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Moderation of Institutional Factors on the Relationship between Stakeholders' Management Practice and Sustainability of Ugweri Dairy Project in Embu County, Kenya

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Abstract:
The sustainability of a project is indicated by continuous benefits to the targeted beneficiaries. However, the concept of project sustainability has erroneously been generalized without consideration of the context in which it is built. In addition, projects operate in dynamically unique environments which persuade sustainability decisions and outcomes. The present study sought to achieve two objectives, namely:

- *To determine the influence of stakeholders' management practices on the sustainability of Ugweri Dairy Project in Embu County, and*
- *To examine the moderating influence of institutional factors on the relationship between stakeholders' management practice and the sustainability of Ugweri Dairy Project in Embu County*

The study was anchored by sustainability, institutional, and stakeholders' theory. A descriptive survey research design with a cross-sectional approach was adopted. The targeted population was 152 personnel, including 7 managers and 145 registered dairy farmers. A sample size of 108 was determined using Krejcie and Morgan table for selecting sample sizes given the total population. The 108 respondents were picked through systematic random sampling (101 farmers) and census (7 managers). Narrative and numerical data were collected using interviews and structured questionnaires correspondingly. Statistical Packages for Social Sciences were used in the computation of numerical data. Descriptive statistics, such as percentage, mean, frequency, and standard deviation, were generated from the quantitative data. Also, parametric tests like Pearson correlational analysis and regression analysis were used in the data analysis. Narrative data were coded, and themes and summaries were generated. Hypotheses were tested at a 95% confidence interval using the F-test. Statistical data were summarized in tables. The relationship between stakeholders' management practice and the sustainability of Ugweri Dairy Project was found to be strong and positive (r = 0.77), and management practice predicted a 59% variation in the sustainability of Ugweri Dairy Project (R Square= 0.59). Thus, the null hypotheses were rejected, and it concluded that stakeholders' management practices have a significant relationship with the sustainability of Ugweri Dairy Project. The introduction of institutional factors to stakeholders' management practice caused a 19% variation in the sustainability of Ugweri Dairy Project. The 19% was statistically significant for p equals to 0.00, which is less than 0.05. This led to the rejection of the null hypothesis and concluded that institutional factors moderated the relationship between stakeholders' management practices and the sustainability of Ugweri Dairy Project. Project planners and designers should ensure that stakeholders are continuously engaged while prioritizing their needs and interest and resolving disputes to promote the delivery of sustainable impacts. The findings from the current study provide empirical evidence upon which the government can rely to develop operational guidelines with regard to stakeholder participation while aligning their needs with the development projects. Equally, the government can legislate on establishing a dispute-handling mechanism between stakeholders and project developers while strengthening and stabilizing the environments in which projects operate. Future methodologies should consider triangulation research like multiple data collection instruments for the greater conclusion and generalization of the findings. Potential areas for further study include:
Interaction of stakeholders' management practice with organizational processes and performance and project success, and
Mediation role of institutional factors on stakeholder management and project sustainability

Keywords: *Stakeholder, stakeholders` management practice, institutional factors, sustainability of project*

1. Introduction

1.1. Background

Globally, milk is one of the most valuable and widely consumed foods due to its richness with essential minerals and nutrients for healthy living. The Food and Agriculture Organization underscores the imperative nature of the dairy

sector in promoting food security through value addition in the milk supply chain (FAO & GDP, 2019). The global production of milk in the year 2019 was about 850 Million Tons (Outlook, 2020). The main sources of milk include:

- Cows,
- Goats,
- Sheep, and
- Camels

Health and economic benefits of milk are extensive and vast. The dairy products include:

- Fresh milk,
- Yoghurt,
- Mala,
- Cheese,
- Butter,
- Cream,
- Ghee, and
- Powdered milk

