

Stakeholders' Engagement Approaches and Sustainability of Water Supply Projects in Nyando Sub County, Kisumu County, Kenya

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Abstract: In spite of Kenya's government increasing financial allocation for rural water supply projects, there is little impact as most of the projects have failed to self-sustain after handing over to the beneficiary stakeholders, a fact that has been attributed to inadequate stakeholder engagement in the planning, initiation and implementation of the projects. The purpose of the study was to examine the influence of stakeholders' engagement approaches on sustainability of rural water supply projects in Nyando-sub County, Kisumu County, Kenya. The objectives of the study were: to establish the extent to which Stakeholders' Collaboration influence sustainability of rural water supply projects in Nyando-sub County; to determine how Stakeholders' Participation influences sustainability of rural water supply projects in Nyando-sub County; to examine how Stakeholders' Empowerment influence sustainability of rural water supply projects in Nyando-sub County and; to establish how Stakeholders' Evaluation influence sustainability of rural water supply projects in Nyando-sub County. The study used descriptive survey design while structured questionnaire was used to collect data from a sample size of 379 respondents out of a target population of 30,567 beneficiaries of water supply projects. Validity test was done and a value of 0.78 obtained while reliability coefficient was 0.79. Descriptive statistics of mean and standard deviation and inferential statistics of Correlation and Regression were done at a significance level of 0.05. The hypotheses test results were: 1. H_0 : Stakeholders' Collaboration does not significantly influence sustainability of rural water supply projects in Nyando-sub County, Kisumu County, Kenya was rejected since $P=0.000<0.05$; 2. H_0 : Stakeholders' Participation does not significantly influence sustainability of rural water supply projects in Nyando-sub County, Kisumu County, Kenya was rejected since $P=0.004<0.05$; 3. H_0 : Stakeholders' Empowerment does not significantly influence sustainability of rural water supply projects in Nyando-sub County, Kisumu County, Kenya was rejected since $P=0.000<0.05$ and; 4. H_0 : Stakeholders' Evaluation does not significantly influence sustainability of rural water supply projects in Nyando-sub County, Kisumu County, Kenya was rejected since $P=0.000<0.05$. Therefore the study concluded that there is significant influence of all Stakeholders' Engagement Approaches on sustainability of rural water supply projects. It is recommended that Project managers should actively engage stakeholders to enhance ownership, entrench technical skills and Knowledge of the project operation, local resource mobilization, and assessment of achievement of project objectives for sustainability of rural water supply projects.

Equally, policy makers should suggest appropriate policies for strengthening Stakeholders' Engagement Approaches of Collaboration, Participation, Empowerment and Evaluation to boost effective implementation and sustainability of water projects. Further research should be carried out on other case studies other than Rural Water Supply Projects for authentication and generalization of research findings.

Keywords: Stakeholders' Engagement Approaches, Collaboration, Participation, Empowerment, Evaluation, Implementation of dairy projects

I. INTRODUCTION

Globally, 1.1 billion people do not have accessibility to safe drinking water resulting into 5 million annual deaths and the situation is expected to exacerbate with a projection of 40% water deficit by 2030 calling for mitigation on the current negative trends felt more so in developing countries (Ndubi, Kagiri and Muchelule, 2018; Kisumbi, Omboto and Nassiuma, 2017). Service improvement in water sector can reduce hygiene related mortality rates by an estimated 65% and 26% morbidity (Silvius and Schipper, 2019). In Kenya, in spite of the governments' increasing financial allocation for rural water supply projects, 35% of water projects fail to self-sustain beyond handing over to the beneficiaries, a fact that has been attributed to inadequate stakeholders' engagement in the planning, initiation and implementation of the projects (Aupe and Sagwa, 2020; Muniu, Gakuu and Rambo, 2017). In Kisumu County only 37% of the population is served with clean piped water with rural areas worst hit compared to urban areas (Oraro 2012). The importance of universal water projects sustainability is emphasized in global Sustainable Development Goals (SDGs 6) (WHO Report, 2017). Sustainable Water project achieve environmental, social and economic demands of a society currently without compromising into the future generation (Bal et al., 2013).

