IMPROVING PROJECT MANAGEMENT PRACTICE IN GHANA WITH FOCUS ON AGRICULTURE, BANKING AND CONSTRUCTION SECTORS OF THE GHANAIAN ECONOMY

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Abstract
This seminar paper was a perception study which identified and analyzed the potential project failure/success factors (project critical factor(s)) in three (3) selected sectors- Agriculture, Banking and Construction of the Ghanaian economy. The paper also identified project management tools and techniques whose application(s) were familiar to the Ghanaian project practitioners and were associated with project outcomes (success/failures). The paper employed mainly quantitative research approaches by designing an independent (project factors) - dependent (project success criteria) variable linear model.

Introduction
Goodman and Love (1980) indicate that Government’s policies are often translated into programs and projects. The projects are therefore seen as vehicles through which government’s policies and programs are achieved. The impact of government’s policies and programs are directly linked to the effective implementation of those projects under the program. The Agriculture, Banking and Construction sectors alone constitute more than 50 percent of the GDP in Ghana. Projects in these important sectors suffer a lot in terms of effective and efficient implementation. Many Agriculture projects have been abandoned in the bush. Banking projects have suffered similar situations where at the end of project, they receive minimum patronage and loss. A typical example of such a banking project is the E-zwich project in Ghana. Failures of construction projects are more evident than in the other two sectors. All these, as has already been mentioned, are a drain on the developing economy.
Project failures in Ghana have been attributed to many reasons such as socio-political, economic, technological, macro and micro-global reasons without any empirical evidence (AfDB, 2006). Juran (1992) indicates that generally, the review of a project history and the root causes of project failures are frequently neglected for projects with a long development cycle. Project failure rates in Ghana are high and the costs involved are excessively high (Daily Graphic, 2006). The phenomenon has been that, in the past and even now, most project contracts have been won by foreign companies. There is little or no knowledge transfer to local companies by foreign companies who win contracts and execute projects in Ghana. Elsewhere, nations have benefited from foreign companies who executed contracts in their home countries because of the transfer of knowledge, experience and expertise (Walker et. al., 2006). The lack of knowledge transfer denies nations the benefits that go along with awarding contracts to foreign companies (Schindler and Eppler, 2003). Consequently, the local companies do not “grow” quickly to compete on an equal footing with their foreign counterparts (World Bank Report, 2001).

This research is carried out on the premise that an understanding of factors critical to project success and failure in three major sectors in Ghana could be regarded as a good step forward to reduce project failure rates. It would inform project planners at the project formulation stage, guide at the planning stage, direct at the implementation phase and improve project implementation efficiency, avoiding certain types of losses. Such improvements could lead to a reduction in the number of delayed projects, reduction in cost and ultimately failed projects.

2. Literature Review

2.1 Conceptual and Operational Definition of Terms

Project

One of Turner’s (1990) definitions which looks quite suitable for the purpose of this study is “an endeavor in which human, material and financial resources are organized in a novel way, to undertake a unique scope of work, of given specification, within constraints of cost and time, so as to achieve beneficial change defined by quantitative and qualitative objectives” (Turner 1993, p35).

Amidst all these definitions certain key characteristics feature in almost all. These are:

- Set of Activities or Tasks
- Has a Time-frame
- Has a well-defined objective
- Consumes resources (i.e. money, people, materials, equipment)
- Has a quality aspect
- Involves risk at every step of the Process
- It is unique: it may never be repeated in the same way by the same group of people at the same place.
- Intended to generate benefit
- Future benefit perspective

Project Management
The Project Management Body of Knowledge (PMI, PMBOK®) defines project management as “the application of knowledge, skills, tools and techniques to project activities in order to meet project requirements (PMI, PMBOK®, 2008 p6). In other words, the project manager must do what is required to make the project happen (Burke, 2003 p3). This definition clearly identifies that the purpose of the project is to meet the stakeholders’ needs and expectations. Turner (1999) defines it as “the process by which projects are successfully delivered, and their objectives successfully achieved”.

**Project Management Success**

The definition of project management suggests a shorter term and more specific context for success. They would include the obvious indicators of completion to budget, satisfying the project schedule, adequate quality standards, and meeting the project goal (Munns and Bjeirmi, 1996).

