Managing Consultants as Key Construction Stakeholders for enhanced Stakeholder Management and Project Delivery

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Abstract

Meeting stakeholders' needs and satisfaction is a primary project success factor in addition to cost, time and quality. Though studies have suggested stakeholders' dissatisfaction with project success, there is lack of studies on quantity surveyors' role and management in developing countries in achieving project success. This paper explored and evaluated consultant's management approach as part of a broader study aimed at 'Developing sustainable stakeholder management framework for construction projects in Ghana'. Firstly, literature on construction stakeholder management from journals and published dissertations were reviewed. GETFund tertiary education projects in Ghana were used as case study. Data was analysed using the stakeholder circle, salience and matrix approaches suggested by scholars and used in similar researches to identify and evaluate key stakeholders role and management. The study confirmed the identification and role of Quantity Surveyors as key stakeholders though not managed as such by project managers. It established project failures as effect of stakeholder management absence and recommends the education, consideration of stakeholder management by project managers, keeping Quantity Surveyors well informed, monitored and actively involved in the project planning.

Keywords; key stakeholder, project success, quantity surveyor, stakeholder, stakeholder management

1.0 Introduction

Construction projects' success have been associated with the achievement of the "golden triangle" set goals of cost, time and quality. In recent past, meeting stakeholder needs and satisfaction has been a major success factor for project success (PMI, 2013). Researchers have identified effective stakeholder management as contributing towards meeting stakeholders needs and project success (Sutterfield et al., 2006; Yang, 2010). Project success is critical in developing countries where construction infrastructure projects are development intervention for enhanced socio-economic development (Othman, 2013). The Ghana Education Trust Fund GETFund Act, 2000 was set up by Ghana's parliament for enhanced educational infrastructure delivery and growth in Ghana. According to the Performance Audit Report of the Auditor General on GETFund funded infrastructural projects in public tertiary institutions in Ghana (March 2013), GETFund projects have not been successfully delivered and are faced with several challenges including governments dissatisfaction of key stakeholders' role.

The 2014, 9th Annual Meeting of the Ghana Institution of Surveyors, Quantity Surveying Division emphasized the need for raised standards in project delivery by quantity surveyors. Esubonteng (2014) states that though professionals in the construction industry, at their best, deliver creditably on projects, clients and other stakeholders have had cause to be concerned about under-achieving performance. Quantity surveyors are identified with all the key players; client organization, sponsors, design team, contractors, suppliers playing a major role in these firms. This raises the question of whether quantity surveyors role, responsibilities, and engagement as key stakeholders are well considered and impacts positively on project delivery.

This paper therefore explores quantity surveyors stakeholder management approach as key stakeholders in project delivery with the objectives of (1) exploring their role and responsibilities of as key stakeholders, (2) evaluating their engagement on a project in relation to stakeholder management approach and (3) suggesting how they ought to be managed as part of a study aimed at 'Developing sustainable stakeholder management framework for construction projects in developing countries'. This is achieved through literature and evaluating data using developed stakeholder management approaches for construction projects.

1.1 Quantity surveyors role and responsibilities

A quantity surveyor QS is normally a member of the design team, by profession handles construction costs and contracts of a construction project. Traditionally, QSs provide several services including, cost planning, estimating, contracts negotiation procurement advice and preparation of project Bill of Quantities (BOQ). In addition monitoring budget, preparation of payment invoice and certification, assessment of variations, dispute resolution, preparing feasibility studies, cost control, advice on cost limits and budgets among others are done by the QS. Providing project life-cycle costing, information on contractual disputes and final project account are additional responsibilities (RICS). Quantity Surveyors have specific roles and responsibilities during the 3-stages of project execution namely pre-contract, tendering and post-contract stages and as such are considered internal, primary and key stakeholder. Quantity Surveyors are team players with influence on the project team, client organization, financiers, contractors and suppliers, also primary key stakeholders (Esubonteng, 2014). The QS's role in achieving project set goals of cost, time, quality and stakeholder satisfaction is underestimated and hence not properly managed. Activities that act as barrier to the enhanced performance of the QSs' and their management are obstacles to effective stakeholder management.