Stakeholder engagement has been the antidote to projects failures since 1980's while in the 1990's, multinational agencies like World Bank and United Nations emphasized for bottom-up rather than top-down approach of stakeholder engagement to promote social learning and fostering consensus on competing interests for project sustainability

(Godenhjelm and Johanson, 2018; Wen *et al.*, 2018). Community participation in the conceptualization, designing, implementing, operating and maintaining water projects ensures various opinions of interest groups including the socially and economically marginalized are taken into account for higher acceptance of the projects benefits (Onyango and Abuya, 2020; Ochelle, 2012). As an intervention, the 2002 water act enacted by the government of Kenya required active community participation in water projects for their sustainability (Muniu, Gakuu and Rambo, 2017). Inadequate stakeholder engagement shatters member's capacity to effectively implement and own the projects leading to poor outcomes (Muniu, Abuya and Kidombo, 2020). Stakeholder engagement is a multidimensional concept that can take the form of collaboration, participation, empowerment and evaluation (Ochunga, Nyonje and Adala, 2016).

The purpose of the study was to examine the influence of stakeholders' engagement approaches on sustainable management of rural water supply projects in Nyando-sub County, Kisumu County, Kenya. The study aimed to contribute valuable knowledge on identifying and entrenching appropriate stakeholder engagement approaches such as collaboration, participation, empowerment and evaluation to help improve sustainability of rural water supply projects and to suggest appropriate policies for strengthening sustainability of rural water supply projects to ensure it meets the socio-economic and environmental objectives. The study also provides reference information on stakeholder engagement approaches for optimal sustainability of rural water supply projects for other researchers, policy developers and development agencies. This study thus helps in formulation of appropriate policies on streamlining stakeholders' engagement approaches for delivery of successful projects. The study was organized into introduction, literature review, findings and discussion, and conclusion.

II. LITERATURE REVIEW

2.1 Sustainability of Rural Water Supply Projects

As early as 18th century, balancing socio-economic development and utilization of natural resources has been a concern and it was not until mid-20th century that sustainable development was broadened into socio-political and managerial aspects (Silvius and Schipper, 2019). According to Bal (2014), project sustainability enhances environmental safety, improves economic gains and social relations with stakeholder groups while Wanyera and Mutunga (2014) posit that in a sustainable project stakeholders have the ability to continuously produce beneficial results after the exit of development partners. Involving stakeholders in project implementation creates a sense of ownership with assurance of sustainability (Musa, 2002). Despite previous studies precision and convergence in the measurement of sustainability of projects in terms of socio-economic and environmental aspects (Wanyera and Mutunga, 2014 and Bal *et al.*, 2013), none focused on how sustainability of water supply projects can be influenced by stakeholders'

engagement, a gap which the current study intended to fill through descriptive survey design and descriptive and inferential statistical analysis.

2.2 Stakeholders' Collaboration and Sustainability of Projects

Stakeholders' collaboration offers opportunity for resolving unmet challenges and improving idea generation and implementation that cannot be offered by bureaucratic channels (Godenhjelm and Johanson, 2018). Collaboration among parties entrenches social and collective undertaking of projects by broadening options, knowledge and political power into play (Larsson and Larsson, 2020). However, networking equally has cost bearings involved in action and should be undertaken within balanced cost (Godenhjelm and Johanson, 2018). A study by Megdal, Eden and Shamir (2017) found that Stakeholders' collaboration aids in developing common understanding for making decisions for sustainable water projects. A collaboration framework without clear goals or with restricted interests limits participation, management and governance for outcomes. Thus, Parties should examine their boundaries to resolve conflicting interests and improve trust and ownership of the water projects for sustainability to be realized. Even though stakeholders' collaboration has been recognized as an instrumental issue in project implementation no local study has been done that links stakeholders' collaboration with sustainability of water supply projects, a gap which the current study intended to fill.

2.3 Stakeholders' Participation and Sustainability of Projects

Participation is an active process where parties take actions deliberately stimulated by their own thinking for effective project control (Wanyera and Mutunga, 2014). Barasa and Jelagat (2013) posit that stakeholders' participation facilitates capacity building, identification and owning of a project while Ocharo and Kimutai (2018) posit that stakeholders' participation facilitates better cost effective project design, equity in distribution of benefits, accountability and transparency and matching of community needs to project objectives. However, social constraints like mentality of over dependency, dominance by elitists and skewed gender parity reduces participation in projects hence threatening their sustainability (Mulwa, 2004). Since participation in projects involves political power-matrix there is the need to take into account the project's political context and consequences.

