular (Skaik & El-Hawary, 2014). The performance level of SSLGCs have been criticized due to delays, cost and time overruns, projects abandonments and projects not meeting specifications (Inuwa et al., 2015; Masrom, 2012). Each level of SSLGCs is characterized by the firm's efficiency, effectiveness or quality of the work executed by the contractor which ranged from extremely low to extremely high performance. Performance is expected target anticipated to attain by each

SSLGC and a level of performance is a journey so far achieved to the destination (Elgar, 2006). Generally, the levels of SSLGCs depend on three factors, financial, technical and management practices of the contractors (Elgar, 2006). Krishna (2015) stated that performance or destination of a contractor includes the efficient utilization of the firm's financial, technical and management resources and the level of firm's performance define the journey so far achieve by the firm in terms of project success. Effective contractor performance refers to the fulfillment of interpersonal relations between client and contractor and among other participants in the project team. The success of any SSLGC is to deliver a project on budgeted cost, time that conforms to client's hope, meets provision, and attains high-quality workmanship and minimized production conflicts (Inuwa, et al., 2015). The performance or destination of a SSLGCs can be achieved by assessing the performance levels of project executed and identifying areas that need improvement (Elgar, 2006).

In Nigeria local government administration in Nigeria has come of age, because of the number of projects awarded every year, and also because of its longevity and resilience of its relevance in the administration of the country (Fatile & Igbokwe-Ibeto, 2012). However, one of the primary aimed of creating local government administration in Nigeria is bringing government closer to the people at grass root by providing efficient and effective social amenities and infrastructures (Akande, 2000). What seems to matter most to the populace at local government level is to see concrete outcome of their taxes, contributions, labour expended and the careful use of monthly subvention from the monthly federation account/allocation to their local governments. However, the enormous benefits that the people at local government stand to benefit from sound and efficient local government system has not been

reality (Fatile &Igbokwe-Ibeto, 2012). The expectations of the people at grassroots are not achieve due to poor performance of contractors and the activies of clients (Local Governments) or client representatives (Alwi, et al., 2002; Wasi et al., 2001).

For example, the performance of SSLGCs in Nigeria is criticised by the committee involved in the monitoring of local government projects i.e. Local Government Monitoring and Evaluation Committee LGMEC (2009) reported that between 2008-2009, twenty local governments of Bauchi State (i.e. One state out of thirty six states in Nigeria and Federal Capital Territory, Abuja) awarded a total of 1607 projects, which about 65.5% of these projects are poorly executed. The committee attributed the poor performance of contractors to poor cash flow policy, effects of fraudulent practices and difficulty in assessing construction sites. In confirmation to the above allegations the Director General Bureau of Public Procurement in Nigeria in the PAN Africa Conference held at National Theatre Accra Ghana between 21-22 May, 2013 attributed poor performance of contractors in Nigeria to the poor cash flow policies, clear flouting of rules and principles in the award and implementation of public contracts, loss of confidence by the public on the performance of contractors and public service, the report also revealed that out of every NGN1.00 spent by Government, 60k i.e. 60% is lost due to fraudulent/underhand practices, contracts are awarded to unqualified and ill equipped contractors inadequate site preparation and investigation, in adequate working drawings, and other relevant contract document (Ezeh, 2013) .

Small scale local government contractors are contracting firms that are entirely owned and managed by Nigerians the origin of the firm possession and

