Factors Influencing Construction Stakeholders’ Engagement Outcome in Nigeria

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ABSTRACT

As a result of an increasing cases of community protest and opposition to construction projects in the Niger Delta during the construction stages, the present study investigated factors influencing construction stakeholders’ engagement outcome. The aim was to determine the severity of factors influencing construction stakeholders’ engagement in the research environment. Due to the pluralist usage of the term stakeholder, the study examined community stakeholders. Qualitative and quantitative data were collected using semi-structured interview and questionnaire survey administered on 186 respondents selected from two stakeholders groups using snowballing. 32 factors generated individually and collectively from literature, interview and practice were ranked and analysed using descriptive and inferential statistics. Gap between regulatory requirements and public expectations, location of projects, effect of cumulative development effects, poverty, and lack of information disclosure are some of the high ranking factors influencing engagement performance. Further analysis involving Levene’s Homogeneity test indicates no significant difference in the population ranking opinion of these factors. This heterogeneous distribution demonstrates strong similarity across the population studied. These factors must therefore be smoothened in future construction engagement process to enhance successful project delivery. The study unveils inherent lacunas in construction project management which strongly correlates project performance.

Keywords: community; construction projects; stakeholders; engagement; Niger Delta

1. INTRODUCTION

The need to engage with stakeholders is hinged on the impacts of construction projects on the environment (Glass & Simmond, 2007), and on the ethical social responsibility of construction organisations to the community (Jahawar & McLaughlin, 2001). However, the most widely publicised impetus in the management science’s circle is the need to enhance public participation in all projects (Arnstein, 1969). Based on these underpinning drivers, construction projects often witness opposition from people who well appreciate the benefits a
Community based opposition to projects can be premised on two fronts (Lake in Olander & Landin, 2008). First, the opposed facility is beneficial to the society; second, self-seeking interest. Such interest is described as the need to satisfy short term needs against the long term benefits a project may bring.

Opposition of proposed project is therefore a demonstration of two issues: fear about the impact of the proposed facility and expression of unfulfilled needs. This places impetus on the need for project managers to always assess and identify the difference needs of the stakeholders in order to devise strategies to satisfying them.

Stakeholder is a comprehensive term. The use of the term in practice and research is pluralistic. Irrespective of the field and industry of application, the term refers to people that can affect or be affected by a project. Community is a stakeholder group that receives abysmal attention in research and the present study’s focus is on this group.

Concern of construction project managers have been on identification, success factors and salient mapping (Newcombe, 2003; Olander 2009; Takim, 2009, Chinyio & Olomolaiye, 2010; and Caputo, 2013 etc.) and very few research are dedicated to engagement at the community level (Ihugba & Osuji, 2011). Engaging effectively with the stakeholders brings significant benefits to the projects yet, it is not an easy process. It is however also associated with immense challenges that require the managerial expertise of the whole organisation and not just the project manager. Such difficulties often necessitate internalisation of mitigating strategy thereby making participation of entire project organisation necessary.

Kivits (2013) distinguishes between stakeholder management and engagement. Stakeholders’ management involves a business gesture for the benefit of the stakeholders without their inputs. Focus in this practice is on salience mapping that is, identifying and managing the influence or the primacy of the stakeholders that yearn for recognition (Amaeshi, 2007). Engagement on the other hand concerns how the firm relates with the stakeholders (Greenwood, 2007) in stimulating benefits and developments (Ihugba & Osuji, 2011). Based on this displacement, little is done to examine the challenges and difficulties associated with effective stakeholder management and engagement in the construction industry. Olander & Landin (2008) examined factors affecting the external stakeholder management in Sweden using a case study of two projects.

The study does not only stop short of possible industry wide generalisation but also failed to identify specific factors influencing an engagement outcome than the engagement style. Furthermore, the term external stakeholder includes parties with contractual capacities with project organisations such as suppliers, their composition and influencing factors are both endogenous and exogenous while the present study examined factors influencing community stakeholders’ engagement in the context of pressured environment. The pressured environment is a project environment immersed in social conflict influenced by the presence of oil mineral. The need for the study is premised on the wide recognition of the importance of appropriately engaging the citizenry for effective project delivery.