In Malaysia, Mei, Weng and Ao (2017) assessed stakeholders' participation on sustainability of water projects through descriptive survey design and questionnaire and interview guide used to collect data while analysis was descriptive in nature. Findings showed that stakeholder participation contribute towards a better water resource management practice notably education, awareness rising through reflection, and local stakeholders' skills strengthening. Further, it enhances democratization of decision-making, creation of a common vision for the management of water resources, and installing the sense of co-responsibility among

stakeholders. In Kenya, Nabifwo and Kimutai (2017) investigated the factors influencing sustainability of water projects in Nairobi County through descriptive survey design and semi-structured questionnaire used for collecting data from a sample of 433 respondents out of a target population of 10,515 while analysis involved descriptive and inferential statistics of regression. Findings indicated a positive significant relationship between stakeholders' participation and sustainability of water projects. Participation of stakeholders enhances project ownership, facilitates resource mobilization, oversight and feedback mechanism for sustainability beyond project takeover. The reviewed literature comprehensively linked stakeholder participation and sustainability of water supply projects and as such provide an impetus for replication in a different geographical context.

2.4 Stakeholders' Empowerment and Sustainability of Projects

Stakeholders' empowerment strategies through capacity-building and training contributes to self-reliance and successful implementation of projects (Muniu, Abuya and Kidombo, 2020). Stakeholders' Empowerment enhances capacity and interest for sustenance of a project beyond handover as the negotiated stakeholder's needs are transformed into tangible outcomes (Rowlinson and Cheung, 2008). In Kenya, Mwangangi and Wanyoike (2016) analyzed factors affecting sustainability of water projects in Kitui County through descriptive survey design and semi-structured questionnaire used to collect data from a sample of 99 respondents with a target population of 9800 while analysis involved descriptive and inferential statistics. Findings showed that regular stakeholders' empowerment training on operations and maintenance of water projects is necessary. Stakeholders should be empowered and awareness created in identifying, planning, and implementing water projects through trainings in managerial and technical skills. Further, Rowlinson and Cheung (2008) observed that Stakeholders' empowerment reduces chances of conflict of interest as it structures parties' understandings and take their interest into account for the success of projects from their design, construction and facility management process.

2.5 Stakeholders' Evaluation and Sustainability of Projects

Involving stakeholders in project evaluation deliberations empowers them, promotes acceptance of outcomes and gauge whether objectives are achieved with the available resources (Jones, 2008). Further, Participatory evaluation ensures ownership and accountability of a project (World Bank, 2004). A study by Sulemana, Musah and Simon (2018) assessed stakeholders' participation in Monitoring and Evaluation of District Assembly Projects in Ghana through case study and interview guide and questionnaire used to collect data from a sample of 196 participants while analysis involved descriptive statistics. The study showed that effective stakeholders' participation in M&E of projects can improve transparency, accountability, project sustainability and ensure positive community level stakeholder attitude to

projects. This can be achieved by increasing the level of participation of key stakeholders beyond information giving and consultation.

Further, Ontiri and Otieno (2015) sought to examine the influence of stakeholders in the Monitoring and Evaluation process towards project implementation in Coast Clay Works Ltd Mombasa County, Kenya through descriptive survey and questionnaire and interview schedule used for collecting data from a sample of 90 respondents with a target population of 120 while analysis involved descriptive and inferential statistics of Chi-square. Findings showed that participation in M&E has a significant influence on successful implementation of projects. Though the studies were comprehensive in findings, the failed to link stakeholder evaluation to sustainability of water projects, a gap which the current study intended to fill.

III. METHODOLOGY

The study used descriptive survey design and mixed method research for collection of both qualitative and quantitative data for results triangulation. The study used a sample size of 379 respondents out of a target population of 30, 567 stakeholders in the implementation of rural water supply projects while data was collected using Questionnaire. The data collection instrument was pre-tested amongst 10% of unselected participants and a validity coefficient of 0.78 and reliability coefficient of 0.79 obtained. Descriptive statistics of mean and standard deviation and inferential statistics of correlation and regression at a significance level of 0.05 was done.

