

Critical Success Factors (CSFs) of MiDA Compact I Road Transport Project in Ghana

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Abstract

The purpose of this study is to provide insight into the critical success factors (CSFs) of a quasi-public institution in the delivery of projects, including the institutional structure of MiDA, processes and procedures affecting the successful implementation of the transport project under the MiDA Compact I. In order to identify the critical success factors the study was planned and performed in two stages. The first stage of the approach was to subject the set of success factors identified in preliminary evaluation to expert group of respondents involved in the MiDA Compact I project. The second stage of the process was to subject the selected CSFs to full scale evaluation by expanding respondents to determine their relative importance. To determine the relative importance of the CSFs based on the expanded survey data, two statistical analysis, namely ranking and factor analysis were performed. The results of the study show that seven (7) critical success factors affected the N1 highway. These include; clear donor guidelines on disbursement of funds, strong national ownership of the project, pre-project design consultation with

stakeholders, senior managers understanding of the project, clear understanding of project environment by contractors, competencies of project designing and planning team and access/ adequate resources. The Pearson's correlation coefficient revealed a statistically significant strong positive relationship between the critical success factors and project performance indicators. Key recommendations arising out of these findings include the need for design of future such project to pay attention to strong national ownership of the project, pre-project design consultation with stakeholders, and inclusion of clear guidelines in the disbursement of funds. It is also important to ensure that project managers to identify and address critical success factors at every stage of the project cycle to ensure effective delivery. Competent and experienced supervisory and coordination team should be a pre-requisite for the implementation of future projects as it has proved to be efficient in the implementation of the MiDA Compact 1 road project.

Keywords

Critical success factors, road project, project design, project environment, project planning, disbursement of funds

1. Introduction

The failure of many projects results in loss of millions of dollars to organizations and countries including Ghana. Due to this persistent challenge, there have been constant attempts to develop efficient project management models and tools to ensure effective project delivery and this call for the identification and evaluation project's critical success factors

Following Rubin & Seelig (1967) seminal work on the impact of project manager's experience on projects' success or failure, evidence abound in literature on the theory and knowledge of the relationship between Critical Success Factors (CSFs) and the efficient delivery of both private and public-sector projects.

It is believed that taking into cognizance of CSFs in the design and management of projects is critical in eliminating waste, cutting costs, improving productivity, and ultimately ensuring efficient delivery of projects (Alias, Zawawi, Yusof, & Aris, 2014). Identifying the CSFs of projects' implementation has also proven to be essential in selecting appropriate contractors to manage large-scale public and private sector projects on account of the efficiency they bring to bear on the management of such projects (Lu, Huang, & Li, 2011).

CSFs studies have been found to provide appropriate tools in guiding contractors in the management of their resources in a manner that ensures that limited resources, including time are efficiently allocated and appropriately aligned to yield a maximum outcome and improve overall competitiveness (Lu et al., 2011).

Based on these views, several studies have tended to focus on investigating what constitutes CSFs of private, public and donor funded projects, and also quantified the extent of their impact on the efficient delivery of projects (Belbin, 2004; Pinto, 2007). The emerging consensus, arising out of previous studies, indicates existence of predominant CSFs which have proven to be essential for the management of all projects, irrespective of the type, location (develop or under develop economy) and ownership of the projects (White & Fortune, 2002). The emerging body of knowledge seems to have identified CSFs related to project management skills, organization structure, resources, competitive strategy, relationships, bidding, marketing, and technology, as critical for the success of any project (White & Fortune, 2002).

In the recent effort to provide strong empirical basis for aggregating the myriad of CSFs identified in literature, Belassi & Tukel (1996) in his work suggested a new scheme that classifies the critical factors and describes their impacts on project performance. His work emphasised on grouping the success factors and explaining the interaction between them, rather than the identification of individual factors. The key areas of interest from his work were the relevance of the project managers' performance, factors related to team members and environmental factors.