While dairy production levels have rapidly been increasing rapidly, about 20% of the global raw milk is wasted or lost along the value chain (Margaret, Luiza, Bethan & Marie, 2019). This is due to the perishability nature of milk, poor storage, and inefficient transportation means (Habtamu, Ashenafi, Taddese & Berhanu, 2018). Milk is also wasted at the factory level due to system failures and quality control rejects. Wastage of milk not only increases the cost of production and loss of revenue but also weakens the production chain of the commodity. To overcome wastage, many countries and organizations are embarking on value addition of milk along the supply chain through the establishment of milk chilling and processing projects. These value-addition projects are important income-generation ventures not only for farmers but also for the socio-economic well-being of a nation (Habtamu, Ashenafi, Taddese, and Berhanu, 2018). This is due to the ripple effects in employment creation, optimizing income and revenue. Processed milk has higher returns and offers sustainable income to rural small-scale farmers. Thus, the establishment of milk processing projects whereby modern technologies are installed increases the production efficiency of dairy commodities, thus contributing to food and nutrition security (Cronin, Rault & Glatz, 2014).

The dairy sector is one of the largest agricultural contributors to the economic development of Unite States of America (Shahbandeh, 2022). In order to increase profitability in the milk supply chain, the government of the USA is encouraging economies of scale by concentrating dairy farming and milk processing in large-scale farms. This has led to increased milk production output and high efficiencies in the milk value chain. However, Dairy Projects continue to face sustainability challenges, including but not limited to:

- Changing needs,
- Conflicting societal values,
- Difference between industry practice, and
- Perceptions of the public which is resulting in public mistrust (Peterson & Mitloehner, 2021)

Thus, societal issues related to stakeholders' needs and interests are important aspects to investigate regarding the sustainability of dairy sector projects. This is echoed by Gauly and Ammer (2020) that due to the dynamic environment in the production and valued addition of milk, there is a need for greater consideration of the environment that builds it. Stakeholders are part of it.

India is the world's largest milk producer, contributing 20% (FAO, 2022; Outlook, 2020). In striving to sustain leadership in the dairy sector, India is strengthening the productivity of the dairy sector Dairy Entrepreneurship Development Scheme (DEDS) aimed at enhancing milk production, preservation, processing, and marketing through the provision of capital and bankable projects (Parida, Parmar & Misra, 2021). However, India's Dairy Projects continue to face numerous challenges constraining the dairy industry's growth and sustainability. These challenges include disaggregation of stakeholders in the dairy sector, lack of bargaining power in the globalized environment, poor technologies in milk processing, inadequate village chain supplies, poor quality of raw milk, and limited access to organized markets. According to Parida (2019) sustainability of Indian Dairy Projects is hampered by a lack of competitiveness. It implies that institutional and external factors play a critical role in promoting the sustainability and competitiveness of the dairy sector.

In Indonesia and many African countries, dairy processing and cooling projects have continued to face sustainability challenges as evidenced by a low supply of quality milk, lack of capacity to run and operate the plants, machine breakdowns, poor market feasibility, and financial capital (Cronin, Rault & Glatz, 2014), service and maintenance among others. The challenges facing the sustainability of Dairy Projects are linked to poor integration of stakeholders and farmers into the value creation. As a result, farmers have continued to practice traditional ways of milk production and marketing, thus lowering the standards of raw milk. This has negative effects on the sustainability of milk cooling projects since the factories depend on the dairy products from farmers. In achieving this, smallholder farmers in livestock keeping need to intensify their farming practice to contribute to the national aspirations in promoting food security in developing countries. Improvement of milk safety requires efforts and good management practices (Habtamu, Ashenafi, Taddese & Berhanu, 2018). Effective Dairy Projects should provide temporary storage to farmers to ensure that post-harvest losses are reduced, and the value is enhanced.

The Ugandan government has largely invested in various initiatives to enhance the milk value chain from farm production to the market. Still, dairy value chain initiatives are facing challenges related to poor coordination and public

engagement, thus posing threats to the long-term realization of the expected impacts (Wozemba & Nsanja, 2018). This calls for enhanced practice and policies for facilitating a sustainable increase in the productivity of the industry while embracing stakeholders' participation. According to Bindgi and Tondel (2015), Uganda's potential for dairy development remains untapped, and it is only by sustainable dispensation of diary initiatives that the milk value chain can realize beneficial impacts.