The regression model takes the form:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \dots + \beta_n X_n + \alpha$$

Where; Y: dependent variable (Sustainability of water supply projects),

β_0 : regression coefficient,

$\beta_1, \beta_2, \beta_3, \beta_4,$ and β_5 : slopes of the regression equation/Beta Coefficients,

$X_1, X_2, X_3, X_4, \dots, X_n$: predictor variables (Stakeholders' Collaboration, Stakeholders' Participation, Stakeholders' Empowerment, and Stakeholders' Evaluation)

α : error term normally distributed about a mean of 0. It captures the effect of all omitted variables or random variation in the dependent variable.

1. H_0 : Stakeholders' Collaboration has no significant influence on sustainability of water supply projects in Nyando sub-county, Kisumu County, Kenya
2. H_0 : Stakeholders' Participation has no significant influence on sustainability of water supply projects in Nyando sub-county, Kisumu County, Kenya
3. H_0 : Stakeholders' Empowerment has no significant influence on sustainability of water supply projects in

- Nyando sub-county, Kisumu County, Kenya
4. H_0 : Stakeholders’ Evaluation has no significant influence on sustainability of water supply projects in Nyando sub-county, Kisumu County, Kenya
 5. H_0 : Stakeholders’ Engagement Approaches have no significant influence on sustainability of water supply projects in Nyando sub-county, Kisumu County, Kenya

IV. FINDINGS AND DISCUSSION

Out of the sampled 379 participants, 300 returned dully filled and complete questionnaires which represents 79% return rate. The study sought to establish the extent to which Stakeholders’ Engagement Approaches influence Sustainability of Rural Water Supply Projects. Stakeholders’ Engagement Approaches used in this study were: Stakeholders’ Collaboration, Stakeholders’ Participation, Stakeholders’ Empowerment, and Stakeholders’ Evaluation. Participants gave their opinions on their level of agreement or disagreement with the statements on a Likert scale of 1-5 where Strongly agree(SA)=5, Agree(A)=4 Neutral(N)=3, Disagree(D)=2 and Strongly disagree(SD)=1. The results are presented in Table 4.1.

Table 4.1: Stakeholders’ Engagement Approaches and Sustainability of Rural Water Supply Projects.

Financial Risk Management Instruments	n	Mean	Standard deviation
Stakeholders’ Collaboration	300	3.823	1.024
Stakeholders’ Participation	300	3.928	0.896
Stakeholders’ Empowerment	300	4.020	0.922
Stakeholders’ Evaluation	300	3.878	0.946
Composite mean standard deviation	& 300	3.912	0.122

Table 4.1 presents the descriptive statistics on participant’s views on Stakeholders’ Engagement Approaches and Sustainability of Rural Water Supply Projects. The mean and standard deviations for: Stakeholders’ Collaboration was 3.823 and 1.024, Stakeholders’ Participation was 3.928 and 0.896, Stakeholders’ Empowerment was 4.020 and 0.922, and finally Stakeholders’ Evaluation was 3.878 and 0.946 respectively. The result shows that when the Combined Stakeholders’ Engagement Approaches is done, Stakeholders’ Empowerment (Mean=4.020) and Stakeholders’ Participation (Mean=3.928) positively influence Sustainability of Rural Water Supply Projects since their means are above the composite means score of 3.912 whereas Stakeholders’ Collaboration (Mean=3.823), and Stakeholders’ Evaluation (Mean=3.878) moderately influence Sustainability of Rural Water Supply Projects since their means are slightly below the composite means score of 3.912. The composite mean and composite standard deviation was 3.912 and 0.122 respectively imply that the participants were agreeing that

Stakeholders’ Engagement Approaches influence Sustainability of Rural Water Supply Projects.