Successful project management can then be defined as having achieved the project objectives:

- Within time
- Within cost
- At the desirable performance/technology level
- While utilizing the assigned resources effectively and efficiently
- Accepted by the customer (Kerzner 1998) and key influential stakeholders

**Project Success**

Based on the literature and the author’s own observations, project success is perceived as a multidimensional concept, and the objective is to see what the specific dimensions that make sense for different kinds of projects are. Three major dimensions have been considered in the study. The first is related to meeting specified project goals such as time, budget, performance and other requirements. The second is related to customer benefits, such as satisfaction, impact, and loyalty. And the third is related to the benefits derived by the organization performing project, such as profits, market share, or growth. The challenge in this respect is to be sure of the reliability of these dimensions being those actually defining project successes. Shenhar et. al. (2001)

**Project Success/Failure Criteria**

These are the measures by which success or failure of a project or business will be judged.

**Specific Critical Factor(s) of Projects**

**Common Critical Factor(s) of the three Sector Projects**

**Capability Maturity Model**

**The Agriculture Sector in Ghana**

Agriculture contributes 36% of Ghana’s total Gross Domestic Product (GDP), 35% of its total export earnings, and 60% of employment. Agriculture, in this respect, is critical in controlling inflation. (Statistic Research and Information Directorate (SRID), 2005)

About two thirds of the poor are located in rural areas and are involved in food farming. Since the implementation of Ghana Poverty Reduction Strategy I (GPRS 1 – 2003 – 2005) the agriculture sector has achieved some progress in the area of farmer access to mechanized tillage, processing equipment and
also in the area of fish farming; the number of hatcheries constructed has increased and post-harvest losses have reduced (GPRS, Report, 2006).

A number of aid agencies, internal and external NGOs, public and private organizations, have initiated projects in the agriculture sector. The purposes of these projects have ranged from increasing food production to increases in export earnings. Project management issues have mainly contributed to either the success or failure of most of these projects under study. Critical success and failure factors mentioned in the literature have been identified to be contributory factors in most of these projects.

**The Banking Sector in Ghana**

A bank is an organization, usually a corporation, chartered by a state or federal government, which does most or all of the following: receives demand deposits and time deposits, honors instruments drawn on them, and pays interest on them; discounts notes, makes loans, and invests in securities; collects checks, drafts, and notes; certifies depositor's checks; and issues drafts and cashier's checks. (Internet – Investorwords.com). In Ghana the business of banking is spelt out in the Banking Act, 2004 (Act 673).

Towards the end of the 1980s a financial sector restructuring program was implemented in Ghana. It involved the reorganization of the majority of the country’s financial institutions, the reform of the regulatory system and strengthening of bank supervision. Earlier, in the early 1980s, the country had embarked on an Economic Recovery Program (ERP) as imposed by the International Monetary Fund (IMF).

One of the key elements required for its success was an efficient and properly functioning banking system. However, it quickly became clear that the banking system at the time was not up to the task of supporting the objectives and goals of the Economic Recovery Program.

A diagnostic study revealed low credit standards at most of the banks, resulting in large portfolios of non-performing loans, a weak regulatory system, non-uniform accounting standards, poor bank supervision, and overstaffing.

The restructuring effort put in place a new banking law and new accounting standards for banks, strengthened the bank supervision department of the central bank, recapitalized managements and operating procedures, and rationalized the staffing of the banks affected. The Government also took over the bad loans of the distressed banks, which were all state-owned, and recapitalized them.

**The Construction Sector in Ghana**

A developing country, like Ghana, requires a wide range of construction projects and goods to achieve its socio-economic developmental objectives in the transport, energy, water and sanitation, mining, housing, education, health and agriculture sectors.

Roads, ports, energy projects and especially housing are all at the forefront of development work in Ghana as the government moves to achieve its vision of transforming the country within the next 20 years. Its 2020 Vision aim is that the country will achieve “middle income” status by UN/World Bank definition.

One example of a formal construction projects follow. The information includes: Project’s Name, Project Location, Project Client/Funding Agency, Implementing Agency, Project Durations and Project Contract...
Sum, Project Objectives, Key Stakeholders/Target Group, Category of the Project whether it was successful or not.

