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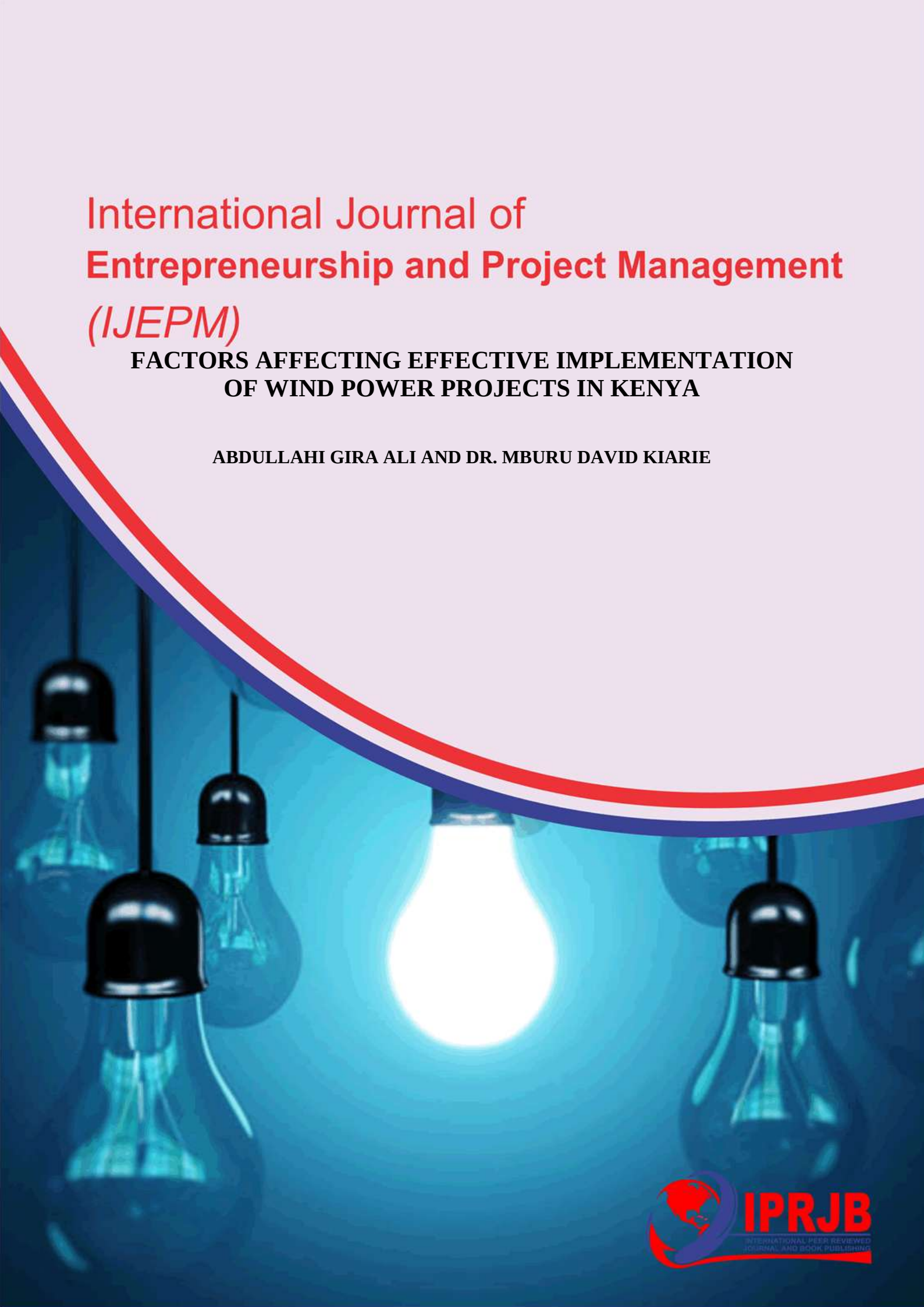

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FACTORS AFFECTING EFFECTIVE IMPLEMENTATION OF WIND POWER PROJECTS IN KENYA

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Abstract

Purpose: The purpose of this study was to determine factors affecting effective implementation of wind power projects in Kenya

***Methodology*:** The study adopted descriptive survey research design. The target population for the study was 128 stakeholders. The study used a 10% pretest sample which was given sample of 13 respondents which were randomly selected from the projects' stakeholders. Stratified random sampling was used to select the respondents. The unit of observation in this study was community leaders, donors, project managers and government agents. The study used primary data gathered by use of a structured and semi-structured questionnaire. The questionnaires were self-administered using a drop and pick method. This involved a pilot study being undertaken on 10% (13) of the stakeholders to test the reliability and validity of the questionnaire. The completed questionnaires were analyzed for consistency and then coded. The coded questionnaires were then analyzed using computer software and preferably the Statistical Packages for Social Science and percentages and inferential statistics (Pearson Product Moment Correlation Coefficients and multiple regression coefficients).

Results: The study findings revealed that community involvement, top management support, donor funding and government regulations positively and significantly affects effective implementation of wind power projects in Kenya.

Policy recommendation: The study recommends that governments through regulations should ensure that there is adequate monitoring throughout the entire implementation period to prevent any un necessary and/or avoidable delays or disruptions to implementation schedules further other studies could consider study on other renewable energy for the purpose of making a comparison of the findings with those of the current study.