4.1 Correlation Analysis of Stakeholders’ Engagement Approaches and Sustainability of Rural Water Supply Projects

Inferential statistics was conducted on participants Perspectives on the relationship between Stakeholders’ Engagement Approaches and Sustainability of Rural Water Supply Projects. Pearson correlation coefficient was used to test the relationship between Stakeholders’ Engagement Approaches and Sustainability of Rural Water Supply Projects; this was done at 95% level of confidence. To test the extent of the relationship between Stakeholders’ Engagement Approaches and Sustainability of Rural Water Supply Projects; Stakeholders’ Collaboration, Stakeholders’ Participation, Stakeholders’ Empowerment, Stakeholders’ Evaluation and Sustainability of Rural Water Supply Projects were analyzed based on the following hypothesis; 6. H_0 : There is no significant relationship between Stakeholders’ Engagement Approaches and Sustainability of Rural Water Supply Projects. The corresponding mathematical model for the hypothesis was identified as follows: Sustainability of Rural Water Supply Projects = f (Stakeholders’ Engagement Approaches). The overall correlation coefficient for Stakeholders’ Engagement Approaches and Sustainability of Rural Water Supply Projects was found to be 0.565 with a p-value of $0.000 < 0.05$, implying that there is a statistically significant relationship between Stakeholders’ Engagement Approaches and Sustainability of Rural Water Supply Projects; leading to rejection of the null hypothesis (6. H_0 : There is no significant relationship between Stakeholders’ Engagement Approaches and Sustainability of Rural Water Supply Projects) and acceptance of the alternative hypothesis, and hence the research findings conclude that there is a significant relationship between Stakeholders’ Engagement Approaches and Sustainability of Rural Water Supply Projects. The results obtained are indicated in Table 4.2

Table 4.2: Correlation Analysis of Stakeholders’ Engagement Approaches and Sustainability of Rural Water Supply Projects

Financial Risk Management Instruments	Sustainability of Rural Water Supply Projects	
Stakeholders’ Engagement Approaches	Pearson Correlation Sig. (2-tailed)	0.565* 0.000
	n	84

Correlation significant at 0.05 level (2-tailed)

4.2 Regression Analysis of Stakeholders’ Engagement Approaches and Sustainability of Rural Water Supply Projects

The researcher analyzed, through regression, the combined effect of the Stakeholders’ Engagement Approaches on Sustainability of Rural Water Supply Projects. This was achieved through multiple regression with Stakeholders’ Collaboration, Stakeholders’ Participation, Stakeholders’

Empowerment and Stakeholders' Evaluation as the predictor variables and Sustainability of Rural Water Supply Projects as

the outcome variable. The regression output is presented in Table 4.1.

Table 4.1: Influence of Stakeholders' Engagement Approaches on Sustainability of Rural Water Supply Projects

Summary	R	R Square	Adjusted R Square		Std. Error of the Estimate		
Model	.565 ^a	.320	.300		3.968		
ANOVA	Sum of Squares		df	Mean Square	F	Sig.	
Model	Regression		4	251.418	15.972	.000 ^b	
	Residual		295	15.741			
	Total		299				
Coefficients	Unstandardized Coefficients		Standardized Coefficients		t	Sig.	
	B		Beta				
Model	(Constant)		-.727	2.617	-.278	.782	
	Stakeholders' Collaboration		.498	.152	.307	3.279	.001
	Stakeholders' Participation		-.143	.113	-.099	-1.263	.209
	Stakeholders' Empowerment		.394	.157	.217	2.514	.013
	Stakeholders' Evaluation		.258	.113	.201	2.289	.024
a. Dependent Variable: Sustainability of Rural Water Supply Projects							
b. Predictors: (Constant), Stakeholders' Evaluation, Stakeholders' Empowerment, Stakeholders' Participation, Stakeholders' Collaboration							

From the output in Table 4.18, the model summary gives a R^2 value = 0.320 with $p = 0.000$. This shows that the combined Stakeholders' Engagement Approaches account for 32.0% of Sustainability of Rural Water Supply Projects. Moreover, the model was found to be a good fit for the data and variables with $F(4, 295) = 15.972$ ($p = 0.000 < 0.05$). The coefficient of the constant term ($\beta = -0.727$, $p = 0.782 > 0.05$) and the coefficient of Stakeholders' Participation ($\beta = -0.143$, $p = 0.209 > 0.05$) were not statistically significant; hence do not form part of the overall model. However, the coefficient of Stakeholders' Collaboration ($\beta = 0.498$, $p = 0.001 < 0.05$), the coefficient of Stakeholders' Empowerment ($\beta = 0.394$, $p = 0.013 < 0.05$) and the coefficient of Stakeholders' Evaluation ($\beta = 0.258$, $p = 0.024 < 0.05$) were found to be statistically significant thus included in the model. Linearly, the variables can be modeled using the equation:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where; β_0 is coefficient of the constant term, β_1 , β_2 , β_3 and β_4 were the coefficients of the predictors while X_1 , X_2 , X_3 and X_4 were the predictors (Stakeholders' Collaboration, Stakeholders' Participation, Stakeholders' Empowerment and Stakeholders' Evaluation) and ε is the error term. Thus replacing the coefficients, the equation becomes:

$$Y = 0.498X_1 + 0.394X_3 + 0.258X_4$$

A unit increase in Stakeholders' Collaboration causes an increase of 0.498 of Sustainability of Rural Water Supply