In his seminal work on CSFs as business guide, Müller & Jugdev (2012) identified three to six critical factors which, in his view, determine the success in all industries. In a follow up studies, Ika, Diallo, & Thuillier (2012) identified seven factors, including design planning, project manager commitment to the goals, and control systems as key to the success project. By 2008, seventy-seven (77) factors have been identified to affect the success of projects in the construction sector in Pakistan (Saqib, Farooqui, & Lodi, 2008). The escalation in the number of CSFs led new investigators on the subject to develop new frameworks for analysing CSFs (Chan, Scott, & Chan, 2004; White & Fortune, 2002).

Comprehensive work has so far not been done to determine Ghana-specific CSFs for effective project delivery in Ghana. Darmoe (2014) in their work investigated the CSFs influencing public project delivery in Ghana, while Donkor (2011) focused on factors affecting delayed payments on donor funded road projects in Ghana. Ignatius, Buerterey, Abeere-Inga, & Kumi (2013), on the other hand, focused on understanding the factors influencing road infrastructure delivery in Ghana. In the light of this, the current study is relevant as it adds to the body of knowledge of the CSFs of projects delivery in Ghana.

Most studies on CSF led to the suggestion of standard CSFs which have proven to be essential for the management of all projects, irrespective of the type, location and ownership of the projects. The proposed standard CSFs notwithstanding, several works on CSFs have shown that the context on which factors are considered is most critical. To this end, the main problem this study is attempting to investigate is the extent to which Ghana's context renders the proposed standard CSFs non-applicable and whether there are local specific factors which ought to be considered in the design and implementation public road transport project in Ghana to ensure its success.

The study seeks to investigate the Critical Success Factors (CSF) of MiDA Compact 1 Transport project, within the context of the institutional structure, processes and procedure of a quasi-public institution. Specifically, the study will identify the CSFs of MiDA Compact 1 road transport project; to determine the relationship between the factors and the overall performance of the project; to determine the extent to which success could be attributed to the nature and practices of the MiDA; and to determine the challenges for smooth implementation of the project with the view to proposing a suitable framework for achieving a successful project delivery in Ghana.

The rest of the study is structured as follow: Part 2 deals with the background, part 3 is concerned with the research methodology, part 4 handles the data manipulation and result, part 5 provides an elaborate discussion and finally part 6 presents the conclusion

2 Background to the Study

2.1 Millennium Challenge Corporation

In August 2006, the Government of Ghana (GOG) signed a 5-year, US\$547 million Compact¹ with the Millennium Challenge Corporation (MCC) of the United States of America, which was aimed at reducing poverty through economic growth led by agricultural transformation. This program was executed by the Millennium Development Authority (MiDA), a special purpose vehicle created by the Government and established by Parliament of Ghana to serve as the independent agent for the implementation of the Compact.

The Compact had two main objectives, namely to: (i) increase the production and productivity of high-value cash and food crops; and (ii) enhance the competitiveness of high-value cash and food crops in local and international markets. The objectives were expected to be achieved through three main projects components, which were: (i) the agriculture component; (ii) transportation component; and (iii) rural development component. The projects were expected to be implemented in 30 districts in the Northern Agriculture Zone (Northern Region), the Afram Basin Zone (Ashanti and Eastern Regions), and the Southern Horticultural Belt (South-East Coastal Plains).

The Agriculture component focused on commercial agriculture training, addressing the land tenure concerns, irrigation development, post-harvest losses, augment the supply of, and access to, credit, while the transportation component focused on the development of selected feeder roads; one major highway to reduce the bottleneck in accessing the international airport and the port of Tema; development of selected trunk roads; facilitate the growth of agriculture and access to social services; and construction of ferry to facilitate growth of the agricultural sector of the Afram Basin Zone. The rural development component focused on supporting the development of procurement; improving health of communities; enhancing skill development through access to education; facilitating small-scale post-harvest processing of agricultural products; strengthening rural financial services and improving the national payments systems to serve people currently not served or under-served.

2.2 MiDA Compact Project

The Government of United States of America designed the Millennium Challenge Account (MCA) as a response to the changing dynamics in the delivery of foreign aid, whilst promoting good governance and democracy around the

developing world. For a country to qualify for Compact funds it must first pass 17 third party eligibility criteria which covers issues of good governance, promotion of economic freedom and investment in the citizens. The funds were expected to be administered through partnerships with beneficiary countries.

