



**STAKEHOLDERS' PARTICIPATION AND PERFORMANCE OF WATER,
SANITATION AND HYGIENE PROJECTS IN EMBU COUNTY, KENYA
COUNTY, KENYA**

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ABSTRACT

This study sought to evaluate the influence of stakeholders' participation on performance of WASH projects in Embu County, Kenya. The study was guided by the following objectives: to assess the effect of stakeholders' participation in project identification, project planning, project implementation, and effect of stakeholder participation in project monitoring and evaluation on performance of WASH projects in Embu County. Additionally, the theories guiding the study includes performance, stakeholder, expectancy, and system theory. A descriptive study design was adopted. The target population of this study comprised of 120 project key stakeholders of WASH projects in Embu County. Data was collected using semi-structured questionnaires. A pilot test of 10% of the sample size (12) was used to check the reliability and validity of the questionnaire. Data validity was determined through a content validity index while reliability was computed through Cronbach's Alpha Coefficient. SPSS computer version 28 was used for data analysis. As such, quantitative data was analysed using descriptive statistics and presentation done in tables. Correlation and regressions analysis was used to establish the relationship between the study variables. The project practitioners, beneficiaries, researchers, Government and Project donors are expected to benefit from the study since it recommends ways to improve their participation in WASH projects in Embu County. Findings reveal that; there is a moderate significant relationship between stakeholder participation in project identification and project performance ($r= 0.349$, $p\text{-value}=0.002$), a strong significant relationship between project identification and project performance ($r= 0.644$, $p\text{-value}=0.000$), a strong significant relationship between project implementation and project performance ($r= 0.612$, $p\text{-value}=0.004$), and a strong significant relationship between project monitoring and evaluation and project performance ($r= 0.677$, $p\text{-value}=0.000$). This study recommends that; all projects undertaken by the government or development partners should be implemented based on the needs or expectations of the community, project developers should clearly specify a framework through which project stakeholders will participate in project planning stage, input of stakeholders should not be ignored but should be carefully considered during project implementation, and the government and other development partners need to encourage stakeholders in monitoring and evaluation processes.

Key Words: stakeholders' participation, project identification, project planning, project implementation, project monitoring and evaluation, performance

INTRODUCTION

Water, Sanitation, and Hygiene (WASH) projects comprise a significant percentage of projects implemented by the county governments, national governments, bilateral, and NGO's. Approximately 565 million individuals in Sub-Saharan Africa do not have enough sanitary resources while an estimated 330 million does not have access to safe water (Omondi, 2017). Stakeholder involvement in project implementation is a crucial factor. The implementation of WASH projects is usually taken to be an intricate and tenacious issue facing societies, administrations, and international development partners. Nonetheless, with the rapid increase in population across Kenya, several initiated programs experience problems of implementation. Circumstantially, stakeholder participation practices in the implementation of WASH projects in many counties and by extension Embu is very poor. There are common cases of diarrhea and cholera among residents while the majority of County residents rely on pit latrines for sanitation needs. Additionally, many facilities are in deplorable conditions and situations.

According to an article by UNDP (2007), stakeholders' participation is an international issue, and the international community has taken their stand in encouraging third world countries to involve stakeholders when resolving matters influencing their lives. Stakeholders play a significant role in organizations' mission and help them achieve their goals, targets, and overall organizational success (Odeneye, 2017; Shubham et al., 2018). The bottom-up approach has proven to be effective in development projects success and sustainability. Stakeholders participation has been recognized internationally as a strategy that enables stakeholders to feel a sense of ownership of the project. The impact of stakeholders on organizations' performance varies, and their different interests and powers affect organizational goals and functioning. This is because as the world develops, organizations need to adjust their relations with stakeholders, including policy and working frameworks (Nwanmereni et al., 2018).

According to the ASQ (2021), stakeholders are "individuals or a group of people interested in any decision or activity of an organization." And therefore, being categorized into primary and secondary stakeholders, they work within the broader environment subject to global economic, political, and socio-cultural legal forces and technological change. Therefore, even at the regional level, both primary and secondary stakeholders stress the need to identify, understand, develop efficient relationships adhere to the main stakeholders' demands, and involve them in generating the organizations' strategy (Odeneye, 2017). For instance, Nwanmereni et al. (2018) study showed that the failure of an institutions' command to involve staff or students in decision-making contributed to several conflicts and misunderstandings within the institution. According to Ginter et al. (2018), successive managerial structures must convey the overall strategy and provide "maintain or change" counsel for the numerous units that must be engaged in order to achieve the goal. According to Boon et al. (2012), several community projects such as market structures and boreholes have stalled in Ghana as a result of stakeholders' exclusion. Similarly, this has also hindered the implementation of projects in Nigeria as indicated by the center down strategy whereby the affected communities did not take part in project identification, planning, monitoring which led to stalling of several development projects (UN, 2005). This indicates that involvement levels in Project implementation should range from forming decisions, influencing the decisions, being heard before decisions, and knowing about decisions. Plan International (2014) disclosed that majority of projects in Africa do not last for more than six months. They are deserted when the sponsor/donor withdraws or leave the project at the hands of the community. This was attributed to very low stakeholder participation.

