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ANALYSIS OF STAKEHOLDER INVOLVEMENT AND PROJECT SUSTAINABILITY AT FOOD AND AGRICULTURE ORGANIZATION IN KENYA

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ABSTRACT

FAO projects in Kenya play a crucial role in achievement of the all-important goal of having a Kenya that is free from hunger and malnutrition, where food and agriculture help to improve the living standards of all, especially the poorest, in an economically, socially and environmentally sustainable manner and thus their model must seek to have sustainable self-reliant projects. However, more often than not, the extent to which the projects are able to persist despite the exit of donors, while the beneficiaries reap dividends; appreciate their participation and ownership role in the project remains a challenge that FAO is struggling with. The study therefore established the influence of consultations, collaborative planning and partnerships on project sustainability at Food and Agriculture Organization (FAO) in Kenya. A descriptive research design was adopted and the target population were 156 respondents consisting of field coordinators, project managers, supervisors, assistant project managers, government representatives in the ministry of agriculture and project beneficiaries of sample projects.



Data was collected using a structured questionnaire and analyzed through descriptive and inferential statistics where correlation and multiple regression models were used through Ordinary Least Square estimators. The study findings indicated that an increase in stakeholder consultations as well as partnerships can lead to a significant increase in sustainability of FAO projects. However, collaborative planning is not associated with a significant increase in sustainability of FAO projects. This study recommends FAO project officers to enhance consultation efforts by allocating more towards attitude surveys, open forum meetings with stakeholders, public hearings as well as joint social audit of projects after completion. Additionally, project managers at FAO can enhance partnerships in project given its significant effect on project sustainability. They should foster linkages with like-minded stakeholders in project funding and resource management, joint management of projects and collaborative decision making.

Key Words: *Consultations, Collaborative Planning, Partnerships, Project Sustainability, Food and Agriculture Organization, Kenya*

BACKGROUND OF THE STUDY

In the modern world, organizations can no longer choose if they want to engage with stakeholders or not; the only decision they need to take is when and how successfully to engage (Heravi, Coffey & Trigunarsyah, 2015). Stakeholder involvement is premised on the notion that ‘those groups who can affect or are affected by the achievements of an organization’s purpose’ should be given the opportunity to comment and input into the development of decisions that affect them (Vink, Imada & Zink, 2008). In today’s society, if they are not actively sought out, sooner or later they may demand to be consulted (Meredith, Jack & Mantel, 2000).

Stakeholder involvement occurs when an organization wants to consider the views and involvement of someone or some group in making and implementing a business decision (Heravi *et al.*, 2015). Stakeholder involvement occur when an organization truly wants input from groups that will be affected by the organization’s decision (Vos & Achterkamp, 2006). Aapaoja, Haapasalo and Soderstrom (2013) argue that many of the issues facing development today are complex and require multiple actors in order to solve. The absence of integration of all these stakeholders and shared responsibility in implementation may spoil the project and limit its performance (Luyet, Schlaepfer, Parlange & Buttler, 2012). Involvement of the beneficiaries in projects ensures capacity is enhanced making beneficiaries become better placed in identifying, implementing, monitoring and evaluating of projects (Zuofa, 2014). When stakeholders participate in projects, a number of advantages will be realized. It will allow their capacities to be built and they will be able to identify their own projects in future. This in turn leads to efficiency and sustainability.

When communities are involved in project initiation and implementation, there is the assurance of sustainability subject to some conditions unlike when they have no idea about the project or when it is imposed on them (Ayuso *et al.* 2012). Gitonga (2012) argues that stakeholder involvement impacts on the success of projects. Stakeholders should be involved at the initial stages to up to a point when they are left to manage the project; recognition and conceptualization. Stakeholders should be completely involved when examining and assessing the projects. This will ensure that the stakeholder’s perspectives are considered thus giving them a greater say in planning and managing the evaluation process. There is a direct connection between stakeholder involvement and project sustainability through accountability, trust and transparency (Mosesti, 2010). It has been argued that project sustainability is important in complying with regulations, maintaining community relations, cost and revenue imperatives as well as societal and moral obligations (Silvius, Schipper & Planko, 2012).



