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### EFFECT OF BENEFICIARY PARTICIPATION ON THE IMPLEMENTATION OF SAND DAM DRIFT PROJECTS IN KAITI SUB-COUNTY

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### Abstract

*Purpose:* The purpose of this study was to establish the effect of beneficiary participation on the implementation of sand dam drift projects in Kaiti Sub-County.

*Methodology:* The study used descriptive research design. The target population for the study was all 19, 656 households in Kaiti Sub-County. The sample size was 150 household. The study used simple random sampling to select the household. The households' heads were the respondents. The study used primary data gathered by use of a structured and semi-structured questionnaire. Descriptive statistics such as, mean and frequencies and inferential statistics, regression and correlation analysis, were used to perform data analysis. A multiple linear regression analysis model was used to test the hypotheses and link the variables.

*Results:* The findings indicated that there was a positive and a significant relationship between Beneficiaries' participation in identification of project activities, Beneficiary Commitment, Beneficiary knowledge and Capacity building and the implementation of sand dam drift projects.

*Unique contribution to theory, practice and policy:* The findings of this study are useful to the government in policy formulation on community project involvement.

*Keywords:* Beneficiary Participation, Sand Dam Drift Projects, Beneficiary Commitment, Beneficiary knowledge and Capacity building



### **1.0 BACKGROUND OF THE STUDY**

There exists a wide range of definitions and interpretations of participation. It is the involvement of a significant number of persons in situations or actions which enhance their wellbeing, for example their income, security or self-esteem (Chambers, 2009). People's participation has become an increasingly important component in the implementation of projects for water, agriculture, fisheries, forestry and human resource development. According to Boston (2007) beneficiary involvement should be from concept to delivery on the project. It helps them get better visibility of the development process and its problems, and a better idea about the progress being made.

Karl (2010) has identified three main aspects of participation in rural development projects and programmes that need to be evaluated namely, the extent and quality of participation, costs and benefits of participation to the different stakeholders, and the impact of participation on outcomes, performance and sustainability. DFID (2005) suggests that, in evaluating participation, it is important to consider the quantitative, qualitative and time dimensions of participation. This is because participation is a qualitative process that cannot be measured using only quantifiable indicators. While quantification in relation to project outputs may be sufficient, the qualitative dimensions of participation should also be evaluated because project success depends on empowering participants to take on greater responsibility and control.

The analysis of development assistance project experience in various parts of the world has identified community participation in decision making in development assistance projects as an important factor for ensuring the relevance, effectiveness, and long-term success of those projects (Cohen & Uphoff, 2007). The concept of participation has been recognized to be of such importance that it has been firmly ensconced as a policy of U.S. foreign assistance. For example, the concept was made an integral part of the "New Directions Mandate" ratified by the U.S. Congress through the Foreign Assistance Act of 1973. This legislation reoriented the priorities of U.S. foreign assistance policy by targeting assistance directly at the rural poor with participation as a major theme.

Just as participation can make the different in project success, so too can its absence lead to failure (Honadle & Klauss, 2009). A potable water project in Tunisia is an example of a project that suffered due to the lack of participation. The team did not seek local participation in either the design or implementation of the project. A feeble effort to get local participation in maintenance failed because of lack of interest and money to pay for such labour.

In order to solve the problem which is pertinent in Arid Counties of Kenya and in many other arid regions in Africa it resulted in a serious thought to develop and design a Non vented drift (without culverts)-sand dam to act as both road crossing and water retaining structure to provide the surrounding communities who live within a radius of 3-5 km from the structure with water all year around and enhance road connectivity (Masila, 2016). Arid areas especially Kitui, Machakos and Makueni counties are characterised by many expansive (large) sandy or rocky seasonal rivers and lack of water by the local communities. The sand dam drifts provide connectivity in rural roads enhancing trade; provide adequate source and sustainable supply of safe and clean water to homesteads and domestic animals; result to a sustained source of clean



river sand for development projects; increase individual house hold income through brick making; increase forest cover; increase school enrolment; increase Health; and provide community owned and managed Projects.