The lack of adequate engagement of stakeholders in project implementation has contributed to the dwindling of several WASH projects within Kenya. Furthermore, this has been promoted by the poorly structured project implementation, which negatively impact organizational performance (Kiecha, 2017). It has left a huge part of the country grappling with the inadequacy of necessities, particularly WASH resources. For instance, within Embu County, there are very few natural water sources and the piped water, boreholes, and water pans cannot meet the deficit of the natural water sources. Therefore, many people still struggle to access water (Embu County Government, 2019). Consequently, residents from constituencies such as Mbeere North and South have had challenges in accessing water for home use and agricultural activities.

Statement of the Problem

Human survival requires access to water and sanitation facilities. There are numerous benefits to having better water and sanitation. According to the United Nations Water Programme (2016), improvements in clean water and hygiene facilities can cut global disease by 10% and avoid the death of children in poor rural regions by 55%. Although many locals consider water and sanitation to be a key concern, the bulk of these projects, particularly in Kenya's rural areas, are unsustainable, ineffective, and inefficient, and are either broken, damaged, or abandoned (Freeman et al., 2018).

As a result, communities continue to rely on unimproved drinking water sources and unsanitary and sanitary conditions, which lead to high prevalence of water-borne disease, death, and losses in productive time for women and school attendance for children (KNBS, 2015).

Hand washing and soap use are still low in most sub-counties in Embu County, at roughly 40%. The county has only one operational sewage treatment plant, which is located in Embu and does not have enough capacity to serve the entire county. Other plants have broken machineries and are thus unusable. Almost 60% of the boreholes funded by the county government and other develop partners are no longer functional due poor operations and maintenance since the community is unwilling to share some of the maintenance costs (Embu County Integrated Development Plan 2018-2022). Only 16.1% percent of respondents dispose of home waste water in appropriate ways, while the remainder simply dispose it off within the compound (Njiru, Omuterema, & Baraza, 2016). Nyaga (2018) found that inadequate funding of projects within the county hurt the success of preferred objectives.. Furthermore, Embu County community development projects are usually marked with rapid failure once donor support is withdrawn. Mwangi (2014) study on factors influencing the sustainability of WASH projects in Embu County found that the projects do not last for more than 3 years after the donor exit.

Various scholars have found that stakeholders' participation is positively associated with project outcomes; however, the extent of their participation and empowerment to participate significantly influenced project implementation (Morongâ et al., 2018; Nakiyaga, 2021). According to Berebon (2020), information disclosure affects organizational decisions. Stakeholder participation starts by identifying the key stakeholders of the project at hand. Engagement in decision-making or knowledge production begins with identifying the appropriate stakeholders (Oliver et al., 2018). Involving stakeholders in project planning positively and significantly influence project success (Matu et al., 2020). Njogu (2016) illustrated that stakeholders' participation in project identification, plans, and monitoring influences project implementation to a great extent. Buertey et al. (2016) found that the majority of stakeholders face several challenges participating in technical discussions and project implementers were unwilling to involve them during decision-making. As such, inadequate stakeholders' engagement derails identification of some hurdles in project implementation

(Harris et al., 2016). A broad divergence exists regarding stakeholders' participation with little evidence on how to best incorporate stakeholder feedback into policy-making processes (Lemke, 2015). To fill this gap, the study sought to evaluate the effect of Stakeholders Participation on performance of WASH projects in Embu County.

Objectives of the Study

- i. To assess the effect of stakeholder participation in project identification on performance of WASH projects in Embu County.
- ii. To examine the effect of stakeholder participation in project planning on performance WASH projects in Embu County.
- iii. To determine the effect of stakeholder participation in project implementation on performance WASH projects in Embu County.
- iv. To examine how stakeholders' participation in project Monitoring and Evaluation affect performance WASH projects in Embu County.