Keywords: *Effective implementation, wind power projects, Kenya*

1.1 Introduction

Energy is essential to economic and social development and to improve the quality of life of the people and is also an important development indicator, which provides vital inputs for economic development (Boyle, 2004). The African continent has abundant energy resources, which still remains untapped. Renewable Energy in form of hydro, geothermal, wind and solar is a major energy resource spread out across Africa. The energy which can be extracted from these resources can solve the most prominent problem that persists in the continent 'Shortage of Power'. The potential of these renewable energy sources is so high that it can solve the problem of shortage, as well as provide the power to everyone at affordable rates (Mallon, 2006).

Across the planet, different countries use different energy sources to meet consumption demands, industry and support public infrastructure like public transport, public buildings and others. As a result of the consequences created by the primary sources of energy fossil fuels and in order to minimize present and future contributions to climate change, there are a variety of recommendations coming from the scientific community, as well as other significant actors, who call for the development of alternative solutions (Commission Proposal COM (2000) 796 final; IPCC, 2007; Mallon, 2006). Amongst these, one mechanism by which to reduce GHG emissions and especially that of carbon dioxide is the diversification and utilization of alternative energy sources that release far less (arguably even zero) GHGs. These energy sources primarily come from solar-direct and solar-indirect (hydropower, wind and bio energy), and non-solar power, such as tidal and geothermal (Boyle, 2004). All of these have been exploited by humans, some for thousands of years and others only for a few decades.

However, various obstacles exist in developing such renewable energy sources depending on energy source, implementation location, and technology available (Geller, 2003; Mendonça, 2007; McCormick, 2007). It is imperative to study how these can be overcome efficiently, since many positive impacts that can be obtained from (local) RE sources. Apart from dealing with GHG emissions, these also include improving energy supply and security, motivating local development and creating direct and indirect employment (Kelly, 2007).

1.2 Research Objectives

1. To determine how community involvement, affect effective implementation of wind power projects in Kenya.

2. To establish how top management support affect effective implementation of wind power projects in Kenya.

3. To assess how donor funding affect effective implementation of wind power projects in Kenya.

4. To determine how government regulation affect effective implementation of wind power projects in Kenya.

2.0 LITERATURE REVIEW

2.1 Theoretical review

2.2.1 Stakeholders Theory

Stakeholders Theory was originally detailed by R. Edward Freeman in the book Strategic Management. Freeman, Wicks, &Parmar, (2004) The Firm is a system of stakeholders operating within the larger systems of the host society that provides the necessary legal and market infrastructure for the Firm's activities. The purpose of the Firm is to create wealth or value for its stakeholders by converting their stakes into goods and services". This view is supported by Blair (1995). This theory states that managers should make decisions that take account of the interest of all the stakeholders in the Firm

Stakeholder concept suggests that the purpose of a business is to create as much value as possible for stakeholders. In order to succeed and be sustainable over time, executives must keep the interests of customers, suppliers, employees, communities and shareholders aligned and going in the same direction. In the traditional view of the firm, the shareholder view, the shareholders or stockholders are the owners of the company, and the firm has a binding fiduciary duty to put their needs first, to increase value for them (Phillips, 2007).

However, stakeholder theory argues that there are other parties involved, including governmental bodies, political groups, trade associations, trade unions, communities, financiers, suppliers, employees, and customers. Sometimes even competitors are counted as stakeholders - their status being derived from their capacity to affect the firm and its other morally legitimate stakeholders. The nature of what is a stakeholder is highly contested (Miles, 2012), with hundreds of definitions existing in the academic literature (Miles, 2011).

The Theory takes account of a wider group of constituents rather than focusing on shareholders and in contest of this study the theory informs community, donors and government. Stakeholders in the wind power project industry invest huge sums of capital into construction projects with expectations of getting value for their money from the final product. In other words, clients' and stakeholders' have high expectations. Further, the wind implementation process entails and consumes huge figures in terms of finances, materials, human capital and technology. The economic benefits that are derived from very efficient wind sector that is delivering are numerous both to the investors, developers and the country in general.

The Meaningful contribution in development projects largely depends on the community spontaneous participation on it. Furthermore, to make any development program a success, involvement of cross-section of people into it is a necessary precondition. In Most African societies traditionally and culturally people, particularly socially enlightened class and female folk are non-participatory in nature, (Wild and Marshall 1999; Bagaka, 2008). The socially enlightened class is self-cantered and always tries to avoid involvement into the existing participatory practices rather thinking it as an unnecessary hassle. The female folk on the other hand, traditionally and religiously engaged themselves into household works and always try to express unwillingness to be involved into local development projects. Such type of attitude has become a part of the tradition.

2.2.2 Management by objectives (MBO) theory

Management by objectives (MBO) was first popularized by Drucer (1954). MBO is based on the thinking that various hierarchies within companies need to be integrated. Drucer argued that all organizations exist for a purpose, and, to achieve that purpose, top management sets goals and objectives that are common to the whole organization. The MBO approach injects an element of dialogue into the process of passing plans and objectives from one organizational level to another. The superior brings specific goals and measures for the subordinate to a meeting with this subordinate, who also brings specific objectives and measures that he or she sees as appropriate or contributing to better accomplishment of the job. Together they develop a group of specific goals, measures of achievement, and time frames in which the subordinate commits himself or herself to the accomplishment of those goals. The subordinate is then held responsible for the accomplishment of the goals (Need, 2006).