It is estimated that about 4 billion liters of milk are produced annually in Kenya (Njeru, 2022). Kenya's Economic Survey of 2022 suggests that the quantity of marketed milk rose by 17.6% from 2020 to 2021 (Kenya National Bureau of Statistics, 2022). The number of dairy cattle is estimated at 5 Million, thus forming the largest contributor to milk production in Kenya (Kenya Dairy Board, 2021). However, the number of dairy goats is about 200,000, whereby 80% are reared in Mount Kenya region (Mbindyo, Gitao & Peter, 2022). This depicts the economic significance of dairy cows and goats in the Mt. Region. For this reason, many milk cooling and processing projects are mushrooming everywhere in the Mt. Kenya region and Kenya in General. The existing milk cooling plants in Kenya include but are not limited to the Mosoriot, Nandi County, Brookside Dairy, Githunguri Dairy, Mt. Kenya Dairy, The New Kenya Cooperative Creameries (KCC). Nevertheless, most factories face operational constraints, as evidenced by under-capacity operations due to low milk supply from farmers (Kudakab, 2017). As a result, many factories have succumbed to laying off staff, closing satellite milk collection centers, and accumulating loans and debts. Despite the expanding dairy production at the farm level, most of the milk cooling plants are just but surviving as dairy farmers broker their milk at throw-away prices. The findings from a study by Kikwatha, Kyalo, Mulwa, and Nyonje (2020) on the interphase of project design characteristics and sustainability of dairy goat-related projects in Tharaka Nithi County, found that design characteristics, namely infrastructure, the capacity of the community, selection of project beneficiary and institutional factors were essential contributors to the sustainability of the dairy goat projects. However, the concept of stakeholder was narrowly explored in that study. In addition, the study by Kikwatha, Kyalo, Mulwa, and Nyonje (2020) was limited to the linear relationship between institutional factors and the sustainability of dairy goat projects. The current study examined the moderation of institutional factors on the sustainability of Ugweri Dairy Project in Embu County, given stakeholder management practice. Ugweri Dairy Project is physically situated in Ugweri town in Embu East Sub-County, Embu County, Kenya.

1.2. Statement of the Problem

The dairy industry contributes up to 14% of Kenya's agricultural Gross Domestic Product (Kenya National Bureau of Statistics, 2022). Whereas the total cost of producing a liter of milk in Embu County is Keya Shilling 35.56 compared to the national average cost of production of Kenya Shilling 27.30 (Kenya Dairy Board, 2021), the profit margins can be furthered through the robust milk value chain. Embu County Government funded Ugweri Dairy Project to contribute to the local growth and development by improving the incomes of milk producers in Embu County. However, a report suggests that the cooling plant is operating below the expected capacities, and very few farmers deliver their milk to the factory (County Government of Embu, 2021). While the cooling plant was expected to increase bargaining power and offer employment opportunities to over 700 dairy farmers, only about 70 farmers are registered members offering continuous milk supply to the factory (Ugweri Dairy Group, 2021). This has increased the cost of maintaining the machines. Additionally, the factory is suffering ownership risk due to the loss of membership by dairy farmers to other dairy factories like Kenya Cooperative Creameries, Kirimiri dairy factory, and Brookside (Bunge Letu, 2019). The dairy farmers are losing the value of their dairy produce to middlemen and brokers as they blame the management of Ugweri Dairy Plant over inconsiderate approaches towards their concerns. The begging question is why farmers opt to sell their milk to middlemen and brokers instead of utilizing the factory they helped to build.