Project sustainability is one of the most critical aspects for all grassroots, national and international development agencies such as FAO (Griffiths, 2007). Recent studies have shown that while the trend with implementation of projects is showing significant improvement, the trend with post implementation sustainability is rather disappointing - increasingly, less projects are being sustained (Morfaw, 2014). A project is sustainable if the community/beneficiaries are capable on their own without the assistance of outside development partners, to continue producing results for their benefit for as long as their problem still exists (Ye, 2017). Silvius et al. (2012) documented that project sustainability is a major challenge in many developing countries. Large number of projects implemented at huge costs often tend to experience difficulties with sustainability. This means that huge expenditures are being incurred in implementing projects while communities are deprived of the benefits and return of these investments due to sustainability issues (Pinter et al. 2012).

One of the main drivers of low project sustainability post-handover is not just the technical, financial, institutional, economic, and social factors (Ceptureanu et al. 2018; Chumbula & Massawe, 2018) but the concept of top-down approach being used. This approach believes that the supposed beneficiaries are too ignorant and perhaps primitive to effectively discern and decide what is good and appropriate for them and as such are not expected to set up their own development priorities, rank them and identify the most felt need (Mulwa, 2008). As a result, sustainability as a key component for ensuring that communities owned the supposed project, continued suffering as long as development specialists kept doing things for the people. Hassan et al. (2018) argued that stakeholder involvement in development projects is meant to correct the inadequacies of the top-down approach to community development, hence ensuring project sustainability.

The role FAO plays in achievement of Sustainable Development Goal (SDG) 2 globally cannot be understated. While this organization implements a myriad of agriculture and environmental related projects across the world and in Kenya too, one of the recurring problems it has continuously faced is the problem of project sustainability post-handover (Ye, 2017). Therefore, this study will seek to find out the extent to which stakeholders are involved when FAO is implementing its projects and if so, the effect it has on its sustainability.

STATEMENT OF THE PROBLEM

FAO projects in Kenya play a crucial role in achievement of the all-important goal of having a Kenya that is free from hunger and malnutrition, where food and agriculture help to improve the living standards of all, especially the poorest, in an economically, socially and environmentally sustainable manner and thus their model must seek to have sustainable self-reliant projects (FAO, 2020). This strongly seeks to achieve Sustainable Development Goal (SDG) 2 that aims to achieve "zero hunger". More often than not, the extent to which the projects are able to persist despite the exit of donors, while the beneficiaries reap dividends; appreciate their participation and ownership role in the project remains a challenge that FAO is struggling with (Oino et al. 2015).

Statistics from World Bank reports on Operations Evaluation Department found that only 30% of FAO led agriculture projects studied were classified as "sustained," 29% more were "doubtful," and the remaining (majority at 49%) were "not sustained or unsustainable" (World Bank, 2015). In addition, out of seventeen education projects covered by the same study and a later study by the World Bank, 50% were classified as likely to be sustained, 27% were doubtful, and 16% were unlikely to be sustained, an indication that indeed after handover, most projects suffer from sustainability problems (World Bank, 2015). Apparently, it is project sustainability that makes the difference between success and failure of projects initiated by NGOs (Ceptureanu et al. 2018; Chumbula & Massawe, 2018; Wanyera, 2016).



Given the sustainability challenges in some of the FAO-led projects post ownership-handover, this study seeks to find out the role of stakeholders in the sustainability. This is supported by Frank and Guidero (2012) and Mwangi (2018) who recommend the role of stakeholder involvement in projects delivery.

OBJECTIVES OF THE STUDY

- i. To establish the influence of consultations on project sustainability at Food and Agriculture Organization in Kenya
- ii. To determine the influence of collaborative planning on project sustainability at Food and Agriculture Organization in Kenya
- iii. To examine the influence of partnerships on project sustainability at Food and Agriculture Organization in Kenya
- iv. To determine the moderating effect of public education on the relationship between stakeholder involvement and project sustainability at Food and Agriculture Organization in Kenya

Theoretical FRAMEWORK

The section presented a review of theories which anchored the study. This study was built on Three theories namely, the Rights Based Perspective theory of Public Participation, Participatory Democratic Theory and the Cognitive Engagement Theory. These theories presented a strong perspective of stakeholder involvement from a public policy angle.