1.2 Project Stakeholders

The unique nature of construction projects brings together several people, professional and organizations that have a different stake, interests or are affected by the project outcome and are referred as stakeholders. Researchers have defined and classified project stakeholders differently following the first introduction of stakeholder concept into the management domain by the Stanford Research Institute (SRI) in 1963 which defined stakeholders as any groups or

individuals who are crucial for organizations survival and can affect or are affected by the achievement of the firm's objectives (Freeman, 1984). Project managers or team leaders must strategically manage such stakeholders (Savage *et al*. 1991). According to Carroll (1993) quoted by Gibson (2000) stakeholders refer to groups or individuals with whom the organisation interacts or has interdependencies". Stakeholders were redefined as those who are, could influence or could by themselves influence an organization (Starik,1994; Kolk and Pinkse, 2006), internal members of project coalition, team or scope, who provide finance and external as those affected significantly or to the project scope (Calvert, 1995; Winch, 2002; Sutterfield et al. 2006). They are further described as those that by virtue of their interaction with an organisation may initiate or trigger a project if perceived to be beneficial, antagonistic, disrupt, and stop an ongoing project if perceived not (Mintzberg et al, 1995; Newcombe, 2003). Yang (2010) adopts Freeman (1984) definition of stakeholders as those that affect and are affected by an organization and the outcome of its activities.

Following this definition researchers and scholars have identified several construction stakeholders to include the client, contractor, customer, sponsor, local community member, NGO, media, lobbying organization, and government agency (Cova & Salle, 2005). The client, project managers, designers, subcontractors, suppliers, funding bodies, users and the community as a whole (Newcombe, 2003). The client, project management team, consultant and design team, contractor, subcontractor, supplier, employees, local community, funding bodies, government authorities have been identified by other scholars (Olander and Landin, 2005; Atkin and Skitmore, 2008; Yang, 2010, Heravi et al., 2015).

1.3 Key stakeholders in a construction project delivery

Construction stakeholders are classified severally depending on their relationship, contractual agreement, impact or effect as a result of the project outcome. Carroll and Buchholtz (2006), suggest that stakeholders can be categorized as primary; with a formal agreement with the project owner and secondary if not. Primary stakeholders are essential or critical to project delivery (Clarkson, 1995; Calvert, 1995) but could be without strong influence due to buyer dominance (Walker, 2007). Chinyio and Olomolaiye (2010), agree that some stakeholders are more critical to the project success though others may change position as the project progresses and increase their support base. Stakeholders may be referred as internal (key stakeholders) or external to the project (OGC, 2003; Calvert 1995; Winch and Bonke, 2002), Mitchel et al, (1997) however suggest that stakeholder classification should be based on salience to a project considering power, urgency, and legitimacy. Stakeholders are classified as dormant, discretionary, demanding, dominant, dangerous or definitive. Key stakeholders are thus, primary, internal, definitive stakeholders and include the project team: client, project manager, main designer, other designers, contractor, sponsors and consumers/end users. Quantity Surveyors as cost designers are key stakeholders who affect the outcome of the project and needs to be effectively managed.

1. 4 Stakeholder Management Process

According to Eskerod and Jepsen (2013), stakeholder management consist of all purposeful activities carried out in connection to the project stakeholders in order to enhance project success Project stakeholders are numerous with diverse interest introducing a level of complexity to stakeholder involvement and project management in the construction industry. This coupled with increasing diversity, power, influence, needs and satisfaction of stakeholders as a success factor has led to the construction industry embracing the need for stakeholder consideration (Meding et al., 2013). To achieve this, there is the need for all stakeholders especially key stakeholders to be identified, their required contributions, power in relation to the project, expectations, and decision on strategy to influence each stakeholder considered (Jepsen and Eskerod, 2009).

Stakeholder management (SM) should entail systematic identification, analysis, planning actions, communication, and negotiation aimed at influencing project stakeholders (Lock, 2007). Mitchell et al. (1997) suggest stakeholder identification and salience framework in classifying stakeholders according to their power, legitimacy and claim's urgency, Bourne (2005) provides a five-step process: identify, prioritise, visualise, engage and communicate with stakeholders while monitoring the effectiveness. Chinyio and Olomolaiye (2010) suggest the use of stakeholder matrix. Further studies have confirmed that there is no such formal approach to the SM process neither a consensus on the best model developed for developing countries (Yang et al., 2011) nevertheless.This paper adopts the use of stakeholder matrix and circle to explore quantity surveyors consideration during the project planning and development.