administration is wholly Nigerian. According to Uduak (2006) and Ibrahim (2012) the performance of SSLGCs' in Nigeria are improved and claimed that the contractors could be entrusted with large and highly technical projects such as oil and gas projects. Whereas most studies reported that the performance of SSLGCs is poor with full up project neglect, cost and time overruns poor project workmanship, poor project management capabilities, financial difficulties, poor planning and mechanization and the high rate of litigations (Oladimeji & Ojo, 2012; Odediran et al., 2012; Muazu & Bustani, 2004; Achuenu, et al., 2000; Bala et al., 2009). The studies attributed poor performance of SSLGCs' to poor funding of projects, incompetency of small scale contractors in handling complex projects, contractors' inexperience and lack of motivations (Ekundayo et al., 2013; Odediran, et al., 2012; Aniekwu & Audu, 2010; Bala et al., 2009; Muazu & Bustani, 2004; Achuenu et al., 2000). The factors led to very few foreign construction firms, which comprises only 5% of the entire number of contractors in the formal sector of Nigerian construction market hence controlling approximately 95% of the main public projects in the construction industry giving the local firms just about 5% share of the market (Aniekwu & Audu, 2010; Oladapo, 2007; Muazu & Bustani, 2004). This resulted into low profits to the industry owing to expatriates repatriating firms' profits overseas. This leaves behind an insignificant value contribution to the construction and local industries supplying construction materials and steady contribution of almost 1% GDP over the last decade as against the World Bank's average benchmark of about 3.2% in other developing countries (Aniekwu & Audu, 2010; Idrus & Sodangi, 2010; Jinadu, 2007).

1.3 Problems Statement

Poor performance of SSLGCs is one of the major problem faced by construction industry globally and especially in Nigeria.The construction industry produces almost 70% of the nations fixed capital project formation and yet its performance within the economy had been poor for example, from the global perspective the construction industry have generally undergone severe and deep contraction over the last few years, between 2007-2010, Irish small scale construction firms lose about £12 billion because of its failure to completes about 10,000 housing units expected in 2011. This contraction is attributed to poor performance of the contractors (Ireland Enterprises & Innovations, 2014). Similarly in the United Kingdom and Australia the construction industry experienced slight contraction in output with a figure of 0.1% between the month of August 2012-July 2013(UK Office of National Statistics, 2013). In Australia, the value of construction output fell by 2.6 points to 48.2 slipping below 50 points level in March 2014 as reported by Australian Performance Construction Index (APCI, 2014). Love et al. (2010) described the persistence of poor performance of small scale contractors in United Kingdom as worrisome issue and emphasized that poor performance behavior of small scale contractors can be reduced through clients' financial and managerial supports. International Labour Organisations ILO (2010) described small scale construction business as a business with very limited working capital investment that requires financial and managerial supports to effectively and efficiently runs the business. The support needed by small scale construction business is through the initial payments of advance to jump start the project (Abubakar, 2004; Aminu-Kano, 2004; Ndah, 2004; Onwusonye 2004; Adams 1997).

The Ghanaian construction industry experience contraction in the years back which was as a result of financial difficulties faced by SSLGCs and harsh construction environments (Laryea, 2010). Poor performance of contractors in the Ghanaian construction industry had cause the country to lose millions of Cedes for example, thirty three (33) out of forty seven projects completed in the country between 1970-1999 experience poor quality delivery, cost and time overruns, while thirty eight (38) projects were abandoned. The study indicated that about 75% of the projects exceeded their initial contract sum and schedule whereas only 25% were completed within original budget. The study concluded that the effects of poor financial, technical and managerial practices are the most important factors leading to poor performance of contractors (Frimpong et al., 2003). In Uganda, the performance of SSLGCs is considered as unsatisfactory; the study revealed that there are many factors responsible for the poor performance of contractors such as: under financing of projects, unrealistic project design, poor/inadequate resources, and under-estimation these are the main causes of contractors' poor performance (Ssngooba et al., 2012). Poor performance of SSLGCs is one of the problem that seriously affects construction industry globally, and it has been reported that the industry lose a huge amount of money due to poor productivity outputs in countries like Nigeria, Indonesia, Palestine, Ireland, Uganda, United Kingdom and United States respectively (Ezeh 2013; Tamin etal., 2011; Ssngooba et al.,2012; Russel, 1991).