### **1.1 Problem Statement**

In developing countries, projects are the backbone of local development. Development projects are undertaken to improve the livelihood of the community. Effective implementation and management of development projects depends primarily on proper project identification, commitment, knowledge and capacity building of the beneficiaries. Moreover, values, norms, social belief and opinions of the local people which are affected directly or indirectly by development interventions should also be considered (Andrews et al., 2011). There is unmistakable evidence that community participation has a favorable impact on the outcomes of a project and this linkage gets established through better aggregation of preferences, better identification, through use of local knowledge and pressure by community on bureaucracies to perform and better sustainability through ownership (Richard, 2009). In rural areas, a significant number of community based project fail to full meet the expectations of the people because they either become unsustainable or fail altogether.

Despite the enormous benefits of sand dam drift projects, the residents of Kyuasini area in Makueni County are missing out on these benefits. This is because of low level implementation of sand dram drift projects in Kyuasini area. The research problem, therefore, is: Effect of beneficiary participation on the implementation of sand dam drift projects in Kaiti Sub-County . In particular, the study seeks to determine the effect of identification, commitment, knowledge and capacity building on implementation of sand dam drifts projects.

Many researchers have asserted that the rural communities have not been encouraged to do much in terms of their development; they have been made to wait for donors and the government to do things. Mansuri and Rao (2014) argue that there isn't much study to illustrate the effects of participation to community development. The participatory practice has not yet been cultured properly. Project information is hardly disseminated to the community people. Ngondo (2014) sought to investigate the influence of community participation in project management processes, as one of the contributors to timely completion of CDF projects in Kanyekini ward-Kirinyaga central constituency. Ageng'a (2010) sought to explore the extent to which the community beneficiaries are involved in the management of CDF projects with a focus on Nyando Constituency in Nyando District, Nyanza Province, Kenya. Kioi (2014) sought to determine the factors influencing implementation of Economic Stimulus Projects (ESP) in reference to fish farming in Kajiado North, Kenya. Literature review also indicates that the focus of these studies was on factors influencing project implementation whereby beneficiary participation featured as one of the factors. In addition, no study concentrated on implementation of sand dam drift projects. This study will attempt to fill in this gap ad seek to establish the effect of beneficiary participation on the implementation of sand dam drift projects in Kaiti Sub-County.



### **1.2 Study Objectives**

- i. To assess the extent to which beneficiaries' participation in identification of project activities influence the implementation of sand dam drift projects in Kaiti Sub-County.
- ii. To determine the effect of beneficiary commitment on the implementation of sand dam drift projects in Kaiti Sub-County.
- iii. To establish the extent to which beneficiary knowledge affects the implementation of sand dam drift projects in Kaiti Sub-County.
- iv. To determine the extent to which capacity building of beneficiaries influence the implementation of sand dam drift projects in Kaiti Sub-County.

### 2.0 LITERATURE REVIEW

### 2.1 Theoretical Literature Review

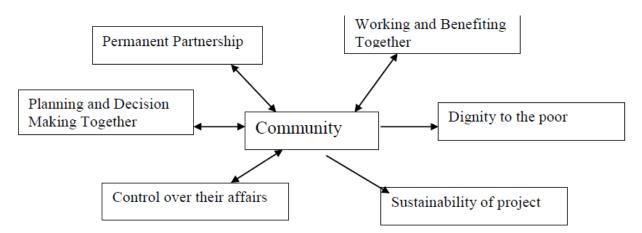
### **2.1.1 Participation Theory**

The theory of participation was developed by Buchy et al. (2000). The theory posits that participation represents a move from the global, a spatial, top-down strategies that dominated early development initiatives to more locally sensitive methodologies (Storey, 1999). Midgley et al. (1986) suggested that the historical antecedents of community participation include: the legacy of western ideology, the influence of community development and the contribution of social work and community radicalism. The roots of citizen participation can be traced to ancient Greece and Colonial New England. Before the 1960s, governmental processes and procedures were designed to facilitate "external" participation. Citizen participation was institutionalized in the mid -1960s with President Lyndon Johnson's Great Society programs.

### 2.1.2 The Partnership Model

Narayana (2002) in his book Empowering Communities through Participatory Methods, explains that in the top-down model of participation, the governments decide and provide for the communities which develops a sense of dependency and lethargy among the people. He presents an alternative to the top-down model in the form of a "partnership model" where the governments and communities work together in planning and decision-making with long-lasting results. This model informs this study in that the model advocates for involvement of the beneficiaries (community) in the decision making.





