

# EXAMINING THE FACTORS CONFRONTING THE EXECUTION OF GETFUND CONSTRUCTION PROJECTS IN THE UPPER WEST REGION, GHANA

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# ABSTRACT

GETFund's primary goal is to offer a specialized financial source to increase government budgetary allotments for the construction of educational infrastructure at all educational levels, from pre-tertiary to tertiary, as specified in the GETFund (2000). The aim of this study is to examine the managerial skills and issues that GETFund contractors employ. The aim of this study is to investigate the challenges faced by GETFund construction project managers, pinpoint the factors that affect GETFund project performance, and suggest practical solutions to improve GETFund project execution in the Upper West Region. For this study, a descriptive survey research design was chosen. One hundred and forty-eight construction firms, twenty-one consultancies, and sixty-five clients made up the sample for the study. A questionnaire was the main method used to collect data. A descriptive statistical analysis was performed on the data. The study's conclusions showed that political and financial issues are the main barriers to the effective execution of GETFund building projects. Moreover, scheduling, and financial issues pose the biggest obstacles to the region's successful implementation of GETFund construction projects. Furthermore, the survey found that the majority of contractors' agents carrying out GETFund projects lack the technical expertise, resources, and manpower required, which makes it challenging for them to comprehend and interpret the criteria and drawings that project consultants provide them. According to the report, in-service training should be offered by reputable regulatory organizations like the Building and Road Research Institute (BRRI) to improve employees' capacity to manage firms.

Keywords: GETFund, Factors, Projects, Problems, Execution, Inefficiencies

# **1. INTRODUCTION**

A construction project is considered successful when it satisfies the clientdetermined requirements for cost, time, safety, resource allocation, and quality Roy & Akintan (2005). Thus, the goal of construction project management and assessment is to accomplish objectives by allocating resources in a planned manner.

The primary goal of construction project management is to successfully complete the project, which calls for a wide range of stakeholders, procedures, stages of work, and contributions from the public and private sectors. Akintoye & Takim (2002). Construction projects in Ghana are evaluated based on their level of success, which is determined by the quality of appropriate managerial practices, as well as the financial, technical, and organizational performance of the relevant parties. The analysis of the obstacles and variables influencing the completion of different construction projects highlights project execution delays as the main issue confronting Ghana's construction sector. It is widespread and has enormous, terrible, and annoying effects on the economy and society.

Consultants, clients, and contractors generally agreed, according to Frimpong & Oluwoye (2003), that project financing, economic and environmental conditions, and material supply were some of the main categories of causes of delay and cost overrun elements.

One significant area of the Ghanaian economy is the building sector. According to the Ghana Statistical Service (2013), it makes up an average of 8.5% of the GDP. In 2002, 2.3% of the working-age population was employed by it Amankwa (2003). The industry produces a wide range of commodities that are utilized by other sectors. With the recent discovery of oil in commercial quantities and Ghana's goal of becoming a middle-income country by 2020, the construction industry plays a critical role.

According to Turner (1993), a project is an undertaking in which financial, material, and human resources are arranged in a novel way to take on a defined scope of work within time and budget restrictions, with the goal of achieving both quantitative and qualitative goals and a positive change. His notion of a project places a strong emphasis on resource organization and the extent of the work's originality. Thus, it is clear that, from the project's conception through its design, tendering, construction, and commissioning phases, managing construction risks and developing safe working practices require careful examination and evaluation of management and planning. This study is restricted to evaluating public sector construction projects in the Upper West Region that are financed by the GETFund. The study also aims to identify and analyze obstacles and factors that affect contractors in the Region's ability to execute building projects efficiently. The analysis will show the relative importance of each component as well as how quickly it affects construction project failure and abandonment in the Upper West Region.

### **2. LITERATURE REVIEW**

Every construction project experiences inefficiencies in project execution, and the extent of these varies greatly from project to project. GETFund construction projects are not an exception, so it is critical to identify the true causes of inefficiencies in order to reduce and prevent them in all construction projects. According to Alaghbari et al. (2007), examining the causes of delays is therefore necessary to maintain good construction time performance and keep costs within budget.