Data Analysis and Result Discussion

Survey Population and Sampling

The population of interest for this research study included project management practitioners with exposure in any of these 3 sectors: Agriculture, Banking, and Construction in Ghana. Participants were drawn from Professional Associations and Institutions such as the Ghana Institute of Engineers, the Banking College, Chartered Institute of Bankers, Ghana Association of Managers, and Ghana Association of Bankers and Association of Building Contractors.

Data Collection

Data for the model was collected via questionnaires, which were administered to 15 different organizations in Ghana. Participants were targeted from the three sectors. Participants were requested to assess/evaluate the extent to which the 18 Project Factors were important in achieving project success in each of the three dimensions of project success. This used a Likert scale from 1 to 5, with 1 being “not important” and 5 being “most important”. In addition, data was collected representing the following three project success dimensions: project goal, customer satisfaction, benefit of organization measured in percentage from the original plan on a scale of 1 to 5 (1 being “failed to achieve any”, and 5 being “achieving all performance targets”).

Financing Strategy of Projects

Project Financing of Agriculture Projects

All 85 valid respondents indicated the status of their projects funding. Out of that, 19 persons (22.35%) indicated funding became available before the project was started, 34 persons (40%) indicating that it was staggered based on time and 30 persons (35.29%) indicated it was staggered based on phase/or phase dependent.

Project Financing of Banking Projects

All 78 valid respondents indicated the status of their projects funding. Out of that, 24 persons (30.77%) indicated funding became available before the project was started, 21 persons (26.92%) indicating that it was staggered based on time and 32 persons (41.03%) indicated it was staggered based on phase/or phase dependent and 1 person (1.28%) indicating it was open funded.

Project Financing of Construction Projects

All 105 valid respondents indicated the status of their projects funding. Out of that, 23 persons (21.90%) indicated funding became available before the project was started, 19 persons (18.09%) indicating that it was staggered based on time and 62 persons (59.04%) indicated it was staggered based on phase/or phase dependent and 1 person (0.95%) indicating it was open funded.

Project Performance

Achievement of PM Objectives/goals of Agriculture Projects
With regard to the Agriculture sector, all the 85 valid respondents scored the performances of their projects. The mean value was computed to be 2.80. Only 2.4 percent of respondents were of the view that their projects achieved all project management goals/objectives. Whilst only 3.5 percent indicated that their projects did not achieve any of the project management objectives at all. Therefore, the majority of respondents were of the obvious view that most projects achieved some of the project management objectives and not all the objectives.

Achievement of PM Objectives/goals of Banking and Construction Projects

For the Banking sector, the mean value was 3.28, higher than that attained by the Agriculture sector and could be interpreted that more of the respondents in the Banking sector perceived more achievement of project management objectives than the Agriculture sector. The mean value of the Construction sector was also computed as 3.44, the highest among the three sectors. Whilst the perception has been that Construction sector projects achieve project management objectives least; it is the highest on the contrary in Ghana. This result shows that more of Construction sector projects achieve project management objectives than in the other 2 sectors.

Achievement of Customer Benefits

This refers to the achievement of customer benefit which comes in many forms such as satisfaction, impact, loyalty, which are important elements in determining the success of a project. In that respect, a similar 5-point Likert scale was used for the scoring of the achievement of customer benefit/satisfaction. The mean value obtained for the Agriculture was 2.84, lower than 3.22 obtained for the Banking sector and 3.53 for the Construction projects. This aspect of the research makes a major assumption that the project practitioners articulate the perceptions of customers well, which may or may not be true. This is one of the limitations of this study. Figure 3.1 shows the achievement of customers satisfaction on the projects.

![Achievement of Customer Satisfaction](image.png)

Source: Field Data, 2018.
Achievement of Benefit to Organization Performing Project

The mean value obtained for the Agriculture sector project was 2.81 for the Benefit of Organization Performing the Project. The scorings are depicted in Figure 3.2. The mean value for the Banking sector was 3.19 and that for the Construction sector was 3.35. The Construction sector projects have again recorded the highest in terms of benefit that organizations derive from doing projects. Generally, the construction industry is more project-oriented. In other words, their businesses survive through projects. The explanation that could be given to this seeming contradiction is that though the Banking sector is known to be richer in Ghana than the Construction sector, its wealth is generated mainly by its operations and not necessarily through projects. Construction companies obtain benefit by undertaking projects on a shorter term basis. Figure 3.2 shows the achievement of organizations performing the project.

![Achievement of Benefit of Organizations Performing Project](image)

Source: Field Data, 2018.