### Figure 1: Partnership Model from Narayana (2002)

### **2.2 Empirical Review**

A study by Munywoki (2013) aimed at assessing the influence of social organization office on successful completion of women's group projects in Katulani district, Kitui County, Kenya. The study showed that project members play a role in identification, planning, implementation and monitoring of the projects. Majority of members agreed that most of the projects have solved communities' problems and have/will meet their project objectives. The study further showed that the women groups' projects were successful and there was considerable participation by the social organizations office. They attributed this success of women groups' projects to proper identification, planning, implementation and monitoring of projects by the social organization office.

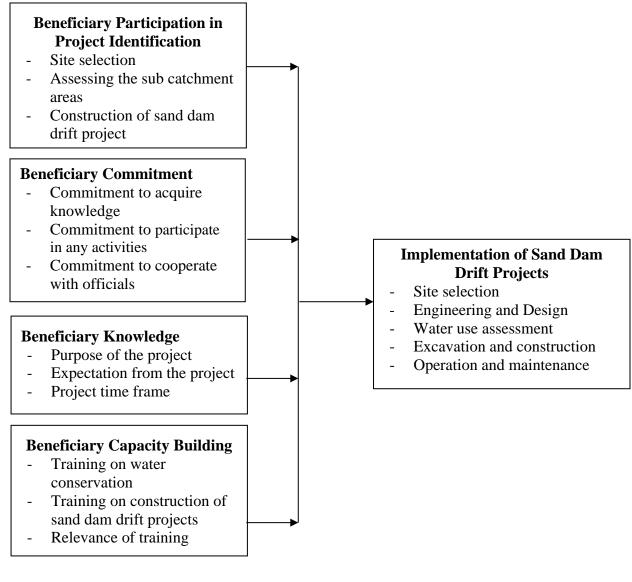
Kioi (2014) sought to determine the factors influencing implementation of Economic Stimulus Projects (ESP) in reference to fish farming in Kajiado North, Kenya. The results showed that implementation of fish farming under ESP is highly influenced by the government financial flow, followed by socio cultural influences, and then commitments by beneficiaries and least by government funding.

In a study conducted by Uganda Debt Network (UDN, 2007), It revealed that most of the beneficiaries did not have knowledge of the CDF. They, therefore, neither participated in the selection of projects nor in the utilization of the fund. It recommended that beneficiaries of the CDF in the constituencies should be involved in the selection and planning of the projects, so that they can participate in project implementation, monitoring and evaluation and whenever CDF money is disbursed, it should be publicized to create citizens' awareness and participation in the utilization and accountability of the fund. In addition, CDF will be impossible to monitor effectively without guaranteed access to quality information: Access to information at constituency level regarding planning and implementation is still a major challenge for citizens to hold the accounting officers to account. A mechanism to empower citizens with information regarding development projects and process in their area should be sought in order to improve participation and accountability.



Githenya and Ngugi (2014) sought to assess the determinants of housing projects implementation in Kenya. The study found that project planning, project control, motivated project team and project management competency have a great influence on housing project implementation in Kenya.

### **2.3 Conceptual framework**



### Independent Variables

**Dependent variable** 

**Figure 2: Conceptual Framework** 



### **3.0 RESEARCH METHODOLOGY**

The study used descriptive research design. The target population for the study was all 19, 656 households in Kaiti Sub-County. The sample size was 150 household. The study used simple random sampling to select the household. The households' heads were the respondents. The study used primary data gathered by use of a structured and semi-structured questionnaire. Descriptive statistics such as, mean and frequencies and inferential statistics, regression and correlation analysis, were used to perform data analysis. A multiple linear regression analysis model was used to test the hypotheses and link the variables.

 $Y = a + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \mathbf{\mathcal{E}}$ 

Where:

Y = Implementation of Sand Dam Drift Projects

 $\beta$ 1,  $\beta$ 2,  $\beta$ 3 and  $\beta$ 4 = Beta coefficients

 $\beta 0 = Constant Term$ 

X1 = Beneficiary Participation in Project Identification

X2 = Beneficiary Commitment

X3 = Beneficiary Knowledge

X4 = Beneficiary Capacity Building

 $\varepsilon = \text{Error term}$ 

### 4.0 RESULTS AND DISCUSSIONS

### 4.1 Response Rate

A total of 150 households were issued with the questionnaires which imply that the entire sample population was used for the study. 135 questionnaires were properly filled and returned. This represented an overall successful response rate of 90%.