Rights Based Perspective theory of Public Participation

This theory presents participation in public policy issues as a right of the beneficiary. According to Hindess and Muetzelfeldt (2000), the proponent of the theory, stakeholders' rights have lately turned out to be an important perception in both rural and town development and political contests across the world. An increase in the perception of the people emerges to be its link to the place and the space, as persons operate as populace of self-governing authority, this authority is at all times distinct in terms of place. Lepofsky and Fraser (2003) argue that, through involvement, people are connected to unreal societies in terms of space, mainly when trying to fulfill the wishes for communal improvement.

Dagnino (2003) argued that addressing issues of society for instance urban poverty; Rights-Based Theory requires the addition of governance and political engagement, ownership and social capital. According to Kabeer (2005), an inclusivity entailing both the opinionated activities and purposes is necessary. The major objective is to come up with a community base setting that allows all the residents irrespective of their societal position, sex, maturity, ethnicity or belief, to contribute effectively and completely in the occasions that towns have to present.

Participatory Democratic Theory

The proponent of this theory was Carole Pateman in the year 1970. The theory indicates the fascination of an opinionated sociology with steady political organization reminiscent of the functionalist theory. The theory presents the bounds of connection among the person and the nation within a social culture. Foremost, the theory points out that ability, expertise and uniqueness of persons are interconnected with forms of administrative arrangement such as involvement. In other language, persons realize to take part by playing a part inside the autonomous systems.

Moreover, the participatory democratic case is a case about autonomy on those modifications that will make our individual collective and political life being independent equally as persons in their own life or persons in the general public. In addition, a consequential participatory democratic theory happens where there is a demand for developing a contributive culture. Lastly, the necessary variations are generally structural. They require restructuring of autocratic



sociopolitical arrangements which slow down participatory practices.

The Cognitive Engagement Theory

The proponents of this theory were Meece *et al.* (1988). The theory posits that contribution relies on the accessibility of information to the citizens and their aspiration to utilize it to connect in a logical way. A rise in the literacy level of the residents is important as it enables them to gain and interpret bigger pieces of information. It is well thought-out that schooling equips the citizens with the ability whilst improving their capability to process further a cost to obtain knowledge, participate to generate a method of marshalling the people. The displeasure of the people with the administration takes place in the form of unlawful contribution for instance remonstrations.

Some of the notable determinants that can be used to expound on this theory includes; interest in politics and political knowledge, education, use of media, approval / displeasure plan. Education is quantified in terms of how high or low; the use of the media if identified using this information is centered around political affairs; opinionated interest in form of incentive to further management activities and the development of strategies, political awareness is if the people realize how the political organization operates; and approval / disapproval policy implies civic stance about the effectiveness of a system to be of significance to the people (O'Brien & Toms, 2008).

EMPIRICAL LITERATURE REVIEW

Kabashome (2008) conducted a study to determine how community participation influences sustainability of Water Supply Projects of Kanungu and Kihhi Town Councils in Kanungu District of Tanzania. The study objective was to analyze the extent of the community participation in problem identification, consultation, involvement, decision-making, project ownership and sustainability. The findings showed that there was only minimal community participation which inevitably leads to low levels of success, questionable ownership and sustainability of the projects.

Waheduzzaman (2010) conducted a study to determine the effect of the participation of people on Bangladesh good governance. The aim of the study was to examine the hindrances to the practice of participation of people in the local administration and to come up with the appropriate means for improving the participation of people in plans for development which can add to quality governance. To get more astute responses for the research questions, the study used a qualitative method. The study found that there are multiple setbacks leading to the people's participation incompetence. Some of the obstacles were lack of awareness and lack of a robust legal system for participation.

Musoke (2011) conducted a study in Uganda to analyze the peoples' participation level and its effect in the implementation of the LGDP II which was development program designed as a successor program to LGDP I that was implemented from October 2000 to June 2003. The LGDP II aimed at contributing to the CAS goal of improving essential services delivery so as to stimulate the development of the economic growth and alleviation of poverty, improve the local administrations Institutional efficiency for sustainable, decentralized service delivery in accordance to the Government decentralization policy. The results showed that the participation of people in the governance and growth discussion was highlighted as a tool for enhancing the ability of the underprivileged in the countryside in pursuit for poverty alleviation and good leadership.