Project Success/Failure Factors

Overall Success of Projects

Respondents were asked about the achievement of overall project success. The overall success/failure refers to the combination of the three success measures/criteria used. These are the achievement of project management objectives; the achievement of Customer benefit; and then the achievement of benefit to Organization. Overall success was measured on a Likert scale of 1 to 5, with 1 being Very Low; 2 = Low; 3 = Medium; 4 = High and 5 = Very High.

The Agriculture sector recorded a computed mean value of 3.22. The Banking sector recorded a computed mean value of 3.54. The Construction sector recorded a computed mean value of 3.69. The Construction sector projects are perceived to have achieved the most overall success amongst the three sectors.

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Conclusion

It was found that the following factors significantly correlated with the project success criteria for Agriculture projects:

1. Lack of Effective Project Management Techniques significantly correlates the achievement of the Project Management Objectives (Cost, Time, and Performance) with a negative correlation coefficient of 0.666 and mean value of 3.15 on a 5 point Likert Scale;
2. Demand on Project Resources also significantly correlates the overall success of the project using achievement of Project Goal, Customer Benefits, and Benefit to Organization with a negative correlation coefficient of 0.652 and mean value of 3.41 on a 5 point Likert Scale;
3. Delay in payment or release of funds significantly correlates the achievement of the Project Management Objectives (Cost, Time, Performance) with a negative correlation coefficient of 0.794 and mean value of 2.93 on a 5 point Likert Scale; it again significantly correlated with the achievement of Customer benefit from the project (satisfaction, impact, loyalty) with a negative correlation coefficient of 0.621 and mean value of 2.93 on a 5 point Likert Scale; and finally significantly correlated with the Achievement of Organization's benefit (Profit, Market Share, or Growth) with a negative correlation coefficient of 0.566 and mean value of 2.93 on a 5 point Likert Scale.

For banking sector projects, the statistical analysis result shows the relationship between some independent variables and dependent variables that were found to have significance at 95% confidence level. It was found that:

1. Ineffective Monitoring & Evaluations significantly correlates negatively with the overall success of the project using achievement of Project Goal, Customer Benefits and Benefit to Organization;
2. Lack of User Involvement significantly correlates negatively with the achievement of Customer benefit from the project (satisfaction, impact, loyalty);
3. Inadequately Defined Tasks significantly correlates negatively with the overall success of the project using achievement of Project Goal, Customer Benefits, and Benefit to Organization;
4. **LackofEffectiveProjectManagementTechniques significantly correlates negatively** with *Achievement of the Project Management Objectives (Cost, Time, and Performance)*; it also significantly correlates negatively with the achievement of Customer benefitting from the project (satisfaction, impact, loyalty);

5. **Improper Definition of Specification significantly correlates negatively with the overall success of the project using achievement of Project Goal, Customer Benefits and Benefit to Organization;**

6. **Improper Feasibility Studies significantly correlates negatively with the overall success of the project using achievement of Project Goal, Customer Benefits and Benefit to Organization;**

7. **Unrealistic Requirements significantly correlates negatively with the Achievement of the Project Management Objectives (Cost, Time, and Performance)**

For Construction projects, the statistical analysis results show a relationship between some independent variables and dependent variables that were found to have significance at 95% confidence level. It was found that:

1. **Demand on Project Resources significantly correlates negatively with achievement of the project goals (Cost, Time, and Performance); significantly correlates negatively with the achievement of Customer benefitting from the project (satisfaction, impact, loyalty); significantly correlates negatively with the overall success of the project using achievement of Project Goal, Customer Benefits and Benefit to Organization;**

2. **Improper Definition of Specification significantly correlates negatively with the achievement of Organization’s benefit (Profit, Market share or Growth);**

3. **Delay in payment or release of funds significantly correlates negatively with achievement of the project goals (Cost, Time, and Performance).**

The critical factors for each of the sectors have been discussed. It was also clear that some of the critical factors were commonto the sectors. For example, "Lack of effective Project Management Technique" was found to be common to both the Agriculture and Banking sectors projects. The factors "Demand on Project Resources" and "Delay in Release of Payment" were found to be critical for Agriculture and Construction projects. The factor "Improper Definition of Specification" was common to Banking and Construction projects. There was no common critical factor for projects of the three sectors.

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