Response	Frequency	Percent	
Returned	135	90%	
Unreturned	15	10%	
Total	150	100.00%	

### Table 1: Response Rate

### **4.2 Demographic Characteristics**

The population of this study consisted of 81 men and 54 females representing 60% males and 40% females. 36% were on age bracket of 26-35 years, 29% were on age bracket of 36-45 years, 22% were above 55 years while only 13% who were the least were below 25 years old. 44% of the respondents had their highest level of education being college level, 37% had secondary qualification while 19% had primary qualification. 53% have been residents for more than 7



years, 22% have been residents for between 5-7 years,16% have been residents for between 2-5 years while 9% have been residents for a period less than less than 1 years.

# **4.3 Influence of Beneficiary Participation in Project Identification on implementation of sand dam drift projects**

### 4.3.1 Descriptive statistics

Descriptive statistics were obtained through running the statements of each objective using descriptive custom table and presenting in percentages. 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 1.13.

### **Table2: Beneficiary Participation in Project Identification**

Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std. Dev
I was involved in selecting a		, ,		,			
site for constructing the sand							
dam drift project.	4.4%	6.7%	8.9%	51.1%	28.9%	3.93	1.02
I was involved when assessing							
the sub catchment areas.	4.4%	11.1%	13.3%	35.6%	35.6%	3.87	1.15
I was involved in selecting							
potential riverbeds and river bed							
sections.	11.1%	4.4%	17.8%	37.8%	28.9%	3.69	1.25
I was involved in the							
construction of sand dam drift		0.00/	4 40/	<b>57</b> 00/	22.24	2 00	1.00
project.	6.7%	8.9%	4.4%	57.8%	22.2%	3.80	1.09
Average						3.82	1.13

# **4.3.2** Relationship between Beneficiary Participation in Project Identification and implementation of sand dam drift projects

Regression analysis was performed by using the composites of the two variables.

### Table 3: Model Fitness

Indicator	Coefficient
R	0.396
R Square	0.157
Adjusted R Square	0.150
Std. Error of the Estimate	0.40842



Beneficiary Participation was found to be satisfactory variables in implementation of sand dam drift projects. Identification of project activities explain 15.7% of the variations implementation of sand dam drift projects.

### **Table 4: Analysis of Variance**

	Sum of Squares	df	Mean Square	F	Sig.
Regression	4.118	1	4.118	24.690	0.000
Residual	22.185	133	.167		
Total	26.304	134			

The results indicate that the model was statistically significant. Further, the results imply that the, Beneficiary Participation, are good predictors of implementation of sand dam drift projects. This was supported by an F statistic of 24.690 and the reported p=0.00 which was less than the conventional probability of 0.05significance level.

### **Table 5: Regression of Coefficients**

sub construct variable	В	Std. Error	Beta	t	sig
(Constant)	3.136	0.167		18.765	0.000
<b>Beneficiary Participation</b>	0.207	0.042	0.396	4.969	0.000

Implementation of sand dam drift projects and Beneficiary Participation in Project Identification are positively and significant related (r=0.207, p<0.05).

The specific model was;

Implementation of Sand Dam Drift Projects = 3.136+0.207 X1

Where X1 is Beneficiary Participation in Project Identification.

### **4.3.3** Hypothesis testing

The p-value of 0.000 indicated that the null hypothesis was rejected hence there is a significant relationship between beneficiaries' participation in identification of project activities and the implementation of sand dam drift projects in Kaiti Sub-County.

### 4.4 Influence of beneficiary commitment on implementation of sand dam drift projects

### 4.4.1 Descriptive statistics

On a five-point scale, the average mean of the responses was 3.95 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 1.20.