According to Bowditch, Buono, & Stewart, (2007) MBO is participative goal setting, choosing course of actions and decision making. An important part of the MBO is the measurement and the comparison of the employee's actual performance with the standards set. Ideally, when employees themselves have been involved with the goal setting and choosing the course of action to be followed by them, they are more likely to fulfill their responsibilities. Some of the important features and advantages of MBO are Motivation.

This theory is relevant to the study topic since it informs top management which is the independent variable in this study. The management support of involving employees in the whole process of goal setting is increasing employee empowerment. This increases employee job satisfaction and commitment, Better communication and coordination-Frequent reviews and interactions between superiors and subordinates help to maintain harmonious relationships within the organization and also to solve many problems, Clarity of goals, Subordinates tend to have a higher commitment to objectives they set for themselves than those imposed on them by another person, Managers can ensure that objectives of the subordinates are linked to the organization's objectives, and everybody will be having a common goal for whole organization.

3.0 METHODOLOGY

The study adopted descriptive survey research design. The target population for the study was 128 stakeholders. The study used a 10% pretest sample which was given sample of 13 respondents which were randomly selected from the projects' stakeholders. Stratified random sampling was used to select the respondents. The unit of observation in this study was community leaders, donors, project managers and government agents. The study used primary data gathered by use of a structured and semi-structured questionnaire. The questionnaires were self-administered using a drop and pick method. This involved a pilot study being undertaken on 10% (13) of the stakeholders to test the reliability and validity of the questionnaire. The completed questionnaires were analyzed for consistency and then coded. The coded questionnaires were then analyzed using computer software and preferably the Statistical Packages for Social Science and percentages and inferential statistics (Pearson Product Moment Correlation Coefficients and multiple regression coefficients)

4.0 RESULTS FINDINGS

4.1 Descriptive statistics

This section presents the descriptive results on statements on community involvement in wind power implementation. Descriptive statistics were obtained through running the statements of each objective using descriptive custom Table and presenting in percentages. The mean and the standard deviations were obtained through running the descriptive statistics. In this study, community involvement in wind power project implementation was measured by four questions. The respondents were asked to give their opinion regarding community involvement in wind power Project implementation. Specifically, they were asked to rate on a scale of 1 to 5 1=strongly disagree, 2-Disagree, 3-Neutral, 4-Agree and 5-Stronly agree. The analysis is on Table 1. The highest of the mean was 5 while the lowest was 1. Therefore, a mean of 1=strongly disagree, 2disagree, 3-Neutral, 4-agree and 5-Strongly agree.

Table 1: Community Involvement

Statements	Strongly Disagree	Disagree	Neutral	agree	Strongly agree	Mean	Std. Dev.
Community involvement in the project implementation makes the community feels part and parcel of project	4.5%	7.1%	8.9%	50.9%	28.6%	3.92	1.03
Community involvement increase Community receptivity by member of community	4.5%	10.7%	13.4%	35.7%	35.7%	3.88	1.15
The community members involve in internal project monitoring arrangement to check project progress, identify problem and achievement of milestone	11.6%	4.5%	17.0%	38.4%	28.6%	3.68	1.26
Community involvement create sense of project ownership by community	7.1%	8.9%	4.5%	57.1%	22.3%	3.79	1.11
Average						**3.82**	**1.14**

According to results in Table 1, majority of the respondents who represented 50.90% of the respondents agreed that Community involvement in the project implementation makes the community feels part and parcel of project, 28.60% strongly agreed, 8.90% were neutral, and 7.10% disagreed while only 4.50% strongly disagreed. In general, 79.50% agreed with the

involvement in the project implementation makes the community feels part and parcel of project. Results also indicated that 71.40% agreed that community involvement increase Community receptivity by member of community, 67.00% agreed that they the community members involve in internal project monitoring arrangement to check project progress, identify problem and achievement of milestone, while 79.40% of the respondents agreed that community involvement create sense of project ownership by community. On a five-point scale, the average mean of the responses was 3.82 which mean that majority of the respondents agreed with most of the statements; however, the answers were varied as shown by a standard deviation of 1.14. The highest of the mean was 5 while the lowest was 1. Therefore, a mean of 1=strongly disagree, 2=Disagree, 3=Neutral, 4=Agree and 5=strongly agree. Therefore, average mean of the responses was 3.82 which mean that majority of the respondents agreed with most of the statements.

4.1.1 Relationship between Community Involvement and implementation of Wind Power Project in Kenya.

Regression analysis was performed by using the composites of the two variables. The data was input to the SPSS software. Results were then presented in Tables 2, 3 and 4.

Table 2: Model Fitness

Indicators	Coefficients
R	0.359
R Square	**0.129**
Adjusted R Square	0.121
Std. Error of the Estimate	0.262241

The results presented in Table 2 present the fitness of model used in the regression model in explaining the study phenomena. Community involvement was found to be satisfactory variables in implementation of wind power in Kenya. This is supported by coefficient of determination also known as the R square of 12.9%. This means that community involvement explain 12.9% of the variations in the dependent variable which is implementation of wind power projects. This results further means that the model applied to link the relationship of the variables was satisfactory.

Table 3: Analysis of Variance

	Sum of Squares	df	Mean Square	F	Sig.
Regression	1.12	1	1.12	16.279	**0.000**
Residual	7.565	110	0.069		
Total	8.684	111			

Table 3 provides the results on the analysis of the variance (ANOVA). The results indicate that the model was statistically significant. Further, the results imply that the independent variable community involvement is good predictor of implementation of wind power projects. This was supported by an F statistic of 16.279 and the reported p=0.000 which was less than the conventional probability of 0.05significance level.