Projects; a unit increase in Stakeholders' Empowerment causes an increase of 0.394 of Sustainability of Rural Water Supply Projects and; a unit increase in Stakeholders' Evaluation causes an increase of 0.258 of Sustainability of Rural Water Supply Projects. Thus, the four (4) Stakeholders' Engagement Approaches significantly contribute to the Sustainability of Rural Water Supply Projects. Having the approaches practiced simultaneously improves the Sustainability of Rural Water Supply Projects as opposed to implementing a single practice at a time. The findings of the study are supported by Aapaoja, Haapasalo and Söderström (2013) argument that stakeholders' engagement by identifying their different roles, liabilities and objectives enables projects to utilize their knowledge base to maximize value creation, reduce costs and conflict and improving quality of projects. Inclusive stakeholder engagement targets and considers the opinions of individuals and groups at risk of being excluded or under-served which can lead to higher public acceptance of a project and informs the project to maximize social benefits. Inadequate stakeholder engagement hinders beneficiaries' participation and weakens their capacity to effectively implement projects leading to poor outcomes.

V. CONCLUSION

The purpose of this study was to examine the extent to which Stakeholders' Engagement Approaches influence Sustainability of Rural Water Supply Projects. On Sustainability of Rural Water Supply Projects, the study

concludes that the water safety and quality were high with moderate revenue generated from the projects for operations and maintenance while the water technology applied could not be sustained locally. The Sustainability of Water Projects is generally moderately effective. On Stakeholder Collaboration, the study concludes that stakeholders had a common objective for project implementation, Stakeholders were willing to identify with the project, and there was inclusivity of stakeholders in the entire project cycle. However, stakeholders did not adequately play their respective roles during and after project implementation which has a negative effect on sustainability of rural water supply projects. Overall, the findings indicate that Stakeholder Collaboration significantly influence Sustainability of Water Projects.

On Stakeholder Participation, the study concludes that the community member's skills and knowledge were used in the implementation of the projects. However, in moderate terms the technical expertise issued authoritative instruction to beneficiaries on project implementation and operations, stakeholders partially availed their resources for project implementation as well as project ownership and community representation in every phase of the project. In general Stakeholders' participation had a weak positive influence on Sustainability of Water Projects. On Stakeholder Empowerment, the study concludes that the stakeholder's roles and responsibilities were clearly defined; stakeholders were imparted with financial management skills, project beneficiaries were motivated to participate in running of the project, and trained on operation and maintenance skills. However, ability of the project management committee to manage, operate and maintain the water facility in a sustainable manner was relatively low compared to other indicators. Overall, Stakeholder Empowerment significantly influences Sustainability of Rural Water Supply Projects.

On Stakeholder Evaluation, the study concludes that stakeholders were involved in assessing the capacity of the project management team, the stakeholders were involved in measurement of performance of project, the stakeholders were involved in the mid-term review of the project progress and that the stakeholders were involved in monitoring of project activities during the implementation. However, stakeholders were not adequately involved in assessing the impact of the project. Overall, Stakeholder Evaluation was found to significantly influence Sustainability of Water Projects. Thus, the four (4) Stakeholders' Engagement Approaches significantly contribute to the Sustainability of Rural Water Supply Projects. Having them practiced simultaneously improves the Sustainability of Rural Water Supply Projects as opposed to implementing a single practice at a time.

Based on the findings, the study recommends that NGOs and government's water agencies should develop implementation plan to systematically include Stakeholders' Collaboration, Participation, Empowerment and Evaluation to ensure enhanced Sustainability of Rural Water Supply Projects. Further, scholars should conduct research using other

Stakeholders' Engagement Approaches not covered in the four variables to assess their influence on Sustainability of Rural Water Supply Projects. Moreover, case studies other than Water Projects should be used to verify the findings for further generalization.

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