LITERATURE REVIEW

Theoretical Review

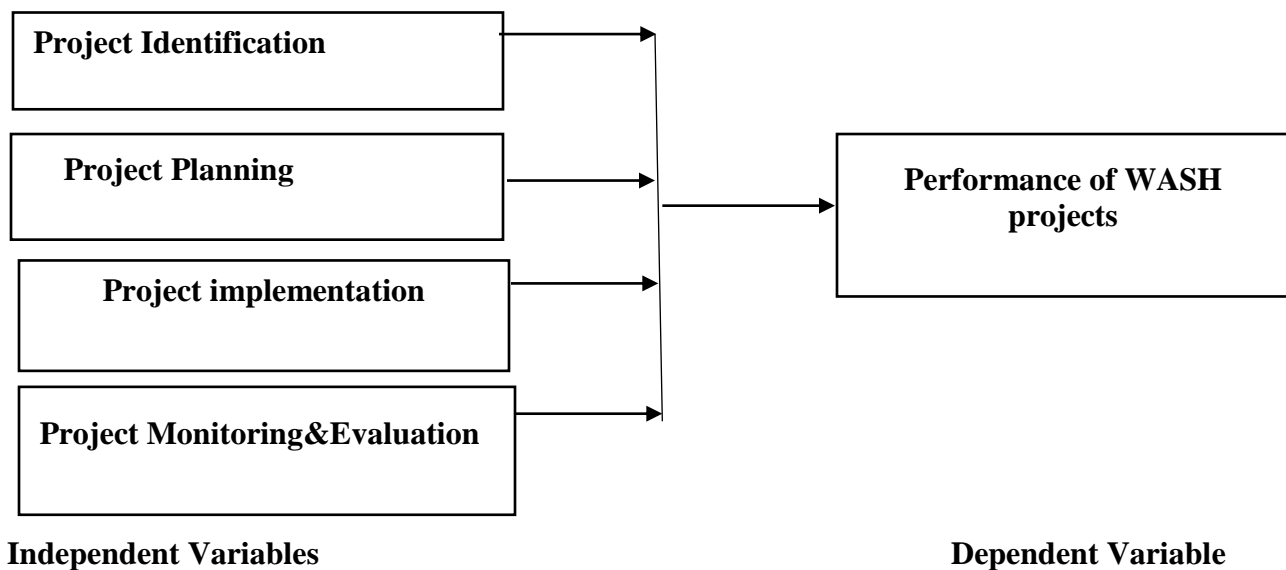
In 1997, Phil Treseder became the proponent of this theory. The idea employs a five-level participation system with no hierarchy of involvement. Treseder's degree of participation sought to validate how the extent of stakeholder participation influences performance of WASH projects in Embu County. Considering stakeholders' participation and project implementation, the type of involvement is determined by the stakeholders' wishes, the setting, the developmental stages of the stakeholders, and the nature of the organization, among other factors. Stakeholders are educated in this model, sponsors decide on the project, and stakeholders volunteer for it. Stakeholders are not just aware of the project, but also of who opted to include them and why. In this scenario, the sponsors value the opinions of the stakeholders. Sponsor-initiated, shared decisions with stakeholders is the second level of participation, in which sponsors have the initial idea but stakeholders are involved at every step of the planning and implementation. Stakeholders' opinions are considered, and they are involved in decision-making.

Stakeholder Theory was presented by Edward Freeman (1984). This theory underpins concerns such as organizational management and the ethical considerations implemented to enhance achievement of project goals. Project managers should consider the views and opinions of various persons and groups since this can have a significant impact on decision-making and, as a result, on the attainment of project objectives (Gibson, 2015). Stakeholder theory describes how project managers and stakeholders communicate and relate with each other for project success. (Filippone, 2016). Stakeholders may be internal or external (Bourne, 2018). Staff, contractors, donors, government, local leaders, and the local community, are all stakeholders in a project. Stakeholder theory may be employed to gain community trust in a project by providing beliefs that identify, analyze, and serve the community's interests as a stakeholder. An organization's decisions to align their efforts towards offering answers for the community are based on the interests of the community (Hill & Jones, 2018). Project implementation in Embu County revolves around donors, staff, suppliers, investors, and the community. According to Donaldson and Preston (1995), this theory has developed into various classifications namely instrumental model, descriptive, and normative model. As such, the theory investigates how WASH projects in Embu County apply stakeholders' identification in project implementation by role, power, and interest.