### Table 6: Beneficiary commitment

	Strongly Disagree	Disagree	Neutral	gree	Strongly Agree	ean	eviatio
Statements	S D	D	Z	A	S A	Z	n D d
I have taken it a personal							
responsibility to learn more about sand	17.8						
dam drift projects.	%	4.4%	8.9%	11.1%	57.8%	3.87	1.56
I am always ready and willing to							
participate in any activities on sand							
dam drift projects in this area.	4.4%	15.6%	8.9%	40.0%	31.1%	3.78	1.18
Community leaders from our midst							
have been appointed to present our							
challenges and recommendations to							
the government officials on any							
difficulties experienced in the sand							
dam drift project.	4.4%	4.4%	11.1%	40.0%	40.0%	4.07	1.05
We work closely with the government							
officials in the implementation process							
of sand dam drift project in the area.	4.4%	4.4%	8.9%	42.2%	40.0%	4.09	1.03
Average						3.95	1.20

### **4.4.2** Relationship between beneficiary commitment and implementation of sand dam drift projects

Regression analysis was performed by using the composites of the two variables. Beneficiary commitment was found to be satisfactory variables in implementation of sand dam drift projects. Beneficiary commitment explains 37.7% of implementation of sand dam drift projects.

Table 7: M	odel Fitness
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Indicator	Coefficient
R	0.614
R Square	0.377
Adjusted R Square	0.070
Std. Error of the Estimate	0.42716

The results indicate that the model was statistically significant. Further, the results imply that beneficiary commitment, is good predictors of implementation of sand dam drift projects. This was supported by an F statistic of 11.160 and the reported p=0.01 which was less than the conventional probability of 0.05significance level.



	Sum of Squares	df	Mean Square	F	Sig.
Regression	2.036	1	2.036	11.160	0.001
Residual	24.267	133	.182		
	26.304	134			

Regression of coefficients results show that implementation of sand dam drift projects and beneficiary commitment are positively and significant related (r=0.207, p<0.05).

The specific model is;

Table 8. Analysis of Variance

Implementation of Sand Dam Drift Projects = 3.136+0.207 X1

Where X1 is Beneficiary commitment.

### **Table 9: Regression of Coefficients**

sub construct variable	В	Std. Error	Beta	t	sig
(Constant)	3.136	0.167		18.765	0.000
Beneficiary commitment	0.207	0.042	0.396	4.969	0.000

### 4.3.3 Hypothesis testing

The p-value of 0.000 indicated that the null hypothesis was rejected hence there is a significant relationship between beneficiaries' participation in identification of project activities and the implementation of sand dam drift projects in Kaiti Sub-County.

### 4.5 Influence of beneficiary knowledge on implementation of sand dam drift projects

### Table 10: Beneficiary knowledge

Statements	y Disagre e	Disagre e	Neutral	Agree	Strongl y Agree	Mean	Std. Dev
I am aware about the principles and policies of sand dam drift							
projects.	7.4%	17.8%	4.4%	31.1%	39.3%	3.77	1.33
I am aware about benefits of sand dam drift projects.	10.4%	11.1%	9.6%	23.0%	45.9%	3.83	1.39
I am aware about the amount of investment made in the sand dam							
project. I am aware about the time that	6.7%	4.4%	15.6%	34.8%	38.5%	3.94	1.15
the sand dam project will take to							
completed. Average	6.7%	9.6%	18.5%	24.4%	40.7%	3.83 <b>3.84</b>	1.25 1.28



On a five-point scale, the average mean of the responses was 3.84 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 1.28.

### 4.5.1 Relationship between beneficiary knowledge and implementation of sand dam drift projects

Regression analysis was performed by using the composites of the two variables.

### **Table 11: Model Fitness**

Indicator	Coefficient
R	0.789
R Square	0.281
Adjusted R Square	0.270
Std. Error of the Estimate	0.42674

Beneficiary knowledge was found to be satisfactory variables in implementation of sand dam drift projects. Beneficiary commitment explains 28.1% of the variations in implementation of sand dam drift projects.

### **Table 12: Analysis of Variance**

	Sum of Squares	df	Mean Square	F	Sig.
Regression	2.084	1	2.084	11.443	0.001
Residual	24.220	133	.182		
	26.304	134			

The results indicate that the model was statistically significant. Further, the results imply that the Beneficiary knowledge, is good predictors of implementation of sand dam drift projects. This was supported by an F statistic of 11.443 and the reported p=0.001 which was less than the conventional probability of 0.05significance level.