1.5 Stakeholder engagement

Engaging project stakeholders is an essential part of stakeholder management to ensure project success. It is a two-way communication process involving stakeholders' exchange of information and promoting interaction between decision makers and other stakeholders. Mot et al. (2015) suggest that delivering the correct message, using a suitable means, clarifying project values and benefits are essential for effective communication in stakeholder engagement. Bourne and Walker (2005), mention stakeholder circle as a useful tool for project managers to understand the nature of SM impact as a result of power and influence for effective engagement. It identifies, prioritizes key project stakeholders for developing engagement strategy for an active relationship.

Research suggests that stakeholders' interactions with a project are either through co-operation or conflict and competition in the political arena (Mintzberg, 1995). Newcombe (2003) suggests the use of power/predictability matrix and the power/interest matrix in assessing the importance of stakeholder expectations in project strategy analysis. A project manager can therefore engage with key stakeholders on "how likely each stakeholder group is to enforce its expectations on the project", "the means to do so" and the possible impact of stakeholder expectations on future project strategies. This study adopts the stakeholder circle and matrix to analyze the Quantity

Surveyors as a key stakeholder and the quantity surveyors' engagement for the projects under review. It considers also the fact that studies have revealed that stakeholder management process involving high level of pre-project planning effort, can save up to 20% from cost and 39% of schedule in facilities projects if considered (Cho & Gibson, 2001).

2.0 Methodology

This paper employed a two stage approach research design. Firstly, there was an exploratory survey that aimed at identifying data on how Quantity Surveyors (QS) are considered and managed by team leaders and project managers. This was followed by an in-depth examination of the Performance Audit Report of the Auditor General on GETFund funded infrastructural projects in public tertiary institutions (March, 2013) and the report on the 9th annual meeting of the Ghana Institution of Surveyors, Quantity Surveying Division in 2014, as case studies. The main aim of the study was to explore and evaluate stakeholder management approach of consultants (quantity surveyors). The objectives were to ascertain if QS were considered as key stakeholders, evaluate the extent of engagement and make recommendation for SM approach that will enhance project delivery. To achieve these objectives, three research questions were developed to address the research objectives as follows; (1) "are quantity surveyors identified as project key stakeholders", (2) "what is the extent of engagement in relation to stakeholder management approach" and (3) "how should they be managed?".

The literature review was conducted mainly using about 50 journals and publications on stakeholder, stakeholder engagement and management selected through filtering process of the institutional database using keywords such as stakeholder, stakeholder management, quantity surveyors and a combination of the keywords. Ten (10) SM models and approaches for stakeholder management and engagement were identified. A further analysis and filtering identified stakeholder circle, salience model, and matrix as suitable for this study as it has also been used for similar studies on stakeholder management. These were used in evaluating the stakeholder consideration by project managers and team leaders. Considering the Performance Audit Report of the Auditor General on GETFund Funded Infrastructural Projects in Public Tertiary Institutions (March, 2013) and Esubonteng (2014) presentation at the 9th annual meeting of the Ghana Institution of Surveyors, Quantity Surveying Division, as case studies, five polytechnics in Ghana were used namely: Cape Coast, Accra, Kumasi, Tamale and Bolgatanga.

The quantity surveyors role as key project stakeholders were reviewed using the stakeholder management tools since all projects were found to have cost overrun or project cost escalation. This was necessary since quantity surveyors were the cost managers and achieving cost targets constitute project success and stakeholder satisfaction. The study accessed for each project considered, the role of QS in the client, sponsor, contractor's organization and in the supply chain. This paper therefore considered in addition responsibilities, communication during the project planning and development stages and relationship with project manager and owner.