The performance of Nigerian construction industry the "Giant", which was so called between 1960-1980, contributed 3-6% of the nation's GDP, but the performance declined to nearly 1% in the last few years and presently appreciated to only 3% in 2012 (Isa et al., 2013). However, it is still below the World Bank's average

benchmark of about 3.2%in developing countries and well below manufacturing industry that contributed 6.81%, petroleum and gas industry contributed 14.4% and telecommunication industry that contributed 8.68% to Nigerian GDP growth (Patrick & Bala, 2014). The persistence low contribution of Nigerian construction industry to the nation's GDP growth is attributed to the poor performance of SSLGCs (Akinola, 2013). In the last decade clients in Nigerian construction industry expressed their high level of dissatisfaction with the performance of SSLGCs. The poor performance of projects that exceed cost and time have contributed to the perceptions that SSLGCs in Nigeria would not be entrusted with large and complex projects (Akinola, 2013; Idrus & Sodangi, 2010). The Nigerian Newspaper "Daily Trust" reported on 19th November, 2013 that one hundred and thirty (130) buildings under construction collapsed in Lagos state Nigeria. The tribunal saddled with the responsibility of investigating the causes of building collapse in the state attributed it to non implementation as well as flouting of rules and regulations, (fraudulent practice) and financial difficulties face by the contractors. The tribunal recommended short, medium and long term solutions to the problem (Akinola, 2013). The effects of cost factors that affect performance of contractors in developing contries pose a serious damage to the projects. Memon et al. (2011) stated that the effects of cash flow problems in Malaysian construction industry are the main cause of contractors' financial difficulties. Cash flows are predicted to experience severely from timing, amount and other similar problems that affects its ability to reflect contractors' performance. Therefore, cash flow problems seriously affect the overall performance of SSLGCs that could hardly obtaine loans from commercial banks due to collateral issues and government policies in developing countries (Kulemeka et al., 2015). The main factors affecting smooth flow of cash in a construction project are the problems

of changes from initial design, delays in agreeing variations/day works, delays in settling of claims, under valuation of perform works, these are the major factors that severely affects firm's flow of cash (El Din Hosny & El Beheri, 2014; Odeyinka et al., 2008). Iyer and Jha (2005) stated that fraudulent practices in construction business is one of the main factors that affect cost of construction projects in India. Elinwa and Buba (2001) stated that fraudulent practices and kickbacks are the most important factors, leading to poor performance of SSLGCs in Nigerian construction industry. Cusworth and Franks (2013) mentioned that most of the public funded projects in developing countries are usually political in nature. Political hitches in turn, consistently leads to fraud and corruption in the industry. Nature of the construction environments affects performance of SSLGCs and it has becomes a major issue particularly to small scale contractors (Pheng & Chuan, 2006; Shen & Tam, 2002). The problems associated with the nature of construction environment are harsh construction sites, civil commotion/disturbances, topography of the construction site, Site's constraints and storage limitations, availability and supply of skilled labour on the site, hostile political and economic environments etc (Yassamis et al., 2002). The problem associated with water pollution affects performance of SSLGCs, similarly the problems of waste recycle and reuse are the main factors affecting nature of construction environments and hence performance of SSLGCs (Shen & Tam, 2002).

Client support is the process which a project client gives out a direct financial support to a contractor through payment of advances. Payment in construction contracts is the act by which the owner makes fund available and directly to a contractor, nominated sub-contractor or supplier for either work executed, goods

supplied or for other justifiable claims (Ekpo, 2014). Payments, when made timely, enable the contractor to maintain reasonable cash flows for financing the projects to successful completion. But when payment made late tends to disrupt the sequence of the execution this lead to delays cost overrun and abandonment of works. Client financial support through payments of advances mediates a properly planned project and is therefore the blood that circulates and gave a project life (Ekpo, 2004; Aminu-Kano, 2004; Ndah, 2004). In another definition, by (Ofoegbu, 2011) client financial support with the payment of advances is any type of payment that is made ahead of its normal schedule; it is the prepaid expense from the client, like paying for contract or services before the actual performance. Client financial support with the payment of advances are meant to provide financial support or aid to the contractor by providing initial funding for jump-starting the project after presenting advance payment guarantee (bank guarantee) to the employer. The advances are affected by three factors: payment timing, percentage amount and method of recovery.