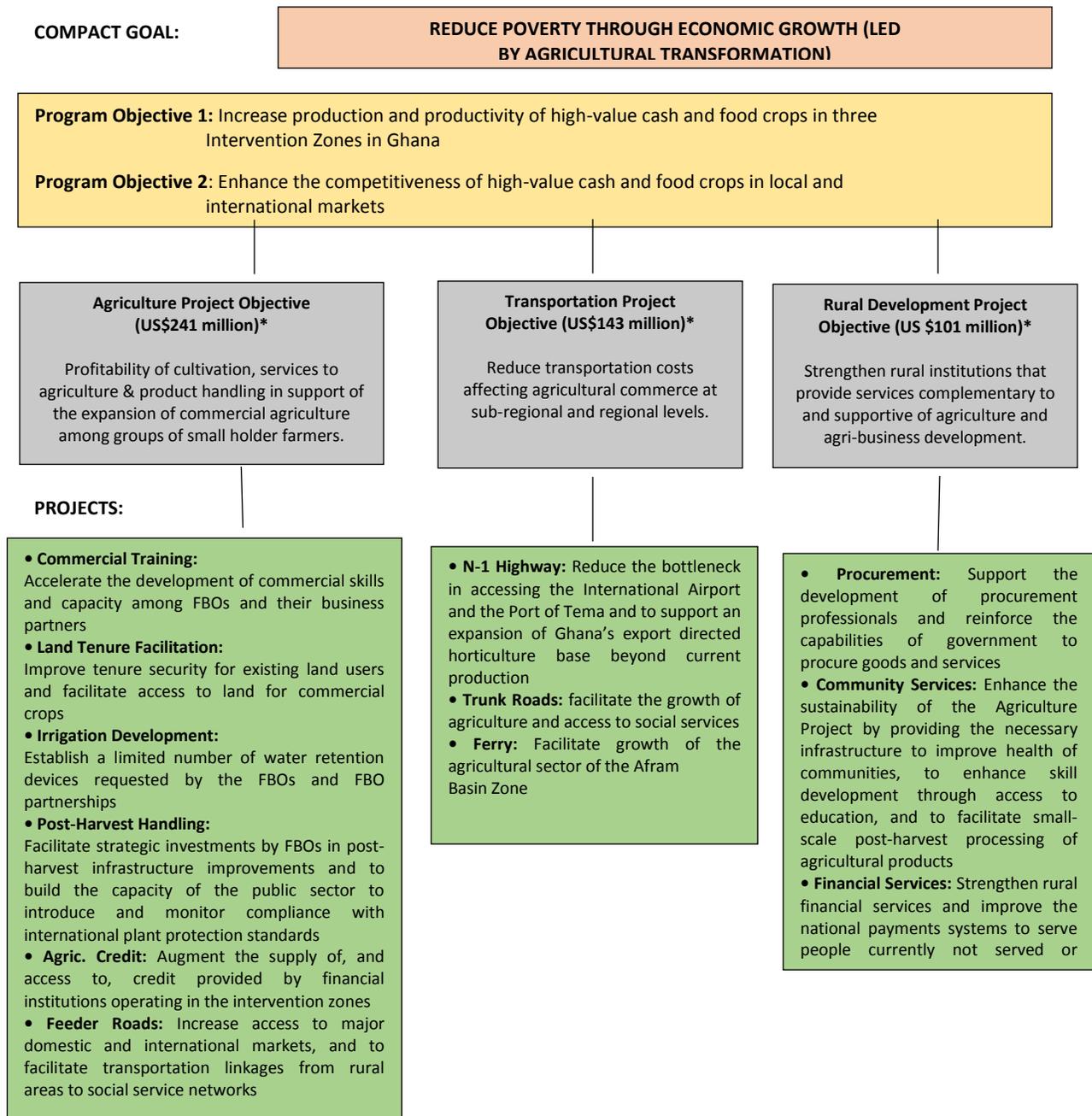


Figure 1. Logical Framework of Ghana's Compact 1 Project

Source: Adopted from MiDA's Compact Completion Report (MiDA, 2007)