Using the stakeholder circle methodology which provides a means for the project team to identify and priotitise project's key stakeholders and develop an appropriate engagement strategy (Bourne, 2005), the research explored whether quantity surveyors were identified as key stakeholders, prioritized, involved in the planning stages and engaged to impact positively on project cost decisions. Following that, the stakeholder matrix was used to analyze qualitatively, the QS as a stakeholder, engagement, influence, importance, positions and communication during the project execution phase (Bourne and Weaver, 2010). This is necessary as scholars suggest an engagement approach for every key stakeholder for a positive impact. This enabled the researcher assess key stakeholders engagement and impact on project success as part of a broader study aimed at "developing a stakeholder management framework for construction projects in developing countries". The quantity surveyor's engagement was analysed using the tools mentioned and conclusions drawn. Finally the study considered how, they ought to have been managed to ensure that stakeholder satisfaction was achieved and that project success was enhanced,

3 .0 Findings and discussion

3.1 *"are quantity surveyors considered as key stakeholders"*?

The Performance Audit Report of the Auditor General (PARAG, March 2013): The purpose of the report was to ascertain if GETFund Secretariat and the National Council for Tertiary Education (NCTE) had adequate measures considered to ensure that beneficiary tertiary institutions planned and implemented their infrastructural projects to achieve the projects objectives of timely completion within the budget and of good quality which will constitute stakeholder satisfaction and covering the period between 2005 and 2010. Quantity surveyors services rendered in relation to the projects and stakeholder management are closely related to these set goals. According to the report, key players identified are NCTE, the public tertiary institutions, development offices of the institutions, consultants, contractors and suppliers. Quantity surveyors were found to be associated with these stakeholder groups. This agrees with literature (Esubonteng, 2014) and confirms quantity surveyors identification as key stakeholders (Chinyio and Olomolaiye (2010). The study found out that, consultants, contractors, client representatives at physical development offices, financiers and official of NTCE interviewed are closely associated with the project have quantity surveyors who are responsible for budget estimates, contract preparations, and project cost management. QSs are close to project development in all the institutions studied (Fig 1, Fig 2). This confirms literature reviewed on their role as key stakeholders (Bourne, 2005). This further agrees with research that QSs are critical and salient to the project (Mitchel et al., 1997; Chinyio and Olomolaiye, 2010)

Stakeholder Circle (Bourne, 2005): The effects of key stakeholders by literature (Bourne, 2005) confirms the findings that, project failure can be attributed to QS's at GETFund and NCTE negligence in ensuring that projects were adequately planned, and due diligence carried out before commencement to avoid cost and time overruns due to variations. Stakeholder concept indicates that primary, internal and key stakeholders can influence or affect project outcome. Quantity surveyors' play significant roles in determining project duration, cost and material specification to ensure good quality. The situation though may vary due to the post contract stage

role by the beneficiary institutions in contractor's claim. The report indicates that contractors were paid for some works not executed.

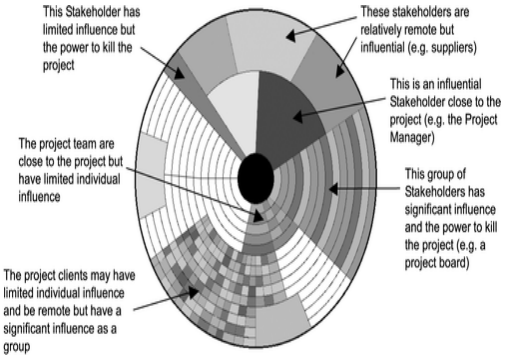


Fig 1 Stakeholder types and attributes

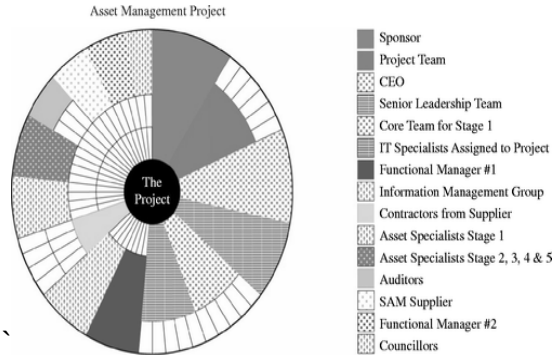


Fig 2 individual Project Stakeholders impact

3.2 *"what is the extent of engagement in relation to stakeholder management approach"*?

The report indicates that generally the projects were not successful in terms of achievement of cost targets and that stakeholders were not satisfied. All the institutions used as case studies had significant variations between final and initial project costs and durations.