The model of instrumentality refers to a conviction that due to the success of the participants anticipated, a reward would be acknowledged. Thus, the extent to which an initial level result will lead to the subsequent level result. This implies that if a stakeholder utmost participates in an institution's project implementation, then they will be rewarded. However, this is influenced by such issues as; a clear comprehension of the relations amid participation and results and transparency of the procedure that resolves who gets what results. On the other hand, expectancy is the belief that determination devoted to participation will lead to the preferred outcome. Stakeholders must, therefore, have the right resources, skills, and be supported by the government, bilateral, or NGOs. Valence refers to the value a stakeholder ascribes to the recompense of the anticipated result. During implementation, stakeholders' perceived return for participation at a preferred level can be relative to their level of intervention in the assignment. However, the application of this theory is inadequate since recompense is not directly connected with participation in several institutions.

The system theory is one of the key theories in project implementation. A system in this sense is a group of interconnected discrete portions making and affecting the running of a combined whole. According to Ludwig Bertalanffy, a proponent of system theory, altering the nature of components affects the other elements equally constituted in the same system. This will ultimately affect the whole organization. This essential hypothesis implies that an organization is larger than the different components that constitute it. Therefore, an organization is described by certain limits. However, the components that constitute a system must work together to realize a mutual objective. This implies that for an organization to achieve better outcomes, proper adaptation to its surroundings is key, and so, it must not operate in seclusion (Neu, 2013). As such, the theory brings out the nature of stakeholders' communication based on time, means, and frequency in the implementation of WASH projects. An institution's acclimatization towards its external surroundings happens when there is an inflow of inputs from the surrounding to the organization and the outflow of the distorted results to the surrounding. Each stakeholder must therefore interact with each other internally and externally to enhance project implementation.

Conceptual Framework



RESEARCH METHODOLOGY

In this study, a descriptive survey design was used. It offers a general strategy that logically and accurately mixes several elements of the evaluation (Gakuu, Kidombo & Keiyoro 2018). Descriptive study aims at elucidating pertinent features of occurrence of preference based on individual, institutional, and industry perceptions (Best and Kahn, 2007).

RESEARCH FINDINGS AND DISCUSSIONS

The analysis was based on the objectives of the study including effect of stakeholder participation in project identification, project planning, project implementation and project monitoring and evaluation on performance of WASH Projects in Embu County. The study participants the key stakeholders of WASH projects in Embu County. The response rate was 71.7% which is a very good representation of the sample size and conforms to Creswell (2017) that a 50% response rate is adequate, 60% is good and more than 70% very good.

Descriptive Analysis of the Variables of the Study

Participation in Project Identification

The first objective focused on the effect of stakeholder participation on performance of WASH projects in Embu County. Respondents were asked to indicate the extent to which they were involved in project identification. Findings are presented in Table 1

Findings show that 65.1% of stakeholders were involved in project identification to a very great extent. This is an indication that stakeholders' involvement in identification of WASH projects is very high. The stakeholders suggest on the type of WASH project they would like initiated in their community. Findings concur with Sam (2018) that stakeholder participation during project identification phase was high hence emphasizing the significance of their involvement in project identification.

Respondents were asked to tick on the extent to which they agree/disagree with listed statements related to stakeholder participation in project identification. Findings are presented in Table 4.5.

Findings show the stakeholders concur that; the community members participate in determining WASH projects' location (m=4.38), the status of prior WASH projects is taken into consideration when identifying new projects (m=4.34), the project developer provides clarification for stakeholders about the project viability and feasibility (m=4.31), during the project identification process conflicts between different stakeholders is identified and resolved (m=4.30), the WASH projects developed are based on community needs and anticipations (m=4.15), and the scope of the project is determined by the local community, the government, and the donor (m=4.12). This implies that the project team consult the key stakeholders project identification process. This is essential since the stakeholders are more conversant with the area and the needs of the community that would directly benefit from the project. Considering the status of prior WASH projects helps in making decisions on the location of the current project to ensure fair development of WASH projects in the county. Findings support Omondi (2017) that stakeholder participation in project identification had a substantial influence on project success. Findings also concur with Mutimba (2013) that high level of stakeholder participation in the identification process is important for project impact because the local community are best at articulating their needs and the locations of the projects.