Regression of coefficients results in Table 4 shows that implementation of wind power projects and community involvement are positively and significant related (r=0.192, p<0.05).

Table 4: Regression of Coefficients

	B	Std. Error	t	Sig.
(Constant)	2.834	0.184	15.428	0.000
Community Involvement	0.192	0.048	4.035	0.000

The specific model was;

Implementation of Wind Power Projects $=2.834+0.192\ X1$

Where X1 is Community Involvement in Project Implementation

The first objective of the study was to determine how community involvement, affect effective implementation of wind power projects in Kenya. Results in Table 4 show that there is a significant relationship between community involvement and effective implementation of wind power projects in Kenya.

This finding is inconsistent with that of Khwaja, (2013) that greater community participation in non-technical decisions is associated with higher project outcomes. Mading, (2013) on their study also found that the level of success that a business or a company may realize in its projects implementation depends on community members with sufficient information that involves the area.

4.1.2 Influence of Top Management Support on Effective Implementation of Wind Power Projects in Kenya**.**

This section presents the descriptive results on statements on top management. Descriptive statistics were obtained through running the statements of each objective using descriptive custom Table and presenting in percentages. The mean and the standard deviations were obtained through running the descriptive statistics. In this study, top management was measured by four questions. The respondents were asked to give their opinion regarding beneficiary commitment. Specifically, they were asked to rate on a scale of 1 to 5 1=Very

small extent, 2-small extent, 3-moderate extent, 4-large extent and 5-very large extent. The analysis is on Table 5. The highest of the mean was 5 while the lowest was 1.

Table 5: Top Management

Statements	Very Small Extent	Small Extent	Moderate Extent	Large Extent	Very Large Extent	Mean	Std. Dev.
The rate at which management allocates resources	10.3%	5.1%	2.0%	34.0%	48.6%	1.41	0.49
Regular managements involvement in meetings	17.0%	4.5%	8.9%	10.7%	58.9%	3.90	1.55
The rate of decision making by managers	4.5%	16.1%	8.9%	39.3%	31.2%	3.77	1.19
Rate of projects supervision by managers	4.5%	4.5%	11.6%	40.2%	39.3%	4.05	1.05
Average						**3.28**	**1.07**

According to results in Table 5 majority of the respondents who represented 48.60% indicated that the rate at which management allocates resources influence the effective implementation of wind power projects in Kenya to a very large extent, 34.00% indicated it was to a large extent, 2.00 said it was to a moderate extent, 5.10% indicated to a small extent while 10.30 indicated to a very small extent. The results also indicated that majority of the respondents who were 69.60% indicated that regular managements 'involvement in meetings influence implementation to a large extent. Results further revealed that 70.50% of the respondents indicated that the rate of decision making by managers' influence implementation to a large extent. Further, the results revealed that 79.50% of the respondents who were the majority indicated that rate of projects supervision by managers' influence implementation to a large extent.

On a five-point scale, the average mean of the responses was 3.28 which mean that majority of the respondents said the influence was to a large extent, however, the answers were varied as shown by a standard deviation of 1.07.

The highest of the mean was 5 while the lowest was 1. Therefore, average mean of the responses was 3.28 which mean that majority of the respondents indicated it was to a large extent.

4.1.3 Relationship between Top Management and implementation of wind power projects

Regression analysis was performed by using the composites of the two variables. The data was input to the SPSS software. Results were then presented in Tables 6, 7 and 8.

Table 6: Model Fitness

Indicators	Coefficients
R	0.474
R Square	0.225
Adjusted R Square	0.218
Std. Error of the Estimate	0.247345

The results presented in Table 6 present the fitness of model used in the regression model in explaining the study phenomena. Top management was found to be satisfactory variable in implementation of sand dam drift projects. This is supported by coefficient of determination also known as the R square of 22.5%. This means that top management explains 22.5% of the variations in the dependent variable which is implementation of wind power projects. This results further means that the model applied to link the relationship of the variables was satisfactory.

Table 7: Analysis of Variance

	Sum of Squares	df	Mean Square	F	Sig.
Regression	1.955	1	1.955	31.948	**0.000**
Residual	6.73	110	0.061		
Total	8.684	111			

Table 7 provides the results on the analysis of the variance (ANOVA). The results indicate that the model was statistically significant. Further, the results imply that the independent variable, top management is a good predictor of implementation of wind power projects. This was supported by an F statistic of 31.948and the reported p=0.000 which was less than the conventional probability of 0.05significance level.

Regression of coefficients results in Table 8 shows that implementation of wind power projects and top management are positively and significant related (r=0.274, p<0.000).

Table 8: Regression of Coefficients

	B	Std. Error	t	Sig.
(Constant)	2.669	0.161	16.597	0.000
Top Management	0.274	0.048	5.652	0.000

The specific model was;

Implementation of wind power projects$=2.669+0.274\ X1$

Where X1 is Top Management.

The second objective of the study was to establish how top management support, affect effective implementation of wind power projects in Kenya. Results in Table 8 show that there is a significant relationship between top management support and effective implementation of wind power projects in Kenya.