Table 1 shows the 5 institutions studied and the changes in contract sums

Name of institution	% change in contract sum	Reasons assigned
Accra polytechnic	25.6-39.42	Addition of one more floor
Kumasi Polytechnic	0-92	Changes in substructure design
Bolgatanga Polytechnic	1.7-41.6	Scope changes, fluctuation
Cape Coast Polytechnic	18-26.57	Scope changes to modernize design
Tamale Polytechnic	Figures not available	Project are still ongoing

According to Table 1, all projects had variation in contract sums. The Audit team not satisfied with the key stakeholders role then recommends as follows:

- Technical Unit of GETFund should be proactive, draw monitoring schedules and use the schedules to inspect on-going GETFund projects;
- GETFund, through the NCTE, should insist on regular progress reports throughout the project life and not only when certificates are prepared.
- Need for effective planning and budgeting, managing project quality and maintaining the project schedule.
- GETFund and NCTE should ensure that projects were planned and budgeted for.

The fact that most projects had cost and time overruns is an indication of poor planning on the part of the project team. Literature suggests the need to manage stakeholders for a positive impact (Jespen and Eskerod, 2009). The report further indicates that new project were always undertaken though there were lack of funds to complete on-going projects as a result of the appointment of new institutional managers who preferred to start project during their term of office. Though this confirms literature on the political influence on project stakeholder

management and project delivery QSs had a role to ensure that project cost was managed for project success. Project managers' inabilities to manage QSs indicate failure to control them rightfully. The need for monitoring confirms that key stakeholders were not monitored and again actually communicated during project planning and implementation stages.

Using the stakeholder matrix (Fig 1 and Fig 2), stakeholders are plotted at positions identified at the beginning of the project and project execution stages and their communication, role and responsibilities determined for monitoring and active management. It was obvious that QSs as members of the design were key stakeholders. Their inability to control project cost and also regularly communicate with the sponsor, client and project managers which is their fundamental role and to ensure that projects were completed within cost budget implies that they were not effectively managed. Newcombe (2003); PMI (2008) suggest the use of a matrix to identify and monitor interest, influence, impact and salience of each stakeholder to ensure effective project success. QSs interest and impact (Fig 3) were to be predicted while their roles and output were to be carefully monitored (Fig 3) did not affect positively on project outcome.

Stakeholder Matrix (Newcombe, 2003, Chinyio and Olomolaiye, 2010)

Fig 3 Power/Interest matrix

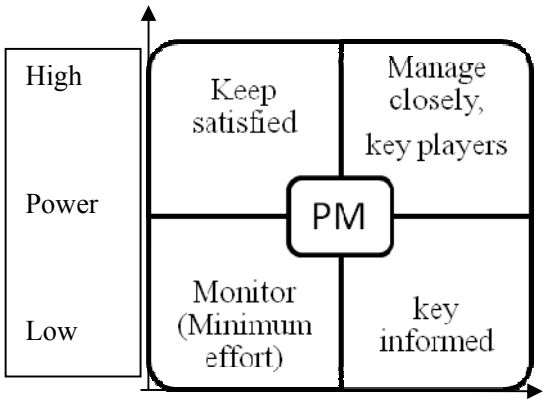
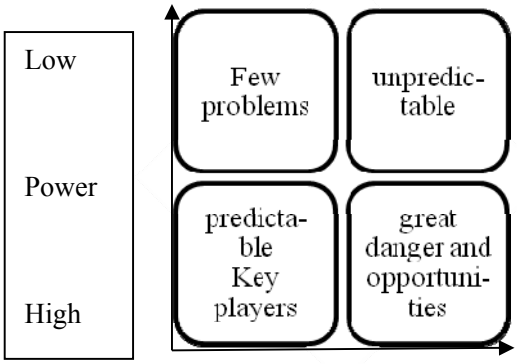


Fig 4 Power/predictability matrix



3.3 *How should quantity surveyors be managed as stakeholders*?