Project Identification and Project Performance

| Statements on Project Identification | SD | | D | | N | | A | | SA | | M |
|---------------------------------------------------------------------------------------------------------------|----|------|---|-----|---|-----|----|------|----|------|------|
| | F | % | F | % | F | % | F | % | F | % | |
| The WASH projects developed are based on the needs and expectations | 9 | 10.5 | 5 | 5.8 | 3 | 3.5 | 16 | 18.6 | 53 | 16.1 | 4.15 |
| There is community participation in determining the location of WASH | 2 | 2.3 | 3 | 3.5 | 6 | 7.0 | 24 | 27.9 | 51 | 59.3 | 4.38 |
| The scope of the project is determined by the local community, the government, and the donor | 4 | 4.7 | 8 | 9.3 | 4 | 4.7 | 28 | 32.6 | 42 | 48.8 | 4.12 |
| The project developer provides clarification for stakeholders | 5 | 5.8 | 4 | 4.7 | 3 | 3.5 | 21 | 24.4 | 53 | 61.6 | 4.31 |
| During the project identification process conflicts between different stakeholders is identified and resolved | 7 | 8.1 | 2 | 2.3 | 5 | 5.8 | 16 | 18.6 | 56 | 65.1 | 4.30 |
| The status of prior WASH projects is taken into consideration | 4 | 4.7 | 7 | 8.1 | 5 | 5.8 | 10 | 11.6 | 60 | 69.8 | 4.34 |

Participation in Project Planning

The second objective sought to examine the effect of stakeholder participation in project planning on performance of WASH projects in Embu county. Respondents were asked to indicate the extent to which they were involved in project planning. Findings are presented in Table 2

Findings show that more than half of the stakeholders (55.8%) participated in project planning to a great extent. This is an indication that the project team did not make project plans in isolation but the key stakeholders were consulted. Findings support Matu et al. (2020) that stakeholders participated in project planning which had a great impact on successful completion of road projects.

The stakeholders were asked to tick on the extent to which they agreed/disagreed with listed statements related to participation in project identification. Findings are presented in Table 4.7

Results reveal that the stakeholders concur that; stakeholders are consulted when planning project activities funding (m=4.45), stakeholders identify their needs during project design (m=4.22), the project deliverables are shared with the stakeholders (m=4.22), stakeholders are involved in identifying the personnel and material resource required (m=4.19), the project timelines are set and agreed upon by stakeholders (m=4.13), and there is consultation on the objectives of the project (m=4.07). This infers that stakeholders actively participate in project planning which equips them with great knowledge on the activities involved in the project. Stakeholder participation in project planning would help to save on project costs since they share ideas on where to source for quality but cheaper materials for project implementation. Stakeholders may also share ideas on how to source for skilled and unskilled labour within the community. WASH projects involve some constructions which are effective during some seasons and hence the community is best suited to suggest the most appropriate timelines to implement projects that would be sustainable. Findings are in agreement with Bal, Bryde, Fearon, and Ochieng (2013) that high level of stakeholders' involvement in project planning is important and lack of participation would limit project success.

Table 2: Project Planning and Project Performance

| Statements on Project Planning | SD | | D | | N | | A | | SA | | M |
|---------------------------------------------------------------------------------------|----|-----|----|------|---|-----|----|------|----|------|------|
| | F | % | F | % | F | % | F | % | F | % | |
| Stakeholders identify their needs during project design | 7 | 8.1 | 1 | 1.2 | 5 | 5.8 | 26 | 30.2 | 47 | 54.7 | 4.22 |
| There is consultation on the objectives of the project | 3 | 3.5 | 3 | 3.5 | 7 | 8.1 | 45 | 52.3 | 28 | 32.6 | 4.07 |
| The project timelines are set and agreed upon by stakeholders | 3 | 3.5 | 12 | 14.0 | 5 | 5.8 | 17 | 19.8 | 49 | 57.0 | 4.13 |
| The project deliverables are shared with the stakeholders | 2 | 2.3 | 6 | 7.0 | 8 | 9.3 | 25 | 29.1 | 45 | 52.3 | 4.22 |
| Stakeholders are consulted when planning project funding | 3 | 3.5 | 3 | 3.5 | 4 | 4.7 | 18 | 20.9 | 58 | 67.4 | 4.45 |
| Stakeholders are involved in identifying the personnel and material resource required | 2 | 2.3 | 7 | 8.1 | 8 | 9.3 | 25 | 29.1 | 44 | 51.2 | 4.19 |

Participation in Project Implementation

The third objective focused aimed at examining effect of stakeholder participation in project implementation on performance of WASH projects in Embu county. Respondents were asked to indicate the extent to which they were involved in project implementation. Findings are presented in Table 3

According to the study findings, half of the stakeholders opined that project implementers involved stakeholders to a moderate extent. This infers that the stakeholders are not involved in every process of project implementation but the project implementers consult the stakeholders on areas that they think that their input is necessary. Findings support Kathongo (2018) who found minimal involvement of stakeholders in implementation of community projects. Stakeholders were further asked to tick on the extent to which they agreed/disagreed with statements on stakeholder participation on project implementation. Findings are presented in Table 4.9