On the basis of good governance benchmarks Ghana was identified as an eligible candidate in 2004 and was invited to submit a Proposal for consideration. The Compact Proposal development process, entails: (i) developing constraints analysis; (ii) project identification; and (iii) preparation of Project Concept Paper. These processes were expected to be undertaken in consultation with members of civil society, non-governmental organizations and business operators in the private sector. The process led to the selection of three strategic programs to be implemented under the compact (see diagram 4.1), which was signed in August 2006, entered into force (EIF) on 16th February, 2007 and expired on 15th February 2012.

The overall goal of the compact intervention was to achieve significant poverty reduction in targeted project areas through economic growth during the 5-year implementation period. The goal to be achieved through simultaneous implementation of specific activities in three broad areas, namely: Agriculture development; transport development; and rural development. To achieve the desired impact the projects were implemented in 30 selected Metropolitan, Municipal and District Assemblies from six administrative regions of the Country.

2.3 Institutional Arrangement for Managing the Implementation of the Project

2.3.1 Establishment of Millennium Development Authority (MiDA)

The implementation of the Compact was expected to be undertaken jointly by the agency of the United States Government, Millennium Challenge Corporation (MCC) and a designated local entity insulated from public sector bureaucratic red-tapes. In this regard, Ghana through an Act of Parliament (*Act 702 (2006) and Act 709 (2006), as amended*), created the Millennium Development Authority (MiDA) as the local implementing entity with the mandate to:

- oversee and manage the implementation of the Compact Program;
- secure the proper and effective utilization of the funds granted to Ghana under the Compact;
- oversee and manage other national development programmes of similar nature with funding from the Government of Ghana (GoG), Development Partners (DPs) or both.

MiDA was placed under the Office of Government Machinery (OGM) and reports directly to the President.

2.3.2 Governance and Administrative set-up of MiDA

The set-up of MiDA consists of the Board of Directors; and the Executive and Management Unit.

The Board of Directors: comprises of voting and non-voting members. The voting members included the Chairman, the Chief Executive Officer (CEO) of MiDA, five government institutional representatives, and three Civil Society Members. The Government representatives were drawn from the Ministry of Food and Agriculture (MOFA), Ministry of Trade and Industry (MOTI), Ministry of Roads and Highways (MRH), Ministry of Local Government and Rural Development (MLGRD), and then Ministry of Finance and Economic Planning (MOFEP) and were represented either by the Ministers of State or any other Government Official not below the rank of Director. This was to ensure that the necessary policy oversight and responsibility is provided by the representative. The Civil society membership included a representative of the Ghana Association of Private Voluntary Organizations in Development (GAPVOD) and two representatives from the Private Enterprise Foundation (PEF) which is the umbrella organization for all private sector groups and association.

The non-voting members of the board included three (3) representatives each from the District Assemblies within each intervention zone and a representative of Millennium Challenge Corporation (MCC). The composition of the board was designed to conform to the MCC's governance guidelines on the management of the Compact funds.

The Executive and Management: The Executive Management Team of MiDA was made up of:

- ✓ Chief Executive Officer
- ✓ Chief Operating Officer
- ✓ Director of Procurement
- ✓ Director of Monitoring and Evaluation
- ✓ Director of Finance and Administration

- ✓ Director of Environmental and Social Impact
- ✓ Director of Community and Public Outreach