Quantity surveyors as key stakeholders in a project development play a significant role in achieving project cost target and cost information. The Performance Audit Report suggests the need for proper planning. All necessary information should be communicated to the quantity surveyor from inception to project signing off and be actively involved during the planning stages. The literature also reviewed suggests the need to enhance the role of a positive impact. A systematic approach to identification, analyzing, engagement and monitoring are essential using stakeholder management framework (Lock, 2007). Effective communication, sharing information about stakeholders, developing strategies, follow-up (Karlsen, 2002) the use of power/impact, interest, influence, importance to predict and monitor key stakeholder attitude is essential (PMI, 2008; Chinyio and Olomolaiye, 2010). The study, therefore, found the following recommendation as focussed towards effective stakeholder management:

- improve upon the planning process during pre-contract in order to minimise project variations

- proposals of projects presented for funding are accompanied by documents to show that the projects were duly planned
- approve projects that can be done within the stipulated time and planned cost
- should be proactive, draw monitoring schedules, using the schedules to inspect ongoing projects;
- should insist on regular progress reports throughout the project life and not only for certificates prepared.

By using the stakeholder matrix, the quantity surveyor ought to have been kept actively involved, informed and monitored as a key stakeholder. The decision to vary project scope without cost provision and approval from the sponsors is an indication of poor communication and stakeholder management.

Culled from Aapaoja and Haapasalo (2014),

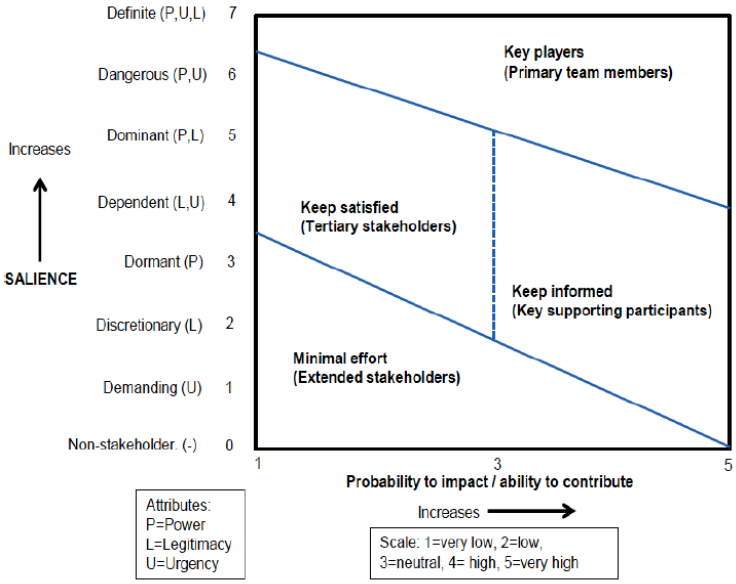


Figure 4. Stakeholder assessment matrix.

Aapaoja and Haapasalo (2014) stakeholder assessment matrix suggests that key stakeholders should be assessed using their salience, the probability to impact, ability to contribute and identified primary team members as key stakeholders, definite and with high ability to impact on project success. QSs as key stakeholders are to be engaged as definite stakeholders with high probability t and ability to influence and contribute towards effective stakeholder management aimed at enhanced project delivery.

4.0 Conclusion

This paper explored QSs' role, responsibilities and management as key stakeholders, assessed their engagement and how they ought to be engaged for enhanced stakeholder management (SM) and project success. This study identified and confirmed their role as key, primary, internal and

definite stakeholders who impact project success due to their professional role in managing, planning project cost targets and delivery.

Secondly, it agreed with the literature that quantity surveyors are involved in project delivery either with the client, consultant, contractor, supplier or NTCE, but were not properly engaged as key stakeholders for enhanced SM as their role and performance were found unsatisfactory particularly at the initial stages of the project. These projects were characterized by delays in finalizing tender documents, inadequate reporting on cost issues, irregular site meetings and monitoring resulting in poor project management and delays which the project manager ought to have considered for enhanced engagement. Strategies were not formulated for cost reporting, monitoring, and effective communication to achieve project cost targets. There was no SM approach in place to ensure enhanced stakeholder impact on the project outcome hence the proposals for effective monitoring and reporting which are focused on improved stakeholder management.