Findings show that the stakeholders agreed that; they participate in project risk assessment (m=4.31), set times lines for project implementation (m=4.20) and the project manager takes corrective action recommended by the stakeholders (m=3.95). However stakeholders are not involved in quality management (m=2.73), the stakeholders do not control the project implementation process (m=2.59), and the project implementation is at times not as per the agreed upon by stakeholders (m=1.81). This is an indication that the stakeholders participate in project implementation through assessing potential project risks, and setting time lines for project implementation. During project implementation, the project team consider the stakeholders' suggestion on project changes that may enhance project performance. The findings may also imply that the project team change the team make changes to the initial design without consulting the stakeholders and the end product may be different from what the stakeholders had agreed on. Findings are in agreement with Laktic and Malovrh (2018) who found that the project implementation process is a well-organized, independent, and fair and so, stakeholders are satisfied.

Table 3 Project Implementation and Project Performance

| Statements on Project Implementation | SD | | D | | N | | A | | SA | | M |
|-----------------------------------------------------------------------------|----|------|----|------|----|------|----|------|----|------|------|
| | F | % | F | % | F | % | F | % | F | % | |
| Project managers implements the plan agreed upon by stakeholders | 51 | 59.3 | 15 | 17.4 | 10 | 11.6 | 5 | 5.8 | 5 | 5.8 | 1.81 |
| The stakeholders set times lines for project implementation | 6 | 7.0 | 7 | 8.1 | 4 | 4.7 | 16 | 18.6 | 53 | 61.1 | 4.20 |
| The project implementation is controlled by the stakeholders | 8 | 9.3 | 52 | 60.5 | 5 | 5.8 | 17 | 19.8 | 4 | 4.7 | 2.59 |
| The project manager takes corrective action recommended by the stakeholders | 4 | 4.7 | 6 | 7.0 | 0 | 0 | 56 | 65.1 | 20 | 23.3 | 3.95 |
| The stakeholders participate in quality management | 7 | 8.1 | 51 | 59.3 | 4 | 4.7 | 21 | 24.4 | 3 | 3.5 | 2.73 |
| Stakeholders participate in project risk assessment | 4 | 4.7 | 7 | 8.1 | 3 | 3.5 | 16 | 18.6 | 56 | 65.1 | 4.31 |

Participation in Project Monitoring and Evaluation

The fourth objective concentrated on effect of stakeholder participation in project monitoring and evaluation on performance of WASH projects in Embu county. The stakeholders were asked to indicate the extent to which they were involved in project monitoring and evaluation. Findings are presented in Table 4.10

Findings show that 53.4% of the stakeholders were involved in WASH projects monitoring and evaluation to a great extent. This implies that stakeholders play a great role in project monitoring and evaluation which participation ensures project acceptance and ownership whence beneficiary satisfaction. Findings concur with Simister (2015) who found out that stakeholder involvement in M&E ensures superior data is generated quality analysis is performed hence accurate and reliable results on project performance. Stakeholders were also asked to tick on the level to which they agree/disagree with various statements related project monitoring and evaluation. Results are shown in Table 4

Findings show that; stakeholders participate in assessing whether the WASH projects are bringing the intended benefits to community (m=4.50), the project manager prepare periodic progress reports for the stakeholders (m=4.43), the donors provide financial resources in monitoring of the project (m=4.28), there is a committee constituted by community members to monitor WASH projects in my community (m=4.20), and the stakeholders take part in preparation of the work plans (m=3.69). The role of developing a project monitoring and evaluation framework is however limited to the project managers with little input from other stakeholders (m=1.91). The findings infer that the stakeholders help to monitor and evaluate the WASH projects in the area of their jurisdiction or community. Project beneficiaries are mainly interested on the usefulness on the project and monitoring and evaluation would give feedback particularly to the donors. Project sponsors always request for project reports to assess whether their financial resources were put into good use and effective monitoring and evaluation helps to achieve this goal. Findings support Heravia et al. (2015) that stakeholders involvement in project M&E allows for immediate identification of whether the project fulfills its intended goals and objectives. This is important particularly for community projects funded by the government and non-governmental organization which involve huge amounts of financial resources.