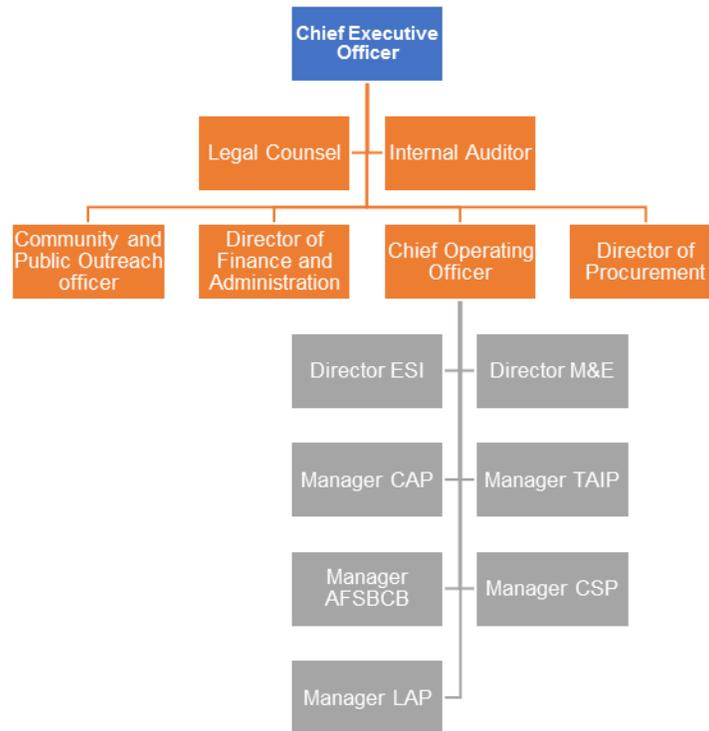


Figure 2. Organizational Structure of MiDA

Source: Adopted from MiDA's Compact Completion Report (CCR), 2013

Five (5) project managers were (i.e. Managers of Commercialization of Agriculture Project, Transportation and Agriculture Infrastructure, Agricultural Financial Services and Bank Capacity Building, Community Services Project, and Land Administration Project). The full complement of staff for the MiDA Compact 1 project were fourteen (14) officers and 78 support staff who were recruited through competitive process.

2.3.3 The National Highway (N-1 Highway) Project

In the context of Compact Project, accelerated development of the country's agriculture depended on a measurable extent on efficient transport network between the farm gate and the market. Ghana's transport system consists of national road network size of 71,729 km in 2014, four domestic airports, one international airport, less developed inland water transport system, and limited rail network in the southern part of the country. The road transport system by far constitutes the largest share of transportation services, accounting for over 95% of movements of goods and people.

The constraint analysis undertaken prior to the development of the compact identified transportation services as significant binding constraints to the accelerated agriculture and private sector growth, and ultimately sustainable economic growth and development of the country. It was also observed to be a major inhibition to the agriculture sector growth due to its negative effects on access to important domestic and international markets. To address this challenge and create opportunities for the development of the agricultural value chains, especially in the horticulture belt in the country, the Compact identified a number of transport infrastructure to be upgraded, with the view to reducing transportation cost for agricultural commerce at the sub-regional and regional levels and improving the competitiveness of agriculture sector in the intervention zones.

The activities under the transport project included the upgrading of sections of the N-1 Highway in Accra, selected Trunk and Feeder Roads. The N-1 Highway is a stretch of road, running from the East to West direction, from the Tetteh Quarshie Interchange to the Mallam Junction (TQM) in Accra. It is part of the Accra–Tema Motorway which

is a Trans-West Africa Highway, running from Aflao in the Volta Region of Ghana to the Elubo in the Western Region of Ghana.

Under the compact a decision was made to upgrade about 14.1 kilometres of the severely congested sections of the N-1 Highway from a two-lane road into a 3-lane, dual carriageway, with two interchange facilities. The objective of this project was to reduce the congestion on that stretch of road and improve access to the Kotoka International Airport and the sea Port of Tema for horticulture exports. The estimated traffic road on that stretch of road was estimated at 28,000 and 35,000 vehicles per day and created a lot of congestions for produce of farmers in the Greater Accra, Western and Central Regions. This lead to high losses of perishable produce destined for international market and significant operating losses due to delays in transportation. The N-1 Project, which was considered as the flagship project under the compact, was deemed as the single most important project because of the role it was going to play in easing movement of goods and persons along the eastern and western corridors of Accra.