Construction projects in the Niger Delta are typical ‘playground’ in which numerous participants with varying stakes assembled for interaction. Despite widely reported evidences of consultation with community in the Niger Delta (Giacomo, 2011); construction projects in this region still encounter opposition in every instance. This study therefore contends there are imminent barriers that must be smoothened.
2. COMMUNITY STAKEHOLDERS

The term external stakeholder is broadly used to address all stakeholders with or without contractual capacity to the contractor and client’s project organisations including suppliers and local community (Cleland, 1999; Stern & Doyle in Chinyio, 2007; and Nguyen et al., 2009). Although, very few identifies the community based stakeholders (Altonen & Sivonen, 2009), external stakeholders also include groups outside the community of locality in which the project is located. Such broad identification include community of interest which in the context of the relationship between the project and the environment they may not be affected. As a result, the present study focused is on community of locality. Community of locality deals strictly with geographical location of projects (BDOR & Capener, 2007). Community is 'a social unit that shares common values and interests and normally lives in close proximity to each other' (Barzilai, 2003).

The community stakeholders’ refers to people who do not form the core of the project organisations, yet, are affected by and can affect the project. This set of stakeholders received appalling attention in research and practice. Ekung et al. (2013b) attributes this trend to the perceived low salience develops from top-down identification approach widely employed by researchers in construction management.

According to Ekung et al. (2013c), community stakeholders are in three groups: social; economic; and political, and in twelve distinct categories. The social group are individual household groups and the rank and file which form the core of unskilled labour in the construction environment. The economic group are power brokers in the community with adequate power to mobilise resources or restrain flow of resources into project organisation (e.g. community based professionals, SMEs contractors and local suppliers). The political groups are the instituted agency of government in the community-council of chief, traditional ruler’s council, and youth council. Based on their uniqueness and level of opposition they posed to project, effective engagement is therefore a critical step to ensuring successful project outcomes.

3. STAKEHOLDERS ENGAGEMENT

Effective stakeholder’s engagement benefits the project by eliminating conflicts and increase cooperation between the firm and the stakeholders. While there may be basic discrepancy between the stakeholder management and engagement, it is pertinent to emphasise that the stakeholders salience determines the engagement strategies to be adopted (Kivits, 2013). Apparently, the degree of importance attached to the engagement relationship can in fact influence the placement of the stakeholders on the importance scale. The success of stakeholder’s engagement is therefore measured on the ability to give and receive support from stakeholders and harmoniously work together to develop innovative business solutions (Olander, 2005).

Engagement is a structured process encompassing agreement to negotiate, setting criteria for negotiation and monitoring the outcome (Ihugba & Osuji (2011). The persistence of opposition to every project in the Niger Delta is not entirely negligence but a case of ineffectiveness, inability to smoothened imminent obstacles and the adoption of positional tactics by firms on the stakeholders (Ekung et al., 2013a). To enhance effective engagement, Takim (2009) identified the need to form project coalition with the stakeholders as priority criteria in the stakeholder needs hierarchy. The term has been variously defined (Table 1).
The common underlying denominators in all the definitions are trust, collaboration, understanding, and respect to the human race. Stakeholder engagement therefore must be geared towards interest resolution on a common platform.

Due to imminent problems encountered in stakeholders’ engagement, McCabe (2006) and Keast et al., (2011) examined the enablers of effective stakeholders’ engagement namely: significant focus on communication; promoting partnership; promoting trust and readiness to cooperate among various actors. The general concord among researchers however champions the participation of all relevant stakeholders in the decision making processes. This is embedded in the practicality of ensuring that, stakeholders views are inculcated in the decision making framework and implemented; and not in mere invitation to participate. There are also different levels of engagement. Edward (2008) identified three basic levels of engagement. First, when information is provided in one way relationship that is emphatically aimed at keeping the stakeholders well informed. Second, when the construction organisation consults- a two prong relationships which extend beyond mere information disclosure to listening and obtaining feedback. Third, active participation- a relationship based on partnering the stakeholders which embraces information disclosure and actively working with stakeholders. Irrespective of the engagement level, six principles are prerequisite namely: inclusiveness; reaching out; mutual respect; integrity; affirming diversity; and adding value (Kivits, 2013).

**Table 1. Matrix of Stakeholders’ Engagement Definitions.**

<table>
<thead>
<tr>
<th>Authors</th>
<th>Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gable and Shireman</td>
<td>A process of relationship management that seeks to enhance understanding and alignment between company and their stakeholders.</td>
</tr>
<tr>
<td>(2005)</td>
<td></td>
</tr>
<tr>
<td>James and Phillips</td>
<td>A type of interaction that involves, at minimum, recognition and respect of common humanity and the ways in which the actions of each may affect the other.</td>
</tr>
<tr>
<td>(2010)</td>
<td></td>
</tr>
<tr>
<td>Pikaaar (2011)</td>
<td>The participative process of discovering what really matters to the key stakeholders, feeding this back into corporate strategies and monitoring of satisfaction levels of stakeholders</td>
</tr>
</tbody>
</table>

**4. FACTORS INFLUENCING STAKEHOLDERS’ ENGAGEMENT**

While effective stakeholder’s engagement benefits the project by eliminating conflicts and increase cooperation between the firm and the stakeholders, ineffective engagement may result in unexpected problems that may be more prominent than a high profile construction mishap (Loosemore, 2000). There are also other widespread implications: financial; political; cultural; and social effects (Pearson and Clair in Loosemore 2000). This protest if not well managed could result in a serious lengthy, costly, and acrimonious dispute between the sponsoring contractor and the community (Chinyio & Olomolaiye, 2010).

According to Newcombe (2003), stakeholders interact with the project in two fronts: cultural and political. These two fronts combined to impose invaluable barriers on stakeholder’s engagement process. Barriers can emanate from the lack of awareness within the external stakeholders community in respect of available package thereby resulting in
exclusion of citizens (Ihugba & Osuji, 2011). Ignoring the short term objectives of the community stakeholders and paying attention to the long term objectives of the project can also breed public resistance. Under-resource or insufficient allocation of time and resources can result in sub-optimal outcome, strong resistance either from the stakeholders or construction organisations towards engagement (Olander & Ladin, 2008). The lack of identifiable project leadership also generates lack of accountability and transparency in the process. This may eschew difficulty in establishing legitimacy (Beaumont & Loopmans, 2008). Barriers can also originate from the engagement and participation style; attitude towards the relationship, communication medium, accessibility and availability of the stakeholders, nature of interaction and location of projects (Kivits, 2013). Blood (2013) identifies compartmentalisation, lack of baseline data, cumulative effect of incremental development, stakeholders’ fatigue, gap between public expectation and regulatory requirements as imminent problems inducing ineffective stakeholders’ engagement in mining projects.

From these broad themes, the study identifies organisational, project environment, communication, contractual, and regulatory issues affecting stakeholders’ engagement. They also form the basis for data collection on factors influencing construction stakeholder engagement in the Niger Delta. Evidence from the review of literature shows the majority of research efforts are product of descriptive research in other sectors and in overseas projects environment.

These studies have also stopped short of aggregating these factors to test empirically the opinion of different stakeholders in construction project notably in Nigeria. There is need therefore for an empirical study in this area to localise and determine stakeholders’ perception of the severity of these factors in the research environment. The aim of the present study is to determine stakeholders’ perception on the severity of factors influencing engagement outcome in the Niger Delta.

Stakeholders (community representatives, non-governmental organisations and construction project managers) are critical to the success of an engagement endeavour. Since these stakeholders represent different groups in the pursuit of project outcomes, the tendency is that their interests in the outcome of the project are also distinct. As a result, the expected outcome may not lean towards desired result held from both ends (Erikkson, 2008), hence, the problems faced in this regard. It is incumbent on this study to determine the perceptions of two major construction stakeholder groups in construction project engagement process. The importance of determining perceptions is predicated on its ability to influence decision, market behaviour and product outcome (Dada, 2013).

5. RESEARCH METHODOLOGY

Qualitative and quantitative data was collected using semi-structured interview and questionnaire survey administered on 186 respondents selected from community stakeholders, NGOs, and project managers in four states of the Niger Delta, Nigeria: Akwa Ibom, Rivers, Delta and Edo. Respondents from community group are mainly representatives of interest groups in the region; client and contractor sample comprised of professionals in the construction industry: quantity surveyors, architects, builders and engineers. By the peculiar nature of practice in Nigeria, it is not uncommon to find consultants’ organisation that practice their discipline and project management (Odusami et al., 2003).
Prior to the field work, literature was examined and recourse to anecdotal issues from practice was condensed to identify parameters for assessing factors influencing stakeholders’ engagement.

Semi-structured interview was also conducted on 12 persons selected among community stakeholders, NGOs, and project managers from both clients and contractors’ organisations to generate additional factors for the survey. The four states were selected because of the quantity of on-going projects and highly publicised cases of stakeholders ‘engagement quagmire in their domain. The respondents were selected based on experience of previous participation in community consultation in construction projects using snowballing.

Snowballing was adopted due to the lack of available data base of registered project managers and community representatives at the time of study. The pluralist nature of stakeholders’ interest also gave impetus to the use of this approach. Similar approach was adopted in an earlier study by Li et al. (2005) based on similar grounds. The method therefore enables a respondent who participated in the study to identify another for informed consent and subsequent administration. Snowballing involves selecting samples based on network (Kumar, 2011). The method was largely successful due to extreme personal contact involved hence, the significant response rate of 41 % recorded.

The questionnaire comprised two major sections. In the first part, respondents were asked the profile of their previous experience in community stakeholders’ engagement. The second part elicited respondents’ perception on the severity of the 32 factors generated individually and collectively from literature, interview and practice. Due to the lack of previous empirical study that tested the severity of these factors, need arises for reliability and validity tests. Reliability evaluates stability in instrument while validity measure the extent in which instrument capture the hemisphere of a subject matter (Dada, 2013). A 5-point Likert was used, and since Alpha-Cronbach is valid at 0.7 and above (DeVellis, 2003); and tend to yield low value when the number of items on the scale is less than 10 (Pallant, 2010), mean inter-item correlation was applied. The applied correction yielded a high Cronbach’s value of .98. Survey data were analysed using SPSS V20. Test statistics include: mean item score, Levene’s Homogeneity test, rank correlation t-test and One-way ANOVA.

6. RESULTS

Table 2. Respondents Composition and Experience.

<table>
<thead>
<tr>
<th>Respondents’ Composition</th>
<th>No of Projects in Engagement Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stakeholders Group</td>
<td>Groups</td>
</tr>
<tr>
<td></td>
<td>Sector/No</td>
</tr>
<tr>
<td>Project Managers</td>
<td>38 50% NGO/CR</td>
</tr>
<tr>
<td></td>
<td>Oil &amp; Gas -12  Project</td>
</tr>
<tr>
<td>NGO</td>
<td>19 25% Road/Civil -23 Project Managers</td>
</tr>
<tr>
<td>Liaison Personnel</td>
<td>19 25% Others -15 Project</td>
</tr>
<tr>
<td>Total</td>
<td>76 100% Total</td>
</tr>
</tbody>
</table>

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The Niger Delta, Nigeria is peculiar for its lengthy stakeholders’ engagement prior to the citing of development projects. While some states may exhibit extreme difficulty trait, others are known for their relative peaceful disposition and no community in the region is without a case in difficult stakeholders’ engagement. The states in the study are vast in the engagement activities either with oil companies or government agency. The proportion of each group in the study is shown in Table 2.

The sample was carefully selected to allow equal representation for both stakeholder groups namely project managers and community representatives (CR). The NGO are often engaged by community or the construction organisations to negotiate on their behalf where trust cannot be established in an individual (Liaison personnel). Projects managers dominate the sample constituting 50% and other groups are in equal proportion of 25% each but since NGO and liaison personnel represent similar interest, there are therefore two key stakeholders in this study. The first stakeholder group-community representatives have participated in an engagement process of 50 projects distributed across different sectors. This group also tend to have significant engagement experience in global oil and gas projects than the other group. In road and civil engineering projects both group records a significant experience in 65 projects although project managers group have 65% of this population. Project category in ‘others’ include buildings project, and industrial plant. Both respondent groups had experience in 138 projects in which project managers experience is 35% more than community representatives. This is adequate and appropriate for an in depth industry inference.

Table 3 presents population ranking of the thirty two (32) factors influencing stakeholders’ engagement outcome. From the average rank, gap between regulatory requirements and public expectation is the most critical factor closely followed by project’s location which ranked 2nd. This outcome buttress an earlier remarks that some of the state in the region are relatively calm than others. The average population ranking is similar to the ranking opinion of project managers. Conversely, the other stakeholder group-community representatives are of the opinion that firms approach during engagement is both unethical and non-responsive, and the factor ‘lack of responsive and unethical behaviour’ was ranked most critical factor by this group. ‘Effects of cumulative development’s impact’ is the second most critical factor in the community stakeholders’ group. Low ranked factor in the average rank group is ‘contribution of the media, and this opinion is similar to all stakeholder groups. Lack of access to project information and lack of information disclosure are also high ranking factors by the community stakeholders group.

7. DISCUSSION

Several factors notably considered essential ingredient in an engagement process that received non-significant high ranking calls for another reflection. These factors are dispersed in the various sub-heads namely: project environment and organisational issues and are not ranked among the first ten factors. One of such factor is lack of stakeholders’ analysis. Studies by Olander & Ladin (2007) and Olander & Ladin (2008) emphatically identified stakeholders’ analysis as an essential denominator in stakeholders’ management. Also, ‘stakeholders leadership selection problem’, ‘lack of stakeholders’ involvement in the formulation of policy’ and ‘lack of clear engagement strategy’ are significantly pointed in Ihugba and Osuji (2011), Amaeshi (2007) and Greenwood (2007) as impediments to effective engagement. While the result on communication factors with high ranking ‘lack of access to information’ and ‘lack of information disclosure is not surprising’, factors associated with contractual
problem such as ‘compartmationalisation’, a significant flag stand in the traditional form widely practice in Nigeria was unexpected. Idoro et al. (2007) in a study of selected contractual forms use in Nigeria found that, the traditional form is widely used in Nigeria. The ranking position of another factor in the contractual issue sub-head “lack of clear strategy by project organisations” is in tandem with the result in Ekung (2013b) which had found that construction organisation adopt ad-hoc monetary incentive rather than seek strategy to address the imminent needs of the community stakeholders. This practice clearly demonstrates the lack of clear strategy hence the expected high ranking.

Lack of information about a proposed project is considered a serious threat to project performance, and constitutes the leading cause of disturbances that often steered community protest (Andersson & Johansson, 2012). The result with “lack of responsive and unethical behaviour” opinion of the community representative about the firm is consistent with the result in Bouma (2002). In the referenced study, the firm is seen as money making entity only responsible to its shareholders. The high ranking factors must be prioritised in every engagement process in subsequent project to ensure successful project delivery.

Another factor ‘gap between regulatory requirements and public expectation’ also deserve another scrutiny. Existing mitigation parameters on community participation as embedded in EIA laws are inadequate. Very little emphasis is laid on social impact assessment rather; environment concern engaged the attention of the law. Unfortunately, stakeholders in this region at the moment are not essentially concern about construction impact on the environment; rather imperatives are placed on economic and social impacts which directly affect livelihoods (Ekung et al. 2013a). Regulatory requirements on the other hand are held as the upper limits of what is achievable. On the contrary, the law only provide a minimum standard of what is achievable and never restricts innovation. The implementation of social and economic agenda in corporate responsibility in the region also lacks innovation (Ekung, 2013a). Contrary to this view, Glass & Simmond (2007) found that contractors in the UK challenged non-innovativeness of certain regulatory apparatus such as the considerate contractors’ scheme. The study also established that, there are lots more a construction organisation can do outside the stipulated requirements to improve on the social well-being of the citizenry.

Engagement should therefore not be seen as mere protocol for government approval rather; adequate attention must be given to the real intent of the exercise keeping in view the overall project objectives and the need to attain successful delivery. Project organisations in Nigeria have failed to realise that, regulatory approval does translate into social permit. Every project needs a social permit to operate and the lack of social permit in projects herald opposition and community protest. Where this eschew, such project environment is said to be controversial (Teo & Loosemore, 2012). Social permit are recognised in most developed and developing countries; but largely unheard of in the Niger Delta. Otherwise, proactive step would precede a contractor’s resumption at the site. Critical to social permit is engagement (Gjolberg 2009) and projects in Nigeria lack public participation in their content despite express provision in extant law (Ijesina, 1999).

On stakeholders’ fatigue, Stakeholders have been exposed to the extant management approach for too long. That is, waiting until the contractors report at the site for the community to protest before engagement began. This exercise often witnessed series of long chained meetings driven by the contractor urgency to commence work. It is seen to be a form of dimensional consultation because at this point, only soliciting information are disclosed (Blood 2013). This is a wrong form of engagement or consultation because; it is one way
information flow system with no provision for feedback from the communities (Ihugba & Osuji, 2011).

7. 1. Hypothesis Testing

Based on the observed discrepancy in the population ranking by respondents, the following hypothesis was tested. The test of hypothesis involved t-test and ranked correlation test of project managers’ mean (PM) and CR mean, and One Way Anova test involving PM, CR and average means (AM). The results are shown Table 4.

H₀: there is no significant difference in the population ranking opinion of factors influencing stakeholders’ engagement in the Niger Delta.

H₁: there is.

Decision rule: accept H₀ if no significant difference is established and accept H₁ if significant difference is established at 95 % level of significance.

Table 3. Factors Associated with Ineffective Construction Stakeholders Engagement.

<table>
<thead>
<tr>
<th>Factors</th>
<th>PMM</th>
<th>PMR</th>
<th>CRM</th>
<th>CRR</th>
<th>AM</th>
<th>AR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contractual issues</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of clear strategy by project organisations</td>
<td>2.16</td>
<td>26</td>
<td>3.46</td>
<td>12</td>
<td>2.81</td>
<td>23</td>
</tr>
<tr>
<td>Legal systems that override traditional systems</td>
<td>2.76</td>
<td>23</td>
<td>3.65</td>
<td>10</td>
<td>3.21</td>
<td>16</td>
</tr>
<tr>
<td>Compartmentalisation</td>
<td>3.75</td>
<td>11</td>
<td>2.53</td>
<td>24</td>
<td>3.14</td>
<td>18</td>
</tr>
<tr>
<td>Lack of stakeholder involvement in the formulation of policy</td>
<td>3.65</td>
<td>13</td>
<td>3.76</td>
<td>9</td>
<td>3.71</td>
<td>10</td>
</tr>
<tr>
<td>Project Environment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project environment</td>
<td>3.88</td>
<td>7</td>
<td>3.78</td>
<td>8</td>
<td>3.83</td>
<td>7</td>
</tr>
<tr>
<td>Cultural and local values</td>
<td>3.49</td>
<td>13</td>
<td>3.45</td>
<td>13</td>
<td>3.47</td>
<td>12</td>
</tr>
<tr>
<td>Dominance of interest groups</td>
<td>2.89</td>
<td>22</td>
<td>3.12</td>
<td>18</td>
<td>3.01</td>
<td>20</td>
</tr>
<tr>
<td>Illiteracy</td>
<td>3.60</td>
<td>14</td>
<td>3.46</td>
<td>12</td>
<td>3.53</td>
<td>12</td>
</tr>
<tr>
<td>Nature of relationship exhibited</td>
<td>2.99</td>
<td>21</td>
<td>2.33</td>
<td>25</td>
<td>2.66</td>
<td>23</td>
</tr>
<tr>
<td>Poverty</td>
<td>4.01</td>
<td>3</td>
<td>3.87</td>
<td>6</td>
<td>3.94</td>
<td>5</td>
</tr>
<tr>
<td>Politics</td>
<td>2.66</td>
<td>24</td>
<td>3.14</td>
<td>17</td>
<td>2.90</td>
<td>21</td>
</tr>
<tr>
<td>Language barrier</td>
<td>1.87</td>
<td>31</td>
<td>2.03</td>
<td>26</td>
<td>1.95</td>
<td>26</td>
</tr>
<tr>
<td>Pluralist vested interest</td>
<td>3.84</td>
<td>8</td>
<td>3.34</td>
<td>13</td>
<td>3.59</td>
<td>11</td>
</tr>
<tr>
<td>Location (co-located or within locality)</td>
<td>4.04</td>
<td>2</td>
<td>4.00</td>
<td>5</td>
<td>4.02</td>
<td>2</td>
</tr>
</tbody>
</table>
The ranking opinions failed Levene’s test of homogeneity test (Table 4) and indicates no significant variance in score between the two stakeholders’ groups. The implication of the Levene’s result is that respondents ranking of each factor cluster around the average mean. In other words, the gap between respondents’ ranking values of each factor does not deviate significantly from the value population mean. While there is no significant difference among the population score (sig. = .411 and .503; valid at < .05). The study however indicates a high F-value, which translates into a significant variation in the three population’s means. This...
significant variation can be attributed to the use of average mean as the third population mean. There is also significant high ranked correlation between the population means. The implication however is that both means share similar characteristics and this is true to the extent of the similarities in ranking opinion between AR and PM mean. The Null hypothesis \( H_0 \) is therefore accepted.

<table>
<thead>
<tr>
<th>Correlation</th>
<th>Homogeneity Test</th>
<th>ANOVA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R</td>
<td>Sig.</td>
<td>Sig.</td>
</tr>
<tr>
<td>0.462</td>
<td>0.109</td>
<td>0.774</td>
</tr>
<tr>
<td>0.19</td>
<td>0.801</td>
<td>0.821</td>
</tr>
</tbody>
</table>

**Table 4. Inferential Statistic Tests.**

8. CONCLUSIONS

This study investigated factors influencing construction stakeholders’ engagement outcome in the Niger Delta with a view to determining the severity of factors influencing construction stakeholders’ engagement in the research environment. Mixed research approach adopted solicited both qualitative and quantitative data using semi-structured interviewing and structured questionnaire administered on key stakeholder groups drawn from construction project organisations and community representatives with experience in construction engagement process in four states of the Niger delta.

Respondents were required to rank their perceptual severity of 32 factors generated collectively and individually from interview, practice and literature. Mean item score and ranking were used to determine the criticality of each factor. Gap between regulatory requirements and public expectation, location of projects, effect of cumulative development effects, poverty, lack of information disclosure, participation style, stakeholders’ fatigue, pluralist vested interests and lack of stakeholder’s involvement in the formulation of policy are some of the high ranking factors associated with ineffective stakeholders engagement. Variation in the ranking opinion of the population of study was tested using inferential statistics to analyse their characteristics.

The tests supported Null hypothesis that, no significant difference exist in the ranking opinion of respondents on the 32 factors. This heterogeneous distribution demonstrates strong similarity across the population studied. These factors must therefore be smoothened in future construction engagement process to enhance successful project delivery. Further study involving other approaches and larger study sample may be an area for further consideration in order to reduce these factors into manageable components.

References


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