Integration of stakeholders in decision-making is known to promote the sustainability of projects (Ochung & Awiti, 2017). Nevertheless, past studies have explored this concept with limited consideration of the contexts in which projects operate (Muniu, Gakuu & Rambo, 2017). In particular, the dynamic environments in which projects work call for flexible approaches to adapt and deliver. Some related studies used qualitative methodologies to arrive at conclusions that cannot be generalized (Gyan & Ampoma, 2016). Other studies have explored the concept of institutional factors from a linear perspective, thus ignoring the possibility of having multiple and nonlinear relationships (Wamuyu, 2021; Kikwatha, Kyalo, Mulwa & Nyonje, 2021). The contextual, methodological, and conceptual limitations were overcome by using mixed methodologies to investigate the moderating influence of institutional factors on the relationship between stakeholders' management practice and the sustainability of Ugweri Dairy Project in Embu County.

1.3. Research Objectives

The study achieved two objectives, namely:

- To determine how stakeholders' management practice influences the sustainability of Ugweri Dairy Project in Embu County
- To examine the moderation of institutional factors on the relationship between stakeholders' management practice and the sustainability of Ugweri Dairy Project in Embu County

1.4. Research Hypothesis

- H_{01}: there is no significant relationship between stakeholders' management practice and the sustainability of Ugweri Dairy Project in Embu County
- H_{02}: there is significant moderation of institutional factors on the relationship between stakeholders' management practice and sustainability of Ugweri Dairy Project in Embu County

1.5. Literature Review

Sustainability is the concept that ensures that the economy is both responsible and sufficient to meet social needs equitably while protecting the environment (United Nations, 2015). This is to ensure a balance that the needs of the current and future generations are balanced. PMI (2017) describes sustainability as a project's ability to achieve set objectives and produce long-term beneficial impacts to the stakeholder even after completion. However, Fearnside (2016) describes the pillars of project sustainability as organizational or management, financial, and community sustainability. From a development perspective, Morfaw (2014) associates project sustainability with the continuity of economic, social, environmental, institutional, and management benefits and well-being. The questions that arise while answering whether a project is sustainable or not are:

- Whether the project was completed, the goals were met, the implementation was economical, and stakeholders were involved,
- Whether the project survived post-implementation, the project is still operational, impacts are positive or negative,
- Whether stakeholders own the project or not, the project is still expanding, the project is adaptable to the changes in the environment, among other aspects (Marcelino et al., 2015)

This shows the amphibious concept of sustainability.

The application of sustainability elements in project management leads to value creation, organizational agility, operational efficiency, and excellent performance (Toljaga Nikoli'c, 2020). It implies that managers must design and implement projects with sustainability in mind. By integrating sustainability aspects into projects, managers take responsibility by influencing resources and systems toward the desired impacts. This leads to better financial strength, growth projection, ability to meet goals, and profitability (Odenyo & James, 2018). The conceptualization of project sustainability is context-dependent. While Dairy Projects are profit-oriented, an assessment of sustainability cannot be complete without reviewing the purpose of its formulation. This is important because sustainability is supported by the nature of benefits reaching stakeholders (Muniu, Gakuu & Rambo, 2017; Kamau, 2019; Agwu, 2019). Past studies have explored the sustainability of Dairy Projects in Kenyan contexts. However, the results cannot be generalized due to contextual limitations (Kikwatha, Kyalo, Mulwa & Nyonje, 2020), methodological limitations (Omondi, 2016), conceptual limitations (Brandt, Hamunyela, Herold, Bruin & Verbesselt et al., 2018; Polong & Kimutai, 2022). In this study, sustainability was perceived to be manifested by meeting the beneficiary needs, continuous flow of benefits, continuous operation, maintainability, and community support. Mixed methodologies were used to overcome limitations in past related studies. However, the research was contextualized in Embu County.

Poor integration of stakeholders and farmers into the value creation is costing sustainability of many Dairy Projects (Habtamu, Ashenafi, Taddese & Berhanu, 2018; Kyalo, Matu, Mulwa & Mbugua, 2020; Dwivedi & Dwived, 2021; Ngumi & Seselwa, 2021). As a result, farmers have continued to practice traditional ways of milk production and marketing, thus lowering the standards of raw milk. The lack of sustainable impacts to Dairy Projects is dwarfing the positive impacts that can help to grow the sector. Instead, dairy farmers continue using traditional and nonproductive means of meeting their ends. In order to overcome this, smallholder farmers in livestock keeping need to intensify their farming practice to contribute to the national aspirations in promoting food security in developing countries. Improvement of milk safety requires efforts and the practice of good management (PMI, 2017).