Any construction project's inability to succeed is mostly due to issues and poor performance. Furthermore, there are numerous causes and contributing variables for this issue. According to Long et al. (2004), a variety of factors, including incompetent designers and contractors, inadequate estimating and change

management, social and technological problems, site-specific concerns, and inappropriate methodologies and equipment, can lead to performance problems in major construction projects. According to Navon (2005), the primary performance issues can be categorized into two groups: (a) reasons originating from the actual construction; (b) causes arising from unrealistic target setting (i.e., planning) (many times the causes for departure arise from both sources). A survey was carried out in Hong Kong and Jordan, respectively, by Chan & Kumaraswamy (2002) to assess the relative significance of delay causes in construction projects. According to their research, among the most significant factors causing inefficiencies in project execution are subcontractors, inadequate contractor experience, financing and payments, labor productivity, slow decision making, unforeseen site conditions, client-initiated variations, and necessary work variations. Lastly, poor risk management and supervision also rank highly.

A survey was carried out in Hong Kong and Jordan, respectively, by Chan & Kumaraswamy (2002) to assess the relative significance of delay causes in construction projects. According to their research, among the most significant factors causing inefficiencies in project execution are subcontractors, inadequate contractor experience, financing and payments, labor productivity, slow decision making, unforeseen site conditions, client-initiated variations, and necessary work variations. Lastly, poor risk management and supervision also rank highly. The processes and work activities that comprise the execution process take input resources, provide value, and result in the completed project; the value of each step or activity is determined by the customer's willingness to pay. An effective foundation for measurement is the execution process itself: a well-managed process produces high-quality results and is amenable to improvement. According to Ling et al. (2007), because they are not accustomed to this new operating environment, architectural, engineering, and construction (AEC) firms may find it challenging to manage the execution of building projects in China. Kim and associates (2008), claimed that the performance of foreign construction projects is influenced by more dynamic and complicated aspects than that of domestic projects; these factors include the regular exposure to significant external uncertainties like political, economic, social, and cultural hazards, as well as internal project risks. Labor is the primary cost and time variable in the execution of a project, according to Jim et al. (2004). As a result, maximizing worker productivity and "doing more with less" are highly valued in order to meet deadlines and budget constraints and achieve superior results. One important indicator of productivity in construction is worker utilization efficiency.

# 3. DATA BASE AND METHODOLOGY

Descriptive survey methodology and design were employed in the study. Using a questionnaire, data for the study was gathered from 69 public clients in total, 66 contractors, and 22 consultants from the four largest firms in the area working on GETFund projects. Data analysis was done with SPSS version 25.

# 4. RESULTS AND DISCUSSION

**Factors impacting the Upper West Region's GETFund construction projects' delivery** The researcher created seven possible questions for consultants, clients, and contractors to rate their degree of agreement or disagreement on each of the seven major confronting factors on a Likert scale, where SD&D stands for strongly disagree and disagree and A&SA for agree and strongly agree. This was done in an attempt to identify the main factors and challenges facing the execution of GETFund construction projects in the Region. The outcomes were shown in Table 1 below.

Analyzing the challenges facing the Upper West Region of Ghana in carrying out GETFund development projects