### Table 13: Regression of Coefficients

sub construct variable	В	Std. Error	Beta	t	sig
(Constant)	3.384	0.171		19.832	0.000
Beneficiary knowledge	0.141	0.042	0.281	3.383	0.001

Regression of coefficients results shows that implementation of sand dam drift projects and beneficiary knowledge are positively and significant related (r=0.207, p<0.05).

The specific model was;

Implementation of Sand Dam Drift Projects=3.136+0.207 X1



Where X1 is beneficiary knowledge.

### 4.5.2 Hypothesis testing

The p-value of 0.000 indicated that the null hypothesis was rejected hence there is a significant relationship between beneficiaries' knowledge and the implementation of sand dam drift projects in Kaiti Sub-County.

# 4.6 Influence of capacity building of beneficiaries on implementation of sand dam drift projects

### 4.6.1 Descriptive statistics

**Table14: Capacity building of beneficiaries** 

Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std. Dev
We receive training on how to	4.40/	4.40/	11.10/	22.284		1.12	1.07
conserve water. We receive training on how to	4.4%	4.4%	11.1%	33.3%	46.7%	4.13	1.07
construct sand dam drift projects.	4.4%	8.9%	17.8%	42.2%	26.7%	3.78	1.08
We receive training on how to			<b>1 –</b> 0.11		10.001	• • •	
maintain sand dam drift projects. We receive training on the	4.4%	11.1%	17.8%	26.7%	40.0%	3.87	1.19
importance sand dam drift							
projects.	8.9%	11.1%	13.4%	31.0%	35.6%	3.73	1.29
The training we receive is							
relevant	4.4%	4.4%	8.9%	40.0%	42.2%	4.11	1.04
Average						3.92	1.13

On a five-point scale, the average mean of the responses was 3.92 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 1.13.

### 4.6.2 Relationship between Capacity building of beneficiaries and implementation of sand dam drift projects

Regression analysis was performed by using the composites of the two variables.

Indicator	Coefficient
R	0.336
R Square	0.113
Adjusted R Square	0.107
Std. Error of the Estimate	0.41879



Capacity building of beneficiaries was found to be satisfactory variables in implementation of sand dam drift projects. Beneficiary commitment explains 11.3% of the variations in implementation of sand dam drift projects.

### **Table 16: Analysis of Variance**

	Sum of Squares	df	Mean Square	F	Sig.
Regression	2.977	1	2.977	16.974	0.000
Residual	23.327	133	.175		
	26.304	134			

The results indicate that the model was statistically significant. Further, the results imply beneficiary knowledge, is good predictors of implementation of sand dam drift projects. This was supported by an F statistic of 16.974 and the reported p=0.000 which was less than the conventional probability of 0.05significance level.

### **Table 17: Regression of Coefficients**

sub construct variable	В	Std. Error	Beta	t	sig
(Constant)	3.322	0.156		21.277	0.000
Capacity building of beneficiaries	0.207	0.041	0.336	4.120	0.000

Regression of coefficients results shows that implementation of sand dam drift projects and capacity building of beneficiaries are positively and significant related (r=0.207, p<0.05).

The specific model was;

Implementation of Sand Dam Drift Projects=3.322+0.207 X1

Where X1 is capacity building of beneficiaries.

### 4.6.3 Hypothesis testing

The p-value of 0.000 indicated that the null hypothesis was rejected hence there is a significant relationship between capacity building of beneficiaries and the implementation of sand dam drift projects in Kaiti Sub-County.

### 4.7 Correlation Analysis

The correlation analysis results revealed that there was a positive and a significant relationship between Beneficiaries' participation in identification of project activities and the implementation of sand dam drift projects (r=0.396, p=0.000). The results indicated that there was a positive and a significant relationship between Beneficiary Commitment and the implementation of sand dam drift projects (r=0.278, p=0.001). The results also indicated that there was a positive and a significant relationship between Beneficiary knowledge and the implementation of sand dam drift projects (r=0.281, p=0.001). Further the results showed that there was a positive and a



significant relationship between Capacity building and the implementation of sand dam drift projects (r=0.366, p=0.000).