3 Methodology

This section outlines the methodology adopted to identify the CSFs for the MiDA Compact 1 Road Transport Project. It also specifies the model used to evaluate the issues under study, as well as the method of data collection and analysis

3.1 Sampling

The formula below was adopted to construct a simple table that helped in determining the appropriate sample size(s) for the study.

$$n = \frac{X^2 \cdot N \cdot P \cdot (1 - P)}{ME^2 \cdot (N - 1) + (X^2 \cdot P \cdot (1 - P))}$$

- N is the required sample size
- X^2 is the Chi-square value for the desired confidence level at 1 degree of freedom
- N is the population
- ME is the desired margin of error

This formula is based on the work of Morgan, (2012) on the sample size determination for Research Activities. Based on the knowledge of the population size for the implementers (which is 16) and policy makers directly involved in the project (which is 12), and the acceptable confidence level of 95 percent, as well as margin of error of ± 5 percent, the sample sizes of 14 and 11 were used for the policy makers and implementing/expert group respectively. However, due to the indeterminant population size for the beneficiary group, an operationally manageable sample size was used for the beneficiary group. After careful consideration of options and also based on experience, time and resources available, a sample size of about 72 individuals was deemed adequate to ensure that there are sufficient sampling units available for meaningful analysis and inferences about the beneficiary population, within a margin of error of plus or minus 5%.

Also, a combination of random sampling and purposive sampling were employed to elicit valuable information for the study. The purposive sampling technique was used to identify the policy makers as well as the experts or the implementation team. However, the random sampling technique was employed to select the beneficiaries of the Compact 1 Road Transport Project. A total of ninety-five (95) respondents were involved in the study.

In addition, a pilot study was conducted to validate the questionnaire used for the study. Also, to acknowledge the effort of respondents and to protect their rights and that of the others engaged in this study, it was prudent to ensure ethical considerations like confidentiality of information and informed consent of research objects are adequately observed. The researcher also obtained the consent of respondents before the questionnaires were administered.

The questionnaire was organized into two parts; the first part contained questions identifying the level of experience of the respondent as well as what they benefited from the project. The second part contained the CSFs which the respondents used to determine which pertains to the projects.

A structured questionnaire which covered a wide range of topics, including demographic characteristics, education, work experience and sector of employment, and individual assessment of the MiDA Compact 1 Road Transport Project, was the main instrument for the survey. There was also implementation level instrument to collect information on cost and time overruns and whether the project was completed according to specification.

3.2 Sources of Data

The data employed in this study was obtained largely through survey, with limited use of secondary data. A survey was conducted to determine the CSFs, and their relative importance to each success/performance indicators. A questionnaire was developed to gather expert opinions as well as general public opinion about the MiDA Compact 1 road project, especially those that relate to the importance of the project to their daily lives. Three types of questionnaire were developed, targeting expert group and managers of the project; policy makers involved in the project; and beneficiary group. The first part of the questionnaires focused on biodata of respondents whilst the second section focused on gathering information to evaluate the relative importance of the CSFs, using the 5-point Likert scale, where 5 denotes extremely important, 4 important, 3 neutral, 2 unimportant, and 1 negligible.

The quantitative assessment of the success of the MiDA Compact 1 road project was undertaken mainly by using secondary data from MiDA office and complemented by the analysis of data from the general public perception survey.

4 Data Manipulation and Results

This section presents the data collected from the respondents and discusses the results of the study. It gives a description of the demographic characteristics of the various categories of respondents involved in the study, namely policy makers, expert/ implementation team and the beneficiaries of the road project. In addition, the critical success factors in the delivery of the MiDA Compact 1 Road Transport Project and their relationship with the overall performance of the project have been discussed.

4.1 Demographic Characteristics

It is important to note that three different categories of respondents were involved in the study. They include policy makers, implementation or expert group as well as the beneficiaries of the MiDA Compact 1 Road Transport Project. The demographic characteristics of the respondents consist of gender, age, employment status and position, level of education, years of experience as well as the frequency of use of the N1 Highway amongst others. The study therefore assesses the background of the various stakeholders involved right from the conception, through to implementation and use of the road project.