Mary (2009) conducted a study to determine the factors hindering the participation of people in coming up with the development plans for the local administration in Nsangi Sub-County Local administration in Wakiso region of Uganda. The results revealed that where the local residents at the community level are drawn in the classification of projects of



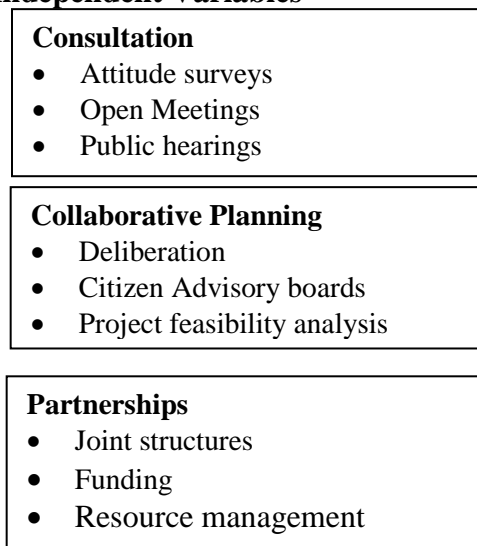
main concern by incorporating their suggestions, they are normally dissatisfied as their much-preferred projects are in most instances not applied and the society in general do not participate in the execution, supervision and assessment of such projects. It also showed that the major test related to community involvement in planning process is late project execution, lack of logistics, the moment for carrying out such meetings together with narrow awareness and polarization of such meetings.

Ngondo (2014) conducted a study to investigate the effect of the participation of the society in project running activities, as a catalyst for the completion of CDF project within the stipulated time in Kanyekini ward in Kirinyaga central. The findings showed that project recipients had not been directly involved in either of the CDF projects operation teams throughout the CDF projects setting and execution, nonetheless, wherever involvement took place, their contribution was factored quite well and that completion limits were achieved to rally round set calendar, financial plan and integrity.

Mupenzi (2010) conducted a study to determine the function of Ubudehe in poverty alleviation in Gatsibo district in Rwanda. The main purpose for the programme was to revitalize and promote communal participation at the village level. The findings showed that even though the longing to significantly engage citizens in society improvement projects, Ubudehe encountered several hindrances due to insufficient funds and hence poverty alleviation is still a subject in consideration amongst citizens in Rwanda.

CONCEPTUAL FRAMEWORK

Independent Variables



Dependent Variable

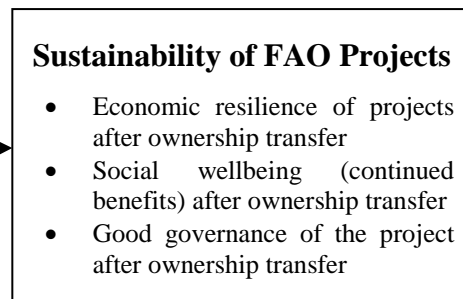


Figure 1: Conceptual Framework



RESEARCH METHODOLOGY

This study employed a descriptive research design. The target population for this study were both internal stakeholders (Field Coordinators, Project Managers, Supervisors and Assistant Project Managers) as well as external stakeholders involved in FAO projects (Government representatives in the ministry of Agriculture and project beneficiaries of sample projects). The total target population broken down per category was as indicated in Table 1.

Table 1: Population of the study

Category	Target Population
Project Field Coordinators	34
Project Managers	5
Supervisors	25
Government Representatives	3
Project Beneficiaries from previous projects	89
Total	156

Source: FAO Kenya (2022)

This study purposively selected targets who were deemed to have the required information regarding project sustainability or stakeholder involvement in FAO projects. To determine the sample size, Yamane (1957) formula was used as shown below.

$$n = \frac{N}{1 + N (\epsilon)^2}$$

Where:

N = Target Population (156)

n = Sample Size

ϵ = Sampling error set at 5%

Therefore, replacing the values in the formula gives,

$$\begin{aligned} n &= \frac{156}{1 + 156 (0.05)^2} \\ &= 112. \end{aligned}$$

The distribution of this sample size was conducted through stratified random sampling procedures. After stratification, the sample was obtained through simple random procedures in each stratum. The study used quantitative primary data collected using structured questions and captured information through a 5-point Likert scale type. Before analysis, data gathered was cleaned by checking for logical consistency and any unnecessary data removed. The quantitative data collected was then analyzed using quantitative methods using descriptive statistics where the responses from the questionnaires were tallied, tabulated and analyzed in percentages, frequencies, mean and standard deviation using Statistical Package for Social Sciences (SPSS V 21). Further, multiple regression analysis was conducted to determine the relationship between variables. The following multiple regression model was used:



$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Where: Y = Sustainability of FAO Projects; X_1 = Consultations; X_2 = Collaborative Planning; X_3 = Public-Private Partnerships; ε = Error term; α = constant; β from 1 ... 3 = coefficient of predictor variables.