Table 4 Project Monitoring and Evaluation and Project Performance

| Statements on Project Monitoring and Evaluation | SD | | D | | N | | A | | SA | | M |
|-----------------------------------------------------------------------------------------------------------------|----|------|---|-----|---|-----|----|------|----|------|------|
| | F | % | F | % | F | % | F | % | F | % | |
| The stakeholders participate in the preparation of the work plans | 11 | 12.8 | 7 | 8.1 | 0 | 0 | 48 | 55.8 | 20 | 23.3 | 3.69 |
| The project manager prepare periodic progress reports for the stakeholders | 3 | 3.5 | 7 | 8.1 | 0 | 0 | 16 | 18.6 | 60 | 69.8 | 4.43 |
| Stakeholders participate in assessing whether the WASH projects are bringing the intended benefits to community | 2 | 2.3 | 2 | 2.3 | 6 | 7.0 | 17 | 19.8 | 59 | 68.6 | 4.50 |
| There is a committee constituted by community members to monitor WASH projects in my community | 7 | 8.1 | 5 | 5.8 | 2 | 2.3 | 22 | 25.6 | 50 | 58.1 | 4.20 |
| The donors provide financial resources in monitoring of the project | 16 | 18.6 | 2 | 2.3 | 0 | 0 | 54 | 62.8 | 16 | 18.6 | 2.28 |
| The stakeholders participated in the development of project monitoring and evaluation framework | 56 | 65.1 | 8 | 9.3 | 3 | 3.5 | 12 | 14.0 | 7 | 8.1 | 1.91 |

Project Performance

In order to measure performance of WASH projects, stakeholders were asked the extent which they agree/disagree with key project performance indicators. Findings are shown in Table 4.12

Findings show that the WASH projects experience delay in delivery ($m=1.91$), they experience budget overrun ($m=1.67$) and meet the expected quality ($m=4.27$). The findings imply that the WASH projects experience budget overruns and time delay. The projects however meet the expected quality which may enhance beneficiary and donor satisfaction.

Project Identification and Project Performance

| Statements Project Performance | SD | | D | | N | | A | | SA | | M |
|-----------------------------------------------|----|------|----|------|---|-----|----|------|----|-----|------|
| | F | % | F | % | F | % | F | % | F | % | |
| WASH projects are delivered on time | 25 | 29.1 | 49 | 57.0 | 4 | 4.7 | 8 | 9.3 | 0 | 0 | 1.91 |
| WASH projects are completed within set budget | 48 | 55.8 | 27 | 31.4 | 0 | 0 | 8 | 9.3 | 3 | 3.5 | 1.67 |
| Expected quality of was projects is achieved | 55 | 64.0 | 14 | 16.3 | 4 | 4.7 | 10 | 11.6 | 3 | 3.5 | 4.27 |

Correlation Analysis

The researcher used the Karl Pearson's coefficient of correlation (r) to establish the correlation between the study variables. The inferential statistics used in this study was Karl Pearson's coefficient of correlation (r). Significance was at less than 0.05 therefore any value with a p value of more than 0.05 was considered insignificant. Correlation results are presented as follows; Findings show; a moderate significant relationship between stakeholder participation in project identification and project performance ($r= 0.349$, p -value=0.002), strong significant relationship between project identification and project performance ($r= 0.644$, p -value=0.000), strong significant relationship between project implementation and project performance ($r= 0.612$, p -value=0.004), and a strong significant relationship between project monitoring and

evaluation and project performance ($r = 0.677$, $p\text{-value} = 0.000$). Findings support with Heravi, Coffey, and Trigunarsyah (2015) that stakeholder participation in project planning, identification, implementation, monitoring and evaluation positively and significantly influence success of community projects in Kenya.

Correlation Coefficients

| Variables | | Project performance | Identification | Planning | Implementation | Monitoring and evaluation |
|---------------------------|----------------------------------------|---------------------|----------------|--------------|----------------|---------------------------|
| Project performance | Pearson Correlation Sig. (2-tailed) | 1 | | | | |
| Identification | Pearson Correlation Sig. (2-tailed) | .349** .002 | 1 | | | |
| Planning | Pearson Correlation Sig. (2-tailed) | .644** .000 | .536 .005 | 1 | | |
| Implementation | Pearson Correlation Sig. (2-tailed) | .612** .004 | .260 .006 | .551 .000 | 1 | |
| Monitoring and evaluation | Pearson Correlation Sig. (2-tailed) | .677** .000 | .561 .000 | .519 .000 | .614 .000 | 1 |

Regression Analysis

Table 4 Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | .799 ^a | .624 | .528 | 0.902 |

Table 5 Analysis of Variance

| Model | Sum of Squares | df | Mean Square | F | Sig. |
|--------------|----------------|----|-------------|-------|------|
| 1 Regression | 22.781 | 4 | 5.516 | 8.174 | .000 |
| Residual | 133.052 | 83 | .813 | | |
| Total | 155.833 | 87 | | | |