4.2 Identification of CSFs by Expert Group

This section attempts to identify the Critical Success Factors for the construction of the Compact 1 Road Transport Project. Four different categories of the factors that influence the success of any project were subjected to the assessment of the experts or the implementation team of the road project. Here, respondents were asked to identify which of these categories ranks highest in the successful construction of the N1 road project. Table 4.5 presents the mean ranking, standard deviation and variance of the responses.

Results from Table 1 shows that project design constituted the most critical stage in the delivery and success of the MiDA Compact 1 Road Transport project since it recorded the highest mean value. This is closely followed by external support which obtained a mean rank of 4.29, project procurement and contracting and subsequently project management.

However, within the broad category of project design, certain critical factors were deemed more significant. In a hierarchical order, these include pre-project design consultation with stakeholders which scored a mean rank of 4.57 followed by competencies of the project designing and planning team with a mean rank of 4.50. The mean ranking of critical success factors for project design, project management, project procurement and contracting as well as external support factors were illustrated in Table 2.

Table 1. Critical Success Factors in Descending Order of Mean Rank

Critical Success Factors	N	Mean	Std. Deviation	Variance
Project design	14	4.64	1.082	1.170
External support factors	7	4.29	1.113	1.238
Project procurement and contracting	11	4.18	1.079	1.164
Project management	12	4.00	1.128	1.273

Source: Authors survey, 2016

Therefore, based on the mean ranking technique, the study has identified seven (7) critical success factors for the construction of the N1 Road Project. These include;

- Clear donor guidelines on disbursement of funds
- Strong national ownership of the project
- Pre-project design consultation with stakeholders
- Senior managers understanding of project
- Clear understanding of project environment by contractors
- Competencies of project designing and planning team
- Access/ adequate resources

These seven (7) critical success factors were subjected to the mass scrutiny by a larger respondents of policy makers and beneficiaries to assess their veracity.

4.3 Impact of Critical Success Factors on Project Performance/Success

The review of literature has highlighted the significance of critical success factors (CSFs) on the overall performance or success of a project. The study has identified seven (7) project performance indicators based on time of delivery, cost effectiveness and quality. The study therefore employed the Pearson's Correlation Coefficient to assess the effect of the identified critical success factors and project performance indicators. The result of the correlation analysis is presented in Table 2.

The results from the correlation matrix indicates a positive correlation between the critical success factors and the performance of the Compact 1 Road Project. There exists a significant strong positive correlation between access or adequate resources and the cost prudence of the road project. At 95% level of confidence the correlation between access or adequate resources and judicious use of resources was 0.55. Also, a significant strong negative correlation existed between adequate resources and unnecessary delay of the project. A similar association is observed between adequate resources and high project quality.

In addition, the results revealed a statistically significant correlation between the competencies of project designing and planning team and cost effectiveness of the project. At the 99% degree of confidence the correlation between competencies of project designing and planning team and cost effectiveness of the project was 0.533.

Table 2. Correlation matrix between critical success factors and project performance indicators

Project performance Critical success factors	Project was completed within cost	Project delayed unnecessarily	Quality of project is high	Project addresses a major road transport bottleneck	Project serve major socio-economic needs	Resource use is worthwhile	Implementation caused discomfort but worthwhile
1. Clear donor guidelines	0.035**	-0.123	0.076	0.463	0.810**	0.134	-0.439
2. Strong national ownership	0.243	0.00	0.070	0.580**	0.821**	0.177	-0.226
3. Senior managers understanding	-0.087	-0.052	0.483	0.385	0.000	0.130	0.110
4. Clear understanding of project environment by contractors	-0.369	0.134	-0.114	0.098	0.120	0.022	-0.019
5. Competencies of project designing and planning team	0.533**	-0.570	0.312	0.083	0.621	0.184	-0.333
6. Access/adequate resources	0.649*	-0.642*	0.525**	0.143	0.553*	0.550*	-0.134
7. Pre-project design consultation with stakeholders	0.502**	-0.504	0.208	-0.192	0.505	0.075	-0.286

* Correlation is significant at the 0.05 level ** Correlation is significant at the 0.01 level

This suggests that the project designing team performed well which explains why they were able to execute the project within the cost constraints. Similarly, at 99% degree of confidence a positive correlation of 0.810 was observed between clear donor guidelines and the project serving a major socio-economic need as well as cost effectiveness. These results are consistent with the findings of Ika et al. (2012) who found strong positive relationships between CSFs and project performance.