		Impleme	Participation	Beneficiary	Beneficiary	Capacity
Variables		ntation	Identification	Commitment	knowledge	building
	Pearson					
Implementatio	Correlatio					
n	n	1				
	Sig. (2-	tailed)				
	Pearson	,				
Participation	Correlatio					
Identification	n	.396**	1			
	Sig. (2-					
	tailed)	0				
	Pearson					
Beneficiary	Correlatio					
Commitment	n	.278**	0.139	1		
	Sig. (2-					
	tailed)	0.001	0.109			
	Pearson					
Beneficiary	Correlatio					
knowledge	n	.281**	.204*	0.056	1	
	Sig. (2-					
	tailed)	0.001	0.018	0.519		
	Pearson					
Capacity	Correlatio					
building	n	.336**	.236**	0.033	.184*	1
	Sig. (2-					
	tailed)	0	0.006	0.701	0.033	
** C	orrelation is s	ignificant at	the 0.01 level (2-ta	ailed).		
			he 0.05 level (2-ta			

### Table 18: Overall correlation analysis

### 4.8 Regression Analysis

Regression analysis was performed by using the composites of the key variables.

Table 19: Model Fitness	for the	Regression
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Indicator	Coefficient
R	0.247
R Square	0.497
Adjusted R Square	0.475
Std. Error of the Estimate	0.321



The results presented in Table 19 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 49.7%. This means that Beneficiaries' participation in identification of project activities, Beneficiary Commitment, Beneficiary knowledge and Capacity building explain 49.7% of the variations in the dependent variable which is the implementation of sand dam drift projects. This results further means that the model applied to link the relationship of the variables was satisfactory.

### Table 20: Analysis of Variance

	Sum of Squares	df	Mean Square	F	Sig.
Regression	7.814	4	1.954	13.735	.000
Residual	18.490	130	.142		
Total	26.304	134			

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 sand dam drift project. This was supported by an F statistic of 13.735 and the reported p=0.00 which was less than the conventional probability of 0.05 significance level.

Variable	В	Std. Err	or	t	sig
(Constant)	2.104	.258		8.155	.000
Beneficiaries' participation	.144	.041	.275	3.557	.001
Beneficiary Commitment	.130	.043	.223	2.999	.003
Beneficiary knowledge	.085	.038	.170	2.239	.027
Capacity building	.117	.038	.233	3.045	.003

### **Table 21: Regression of Coefficients**

Regression of coefficients results in table 21 shows Beneficiaries' participation has a positive and significant effect on the implementation of sand dam drift projects. (r=0.144, p=0.000). The table further indicates that Beneficiary Commitment and implementation of sand dam drift projects are positively and significantly related (r=0.130, p=0.003). It was further established that Beneficiary knowledge and implementation of sand dam drift projects were positively and significantly related (r=0.085, p=0.027). Capacity building had a positive and significant effect on the implementation of sand dam drift projects (r=0.117, p=0.003).

The specific model before moderation is;

Implementation of sand dam drift projects =2.104+0.144X1+0.130X2+0.085X3+0.117X4

Where X1 is Beneficiaries' participation



X2 is Beneficiary CommitmentX3 is Beneficiary knowledgeX4 is Capacity building

### 5.0 DISCUSSION CONCLUSIONS AND RECOMMENDATIONS

### 5.1 Discussion

Increase in beneficiaries' participation in identification of project activities, beneficiary commitment, beneficiary knowledge and capacity building of beneficiaries lead to a positive variation in implementation of sand dam drift projects. This were also supported by the responses in the statements in the questionnaire.

### **5.2** Conclusions

The study concludes that beneficiaries' participation in identification of project activities can increase the efficiency, effectiveness, self-reliance, coverage and sustainability of development projects. People's participation is important component in the implementation of projects. The success of local development projects depends on the willingness of communities to participate in the projects from their initiation to completion stages. It also depends on the integrity of the local committee members. Awareness and knowledge has an impact on participation by citizens and level of their involvement in public affairs. It determines the level of access and how they benefit from the development projects. Capacity building in community development projects has some implications for project design, implementation, monitoring and evaluation. It affects the nature of beneficiaries, the time at which beneficiaries should be involved in the project, the choice of project activities, the sequence of their implementation and the techniques used in the process of project implementation.

### 5.3 Recommendations

The study recommended the community involvement by the project implementation team to give an update of the progress of the project during the project implementation, the project managers ought to ensure commitment of project stakeholders, involvement in the selection and planning of the projects and Capacity building, monitoring and evaluation to enhance efficiency of the people by providing communication relevant to the project.

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