RESEARCH FINDINGS AND DISCUSSIONS

Introduction

This study targeted and issued out 112 questionnaires out of the number, a total of 98 questionnaires were well responded to giving a response rate of 88% as shown in Figure 3. This response rate is satisfactory given the argument by Lewis *et al* (2007) that a response rate above 60% is satisfactory to be used in generalizing study findings.

Description of Stakeholder Consultations in FAO Projects

The first objective of the study was to establish the influence of consultations on project sustainability at Food and Agriculture Organization in Kenya. The likert scale rating of the statements on stakeholder consultations as presented in Table 2 indicated that before implementing projects at the community level, FAO conducts an attitude survey to establish the reception of the projects by the local community (Mean = 4.08), conducts open forum meetings with stakeholders to get their opinions (Mean = 4.00) as well as public hearings to establish the reception of the projects by the local community (Mean = 3.92). It was also established that before implementing projects at the community level, FAO visits the areas and the beneficiaries to hear their views regarding the project (4.05) as well as conducts joint social audit of its projects after completion (Mean = 3.89). There was an overall agreement of stakeholder consultations in FAO projects with a small variation in responses (Mean = 3.99; SD = 1.16).

Table 2: Description of Stakeholder Consultations in FAO Projects

Statement	Mean	Standard Deviation
Before implementing projects at the community level, FAO conducts an attitude survey to establish the reception of the projects by the local community	4.08	1.19
Before implementing projects at the community level, FAO conducts open forum meetings with stakeholders to get their opinions	4.00	1.12
Before implementing projects at the community level, FAO conducts public hearings to establish the reception of the projects by the local community	3.92	1.07
Before implementing projects at the community level, FAO visits the areas and the beneficiaries to hear their views regarding the project	4.05	1.21
FAO always for joint social audit of its projects	3.89	1.22
Average	3.99	1.16



Description of Collaborative Planning in FAO Projects

The second objective of the study was to determine the influence of collaborative planning on project sustainability at Food and Agriculture Organization in Kenya. The likert scale rating of the statements on stakeholder collaborations as presented in Table 3 indicated that before implementing projects at the community level, FAO deliberates with its stakeholders on the best delivery approaches (Mean = 3.82), there is space for stakeholders in FAO boards to allow for their inputs (Mean = 3.76) and that FAO involves its stakeholders in project M & E and positively takes their views and recommendations (Mean = 3.87). However, it was noted that before implementing projects at the community level, FAO conducted feasibility analysis in conjunction with stakeholders to a moderate extent (Mean = 3.06). In addition, it was noted that FAO involves its stakeholders in project implementation and positively takes their views and recommendations to a low extent (Mean = 2.49). Overall, the extent of collaborative planning in FAO projects was established to be moderate (Mean = 3.40).

Table 3: Description of Collaborative Planning in FAO Projects

Stakeholder	Mean	Standard Deviation
Before implementing projects at the community level, FAO deliberates with its stakeholders on the best delivery approaches	3.82	1.23
There is space for stakeholders in FAO boards to allow for their inputs	3.76	1.22
Before implementing projects at the community level, FAO conducts feasibility analysis in conjunction with stakeholders	3.06	1.53
FAO involves its stakeholders in project implementation and positively takes their views and recommendations	2.49	1.25
FAO involves its stakeholders in project M & E and positively takes their views and recommendations	3.87	1.04
Average	3.40	1.25

Description of Partnerships in FAO Projects

The third objective of the study was to examine the influence of partnerships on project sustainability at Food and Agriculture Organization in Kenya. The likert scale rating of the statements on stakeholder collaborations as presented in Table 4 indicated that FAO has partnerships with like-minded stakeholders regarding project funding (Mean = 3.78), resource management (Mean = 3.69) and that some projects at FAO are jointly managed with other NGOs and state actors (Mean = 3.70). It was also indicated that FAO is sometimes involved in projects that require collaborative decision making with various agencies (Mean = 3.98) and that some projects at FAO are jointly operated with other NGOs and state actors (Mean = 3.74). Overall, it was established that partnerships in FAO Projects have been established to a high extent (Mean = 3.78).