Institutional factors are elements like resources, capacities, objectives, rules, and procedures and form the internal part of the project environment (Geuna & Shibayama, 2019). Unlike external factors, which are highly risky, institutional factors are easy to predict and control. Thus, institutional factors can be manipulated effectively to extend the benefits of a project. A study by Wamuyu (2021) on the effects of institutional factors on the performance and success of projects in Postal Corporation, Kenya, revealed that project resources, competencies, rules, procedures, and culture had a significant influence on project effectiveness. While exploring the institutional factors affecting the execution of infrastructure projects in Embu County in Kenya, Gakuu and Musyoki (2018) found that governance, management, and resources have a positive effect on project effectiveness. Nevertheless, past studies consider institutional factors from a linear perspective. Kikwatha, Kyalo, Mulwa, and Nyonje (2021) carried out a study to establish the linkage between institutional factors and the sustainability of dairy goat projects in Tharaka Nithi County, Kenya. While using descriptive and correlational survey designs, structural-functional theory, mixed methodologies, 196 respondents, stratified and purposive sampling, questionnaires, interviews, and focused group discussion, the correlation and regression analysis showed that institutional factors (market, social, and health) had a significant effect on the sustainability of dairy goat project. However, institutional factors were conceived from a linear perspective. Also, the constructs of institutional factors were not elaborate. In overcoming the limitations, the current study examined the moderating influence of institutional factors on the sustainability of Ugweri Dairy Project given stakeholder management practice. The study used elaborate indicators of institutional factors that reflect the project context for greater validity of the findings.

Wamuyu (2021) studied the contribution of institutional factors on project performance in Kenya Postal Corporation. The results revealed that project resources, competencies, rules, procedures, and culture significantly influenced project effectiveness. The study used a descriptive survey, stratified random sampling, 132 respondents, semi-structured questionnaires, and descriptive statistics. However, the study was limited to linear analysis of institutional factors relative to the sustainability of the project. Also, the study failed to use inferential statistics to generalize the findings. The current study examined the moderating influence of institutional factors on the sustainability of Ugweri Dairy Project.

1.6. Theoretical Framework

Stakeholders' theory, institutional theory, and sustainability theory formed the theoretical foundation for the study. Stakeholder theory states that organizations whose stakeholders are treated and viewed as assets create more value by utilizing stakeholders' potential in strengthening project prospects (Freeman, 1984). Stakeholder theory is built on the principle of interdependence between project management and stakeholders' strengths. Stakeholder theory is linked very well with the independent variable (stakeholders' management practice) because it emphasizes effective stakeholder management for impactful results. The institutional theory views the organization as a system that constantly interacts with the external environment. It is the role of the internal environment to develop adaptable mechanisms in response to external forces. Institutional theory is relevant to the study since it is linked with the moderating variable (institutional factor) and lays stresses on adherence to the rules, procedures, culture, schedules, and practice for greater effectiveness of project operations and greater sustainability. Sustainability theory agitates for project management practice that focuses on the stability and adaptability of the project (Ekardt, 2014). Therefore, project decisions must be anchored on a sustainable decision that integrates bearable impacts. Sustainability is linked with the dependent variable as it emphasizes effectiveness in making sustainability decisions in order for projects to have long-term beneficial impacts.

1.7. Conceptual Framework

Figure 1 is the conceptual framework.