This findings is consistent with that of ALGA, (2010) who empirically proved that strong and committed leadership at the top management level is essential to the success of project implementation and that successful project manager should have the skills and competences, flexibility and adaptability, preference for significant initiative and leadership confidence pursue, verbal thereby, forcefulness, effectiveness able to balance technical solutions with time, cost, and human factors poise, enthusiasm, imagination, well organized and disciplined and willing devote most of his or her time.

4.1.4 Influence of Donor Funding on the Effective Implementation of Wind Power Projects in Kenya.

This section presents the descriptive results on statements on donor funding. Descriptive statistics were obtained through running the statements of each objective using descriptive custom Table and presenting in percentages. The mean and the standard deviations were obtained through running the descriptive statistics. In this study, donor funding was measured by five questions. The respondents were asked to give their opinion regarding donor funding specifically, they were asked to rate on a scale of 1 to 5 1=strongly disagree, 2-Disagree, 3-Neutral, 4-Agree and 5-Stronly agree. The analysis is on Table 5. The highest of the mean was 5 while the lowest was 1. Therefore, a mean of 1=strongly disagree, 2-Disagree, 3-Neutral, 4-Agree and 5-Stronly agree.

Table 9: Donor Funding

Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std. Dev.
The donors take a very short time to release funds after a request.	4.5%	4.5%	8.9%	42.0%	40.2%	4.09	1.04
The donor funds are adequate and sufficient enough to enhance effective implementation of the project	10.2%	10.1%	3.0%	41.8%	35.1%	3.52	0.50
The donors have been consistently contributing to the project implementation process	6.2%	17.9%	4.5%	31.2%	40.2%	3.81	1.31
The donors have been assisting in capacity building through training of employees.	10.7%	11.6%	8.9%	22.3%	46.4%	3.82	1.40
Disbursement and release of donor funds have been done on time to enhance effective implementation of wind project	6.2%	4.5%	16.1 %	34.8%	38.4%	3.95	1.14
Average						**3.44**	**1.08**

According to results in Table 9, majority of the respondents who represented 42.00% of the respondents agreed that the donors take a very short time to release funds after a request.40.20% strongly agreed, 8.90% were neutral, and 4.50% disagreed while only 4.50% strongly disagreed. In general, 82.20% agreed with the statement donors take a very short time to release funds after a request. Results also indicated that 76.90% agreed that The donor funds are adequate and sufficient enough to enhance effective implementation of the project,71.40% agreed that the donors have been consistently contributing to the project implementation process, 68.70% of the respondents agreed that the donors have been assisting in capacity building through training of employees, while 73.20% of the respondents agreed that disbursement and release of donor funds have been done on time to enhance effective implementation of wind project.

On a five-point scale, the average mean of the responses was 3.44 which mean that majority of the respondents agreed with most of the statements; however, the answers were varied as shown by a standard deviation of 1.08.

The highest of the mean was 5 while the lowest was 1. Therefore, a mean of 1=strongly disagree, 2=Disagree, 3=Neutral, 4=Agree and 5=Strongly agree. Therefore, average mean of the responses was 3.44 which mean that majority of the respondents agreed with most of the statements.

4.1.5 Relationship between Donor funding and implementation of Wind Power Projects

Regression analysis was performed by using the composites of the two variables. The data was input to the SPSS software. Results were then presented in Tables 10, 11 and 12.

Table 10: Model Fitness

Indicators	Coefficients
R	0.417
R Square	**0.174**
Adjusted R Square	0.166
Std. Error of the Estimate	0.255385

The results presented in Table 10 present the fitness of model used in the regression model in explaining the study phenomena. Donor Funding was found to be satisfactory variable in implementation of wind power projects. This is supported by coefficient of determination also known as the R square of 17.4%. This means that donor funding explains 17.4% of the variations in the dependent variable which is implementation of wind power projects. This results further means that the model applied to link the relationship of the variables was satisfactory.

Table 11: Analysis of Variance

	Sum of Squares	df	Mean Square	F	Sig.
Regression	1.51	1	1.51	23.151	**0.000**
Residual	7.174	110	0.065		
Total	8.684	111			

Table 11 provides the results on the analysis of the variance (ANOVA). The results indicate that the model was statistically significant. Further, the results imply that the independent variable, donor funding, is a good predictor of implementation of wind power projects. This was supported by an F statistic of 23.151 and the reported p=0.000 which was less than the conventional probability of 0.05significance level.

Regression of coefficients results in Table 12 shows that implementation of wind power projects and donor funding are positively and significant related (r=0.220, p<0.05).

Table 12: Regression of Coefficients

	B	Std. Error	t	Sig
(Constant)	2.812	0.159	17.697	0.000
Donor Funding	0.220	0.046	4.812	0.000

The specific model was;

Implementation of wind power Projects=*2.812+0.22 X1*

Where X1 is donor funding.

The third objective of the study was to assess how donor funding affect effective implementation of wind power projects in Kenya. Results in Table 12 show that there is a significant relationship between donor funding and effective implementation of wind power projects in Kenya.

This find is consistent with that of Bennett and Barkensjo (2005) that there is a significant and positive relationship between donor funding, satisfaction and project implementation .Sargeant (2011) identified a positive correlation with loyalty, donors indicating that they were ‘very satisfied’ with the quality of service provided being twice as likely to offer a second or subsequent gift than those who identified themselves as merely satisfied.