Table 4: Description of Partnerships in FAO Projects

Statement	Mean	Standard Deviation
FAO has partnerships with like-minded stakeholders regarding project funding	3.78	1.38
FAO has partnerships with like-minded stakeholders regarding resource management	3.69	1.24
Some projects at FAO are jointly managed with other NGOs and state actors	3.70	1.33
FAO is sometimes involved in projects that require collaborative decision making with various agencies	3.98	1.18
Some projects at FAO are jointly operated with other NGOs and state actors	3.74	1.16
Average	3.78	1.26

Sustainability of FAO Projects

The study sought to find out the extent to which FAO projects were sustainable. The likert scale rating of the statements on sustainability of FAO projects (Table 5) indicated that most of the previous FAO projects continue to change the livelihoods of the beneficiaries positively after handing over (Mean = 3.94). However, it was indicated that most of the previous FAO projects continue to deliver economic benefits to beneficiaries to a moderate extent after handing over (Mean = 3.43) and also continue to operate under sustainable plans to a moderate extent after handing over (Mean = 3.46). It was also established that most of the previous FAO projects continue to be well governed and managed to a low extent after handing over (Mean = 2.46) and most of the previous FAO projects continue to adhere to environmental integrity to a moderate extent after handing over (Mean =3.47). Overall, it was established that FAO projects were moderately sustainable.

Table 5: Sustainability of FAO Projects

Statement	Mean	Standard Deviation
Most of the previous FAO projects continue to deliver economic benefits to beneficiaries after handing over	3.43	1.17
Most of the previous FAO projects continue to operate under sustainable plans after handing over	3.46	1.39
Most of the previous FAO projects continue to change the livelihoods of the beneficiaries positively after handing over	3.94	1.23
Most of the previous FAO projects continue to be well governed and managed after handing over	2.46	0.50
Most of the previous FAO projects continue to adhere to environmental integrity after handing over	3.47	1.10
Average	3.35	1.08



Correlation Analysis

Correlation analysis was conducted to find out the nature of the relationship between the main study variables. The results in Table 6 show that all the stakeholder involvement practices have a positive association with sustainability of FAO projects. Specifically, the findings indicated that stakeholder consultations had a positive and significant effect on sustainability of FAO projects ($r = 0.744$; $Sig < 0.05$). This shows that increasing stakeholder consultations is associated with an increase in sustainability of FAO projects. The findings are consistent with that of a study by Kabashome (2008) which showed that community participation in projects through consultations was associated with enhanced sustainability of the projects.

The study also established that collaborative planning had a positive and significant effect on sustainability of FAO projects ($r = 0.595$; $Sig < 0.05$). This shows that increasing collaborative planning is associated with an increase in sustainability of FAO projects. Mary (2009) similarly stated that community involvement enhances the sustainability chances. In regard to partnerships, it was demonstrated that it also has a positive and significant effect on sustainability of FAO projects ($r = 0.877$; $Sig < 0.05$). This implies that increasing partnerships is associated with an increase in sustainability of FAO projects. The findings agree with that of a study by Ngondo (2014) who established that partnerships enhanced information exchange and sustainability of projects.

Furthermore, it was demonstrated that public education had a positive and significant effect on sustainability of FAO projects ($r = 0.715$; $Sig < 0.05$). This shows that increasing public education is associated with an increase in sustainability of FAO projects. The findings are consistent with that of a study by Mupenzi (2010) who established that public education was important in improving stakeholder knowledge which increased their chances of being involved.