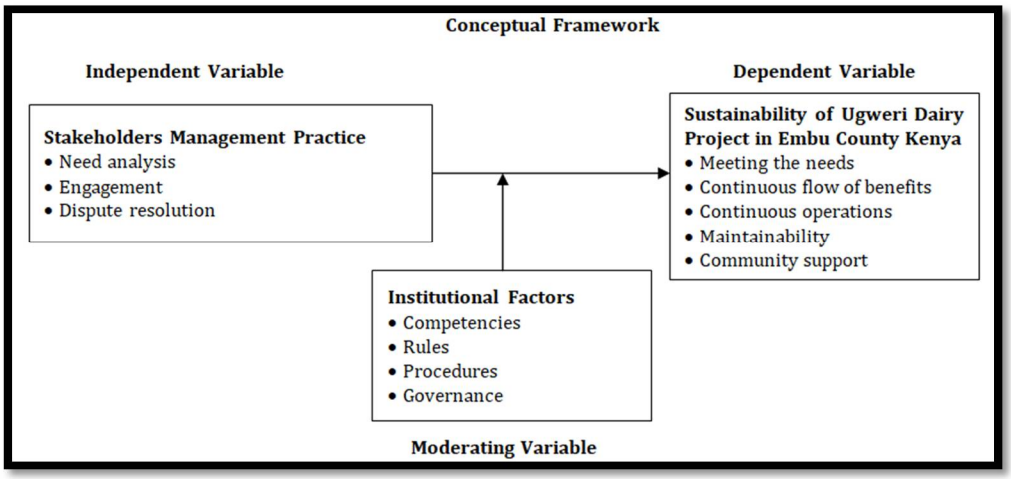

Figure 1: Conceptualization of the Moderation of Institutional Factors on the Relationship between Stakeholders' Management Practice and the Sustainability of Ugweri Dairy Project in Embu County in Kenya

2. Methodology

A descriptive survey research design with a cross-sectional approach was adopted. The targeted population was 152 personnel, including 7 managers and 145 registered dairy farmers. A sample size of 108 was determined using Krejcie and Morgan table for selecting sample sizes for a known population. The 108 respondents were picked through systematic random sampling (101 farmers) and census (7 managers). Narrative and numerical data were collected using interviews and structured questionnaires correspondingly. The reliability of data collection tools was established by the split-half method whereby instruments were first and randomly divided into 2 halves. Correlation between the two halves was conducted using Pearson Correlation Method. The instruments were considered reliable since Cronbach Alpha for α exceeded 0.7. Statistical Packages for Social Sciences version 24 was used to compute numerical data. Descriptive statistics, such as percentage, mean, frequency, and standard deviation, were generated from the quantitative data. Also, parametric tests like Pearson correlational analysis and regression analysis were used in the data analysis. Narrative data were coded, and themes and summaries were generated. Hypotheses were tested at a 95% confidence interval using the F-test.

Research model:

$Y = \beta_{.0.} + \beta_{.1.}(X_{.1}) + \beta_{.5.}(X_{.1.}X_{.2.}) + \varepsilon.$

Whereby,

- Y= Sustainability of Ugweri Dairy Project
- $X_{1.}$ = Stakeholders` Management Practice
- $X_{2.}$ = Institutional factors
- $\beta_{0.}$ = Constant, $\beta_{1.}$, $\beta_{2.}$ are coefficients of determination for $X_{1.}$, $X_{2.}$ accordingly, and ε is the term for error

3. Data Analysis and Findings

The relationship between stakeholders' management practices and the sustainability of Ugweri Dairy Project was established by Pearson's Correlation method, as shown in table 1.

		Stakeholders' Management Practice
Sustainability of Ugweri Dairy Project	Pearson Correlation	0.77
	Sig. (2-tailed)	0.00
	N	94

Table 1: Correlation between Stakeholders' Management Practice and Sustainability of Ugweri Dairy Project

The statistics in table 1 indicate that stakeholders' management practice had a strong positive relationship with the sustainability of Ugweri Dairy Project was strong for a coefficient of correlation r = 0.77 at a 95% confidence interval. Therefore, the null hypothesis was rejected, and concluded the alternate hypothesis that a significant relationship exists between stakeholders' management practices and the sustainability of Ugweri Dairy Project in Embu County, Kenya.