Table 1

Table 1 Elements Impacting GETFund Contractors, Consultants, and Clients' Performance												
GROUPS/FACTORS	SD/D		N		SA/A							
	Freq	%	Freq	%	Freq	%	Mean	Std Dev	Rank			
COST FACTORS												
Cost on labor for the project	31	25.20%	6	4.90%	86	69.90%	2.45	0.87	6			
Project's cash flow	21	17.10%	4	3.30%	98	79.70%	2.63	0.76	4			
Cost of materials escalating	6	4.90%	0	0.00%	117	95.10%	2.9	0.43	1			
Financial stability of the company	18	14.60%	2	1.60%	103	83.70%	2.69	0.71	3			
Overhead expenses	25	20.30%	1	0.80%	97	78.90%	2.59	0.81	5			
Variation order costs	12	9.80%	0	0.00%	111	90.20%	2.8	0.6	2			
Cost of supplies and machinery	31	25.20%	10	8.10%	82	66.70%	2.41	0.87	7			
Project overtime expenses	31	25.20%	10	8.10%	82	66.70%	2.41	0.87	7			
Rate of material waste	37	30.10%	12	9.80%	74	60.20%	2.3	0.9	10			
Cost of motivation	30	24.40%	20	16.30%	73	59.30%	2.35	0.85	9			
AVERAGE	24.2	0.20	6.5	0.05	92.3	0.75	2.6	0.8				
TIME FACTORS												
The accessibility of resources	18	14.60%	6	4.90%	99	80.50%	2.66	0.72	2			
Schedule for project expenses	25	20.30%	6	4.90%	92	74.80%	2.54	0.81	3			
Time required to fix errors	31	25.20%	6	4.90%	86	69.90%	2.45	0.87	4			
Average length of payment delay	12	9.80%	2	1.60%	109	88.60%	2.79	0.6	1			
Time spent preparing the site	37	30.10%	0	0.00%	86	69.90%	2.4	0.92	5			
AVERAGE	24.6	0.2	4	0.03	94.4	0.8	2.6	0.8				
		QUAL	ITY FACT	ORS								
Conformance to specification	25	20.30%	6	4.90%	<i>92</i>	74.80%	2.54	0.81	4			
Quality of equipment and raw materials	12	9.80%	0	0.00%	111	90.20%	2.8	0.6	1			
Availability of personnel	12	9.80%	0	0.00%	111	90.20%	2.8	0.6	1			
Quality training/meeting	23	18.70%	3	2.40%	97	78.90%	2.6	0.79	3			
AVERAGE	18	0.1	2.3	0.02	103	0.84	2.7	0.7				
PRODUCTIVITY FACTORS												
Management labor relationship	12	9.80%	1	0.80%	110	89.40%	2.8	0.6	2			
Arranging tasks in accordance with the schedule	0	0.00%	6	4.90%	117	95.10%	2.95	0.22	1			
Rate of absenteeism via programs	31	25.20%	12	9.80%	80	65.00%	2.4	0.87	3			
Project intricacy	43	35.00%	0	0.00%	80	65.00%	2.3	0.96	4			
Number of new project/years	49	39.80%	4	3.30%	70	56.90%	2.17	0.97	5			
AVERAGE	27	0.22	4.6	0.04	91.4	0.74	2.5	0.72				

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		CLIENT SATI	SFACTION	FACTORS								
Information coordination between Owner	6	4.90%	0	0.00%	117	95.10%	2.9	0.43				
Project management abilities	18	14.60%	6	4.90%	99	80.50%	2.66	0.72				
The quantity of disagreements between owners	25	20.30%	10	8.10%	88	71.50%	2.51	0.81				
AVERAGE	16.3	0.13	5.3	0.04	101.3	0.82	2.4	0.65				
	IN	NOVATION A	ND LEARN	ING FACTO	RS							
Number of reworks	37	30.10%	12	9.80%	74	60.20%	2.3	0.9				
Learning from best practices	12	9.80%	0	0.00%	111	90.20%	2.8	0.6				
Training the human resources	18	14.60%	2	1.60%	103	83.70%	2.69	0.71				
Learning from own experiences	31	25.20%	6	4.90%	86	69.90%	2.45	0.87				
Review of failures	18	14.60%	0	0.00%	105	85.40%	2.71	0.71				
AVERAGE	23.2	0.19	4	0.03	95.8	0.78	2.5	0.75				
ENVIRONMENTAL FACTORS												
Climate condition on site	25	20.30%	12	9.80%	86	69.90%	2.5	0.81				
Waste around the site	62	50.40%	61	49.60%	0	0.00%	1.5	0.5				
Noise level and air quality	37	30.10%	6	4.90%	80	65.00%	2.35	0.91				
AVERAGE	41	0.3	26	0.2	55	0.4	2.1	0.7				
OVERALL AVERAGE	25	0.2	7.6	0.1	91	0.7	2.5	0.7				

#### • Cost Factors

The cost factors affecting performance of GETFund results as shown on table 4.4 indicate that: project labor cost 25.20% (n = 31) were strongly disagree/disagree, 4.90% of respondents (n = 6) had no opinion about the statement, whereas The statement was strongly agreed or agreed with by 69.90% (n=86). Regarding the project's cash flow, 17.10% of respondents (n = 21) strongly disagreed or agreed with the statement, 3.30% of respondents (n = 4) had no opinion, and the majority of respondents (n = 98) strongly agreed or agreed with the issue at hand. Regarding the increase in material costs, 4.90% (n = 6) of respondents strongly disagreed or disagreed, 0.0% (n = 0) said they were neutral, and 95.0% (n = 117) said they were neutral. We firmly concur or agree. Regarding the organization's liquidity, the majority of respondents -83.70 percent (n = 103) were highly in agreement with the statement, 1.60% (n = 2) disagreed, and 14.60percent (n = 18) severely disagreed. Regarding overhead costs, 20.30% (n = 25) respondents strongly disagreed or disagreed with the statement, 0.80% (n = 1) respondents were neutral, and 78.91% (n = 97) respondents agreed. were at the highly agree/agree level, which reflected the respondents' majority group. Regarding the cost of variant orders, 9.80% of respondents (n = 12) were neutral or strongly disagree with the statement, 0.0% of respondents (n = 0) were neutral, and the rest of respondents (n = 111) were either agree or disagree. Regarding the cost of materials and equipment, 25.20% (n = 31) of respondents strongly disagreed or agreed with the statement, 8.10% (n = 10) expressed neutrality, and 66.70% (n = 82) strongly agreed or agreed, which represents the majority of respondents. Regarding the expense of project overtime, 25.20% (n = 31) strongly disagreed or disagreed. The majority of respondents, at 66.70% (n = 82), strongly agreed or agreed with the statement, while 8.10% (n = 10) had no opinion. Regarding the