Table 6: Correlation Results

		X ₁	X ₂	X ₃	Y
Stakeholder Consultations (X ₁)	Pearson Correlation	1			
Collaborative Planning (X ₂)	Pearson Correlation	.791**	1		
Partnerships (X ₃)	Pearson Correlation	.690**	.512**	1	
	Sig. (2-tailed)	0.000	0.000		
Project Sustainability (Y)	Pearson Correlation	.744**	.595**	.877**	1
	Sig. (2-tailed)	0.000	0.000	0.000	
	N	98	98	98	98

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

Diagnostic Tests

Since the study set about to use a multiple linear regression model in establishing cause-effect, there was a need to test various underlying assumptions of the model. This section covers that.

Normality Test

This assumption states that the dependent variable ought to be normally distributed, in that, it assumes a bell shape as shown in Figure 2 without outliers. Using Kolmogorov Smirnova test (Table 7), it was confirmed that since the Sig (0.786



> 0.05), the data was not different from a normal distribution, implying that, it was normally distributed. The use of a multiple linear regression therefore sufficed.

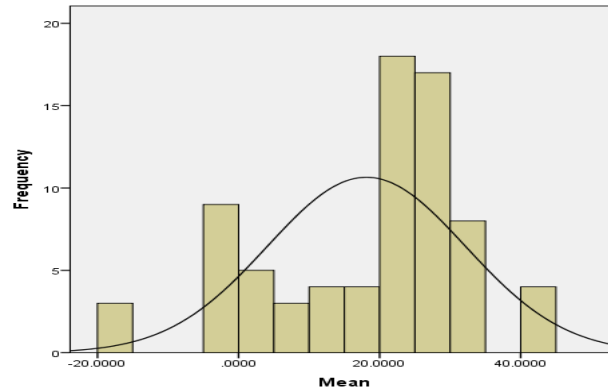


Figure 2: Normality Curve of data on Project Sustainability

Table 7: Normality Test (Kolmogorov Smirnova)

Kolmogorov-Smirnova			Shapiro-Wilk		
Statistic	df	Sig.	Statistic	df	Sig.
1.986	98	0.786	2.168	98	0.982
Lilliefors Significance Correction					

Multicollinearity Test

Multicollinearity happens when the predictor variables are high correlated with a correlation above 0.8. If it happens, it gives spurious results which would lie about the true picture of the relationship. Referring to Table 6 of correlation results, this is not the case. However, this test was confirmed through VIF as shown in Table 8. It is apparent that all the predictor variables demonstrated to have VIF values below 10 to imply that there was no problem of multicollinearity at least based on Smith (2015). The use of multiple regression therefore didn't violate this rule.

Table 8: Multicollinearity test (VIF)

	Tolerance	VIF
Stakeholder Consultations	0.139	7.207
Collaborative Planning	0.358	2.793
Partnerships	0.52	1.923
Public Education	0.176	5.690
Dependent Variable: Sustainability		

Autocorrelation Test

The assumption of autocorrelation was also obeyed by the study. This assumption demands that the error terms of the predictor variables should not show any correlations with each other for fear that it can affect the true nature of the relationships being tested. As shown in Table 9, this test demonstrated absence of autocorrelation since the DW value



laid in the agreed region below 2. The use of a multiple regression model was therefore justified.

Table 9: Test of Autocorrelation (Durbin Watson)

Durbin Watson Value
1.642

Heteroskedasticity Test

This problem is said to exist whenever there is inconsistent variance in the error terms of the independent variables. Its absence is called Homoskedasticity. Using Breusch Pagan test (Table 10), the study demonstrated that the data did not suffer from this condition, that is, $\text{Prob} > \text{Chi}^2 = 0.765 > 0.05$, hence it was all set to use a regression model based on the fact that none of the assumptions would be violated in using it.

Table 10: Heteroskedasticity test (Breusch Pagan)

H₀: Constant Variance	
Chi ² (1)	0.689
Prob > Chi2	0.765

Multiple Regression Analysis

The study used this inferential method to determine the nature of the relationship between stakeholder involvement and sustainability of FAO projects.

Coefficient of Determination

Table 11 gives the results of the model summary which imply that stakeholder involvement in terms of partnerships, collaborative planning and stakeholder consultations could predict up to 80.9% of the variations in sustainability of FAO projects. Other than that, the remaining variation can be predicted by other factors.