4.4 Comments on CSF in the Design and Execution of the MiDA Compact 1 Road Project

The three categories of respondents have enumerated a number of issues which have invariably affected the overall success of the MiDA Compact 1 Road Project. These include:

- Lack of accountability
- Critical and strict oversight by donor
- Design deficiencies
- Balance between delivery and perfection
- Timely actions

5. Discussion

The failure of several projects has resulted in the loss of financial resources to institutions and countries alike for which Ghana is no exception. Several studies have identified several critical success factors that ensures efficient management and effective project delivery. The study therefore sought to investigate the extent to which the MiDA Compact road project could be deemed as successful as well identifying the critical success factors of the project. The study also examined the relationship that existed between the identified critical success factors and variables of project performance or success.

The study employed a qualitative research approach in its methodology. A synthesis of purposive and random sampling techniques was used to select respondents for the study. A total of ninety-seven (97) respondents were involved in the study. Three (3) categories of respondents constituting policy makers, expert/ implementation team and beneficiaries of the MiDA Compact road transport project.

The following are some of the key findings of the study:

- Majority of the respondents (61%) use the N1 Highway more than once a day and they mostly comprised passengers. The road has been commended for its superior architectural design and the ability to accommodate huge traffic flow.
- About 86% of respondents who have used that stretch of road before and after the MiDA Compact 1 road project have observed a significant difference while admitting a drastic reduction in the time to travel on the road.
- Contractors were commended to have done a good job and have largely attributed this success to their status of a foreign company who are judged to have the capacity to do a good job.
- The study has identified seven (7) critical success factors. These include; clear donor guidelines on disbursement of funds, strong national ownership of the project, pre-project design consultation with stakeholders, senior managers understanding of the project, clear understanding of project environment by contractors, competencies of project designing and planning team and access/ adequate resources.
- The Pearson's correlation coefficient revealed a statistically significant strong positive relationship between the critical success factors and project performance indicators.
- About 89% of respondents believed that, the institutional arrangements of MiDA was essential for ensuring the overall success of the MiDA Compact 1 Road Transport project.
- Finally, both policy makers and the implementation team rated the MiDA Compact 1 Road transport Project as highly successful. Albeit the success ranking of the project, respondents have lamented about the critical and strict oversight by donor as well as the balance between delivery and perfection of the project.

6. Conclusion

The results obtained in this study has identified seven critical success factors for effective project delivery. These critical success factors have impacted positively on the overall performance of the MiDA Compact 1 road transport project. The project exhibited high quality and timely delivery as well as completion within the costs specified. Road users have affirmed their preference of the road in terms of its architectural design and its ability to accommodate huge traffic flow.

Beneficiaries of the road has therefore commended the contractors for doing a good job. It was also evident that organizational and managerial attributes of MiDA has played a significant role in the efficient and successful delivery of the road project. It is therefore imperative to emulate the approach adopted by MiDA on the supervisory role it played to ensure the successful completion of the road project. This study has significantly contributed to the General body of knowledge in the following dimensions:

- Provision of more information and contribution to the body of knowledge on CSFs for delivery of public projects, especially in the context of a quasi-public institution in Ghana;
- Provision of more information to evaluate the notion of relevance of management skills and organization structure in the efficient delivery of project, especially in Ghana; and
- Provision of necessary information to policy makers and political leadership in Ghana to make informed policy decisions on public project management.

However, it is the general consensus that the success of the road project stemmed from the fact that the contractors were foreigners which by their inherent nature are accustomed to doing a good job. This raises several concerns about the ability of local contractors to deliver on large projects. It is therefore important for local contractors to build capacity and ensure high quality of projects as well as cost efficiency in order to be able to manage projects of huge magnitude. Project managers must therefore identify such critical success factors that promote the effective and efficient delivery of projects.

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