Thirdly this paper identified absence of formal SM process, approach or framework which informs project managers on how to manage key stakeholders. It therefore proposes the need for a framework for key stakeholders' engagement for effective project planning, implementation, procedure for managing scope and cost targets. Quantity surveyors role in project execution is affected by the procurement approach, planning, monitoring and lack of SM approach. It impacts on the achievement of set targets of cost, quality, schedule, and stakeholder satisfaction. Enhancing critical stakeholder engagement will improve stakeholder management and achievement of project set goals. This study contributes to the body of knowledge by assessing QSs as key stakeholders role and impact on project delivery in a developing country and affirms the need for a construction stakeholder management framework. It is however limited to the review of selected projects by GETFund in Ghana only.

5.0 References

Aapaoja, A.and Haapasalo, H. (2014), *A Framework for Stakeholder Identification and Classification in Construction Projects*, Open Journal of Business and Management 01/2014; 02(01):43-55. DOI:10.4236/ojbm.2014.21007

Bourne, L. and Walker, D. (2005), *Visualising and mapping stakeholder influence*, Management Decision, Vol. 43 No. 5, pp. 649-660.

Carroll, A. (1993) *Business and Society: Ethics and Stakeholder Management* (South-Western Publishing, Cincinnati).

Chinyio, E. and Olomolaiye, P. (2010), *Construction Stakeholder Management*, Chichester Wiley.

Freeman, R.E. (1984), *Strategic Management: a Stakeholder Approach*, Pitman Publishing, Boston, MA.

Jepsen, A.L. and Eskerod, P. (2008), *Stakeholder analysis in projects: Challenges in using current guidelines in the real world*, International Journal of Project Management (in press)

Karlsen, J.T., (2002). *Project stakeholder management, Eng. Management*. J. 14, 19–24.

Kolk, A. and Pinkse, J. (2006). "*Stakeholder mismanagement and corporate social responsibility crises*", European Management Journal, Vol. 24 No. 1, pp. 59-72.

Mitchell, R. K., Agle, B. R., and Wood, D. J. (1997), *Towards a theory of stakeholder identification and salience: Defining the principle of who and what really counts.* Academy of Management Review, 22, 853−886

Newcombe, R. (2003), "*From client to project stakeholders: a stakeholder mapping approach*", Construction Management and Economics, Vol. 21 No. 8, pp. 841-848.

Olander, S. and Landin, A. (2005), *Evaluation of stakeholder influence in the implementation of construction projects.* Int. Journal Project Management. 23.

Othman, A. (2013), *Challenges of mega construction projects in developing countries*. Organisation, Tech. and Mgt. in Cons. An International Journal DOI10.5592

PMI (2013), *A Guide to the Project Management Body of Knowledge:* (PMBOK guide).Project Management Institute, Newtown Square, PA. 5th ed.

Von Meding, J., McAllister, K., Oyedele, L., Kelly, K. (2013), *A framework for stakeholder management and corporate culture*, Built Environment Project and Asset Management, 3 (1) (2013), pp. 24–41

Sutterfield, J., Friday-Stroud, S., and Shivers-Blackwell, S. (2006), *A case study of project and stakeholder management failures*: Lessons learned. Project Management Journal, 37(5):26-35

Winch, G. Bonke, S. (2002) *Project stakeholder mapping:* analyzing the interests of project stakeholders. In: Slevin, D.P., Cleland, D.I.,

Yang, J., Shen, Q., Ho, M., Drew, D and Xue, X. (2011), "*Stakeholder management In construction: an empirical study to address research gaps in previous studies*", International Journal of Civil Engineering and Management, Vol. 15 No. 4, pp. 337-34

Online

Performance Audit Report of the Auditor General on GETFund Funded Infrastructural Projects in Public Tertiary Institutions

http://afrosai-e.org.za/sites/afrosai-e.org.za/files/report-files/GETFUND%20funded%20infrastructural%20projects%20in%20public%20tertiary%20institutions%20%282013%29.pdf

Project Completion Report Tertiary Education Rehabilitation Project Republic Of Ghana (Loan No 2100150000335 (F/GHA/EDU-REH/92/13)

http://www.afdb.org/fileadmin/uploads/afdb/Documents/Project-and-Operations/ADF-BD-IF-2007-118-EN-GHANA-PCR-TERTIARY-EDUCATION-REHABILITATION-PROJECT.PDF