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material waste rate, 30.0% (n = 6) of the respondents strongly disagreed or agreed with the statement, 4.90% (n = 6) expressed no opinion, and 70.0% (n = 14) strongly agreed or agreed, which represents the majority of the respondents. In conclusion, the cost factors for motivation cost showed that 24.40% (n = 30) of respondents strongly disagreed or agreed with the statement, 16.30% (n = 20) were neutral, and 59.30% (n = 73) strongly agreed or agreed, which represents the majority of the respondents.

### • Time Factors

Table 4.6 displays the time elements that impact the performance of GETFund outcomes. These factors are as follows: the accessibility of resources Of the responders, 14.60% (n = 18) strongly disagreed or agreed with the statement, 4.90% (n = 6) were indifferent, and 80.50% (n = 99) strongly agreed or agreed with the statement regarding the availability of resources. Regarding the estimated time for project cost, 20.30% (n = 25) of respondents strongly disagreed or agreed with the statement, 4.90% (n = 6) expressed uncertainty, and the majority of respondents, 74.80% (n = 92), strongly agreed or agreed with the issue at hand. Regarding the time required for defects: 25.20% (n = 31) of respondents strongly disagreed or disagreed, 4.90% (n = 6) said they were neutral, and 69.90% (n = 86) said they were neutral. We firmly concur or agree. The average response to the statement regarding payment delays was 9.80% (n = 12) strongly disagree/disagree, 1.60% (n = 2) respondents were neutral, and 88.60% (n = 109) strongly agreed/agree, which represented the majority of respondents. To sum up, time-related factors, site setup time: The majority of respondents, at 69.90% (n = 86), strongly agreed or agreed with the statement, compared to 30.10% (n = 37) who strongly disagreed or disagreed and 00% (n = 0) who were neutral.

### • Quality Factors

According to table 4.6, the quality variables influencing the GETFund outcomes' performance are as follows: conformity to specification of the responses, 74.80% (n = 92) strongly agreed or agreed with the assertion of compliance to specification, whereas 20.30% (n = 25) strongly disagreed or disagreed. Regarding the caliber of the tools and raw materials, 9.80% of respondents (n = 12) strongly disagreed or agreed with the statement, 0.0% of respondents (n = 0) were neutral, and the majority of respondents (n = 111) strongly agreed or agreed with the issue at hand. Regarding staff availability: 9.80% (n = 12) were strongly in agreement or disagreement with the statement, 0.0% (n = 0) respondents expressed uncertainty, and 90.20% (n = 111) respondents expressed strong agreement or disagreement. Finally, regarding quality-related elements, quality training/meeting: The majority of respondents, or 78.90% (n = 97), strongly agreed or agreed with the statement, whilst 18.70% (n = 23) strongly disagreed or disagreed, and 2.40% (n = 3) were neutral.

### • Productivity Factors

The productivity factors affecting performance of GETFund results as shown on table 4.6 indicate that: management labor relationship 9.80% (n = 12) were strongly disagree/disagree, 0.80% (n = 1) respondents were neutral to the statement while 89.40% (n=110) were strongly agree/agree of the statement. On sequencing of work according to Schedule: 0.0% (n = 0) were strongly disagree/disagree, 4.90% (n = 6) respondents were uncertain to the statement and majority of the respondents 95.10% (n = 117) were strongly agree/agree to the issue at hand. On absenteeism rate through projects: 25.20% (n = 31) were strongly disagree/disagree, 9.80% (n = 12) respondents were undecided to the statement while, 65.0% (n = 80) were strongly agree/agree to the statement. On project

complexity: 35.00% (n = 43) were strongly disagree/disagree, 0.0% (n = 0) respondents were neutral to the statement while 65.0% (n = 80) were strongly agree/agree level representing the majority group of the respondents. To end with productivity factors, on number of new project/year: 39.80% (n = 49) were strongly disagree/disagree to the statement, 3.30% (n = 4) respondents were undecided to the statement while 56.90% (n = 70) of the respondents strongly agree/agree.