4.1.6 Influence of government regulation on the effective implementation of wind power projects in Kenya.

This section presents the descriptive results on statements on government regulations. Descriptive statistics were obtained through running the statements of each objective using descriptive custom Table and presenting in percentages. The mean and the standard deviations were obtained through running the descriptive statistics. In this study, a government regulation was measured by five questions. The respondents were asked to give their opinion regarding government regulations. Specifically, they were asked to rate on a

scale of 1 to 5 1-Strongly disagree, 2-Disagree, 3-Neutral, 4-Agree and 5-Stronly agree. The analysis is on Table 13. The highest of the mean was 5 while the lowest was 1. Therefore, a mean of 1=strongly disagree, 2=Disagree, 3=Neutral, 4=Agree and 5=Strongly agree.

Table 13: Government Regulations

Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std. Dev.
Regulations have promoted implementation of wind power project by ensuring conformity with law and legislations.	7.1%	8.9%	17.9%	25.0%	41.1%	3.84	1.26
Regulations have negatively impacted on the implementation.	3.6%	10.0%	6.0%	30.4%	50.0%	3.46	0.50
Government regulation on project procurements has made it possible to have right quality of goods and services for the project	4.5%	4.5%	10.7%	33.9%	46.4%	4.13	1.07
Macroeconomics policy such taxation, interest rate and inflation rate have influence on implementation of wind power project	4.5%	8.9%	17.9%	42.9%	25.9%	3.77	1.07
The attractive policy frameworks has resulted to high equity returns to any investor in wind energy projects	4.5%	10.7%	17.9%	26.8%	40.2%	3.87	1.19
Average						**3.81**	**1.02**

According to results in Table 13, majority of the respondents who represented 41.10% of the respondents strongly agreed that regulations have promoted implementation of wind power project by ensuring conformity with law and legislations, 25.00% agreed, 17.90% were neutral, and 8.90% disagreed while only 7.10% strongly disagreed. In general, 66.10% agreed with the statement regulations have promoted implementation of wind power project by ensuring conformity with law and legislations. Results also indicated that 80.40% agreed that Regulations have negatively impacted on the implementation,80.30% agreed that government regulation on project procurements has made it possible to have right quality of goods and services for the project, 68.80% of the respondents agreed that macroeconomics policy such taxation, interest rate and inflation rate have influence on implementation of wind power project, while 67.00% of the respondents agreed that the attractive policy frameworks has resulted to high equity returns to any investor in wind energy projects.

On a five-point scale, the average mean of the responses was 3.81 which mean that majority of the respondents agreed with most of the statements; however, the answers were varied as shown by a standard deviation of 1.02.

The highest of the mean was 5 while the lowest was 1. Therefore, a mean of 1=strongly disagree, 2=Disagree, 3=Neutral, 4=Agree and 5=Strongly agree. Therefore, average mean of

the responses was 3.44 which mean that majority of the respondents agreed with most of the statements.

4.1.7 Relationship between government regulations and implementation of wind power projects

Regression analysis was performed by using the composites of the two variables. The data was input to the SPSS software. Results were then presented in Tables 14, 15 and 16.

Table 14: Model Fitness

Indicators	Coefficients
R	0.352
R Square	0.124
Adjusted R Square	0.121
Std. Error of the Estimate	0.278159

The results presented in Table 14 present the fitness of model used in the regression model in explaining the study phenomena. Government Regulations was found to be satisfactory variables in implementation of wind power projects. This is supported by coefficient of determination also known as the R square of 12.4%%. This means that government regulations explain only 2%% of the variations in the dependent variable which is implementation of wind power projects. This results further means that the model applied to link the relationship of the variables was satisfactory.

Table 15: Analysis of Variance

	Sum of Squares	df	Mean Square	F	Sig.
Regression	0.173	1	0.173	12.24	0.007
Residual	8.511	110	0.077		
Total	8.684	111			

Table 15 provides the results on the analysis of the variance (ANOVA). The results indicate that the model was statistically significant. Further, the results imply that the independent variable, government regulations, is a good predictor of implementation of wind power projects. This was supported by an F statistic of 12.24 and the reported p=0.007 which was greater than the conventional probability of 0.05significance level.

Regression of coefficients results in Table 16 shows that implementation of wind power projects and government regulations are positively and significant related ($r=0.092$, $p<0.007$).

Table 16: Regression of Coefficients

	B	Std. Error	t	Sig
(Constant)	3.254	0.212	15.38	0.000
Government Regulation	0.092	0.061	1.497	0.007

The specific model was;

Implementation of Wind Power Projects=*3.354+0.092 X1*

Where X1 is government regulations.

The fourth objective of the study was to determine how government regulation, affect effective implementation of wind power projects in Kenya. Results in Table 16 show that there is a significant relationship between government regulation and effective implementation of wind power projects in Kenya.

The finding is consistent with that of (Busiinge, 2010) that the government is a significant contributor in community implementation projects by creating the need to participate in information sharing platforms to discuss development progression in the communities. Their representatives keep watch on the performance of community development programs. The local governments need to demand accountability of the projects.

4.2 Correlation Analysis

The correlation analysis results in table 17 revealed that there was a positive and a significant relationship between Community Involvement and the implementation of wind power projects (r=0.359, p=0.000).