Table 11: Regression Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.899	0.809	0.803	0.3521
Predictors: (Constant), Partnerships, Collaborative Planning, Stakeholder Consultations			

Model Fitness

The study also tested whether the regression model linking the variables was significant. As shown in Table 12, it was established that since the F statistic value of 132.412 was significant $\text{Sig} = 0.000 < 0.05$, the model was significant and any conclusions drawn from it, are relevant.



Table 12: ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	49.234	3	16.411	132.412	.000
Residual	11.651	94	0.124		
Total	60.885	97			
Dependent Variable: Sustainability					
Predictors: (Constant), Partnerships, Collaborative Planning, Stakeholder Consultations					

Regression Model Coefficients

The regression model coefficients in Table 13 demonstrates that other factors held constant, stakeholder consultations have a positive and significant effect on sustainability of FAO projects ($\beta = 0.149$; $\text{Sig} < 0.05$). This shows that a unit increase in stakeholder consultations can lead to a significant increase in sustainability of FAO projects by 0.149 units. The study findings agree with that of Waheduzzaman (2010) who showed that community participation in projects through consultations was associated with enhanced sustainability of the projects.

The regression model coefficients result also indicated that other factors held constant, partnerships have a positive and significant effect on sustainability of FAO projects ($\beta = 0.627$; $\text{Sig} < 0.05$). This shows that a unit increase in partnerships can lead to a significant increase in sustainability of FAO projects by 0.627 units. Musoke (2011) similarly established that partnerships were linked with enhanced project sustainability. It was however established that other factors held constant, collaborative planning have a positive but not significant effect on sustainability of FAO projects ($\beta = 0.072$; $\text{Sig} < 0.05$). This shows that collaborative planning is not associated with a significant increase in sustainability of FAO projects. Kugonza and Mukobi (2016) similarly linked collaborative planning to project success.

Table 13: Regression Model Coefficients

	B	Std. Error	Beta	t	Sig.
(Constant)	0.344	0.162		2.115	0.037
Stakeholder Consultations	0.149	0.066	0.197	2.243	0.027
Collaborative Planning	0.072	0.065	0.081	1.096	0.276
Partnerships	0.627	0.056	0.700	11.199	0.000
Dependent Variable: Sustainability of FAO Projects					

CONCLUSIONS

It can be concluded that engaging in consultations through attitude survey to establish the reception of the projects by the local, conducting open forum meetings with stakeholders to get their opinions as well as public hearings to establish the reception of the projects by the local community and visting the areas and the beneficiaries to hear their views regarding the project as well as joint social audit of its projects after completion is associated with higher chances of project sustainability. The study also concludes that establishing partnerships such as engaging like-minded stakeholders regarding project funding, resource management, joint management of projects and collaborative decision making with



various agencies is associated with higher chances of project sustainability.

RECOMMENDATIONS

Given its positive effect, the study recommends FAO project officers to enhance consultation efforts by allocating more towards attitude surveys, open forum meetings with stakeholders, public hearings as well as joint social audit of projects after completion. The study also recommends project managers at FAO to enhance partnerships in project given its significant effect on project sustainability. They should foster linkages with like-minded stakeholders in project funding and resource management, joint management of projects and collaborative decision making.

Another recommendation by the study is the need for project officers at FAO to enhance stakeholder education and awareness creation activities by allocating more resources towards that since it leads to greater stakeholder involvement and project sustainability. This can be done through allocating more resources towards printing detailed information regarding projects through the annual reports, availing information on the status of projects on websites, holding joint workshops to create awareness on projects as well as mutual benchmarking with other organizations.

AUTHOR'S AUTOBIOGRAPHY

Jade Mwaniki is an experienced Business Support with a demonstrated history of working in the non-profit organization management industry. She is skilled in Management and Business Strategy.

AUTHOR CONTRIBUTIONS

Under the supervision of Dr. Christopher Mutembei as the university lecturer, Jade Mwaniki wrote the concept paper, edited and proceeded to write the whole paper. Under the supervisor's guidance, she collected and analyzed data as reflected in the work. Therefore, any grammatical issues are solely hers.

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CONFLICT OF INTEREST DECLARATION

The authors registered no conflict of interest in this study. In addition, the ethical issues; including plagiarism, informed consent, misconduct, data fabrication and (or) falsification, double publication and (or) submission, redundancy has been completely observed by the authors.

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