#### • Client Satisfaction Factors

Table 4.6's results for the client satisfaction elements influencing the success of GETFund building projects reveal that: information coordination between Owner 95.10% (n = 117) respondents highly agreed or agreed with the statement, compared to 4.90% (n = 6) who strongly disagreed or disagreed. Regarding the number of disputes amongst owners, a minority of respondents—14.60% (n = 18)—strongly disagreed or disagreed, while 4.90% (n = 6) respondents were unsure of their position and 80.50% (n = 99) respondents agreed. we wholeheartedly concur or agree with the topic at hand. In conclusion, regarding client satisfaction factors, regarding the number of disputes between owners, 20.30% (n = 25) of respondents strongly disagreed or agreed with the statement, 8.10% (n = 10) were unsure, and 71.50% (n = 88) strongly agreed or agreed, which represents the majority group of respondents.

#### • Innovation and Learning Factors

Table 4.6 displays the innovation and learning aspects that impact the success of GETFund results. These factors include: gaining knowledge from best practices 9.80% (n = 12) of respondents strongly disagreed or agreed with the assertion, 0.0% (n = 0) were unsure, and 90.20% (n = 111) strongly agreed or agreed with the statement that best practices should be learned from. Regarding human resource training: 83.70% of respondents (n = 103) strongly agreed or agreed with the topic at hand, whereas 14.60% of respondents (n = 18) strongly disagreed or disagreed. 1.60% of respondents (n = 2) were unsure about their position on the subject. Regarding experience-based learning: 25.20% (n = 31) were strongly disagree or disagree with the statement, 4.90% (n = 6) respondents were unsure, and 69.90% (n = 86) respondents strongly agreed or agreed with the idea of learning from personal experience. Regarding the review of failures, the vast group of respondents, or 85.40% (n = 105) highly agreed or agreed with the statement, while 14.60% (n = 18) strongly disagreed or disagreed, and 0.0% (n = 0) were indecisive.

#### Environmental Factors

Table 4.6 presents the environmental elements that have an impact on the performance of GETFund outcomes. These factors include: Regarding the site's climate, 20.30% (n = 25) of the respondents strongly disagreed with the statement, 9.80% (n = 12) were neutral, and 69.90% (n = 18) strongly agreed, indicating the majority of the respondents. Regarding rubbish near the site, 50.40% (n = 62) of respondents strongly disagreed or agreed with the statement, 49.60% (n = 61) expressed uncertainty, and 0.0% (n = 0) strongly agreed or agreed, which represents the majority of respondents. Finally, for environmental considerations, including noise level and air quality, 30.10% (n = 37) of respondents strongly disagreed, making up the majority of respondents.

Overall, we were pleased to see that 73.98% of respondents (n = 91) agreed with the majority about the causes preventing the region's GETFund development projects from being executed efficiently, while 20.33% of respondents (n = 25) disagreed. Table 4.6 indicates that the primary factors impede the efficient

execution of GETFund construction projects in the region are quality, cost, and time factors. These factors have the highest mean scores, with mean values of 2.7, 2.6, and 2.6, respectively, and standard deviations of 0.7, 0.8, and 0.8.

# **5. CONCLUSION AND RECOMMENDATIONS**

Based on the study's findings, it can be concluded that the Upper West Region's GETFund construction projects are significantly hampered by a number of factors and challenges, including inadequate funding, political meddling in the selection of worthy contractors, high interest rates, fluctuating prices, a shortage of qualified personnel, outdated equipment, and inadequate payments. It is advised that clients make sure there are sufficient finances for a project before awarding it to prevent long-term delays in the payment of certified certificates for work performed by contractors and interest accruing. In order to facilitate the free exchange of information among all parties involved—especially contractors who are illiterate and need assistance interpreting drawings and specifications—the study suggests that contractors, project consultants, and clients establish an effective and efficient communication and coordination link. The study also suggests that, in order to reduce material deterioration and theft, contractors should, prior to making material requests to the project site, ascertain whether storage facilities are available to receive the goods.

# **CONFLICT OF INTERESTS**

None.

# **ACKNOWLEDGMENTS**

None.

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