Table 17: Correlation analysis

Variables		Implementation	Community Involvement	Top Management	Donor Funding	Government Regulation
Implementation	Pearson Correlation	1.000				
	Sig. (2-tailed)					
Community Involvement	Pearson Correlation	0..359**	1.000			
	Sig. (2-tailed)	0.000				
Top Management	Pearson Correlation	0.474**	.265**	1.000		
	Sig. (2-tailed)	0.000	0.005			
Donor Funding	Pearson Correlation	0.417**	.229*	0.049	1.000	
	Sig. (2-tailed)	0.000	0.015	0.005		
Government Regulation	Pearson Correlation	0.141	0.082	.238*	.242*	1.000
	Sig. (2-tailed)	0.007	0.392	0.001	0.01	

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

The results indicated that there was a positive and a significant relationship between Top Management and the implementation of wind power projects (r=0.474, p=0.000). The results also indicated that there was a positive and a significant relationship between Donor Funding and the implementation of wind power projects (r=0.417, p=0.000). Further the results showed that there was a positive and a insignificant relationship between Government Regulations and the implementation of wind power projects (r=0.141, p=0.007).

4.9 Regression Analysis

Regression analysis was performed by using the composites of the key variables. The data was input to the SPSS software. Results were then presented in Tables 18, 19 and 20.

Table 18: Model Fitness for the Regression

Indicators	Coefficients
R	0.767
R Square	0.589
Adjusted R Square	0.573
Std. Error of the Estimate	0.182746

The results presented in Table 18 present the fitness of model used in the regression model in explaining the study phenomena. This is supported by coefficient of determination also known as the R square of 58.9%. This means that Community Involvement, Top Management, Donor Funding and Government Regulations explain 58.9% of the variations in the dependent variable which is the implementation of wind power projects. This results further means that the model applied to link the relationship of the variables was satisfactory.

Table 19: Analysis of Variance

	Sum of Squares	df	Mean Square	F	Sig.
Regression	5.111	4	1.278	38.26	**0.000**
Residual	3.573	107	0.033		
Total	8.684	111			

Table 19 provides the results on the analysis of the variance (ANOVA). The results indicate that the overall model was statistically significant. Further, the results imply that the independent variables are good predictors of the implementation of wind power project. This was supported by an F statistic of 38.26 and the reported p=0.000 which was less than the conventional probability of 0.05 significance level.

Table 20: Regression of Coefficients

Variables	B	Std. Error	t	Sig
(Constant)	0.575	0.264	2.181	0.031
Community Involvement	0.245	0.036	6.864	0.000
Top Management	0.364	0.039	9.405	0.000
Donor Funding	0.123	0.035	3.509	0.001
Government Regulation	0.129	0.043	2.986	0.004

Regression of coefficients results in table 20 shows Community Involvementhas a positive and significant effect on the implementation of wind power projects. (r=0.245, p=0.000). The table further indicates that Top Management and implementation of wind power projects are positively and significantly related (r=0.364, p=0.000). It was further established that Donor Funding and implementation of wind power projects were positively and significantly related (r=0.123, p=0.001). Government Regulations had a positive and significant effect on the implementation of wind power projects (r=0.129, p=0.004).

The specific model is;

Implementation of Wind Power projects $=0.575+0.364X_1+0.245X_2+0.129X_3+0.123X_4$

Where X1 is Community Involvement

X2 is Top Management

X3 is Government Regulations

X4 is Donor Funding

5.0 SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary of the major findings

5.1.1 Community Involvement

The first objective of the study was to determine how community involvement, affect effective implementation of wind power projects in Kenya. Regression results reveal that Community Involvement has a positive and significant relationship with the effective implementation of wind power projects in Kenya. This means that an improvement in community involvement lead to a positive variation in effective implementation of wind power projects in Kenya. Further, the finding was supported by results on statements about community involvement. On a five-point scale, the average mean of the responses was 3.82 which mean that majority of the respondents agreed with most of the statements on community involvement.

5.1.2 Top management support

The second objective was to establish how top management support, affect effective implementation of wind power projects in Kenya. Regression results reveal that top management support has a positive and significant relationship with the effective implementation of wind power projects in Kenya. This means that an improvement in Top

management support lead to a positive variation in effective implementation of wind power projects in Kenya. Also, this finding was supported by the outcome on the statements about top level management. On a five-point scale, the average mean of the responses was 3.28 which mean that majority of the respondents said the influence of top level management on implementation of wind power project was to a large extent.

5.1.3 Donor Funding

The third objective of the study was to assess how donor funding affect effective implementation of wind power projects in Kenya. Regression results reveal that donor funding has a positive and significant relationship with the effective implementation of wind power projects in Kenya. This means that an increase donor funding lead to an increase variation in effective implementation of wind power projects in Kenya. This finding is further supported by the result on donor finding questionnaire where on a five-point scale, the average mean of the responses was 3.44 which mean that majority of the respondents agreed with most of the statements on donor funding.

5.1.4 Government Regulation

The forth objective of the study was to determine how government regulation, affect effective implementation of wind power projects in Kenya. Regression results reveal that government regulation has a positive and significant relationship with the effective implementation of wind power projects in Kenya. This means that an improvement in government regulation lead to positive variation in effective implementation of wind power projects in Kenya. Further, the finding was supported by results on statements about government support. On a five-point scale, the average mean of the responses was 3.81 which mean that majority of the respondents agreed with most of the statements about government regulation.

5.2 Conclusions of the Study

Based on the findings above the study concluded that community involvement, top management support, donor funding and government regulations positively and significantly affects the effective implementation of wind power projects in Kenya.