The study of Hans et al. (2016) discussed the impact of contractor motivation towards improving performance of contractors in Australian construction industry. Similarly, Beatham et al. (2004) have critically appraised the use of KPIs in the construction industry with the view of improving performance of contractors. Ugwu and Haupt (2007) assesed the KPIs method for the sustainable infrastructural development of South African construction industry, while Yu et al. (2007) compared the performance measurement system with the view of identifying effective system. Luu et al. (2008) studied the pattern of performance measurement of construction firms in developing countries. Those studies have attempted to improve performance of contractors in construction industry by setting up key

performance indicators (KPIs), from the point of view of those research findings it could be concluded that contractors in construction industry have been facing problems in terms of performance. It is very difficult to find a project that is completed on cost, schedule time, quality and satisfied client's need. Accordingly, based on this reasons it is of utmost importance to search for a new tool, way or techniques and method instruments to minimize the effects of the main cost factors that affect performance of SSLGCs. The studies have came up with construction performance models such as cost and time models for predicting cost and time performances, models that link project performance with contractor selection criteria, the studies concluded that if an industry moved from one level to another level then the performance of the industry would be improved but the studies did not consider the root causes of poor performance among SSLGCs in the industry (Ugwu & Haupt, 2007). Also, the studies did not introduce an intervening variable (mediator variable) that mitigates the effect of cost factors that affect performance of SSLGCs. This research work filled-up the research gap created by the scarcity of literature through using intervening variable to minimize the effect of cost factors that affect performance of SSLGCs. The study would assess the severity effect of cost factors that affect the performance of SSLGCs in Nigeria, moreover, the study would determine the difference in the levels of performance among SSLGCs in Nigeria. It would also investigate the relationship between cost factors and performance of SSLGCs in Nigeria and finally,the study would develop a model for the relationship between cost factors and performance of SSLGCs in Nigeria through introduction of client support as a mediator variable.

1.4 Research Questions

This research is sought to answer the following questions

i. What are the main cost factors and their severity effects on the performance of small scale local government contractors in Nigeria?
ii. Is there any differences in the levels of performance among small scale local government contractors in Nigeria?
iii. Is there any relationship between cost factors and the performance of small scale local government contractors in Nigeria?
iv. Will client support mediates/intervene the relationship between cost factors and the performance of small scale local government contractors in Nigeria?

1.5 Aim and Objectives

1.5.1 Aim of the Study

The aim of this research work is developing a model for the relationship between cost factors and performance of small scale local government contractors through introduction of client support as mediator for efficient and effective service delivery in the rural areas of Nigeria.

1.5.2 Objectives of the Study

i. To identify and assess the severity effects of main cost factors that affect performance of small scale local government contractors in Nigeria.
ii. To determine the differences in the levels of performance among small scale local government contractors in Nigeria.

iii. To investigate the relationship between cost factors and the performance of small scale local government contractors in Nigeria.
iv. To develop a model for the relationship between cost factors and performance of small scale local government contractors in Nigeria.

1.6 Scope and Limitations of the Study

1.6.1 Scope of the Study

The area of this research work is limited to small scale local government contractors in Nigeria. This is chosen because majority of small scale contractors in Nigeria operate minimally at states and most at local governments with high level of reports of poor performance by various studies, committees and the benefitting communities (Ezeh, 2013; LGMEC, 2009). The study focused on examining the mediation effects of clients support on cost factors that affect performance of small scale local government contractors in Nigeria. The study used a primary (first hand) data that were collated using well structured questionnaire survey administered to three major stakeholders in the Nigerian construction industry; clients contractors and consultants using a proportionate stratified random sampling technique.

1.7 Significance of the Study

The significance of this study is divided into contribution to knowledge and practical contribution to both the industry and SSLGCs in Nigeria. Contributions are in the following ways: