Archives of Business Research – Vol.6, No.6
Publication Date: June. 25, 2018
DOI: 10.14738/abr.66.4612.
Tang, D. F., Jianguo, D., Caesar, A. E., & Osei, A. A. (2018). Impact of Not in My Back Yard Conflict Management on Stakeholders: A Case of Bui Dam Project in Ghana. *Archives of Business Research,* 6*(6),* 315-332.

Impact of Not in My Back Yard Conflict Management on Stakeholders: A Case of Bui Dam Project in Ghana.

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ABSTRACT
Not in my backyard is an important aspect affecting the establishment of large projects in the society that are deemed to have negative effect. The purpose of this paper was to study how the phenomenon of not in my backyard could impact on conflict management and enterprise growth resulting from the construction of the Bui dam project in Ghana. The study employed both primary and secondary data in the analysis process while making use of linear regression models to explain linear relationship between the variables. The empirical results indicated that a substantive relationship exists between the factors affecting the NIMBY attitude in the current society. Implying if adequate information is made available to the publics the expected reactions would be positive whereas the reverse is true.

Keywords: Not in My Back Yard, Public exposure, Information disclosure,

INTRODUCTION

Supply of constant energy in Ghana has been a problem for over two decades now. Several governments have made efforts of adding up to the existing energy supply of the country in order to boost economic growth and development. One of such projects is the Bui Power Project [1]. The project was aimed at adding 400 megawatt hydroelectric power to the existing power supply in Ghana. Construction of this project will mean using farm land and government claiming ownership of some lands. This project is located at Bui, a town in the northern part of Brong Ahafo Region of Ghana.

The 'Not In My Back Yard' (NIMBY) phenomenon has been the center of debate by researchers for the last years. It signifies the resistance and also the unwillingness of the people in the society to accept the establishment of large scale projects by either governments or corporations nearby. The resistance is due to the fear that the constructed project might affect the quality of life and property value in the region. The most significant aspect of NIMBY is established from the fact that, most people who oppose projects are either of lower class or middle class origin. The proponents, therefore, are classified as the political class or those who

support the project. According to Sun, Yung [2], the phenomena is described as the public opposition for the establishment of a public facility in the urban development. Such facilities includes power plants, landfills, hospitals and highways among others. The facilities are feared might have a negative effect to the community, the environment and the quality of life around the area. Although the facilities might have a negative effect on the society and the environment, it has a social benefit to the wider public.

The conflict arises mostly when the local residents have a different perception regarding the loss and benefits brought about by the project. According to Devilee and Wolsink [3], the methods of reducing such conflicts can be achieved by ensuring continuous public participation, disclosing information on a timely basis, and assessing the impact of the project to the environment before commencement. Studies show that, the relationship which exists between the local government and the societal opposition of the projects during the NIMBY conflict is worsening. According to Botetzagias and Karamichas [4], during NIMBY conflict resolution, the locals mistrust the government. Therefore, the issues among the stakeholders need to be understood by both parties to effectively resolve the conflict. There is little academic research on the issue of NIMBY and the enterprise development in Ghana. Although the issue has been widely studied in western nations, few studies have been carried out in the developing nations like Ghana [2].

The Bui Dam Construction project falls under the government development plan which are supposed not only to meet the goals and objectives they are formed for, but also stricter rules on social, economic, technical and environmental aspects. The project is aimed at expanding the electricity supply to the central parts and northern sections of Ghana [5] [6]. According to Obour, Owusu [6], the project is aimed at establishing good roads, hospitals, schools which is aimed at boosting the local economy of the community. The other benefits which come together with the project includes stable electricity in the region, exportation of power to the neighboring countries like Burkina Faso, and Mali, construction of the agro-tourism park and Bui city, establishment of the irrigation and fishing harbor in the region and improving the employment rates of the locals among others [6].

However, before the construction of the dam had commenced, several issues were raised by the locals regarding the viability and the environmental impact of the project. According to Mortey, Ofosu [7], the health impact of the dam, environmental and social impact of the project was questioned. The local position was based on the fact that, the negative effects of the project had been understated in order to attract more international donors. According to McCully [8], the other aspects which raised the tone of contention are the climate change impact together with the Environmental and Social Impact Assessment's (ESIA) which was challenged by the locals through the human rights movements. According to Raschid, Twum [9], the assessment had established that, the greenhouse gases[1] emitted by the project will be less. However, according to McCully [8], the dam, upon completion, will be a major emitter of the greenhouse gasses in the region. For this matter, McCully [8] concluded that, the assessment carried out by [9], was meant to distort the reality and a deliberate action to continue with the project without strong considerations of its impact to the community at large.

[1] Greenhouse gases are a group of compounds that are able to trap heat (longwave radiation) in the atmosphere, keeping the Earth's surface warmer than it would be if they were not present.

Among the main causes of conflict in Africa are the natural resources and the government plans to establish projects which benefits the society. However, some communities have felt neglected or their concerns not incorporated to the policy concerning the project. The Bui power plant is the best example for this situation. The concept of NIMBY has been heavily researched in developed nations with little research being undertaken the developing parts of Africa, like Ghana. The Not In My Back Yard issue challenges the government efforts to establish large public projects which have the potential of affecting the livelihood of the people around the community. The concern raised by the farmers, and the fishermen which had been corroborated by the research study conducted by other scholars had not been duly dealt with.

According to [6], the most affected people were the farmers who complained of losing a significant section of their farmlands and the ones which remained were infertile. Also, the fishermen complained that they had been pushed to settle far away from the rivers which is their only source of livelihood. The social and economic effect of the dam raised concern from the locals which could have escalated into conflict. The government was seen to have deliberately ignored the important aspects related to the environment, the plight of the farmers and the concerns raised by the fishermen. For that reason, this study aims at analyzing the impact of NIMBY conflict management on the enterprise growth from the perspective of crop farmers, a case study of Bui power project in Ghana.

The negligence by the government on the concerns raised jitters among the community. With less research on the NIMBY topic, it is essential to conduct this research and determine the impact of NIMBY conflict management on the enterprise growth from the perspective of crop farmers, a case study of Bui power project in Ghana. As this study aims at establishing the impact of NIMBY conflict management on the enterprise growth from the perspective of crop farmers, a case study of Bui power project in Ghana, other key research objectives that have been analyzed includes: to establish the strategies which can be used to reduce the NIMBY conflict among the community and the government, to assess the impact of information sharing in the society and establish the effects of NIMBY conflict in the establishment and success of Bui project.

The not in my backyard phenomenon is a factor that is really affecting the establishment of government and the non-governmental projects that aims at the overall development of a region and the country as whole. The factors associated with NIMBY include the negative and positive attitude corresponding to different individuals in the society towards the development projects and the information sharing levels among members of different communities. The general objective of this study is to look at the impact of NIMBY conflict management on enterprise growth. The specific aim of the study is to look at the impact of Bui Dam project on the inhabitants.

The study is divided into six sections. The first section discusses the background, introduction and objective of the study. The second section focuses on literature review about NIMBY, Bui Dam and the positive and negative of the project on the inhabitants. In section three, hypotheses are developed. Section four presents the methodology of the study. Discussion of the findings and results is elaborated in section five. The final section looks at the conclusion, recommendation and limitation of the study.

LITERATURE REVIEW

Not In My Back Yard

NIMBY is a pejorative characterization of opposition by residents to a proposal for a new development because it is close to them Burningham [10] or, in some cases, because the

development involves controversial or potentially dangerous technology often with the connotation that such residents believe that the developments are needed in society but should be further away [11]. The NIMBY concept may also be applied to people who advocate some proposal (e.g., budget cuts, tax increases, layoffs, immigration or energy conservation) but oppose implementing it in a way that might affect their lives or require any sacrifice on their part [12].

The phrase "not in my backyard" has two distinct usages and categories of users. In some circumstances, it connotes the unwillingness of individuals to accept the construction of large-scale projects by corporations or governmental entities nearby, which might affect their quality of life and the value of their property [13]. Project proponents (which usually consist of the sponsoring corporation, construction labor unions and contractors, etc.) tend to use the phrase in this manner. The phrase is also used by social service and environmental justice advocates to imply an absence of social conscience expressed by a class, race, or disability-based opposition to the location of social-service facilities in neighborhoods [14].

The negative connotation of "not in my backyard" comes from the fact that those opposing high-impact projects on environmental grounds tend to have middle-class or lower-class origins. As a result the phrase may be used by project proponents as part of a wedge issue [15]. The phrase has a double edge, which makes it difficult to cope with for people so labeled. On one hand, it implies that project opponents want poor people and poor neighborhoods to bear the burdens of toxic waste facilities or quarries, whereas, on the other, it suggests that opponents are willing to sacrifice the blue-collar jobs that would be generated by the construction and operation of the facility [16].

Some environmentalists have tried to look at it in a positive manner. They have argued that the very basis of environmental awareness rests on caring about what happens in a person's own locality [17]. They have also pointed out the logical discrepancy of a corporation's playing on social class in order to win its project. While undoubtedly true, the NIMBY as positive argument has had little traction because in the 1990s environmental justice advocates and other social justice campaigners generally adopted a negative usage of the phrase and reinforced its class-based implication. In the present day, it is used as a response by those opposing the location of group homes for people with developmental disabilities or of drug-treatment facilities [18].

Overview of Bui Dam

The Bui Dam is a 400-megawatt (540,000 hp) hydroelectric project in Ghana. It is built on the Black Volta river at the Bui Gorge at the southern end of Bui National Park [19]. The project is a collaboration between the government of Ghana and Sino Hydro, a Chinese construction company. Construction on the main dam began in December 2009. Its first generator was commissioned on 3 May 2013, and the dam was inaugurated in December of the same year [19]. Bui will be the second largest hydroelectric generating plant in the country after the Akosombo Dam. The reservoir flooded about 20% of the Bui National Park which had a negative impact on the habitats for the rare black hippopotamus as well as a large number of wildlife species. It required the resettlement of 1,216 people and affected many more.

The Bui hydro-electric dam had first been envisaged in 1925 by the British-Australian geologist and naturalist Albert Ernest Kitson when he visited the Bui Gorge. The dam had been on the drawing board since the 1960s, when Ghana's largest dam, the Akosombo Dam, was built further downstream on the Volta River. By 1978 planning for the Bui Dam was advanced

with support from Australia and the World Bank. However, four military coups stalled the plans. At the time Ghana began to be plagued by energy rationing, which has persisted since then. In 1992, the project was revived and a first feasibility study was conducted by the French firm Coyne et Bellier. In 2005 the Chinese company Sino hydro submitted an unsolicited bid for the dam together with funding from the Chinese Exim Bank. The government accepted the bid and the Ministry of Energy signed contracts for an environmental impact assessment in December 2005, as well as for an updated feasibility study in October 2007. The government created the Bui Power Authority in August 2007 to oversee the construction and operation of the project and the associated resettlement [19]. Responsibility for the dam was thus transferred from the Volta River Authority, which until then had been responsible for the development and operation of all power projects in Ghana.

Field investigations for the dam began in October 2007. In January 2008 preparatory construction began and in May 2008 the first people were resettled. In December 2008 the river was diverted and a year later construction on the main part of the dam began. The filling of the reservoir began in June 2011. Unit 3 was connected to the grid on 3 May 2013; Units 2 and 1 were commissioned by the end of November 2013 [1].

Positive effects of Bui Dam

The Bui hydropower plant will increase the installed electricity generation capacity in Ghana by 22%, up from 1920 MW in 2008 to 2360 MW. Together with three thermal power plants that are being developed at the same time, it will contribute to alleviate power shortages that are common in Ghana [20]. Like any hydropower plants, the project avoids greenhouse gas emissions that would have occurred if thermal power plants had been built instead. An additional expected benefit is the irrigation of high-yield crops on 30,000 hectares of fertile land in an "Economic Free Zone". The current status of the irrigation project is unclear [21].

Negative effects of the dam on inhabitants and environment

The Bui National Park will be significantly affected by the Bui Dam. 21% of the park will be submerged. This will affect the only two populations of black hippopotamus in Ghana, whose population is estimated at between 250 and 350 in the park. It is unclear if hippos can be relocated and if there is any suitable habitat near the area to be inundated. Even if there were such a "safe haven", it is not clear if the country's game and wildlife department has the means to rescue the animals. The Environmental and Social Impact Assessment states that hippos will be vulnerable to hunting during the filling period of the reservoir [22]. It also claims that they would ultimately benefit from the increased area of littoral habitat provided by the reservoir.

The dam could also have other serious environmental impacts, such as changing the flow regime of the river which could harm downstream habitats [23]. A survey by the University of Aberdeen has revealed that the Black Volta River abounds with 46 species of fish from 17 families. None of these species is endangered. Nevertheless, these fish communities could be severely impacted by changes to water temperature, turbidity and the blocking of their migration. Waterborne disease could also occur. Schistosomiasis in particular could become established in the reservoir, with severe health risks for local people.

The Bui dam project requires the forced relocation of 1,216 people of which 217 have been resettled as of June 2010. In order not to slow down the construction of the dam, the Bui Power Authority has opted for a quick resettlement process. It neglected the recommendations of a study, the Resettlement Planning Framework, that it had contracted itself. In theory, all affected people are expected to be moved to a new locality called Bui City. However, as of 2010 the city did not exist and there is not even a schedule for its construction. Instead, the first 217

relocated people have been moved to a temporary settlement called Gyama Resettlement Township, which has dilapidated infrastructure. Fishermen were resettled on dry land and lost their livelihoods. Although the study had recommended to establish an independent body to monitor the resettlement, no such body has been set up [24].

HYPOTHESIS DEVELOPMENT

Not in my Backyard as a Context

The concept of NIMBY is described as the undesirable social reaction of the local community to the large projects put up by governments or unwanted facilities erected in the community [25]. NIMBY first emerged in the early 1980s according to Wonjun et al. (2016), and has remained relevant over a long period. The aspect has remained to be significant in communal conflict resolutions across the world. The relevance, according to [18, 25], Chapman and Chaudoin [26] is because the communication practitioners have been in the frontline to champion for the rights and challenge the projects by responding to the public opposition. According to Chung, Choi [27], the three key attributes which constitute NIMBY as a context includes the types of the unwanted infrastructure, the method in which the NIMBY issue has been featured and the participants who become involved in the responses of NIMBY. Also, it involves increasing concern and awareness on the community regarding the project, obtaining the support or opposition towards the program being launched which addresses the community needs and reduce the problems which exist [27]https://www.emeraldinsight.com/doi/full/10.1108/IJCMA-09-2014-0069. According to Grunig [28] recognizing the features and characteristics of a particular community ensures that there are fruitful community relations.

In the NIMBY situation, the more the community characteristics are understood by the people, the easy it will be to predict their reaction when such project is being implemented. The anticipated response will enable the selection of a strategic approach to handle the public reactions. The research by Grunig [28] established a situational theory of the publics' which is essential in explaining and predicting why some publics are passive while others are active in the community participation.

H_1: *There exists no significant association between the positive public exposure levels and the total community involvement levels towards the growth and development agenda.*

A typology of Publics in Community Relations: Situational Theory of Publics

In communication literature, the term publics is used in the situational theory to depict and show the stakeholders in the shared situation. According to Grunig [28], the term publics is defined as the group of individuals who face familiar circumstances, recognizes the scenario and organizes among themselves to solve the problem arising from the scenario. The term publics is based on the shared behavior, and it is measured by examining how the members perceive a condition in which they are affected by the organizational consequences. The theory presents a typology of the publics which predicts how people perceive a situation and how they will engage a communication behavior based on the perception. He proposed three components of the theory aimed at determining the communicative effectiveness of different societies. The first component is the recognition of the problem. In this case, people do not think about the scenario unless they perceive a problem that needs to be fixed. The second element is the constrained recognition, where the public feel constrained to deal with the problem arising from the situation identified in element one. The third element is involvement which refers to the degree of which the person feels both emotionally and physically connected to the problem. The level of involvement determines the likelihood of the public to get engaged

in such activities as NIMBY [27]. These people are categorized into four publics, the aware, active, nonpublic and latent. According to King, Stivers [12], the active members have high involvement and problem recognition levels and lower constraint recognition. The aware category of people process the received information and act depending on the levels of involvement and recognition. The latent group is not aware of their involvement with the problem being discussed. Finally, the nonpublic do not care about the situation with its problems they exhibit minimal levels of involvement on the issue. The study by Hallahan [29] renamed the latent and nonpublic as aroused and inactive publics respectively.

H_2: *There exists no significant relationship or influence between the information sharing levels and the total community involvement levels towards the growth and development agenda.*

Information Processing for Action Taking: Social Exchange Theory

Research studies have shown that the type of information which the community receives regarding a particular activity influences how the publics will perceive it, whether negatively or positively. According to Heath, Liao [30] people show distinctive differences in their conduct. However, the differences depend on the type of message a person received or is exposed to. Furthermore Heath, Seshadri [31] argued that the publics are less likely to accept a hazardous technology or project in which the benefits are not apparent. Also, the study found that the disapproval could also be because the project will benefit another person other than the one who is making the evaluation. However, the project will be supported in many cases if the publics perceive it as a source of economic growth and job creation. From the explanation, the social exchange theory is a significant concept used in explaining the relationship which exists between the community's opinion to the potential hazardous project after being exposed to either supportive or opposing information about the facility and their behavioral intentions towards the community participation.

The basic form of interactions according to the social exchange theory involves the exchange of material and social resources. However, according to Thibaut and Walker [32] the publics always want to maximize the exchange outcome value. Summarily, individuals enter into a relationship by analyzing the benefits versus costs associated with it. Based on the socioeconomic approach to the issue, the community will have a little incentive to change their behavior unless the perceived value and benefits derived from the project significantly exceeds the costs associated with the project. According to Grunig [28], unless the issue is essential, or other external factors prompt the community, the inertia leads to inactivity and indifference or routine behaviors.

The people always seek to determine the possible community benefits of the project in comparison to other personal value when considering a facility that is potentially harmful. Under the NIMBY scenario, a section of the public will be concerned about the dangers of the project due to the conflicting interest between the issue and themselves [33]https://www.emeraldinsight.com/doi/full/10.1108/IJCMA-09-2014-0069. Thus when considering the potentially harmful facility, the group weighs the competing needs. According to Miller (2012) the supporting-involved publics could form a category of the individual supporting the project due to the social, economic and psychological aspects which they might gain from it. According to [34], having a project can be a source of tax revenue, business opportunities, income and job creation. According to the social exchange theory, the reactions of the community towards a project depends on the type of information they have received concerning the project. Those who receive positive messages tend to support the project unlike those who receive the negative messages.

H_3: *There exists no significant relationship or influence between the information sharing levels, positive and negative public exposure levels and the economic improvement brought about by development projects.*

METHODOLOGY

The general economic development rates from the effects of the NIMBY attitude are an important aspect of this analysis. The data is collected from different towns and villages of the Brong Ahafo Region of Ghana where Bui Dam is located. Both Primary and Secondary data were collected and used for the study.

Different methods can be used to explain the variation of the given factors attributing to the NIMBY attitude in different regions of the country. The following are the set of hypothesis considered for the analysis:

- **H_0:** There exists no significant association between the positive public exposure levels and the total community involvement levels towards the growth and development agenda.
  H_{0a}: There exists a significant association between the positive public exposure levels and the total community involvement levels towards the growth and development agenda
- **H_1:** There exists no significant association between the negative public exposure levels and the total community involvement levels towards the growth and development agenda.
  H_{1a}: There exists no significant association between the negative public exposure levels and the total community involvement levels towards the growth and development agenda.
- **H_2:** There exists no significant relationship or influence between the information sharing levels and the total community involvement levels towards the growth and development agenda.
  H_{2a}: There exists a significant relationship or influence between the information sharing levels and the total community involvement levels towards the growth and development agenda.
- **H_3:** There exists no significant relationship or influence between the information sharing levels, positive and negative public exposure levels and the economic improvement brought about by development projects.
  H_{3a}: There exists a significant relationship or influence between the information sharing levels, positive and negative public exposure levels and the economic improvement brought about by development projects

The techniques to be used for this analysis may vary but most importantly, it's important to consider the exploratory data analysis and specifically descriptive statistics that is important in explaining the overall characteristics of the variables and helps in identifying the most important variables that can be specifically used to bring about the most important results required to understand this research.

The chi-square tests can be used to check for the independence and significance (goodness of fit) of different variables stipulated in the study. Several econometric models are tested in reference to linear regression models to explain linear relationship between the variables. The correlation analysis is also conducted to indicate the level of association between given variables. The statistical software used for analysis is the statistical package for social sciences (SPSS). An important syntax referred to as the PROCESS is added to the regression analysis to

take considerations of the aspects such as mediation and moderation of factors in a given regression model and important results are accrued from this method. Diagrams such are the scatterplots are also incorporated in the analysis to exhibit visual trends and relationship between given variables.

Model Specification & Variables.

Two econometric models are considered in this research

The first regression model containing factors affecting the NIMBY impact is shown. The econometric regression model is clearly stipulated by the following econometric equation:

$$\textit{Total community involvement} = \beta 0 + \beta 1\ ISL_{it} + \beta 2 PPEL_{it} + \beta 3\ NPEL_{it} + \beta 3\ EILS_{it} + \varepsilon_{it}$$

Where:
ISL= Information Sharing Levels
PPEL= Positive Public Exposure levels
NPEL = Negative Public Exposure Levels
EILS= Economic improvement levels
Ɛ = is error term
β0 = Constant
i **=** represents the region
t = represents the years

The second econometric model is represented by the following multiple regression equation:

$$\textit{Economic Improvement Levels} = \beta 0 + \beta 1\ ISL_{it} + \beta 2 PPEL_{it} + \beta 3\ NPEL_{it} + \beta 3 + \varepsilon_{it}$$

The variables for the above equation are represented on the first econometric model.

RESULTS AND DISCUSSION

We begin the analyses by stipulating the descriptive statistics of the data. Table1 shows the descriptive characteristics of the variables in the data set. The characteristics indicated on the table shows the general distribution of the data variables. For instance the total number of the observations is approximately 500 and some cases the observations are 504 indicating possibility of missing values. The community involvement in total indicates the largest mean and standard deviation since it is one of the major focus and it is referred to as the response variable of this analysis. The skewness and kurtosis values of this dataset indicates uniform and symmetric distribution implying that this data may show important distributions and trends which effects to significant results and relationship between the vital variables. This also implies that all the variables are viable for further analysis and each of them have a significant all the models in this research.

Table 1: Descriptive statistics

Descriptive Statistics

	N	Range	Minimum	Maximum	Mean		Std. Deviation	Variance	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
positive public exposure levels	500	5.78	1.22	7	4.0748	0.05812	1.29967	1.689	-0.151	0.109	-0.687	0.218
Community involvement in total	500	625	286	911	603.508	4.4656	99.8547	9970.96	-0.077	0.109	0.07	0.218
Information sharing levels in percentsge	500	84	0	84	41.248	0.6553	14.652	214.68	-0.55	0.109	0.428	0.218
negative public exposure levels	500	15.13	0.08	15.21	3.2522	0.09497	2.12363	4.51	1.137	0.109	2.963	0.218
economic improvrment by projects in percentage	500	60.19	39.03	99.22	76.3149	0.50862	11.4184	130.38	-1.278	0.109	0.693	0.217
Number of observations	500											

Therefore, the next step of the analysis is considering the variables shown to perform the correlation, and regression analysis using the econometric models in consideration of the mediation and moderating effects.

Correlation results

Table 2: Correlation Result

		positive public exposure levels	Community involvement in total	Information sharing levels in percentage	negative public exposure levels	economic improvement by projects in percentage
positive public exposure levels	Pearson Correlation	1	0.007	0.37	-.106*	-0.029
			.			
Community involvement in total	Pearson Correlation	0.007	1	0.85	0.021	0.012
Information sharing levels in percentage	Pearson Correlation	0.37	..850	1	0.03	-0.012
negative public exposure levels	Pearson Correlation	-.106*	0.021	0.03	1	-.131**
						.
economic improvement by projects in percentage	Pearson Correlation	-0.029	0.012	-0.012	-.131**	1
				.		

The above table indicates both positive and negative levels of association between the variables. The correlation coefficient between the information sharing levels in percentage and information sharing levels is approximately 0.85 which represents a strong positive relationship between these aspects. This means that information sharing is one of the contributors of community involvement in important economic development projects in the community. The negative public exposure of the development projects brings about a very small correlation coefficient implying that it has a weak association and impact towards the total community involvement in the development projects. Economic improvement and the total community involvement works hand in hand with a positive correlation indicating substantive relationship between these aspects. The positive public exposure levels of the economic development projects and the total community involvement indicates a positive correlation coefficient which is quite weak but still explains a positive relationship between these two variables. The negative correlation coefficients indicates negative relationship which means that increase in one variable causes decrease in the other variables hence indicating insignificant association.

Regression econometric model results

The following table shows the model summary of the regression model:

Table 3: Model Summary.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.912[a]	.832	.830	41.1268

a. Predictors: (Constant), economic improvement by projects in percentage, Information sharing levels in percentage, negative public exposure levels, 1

b. Dependent Variable: Community involvement in total

The model summary shows that the R-squared statistic is approximately 0.832 which indicates 83% amount of variation between the variables. This implies that the model is significant and shows that the relationship between the variables is able to explain the in-depth association between the variables.

Table 4: ANOVA table:

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4138257.845	4	1034564.461	611.657	.000[b]
	Residual	837249.123	495	1691.412		
	Total	4975506.968	499			

a. Dependent Variable: Community involvement in total

b. Predictors: (Constant), economic improvement by projects in percentage, Information sharing levels in percentage, negative public exposure levels, 1

The significance level corresponding to the F-value is approximately 0.00 which is less than the significance level 0.05 which also indicates significant results.

Table 5: Coefficient table:

Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	994.981	17.145		58.033	.000
positive public exposure levels	-27.257	1.535	-.355	-17.762	.000
Information sharing levels in percentage	-6.689	.135	-.981	-49.441	.000
negative public exposure levels	.560	.880	.012	.636	.525
economic improvement by projects in percentage	-.083	.166	-.009	-.499	.618

The coefficient results above shows the p-values corresponding to each variable. The interpretation is done in reference to the set hypothesis. Considering the first hypothesis that states; there exists no significant association between the negative public exposure levels and the total community involvement levels towards the growth and development agenda. The p-value corresponding to the negative public exposure levels is approximately 0.525 which is greater than the significance level 0.05 which implies that negative public exposure do not give enough evidence of having an impact on the total community involvement. This implies that we accept the null hypothesis and conclude that there exists no significant association between the negative public exposure levels and the total community involvement levels towards the growth and development agenda. This result is similar to the economic empowerment which has a similar result which is quite insignificant because the p-value is greater than the significance level 0.05. The information sharing levels indicates a very significant result because the corresponding p-value is less than 0.05. Therefore, we reject the null hypothesis and conclude that there exists a significant relationship or influence between the information sharing levels and the total community involvement levels towards the growth and development agenda. Positive public exposure also indicates a significant relationship which implies that it is one of the factors contributing to the overall community attitude towards the community development projects which contribute to overall economic development.
The following are the corresponding regression plots:

Figure 1: Histogram

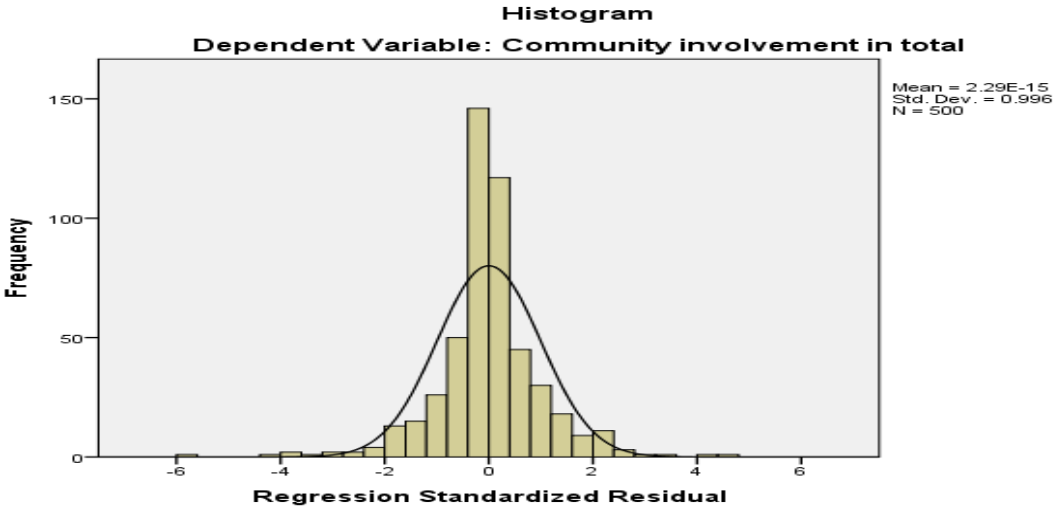
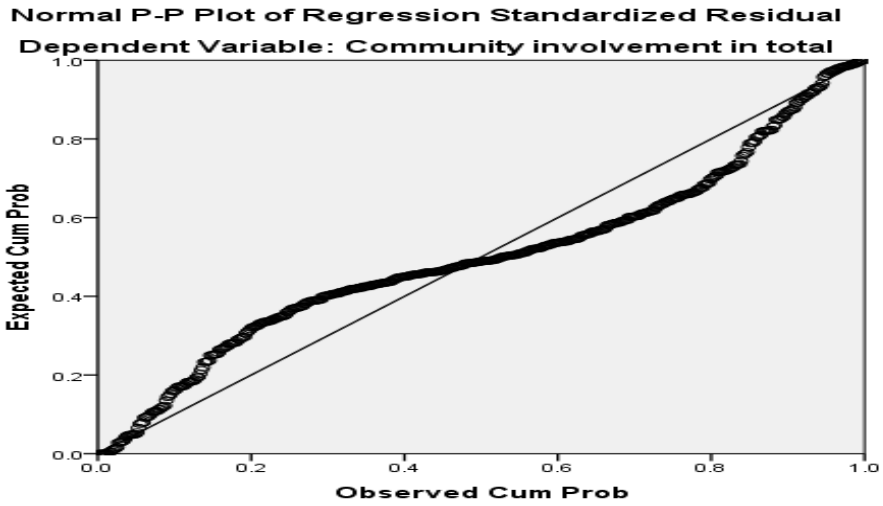


Figure 2: Normal P-P plot



The histogram shown above indicates an approximate normal distribution which is attributed to appropriateness and effectiveness of analysis results.

The following are the results of the second regression model

Table 6: model summary

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.142[a]	.020	.012	11.15951

a. Predictors: (Constant), 1, Community involvement in total, negative public exposure levels, Information sharing levels in percentsge

b. Dependent Variable: economic improvrment by projects in percentage

Table 7: ANOVA table:

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1276.256	4	319.064	2.562	.038[b]
	Residual	61644.661	495	124.535		
	Total	62920.917	499			

a. Dependent Variable: economic improvrment by projects in percentage

b. Predictors: (Constant), 1, Community involvement in total, negative public exposure levels, Information sharing levels in percentsge

Table 8: coefficient table:

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	87.660	12.384		7.078	.000
	Information sharing levels in percentage	-.062	.089	-.081	-.697	.486
	negative public exposure levels	-.716	.237	-.135	-3.023	.003
	Community involvement in total	-.006	.012	-.054	-.499	.618
	positive public exposure levels	-.635	.532	-.074	-1.194	.233

This model represents a very minimal substantial association between the factors affecting the NIMBY effect of the members of the community towards the setup of economic development projects. The economic development levels are not related to the factors associated with the individuals effects towards the setting up of new industries that are supposed to raise the living standards of the individuals from the specified locations.

Figure 3: Histogram

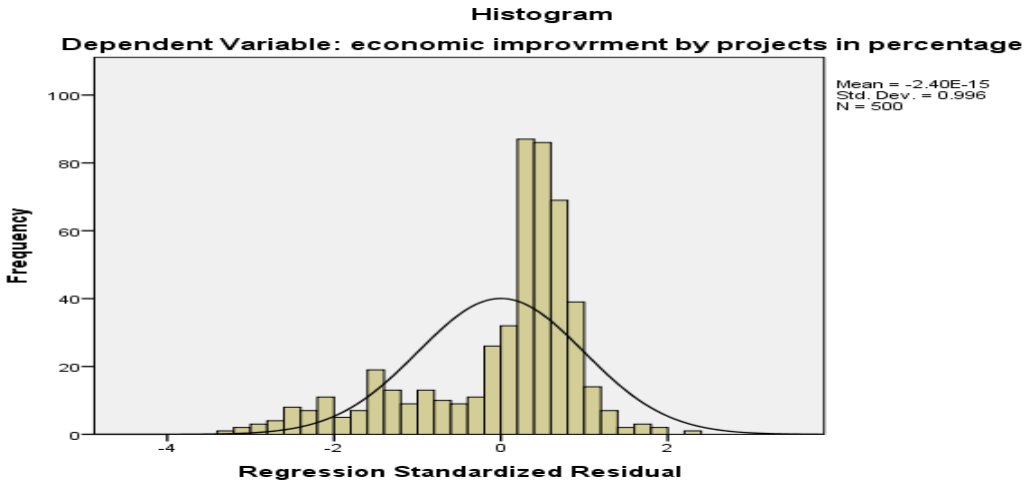


Figure 4: Normal P-P plot

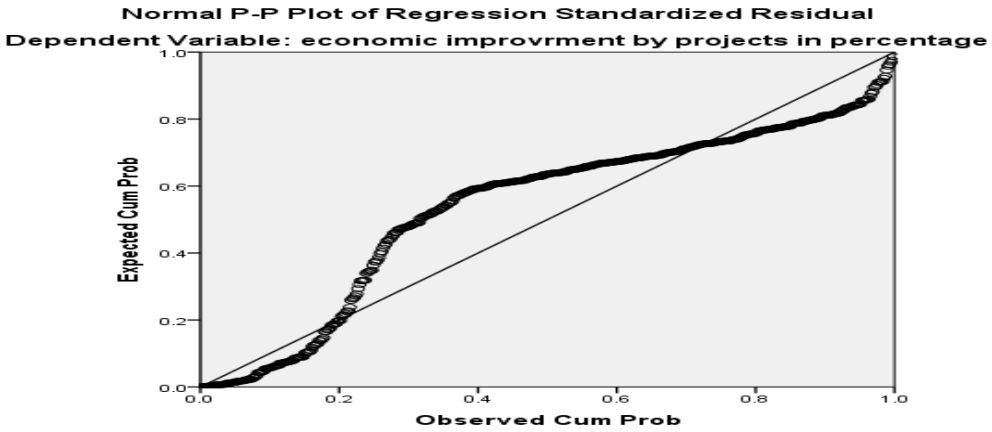


Table 9: The moderation process results

MODEL1

Run MATRIX procedure:

Model : 1
Y : Communit
X : positive
W : Informat

Sample
Size: 500

Model Summary

R	R-sq	MSE	F	df1	df2	p
0.9454	0.8937	1066.4566	1389.8189	3.0000	496.0000	0.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	1366.1411	23.4041	58.3719	0.0000	1320.1577	1412.1245
positive	-102.6376	4.5830	-22.3955	0.0000	-111.6420	-93.6332
Informat	-14.6628	0.4802	-30.5322	0.0000	-15.6064	-13.7192
Int_1	1.6169	0.0949	17.0374	0.0000	1.4305	1.8034

Product terms key:
Int_1 : positive x Informat

Test(s) of highest order unconditional interaction(s):

	R2-chng	F	df1	df2	p
X*W	0.0622	290.2720	1.0000	496.0000	0.0000

Focal predict: positive (X)
Mod var: Informat (W)

Conditional effects of the focal predictor at values of the moderator(s):

Informat	Effect	se	t	p	LLCI	ULCI
28.0000	-57.3640	2.1385	-26.8242	0.0000	-61.5657	-53.1624
43.0000	-33.1103	1.2572	-26.3355	0.0000	-35.5805	-30.6401
54.0000	-15.3242	1.4007	-10.9402	0.0000	-18.0764	-12.5721

The above model indicates significant moderation and mediation effects to the response variable community involvement and support to the new investments. The model depicts approximately 89% amount of variation between variables in the model indicating an effective model analysis using incorporation of other interaction and mediation factors in the model. The total community involvement is positively affected by the factors positive and negative

public exposure of information as well as the information sharing aspect.

Table 10: The moderation process results
MODEL2

Model : 1
Y : economic
X : positive
W : negative

Sample
Size: 500

OUTCOME VARIABLE: economic

Model Summary

R	R-sq	MSE	F	df1	df2	p
0.1907	0.0364	122.2420	6.2414	3.0000	496.0000	0.0004

Model

	coeff	se	t	p	LLCI	ULCI
constant	73.8718	2.8760	25.6853	0.0000	68.2210	79.5225
positive	1.3151	0.6851	1.9195	0.0555	-0.0310	2.6613
negative	1.2199	0.6909	1.7657	0.0781	-0.1375	2.5773
Int_1	-0.5171	0.1734	-2.9820	0.0030	-0.8578	-0.1764

Product terms key:
Int_1 : positive x negative

Test(s) of highest order unconditional interaction(s):

	R2-chng	F	df1	df2	p
X*W	0.0173	8.8921	1.0000	496.0000	0.0030

Focal predict: positive (X)
Mod var: negative (W)

Conditional effects of the focal predictor at values of the moderator(s):

negative	Effect	se	t	p	LLCI	ULCI
1.1151	0.7385	0.5358	1.3783	0.1687	-0.3142	1.7913
3.0821	-0.2786	0.3845	-0.7247	0.4690	-1.0340	0.4768
5.1648	-1.3556	0.5039	-2.6900	0.0074	-2.3457	-0.3655

All the p-values corresponding to the conditional effects and the unconditional interactions are less than the significance level 0.05 indicating a considerable amount of variation between these factors affecting the overall economic improvement in the regions that embrace or reject the NIMBY attitude,

CONCLUSION AND RECOMMENDATIONS

In conclusion, this study shows the different aspects that affect the general community involvement in supporting the economic empowerment projects such as the health facilities and other community development projects. Factors such as the positive and negative public exposure towards the life changing projects in the society has a great impact on the acceptance of changes in devolution. In regard to setting of null and alternative hypothesis, it has been clearly proven that there exist relationship and significant association between the negative and positive public attitude and the total community involvement. The econometric models have proved useful information is a very important aspect since it can be disseminated to many individuals in the community and it can influence the attitude towards different matters affecting the community such as technology advancement projects and youth recreational centers. This implies that information sharing is one of the factors affecting the total community involvement in accepting the development proposals corresponding to different specific regions of the country.

To effectively manage the Bui Project in Ghana, it is recommended that, positive information on the project should be shared among the community to increase acceptance. Due to the little information and luck of transparency among the Bui officials, the local farmers, fishermen and the entire community found it not worthy. Therefore, the NIMBY concept can easily be influenced by aspects like positive messages and transparency of the officials.

This study meets the objectives; however there were issues that did not go as expected. The second econometric model does not show enough evidence of association between variables depicted in the model. This is because the R-squared statistics which represents a significant amount of variation since it is very far from 50%. This implies that another model should be considered to analyze the model in order to produce more significant results.

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