The study concludes that if a community participates in an activity, the more likely it is to have a say in this activity. Non-involvement of community is a challenge facing implementation. One frequent problem is the exclusion the community from the process of project implementation affects the strategy, the speed and the goodwill of the community on the projects.

In addition, the study concluded that successful project manager should be flexibility and adaptable, preference for significant initiative and leadership confidence pursue, verbal thereby, forcefulness, effectiveness able to balance technical solutions with time, cost, and human factors poise, enthusiasm, imagination, well organized and disciplined and willing devote most of his or her time

The study concluded that project accounts information should regularly be updated and that statutory audits are carried out every year by a qualified external auditor to enhance donor satisfaction. It also concludes that periodic donor program reporting contributes the most towards project implementation, followed by donor financial reporting, then audit requirements.

Lastly, the study concludes that the government creates the need to participate in information sharing platforms to discuss development progression in their communities. Their representatives keep watch on the performance of community development programs. Ideally local governments need to demand for top management accountability

5.3 Recommendations

The study recommends that before the project is started, community heads should be educated about the importance of wind power projects to avoid the locals from the mistrust that occurs with the project implementation without proper consultation from them. They should also be made aware that wind power project activities that have no negative impact on their lifestyles or the environment. Further this study recommends that the local community should be made the first direct beneficiaries from the projects.

From the findings, this study recommends that skilled and competent top managers should be recruited in undertaking the wind power projects given their big role. Top level managers with great passion for work, and who are visionary be recruited to be in charge of wind power projects.

This study recommends that for donor funds be channeled, Kenya as a country to be performing better hence encouraging policy reform incentives. This comes from the widespread view that donors should use aid to encourage recipients to improve their policies. Kenya should therefore manage donor project in a way that they will be satisfied.

This study recommends that government through regulations should ensure that there is adequate monitoring throughout the entire implementation period to prevent any un necessary and/or avoidable delays or disruptions to implementation schedules, Lastly the governments should through regulations make sure that the implementing agencies keep detailed records of data throughout the period of implementation. This kind of detailed reporting would help policy makers and other researchers to evaluate the projects and make appropriate recommendations to governments.

5.4 Suggested area for further research

Further studies can be done on other renewable energy for the purpose of making a comparison with the findings with those of the current study. A study can also be done to establish other factors than those of current study that influence effective implementation of wind power projects in Kenya .The results indicated that the study objective explain 58.9%.of the changes in effective implementation of wind power projects in Kenya This implies that the remaining 41.1%.of the changes in effective implementation of wind power in Kenya is explained by other factors not investigated in the current study.

REFERENCES

Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika.*

Hakim, A., & Hakim, H. (2010).A practical model on controlling the ERP implementation risks.*Information systems, 35(2), 204-214.*

Heracleous, L. (2010). The Role of Strategy Implementation in Organization Development.*Organization Development Journal, 18, 75-86*

Johnson, P. (2010). *Research methods for managers*. 3rd Ed. London, UK: Sage Publications

Kelly, G. (2007), *Renewable energy strategies in England, Australia and New Zealand. Science, 37, 326-338.*

Kombo, D.K. & Tromp, L.A. (2006). Proposal and Thesis Writing: An Introduction. Nairobi: *Paulines Publications Africa*

Kothari, C. (2004). *Research Methodology*: Methods & Techniques, 2nd edition. New age International Publishers, New Delhi, India.

McCormick, T. (2007). Coordination of carbon reduction and renewable energy support policies. *Climate Policy, 8, 377-394.*

Mugenda, O. M., and Mugenda, A. G. (2008). Research Methods: Quantitative and Qualitative Approaches, *Acts Press, Nairobi-Kenya*

Mugenda, O. Mugenda (2003) Research Methods: Quantitative and Qualitative Approaches. *Nairobi: ACTS.*

Need, W. C. D. H. P. (2006). *Human resource management*: Gaining a competitive advantage.

Odoyo, C. (2013). *Factors Affecting Implementation of Community Projects*: Case of KimiraOluch Smallholder Farm Improvement Project in Homa Bay County, Kenya. *Universal Journal of Management, 1(2), 111-1.*

Rapert, M.I., Lynch, D., and Suter, T. (1996).Enhancing Functional and Organizational Performance via Strategic Consensus and Commitment.*Journal of Strategic Marketing, 4, 193-205.edition, New York: Richard D. Irwin.*

Shukor, F. S. A., Mohammed, A. H., Sani, S. I. A., &Awang, M. (2011, June). *A review on the success factors for community participation in solid waste management.*In Proceeding of International Conference on Management (ICM, 2011). Penang, Malaysia.

Too, D. (2015).*Influence of donor funds disbursement procedures on project implementation in Kenya: the case of NGOs in Nairobi county* (Doctoral dissertation, University of Nairobi).

Turner, J. R., & Müller, R. (2005, June).*The project manager's leadership style as a success factor on projects:* A literature review. Project Management Institute.

Webler, T., S. Tuler, and R. Krueger. (2011) "What is a good public participation process? Five perspectives from the public."*Environmental Management, Vol. 27, No. 2, pp. 435-450.*

Zervos, J. (2007), "Infrastructure and Poverty in Vietnam."*LSMS Working Paper No. 121. The World Bank. Washington, D.C.*

Zwikael O, Shimizu K, and Globerson S (2005), "Cultural differences in project management capabilities: A field study," *International Journal of Project Management, vol. 23, pp. 454-462.*