Table 6 Regression of Beta Coefficient and Significance Coefficients^a

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|----------------|-----------------------------|------------|---------------------------|-------|-------|
| | B | Std. Error | Beta | | |
| (Constant) | 2.902 | .7622 | | 2.065 | 0.044 |
| Identification | 0.198 | 0.046 | 0.292 | .725 | 0.215 |
| Planning | 0.304 | 0.144 | 0.464 | 4.162 | 0.002 |
| Implementation | 0.276 | 0.088 | 0.318 | 2.165 | 0.032 |
| M&E | 0.412 | 0.064 | 0.611 | 4.668 | 0.000 |

a Dependent variable: performance of WASH projects

A regression analysis was conducted to examine whether a change in the independent variable would predict a change in the dependent variable. The coefficient of determination determines the suitability of statistical model in predicting future results. Table 4.14 presents the Model Summary. Findings show that out of the four variables that were studied, they contribute 62.4% to performance of WASH projects as represented by the adjusted (r^2). This shows that others stakeholder participation practices that were not part of the project scope contribute to 37.6% of performance of WASH projects. This infers that stakeholder participation explains 62.4% of the variations in the performance of WASH Projects in Embu County. An analysis was performed on the relationship between stakeholder participation in project identification, planning, implementation, monitoring and evaluation on project performance. The F-ratio in the ANOVA tests whether the overall regression model is a good fit for the data. The model was significant (p -value = 0.000) at 0.05 hence there is a linear relationship between stakeholder participation in project identification, planning, implementation, monitoring and evaluation and project performance. The F is 8.174 which shows that the model is suitable in testing the relationship between independent and dependent variable

Multiple regression aims at providing better understanding of the relationship between the independent and dependent variables.. Table 4.16 presents the multiple regression.

The regression coefficients ($Y = 2.902 + 0.198X_1 + 0.304X_2 + 0.276X_3 + 0.412X_4$) shows that a unit increase in stakeholder participation in project identification would cause a unit increase in project performance by a factor 0.198, increase in project planning would cause a 0.304 increase in project performance, a unit increase in project implementation would cause a 0.276 increase in performance and a unit increase in project monitoring and evaluation would cause a 0.412 increase in performance of WASH projects. Findings are in agreement with Ileri (2018) who found that changes in stakeholder participation in project identification, planning, implementation, monitoring and evaluation cause significant variations in project performance.

Conclusion

Findings show that project developers involve stakeholders in project identification. Prior to developing WASH projects, key stakeholders are identified and request to assist in identifying the most suitable location of project. During this stage, conflicts may arise as different stakeholders had varying opinion particularly at the community level where everyone would like to have the project initiated in their locality. If these conflicts are not addressed on time then the project may not be sustainable as the team may not collaborate to oversee project success. Stakeholders input on type of project to be initiated is also essential as they more conversant with the locality and may suggest on the most needed WASH project by the community. WASH projects are funded either by the government, donors, health NGOs or in collaboration. Therefore accountability of resources used in such projects is key. Stakeholder involvement in project planning enhances accountability of the funds allocated to the project. The stakeholders since they are locals may suggest on materials and human resource sourcing at fare rates that would help to save on some costs and eventually avoid budgetary overruns.

When stakeholders participate in project implementation, they feel the sense of project ownership and hence provide solutions to any implementation challenge that may arise. The community would also offer free services such as security and other resources since the projects are directed towards community development and hence benefit to the entire community. Key stakeholders are well integrated in project M&E. Effective monitoring and evaluation is critical for maintaining the support of development partners and health non-governmental organizations with key interest in WASH programs. Monitoring reports provides accurate feedback on the

projects implemented and enables the project sponsors to evaluate whether their resources are put into good use.

Recommendations

All projects undertaken by the government or development partners should be implemented based on the needs or expectations of the community. The project scope should also be determined by the local stakeholders particularly the local community. Conflicts between the various stakeholders should also be pointed out before they escalate and solved prior to project implementation. Project developers should also make the project viability and feasibility clear to all stakeholders.

Project developers should clearly specify a framework through which project stakeholders will participate in project planning stage. Adequate resources should also be availed to enable stakeholder participation in project planning. The stakeholders particularly the community members should be sensitized of the importance of actively participating in community development projects. This would encourage more community members to participate in development projects to oversee their successful implementation and community development.

Projects must be well planned, key stakeholders must be identified based on their interest, cost, and attitude, and stakeholder profiling may be carried out by project managers in order to formulate an effective stakeholder management strategy.

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