Stakeholders' management practice was regressed against the sustainability of Ugweri Dairy Project, and the regression results are shown in table 2.

Model Summary									
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**	**Change Statistics**				
					R Square Change	**F Change**	**df1**	**df2**	**Sig. F Change**
1	0.77[a]	0.59	0.58	0.18	0.59	130	1	92	0.00

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.53	1	4.53	130	0.00[b]
	Residual	3.20	92	0.04		
	Total	7.72	93			

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.76	0.31		2.49	0.01
	Stakeholders' management practice	0.82	0.07	0.18	11.41	0.00

a. Dependent Variable: Sustainability of Ugweri Dairy Project in Embu County
b. Predictor variables: (Constant), stakeholders` management practice

Table 2: Regression of Stakeholders' Management Practice and Sustainability of Ugweri Dairy Project in Embu County

The statistics shown in table 2 show that stakeholders' management practice had a statistically significant relationship with the sustainability of Ugweri Dairy Project in Embu County at F (1,92) = 130 and for p=0.00<0.05. Stakeholders` management practice predicted a 59% variation in the sustainability of Ugweri Dairy Project in Embu County (for R Square = 0.59). The balance of 41% was due to other factors beyond the model.

The perceived moderator (institutional factors) was introduced to the linear relationship between stakeholders` management practice and the sustainability of Ugweri Dairy Project in Embu County. The results are in table 3.

Model Summary									
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**	**Change Statistics**				
					R Square Change	**F Change**	**df1**	**df2**	**Sig. F Change**
1	0.77[a]	0.59	0.58	0.18	0.59	130	1	92	0.00
2	0.64	0.41	0.64	0.20	0.39	69.0	1	92	0.00

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.53	1	4.53	130	0.00[b]
	Residual	3.20	92	0.04		
	Total	7.72	93			

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.76	0.31		2.49	0.01
	Stakeholders' management practice	0.82	0.07	0.18	11.41	0.00

a. Dependent Variable: Sustainability of Ugweri Dairy Project in Embu County
b. Predictor variables: (Constant), stakeholders' management practice

Table 3: Moderation of Institutional Factors on the Relationship between Stakeholders' Management Practice and Sustainability of Ugweri Dairy Project in Embu County

The data in table 3 shows that when institutional factors are introduced to the relationship between stakeholders` management practice and the sustainability of Ugweri Dairy Project in model 2, the R^2 by 0.19. This implies that the interaction of institutional factors with the stakeholders' management practice resulted in a 19% variation in the sustainability of Ugweri Dairy Project. The 19% is statistically significant for p is equal to 0.00, which is less than 0.05.

The ANOVA results support that the model was statistically significant for F = 69 at p=0.00. Since p=0.00 was far lower than 0.05, the null hypothesis was rejected and concluded that there was significant moderation of institutional factors on the relationship between stakeholders' management practice and the sustainability of Ugweri Dairy Project in Embu County.

The resolved model becomes $Y= 0.76 + 0.82X_1 + 0.19(X_1X_2)$.

4. Discussion of the Findings

Stakeholders' management practices (need analysis, engagement, and dispute resolution) were found to contribute and significantly influence the sustainability of Ugweri Dairy Project. This evidence was built around the descriptive and inferential results after the numerical data. Similarly, project managers attributed sustainability to meeting stakeholders' needs and expectations. This finding is inherent in a previous allied study by Muniu, Gakuu, and Rambo (2017) that integration of stakeholders' concerns in all stages of decisions results in more sustainable projects. Similarly, Kamau (2019) did a study to examine how stakeholders' analysis affected the delivery of projects for CDF in Vihiga County, and the conclusion was that stakeholder analysis influenced project completion. This finding is also consistent with the finding by Agwu (2019) that alignment of stakeholders' needs to organization plans enhances project responsiveness and performance. Moreover, the finding concurs with previous studies by Matu, Kyalo, Mbugua, and Mulwa (2020), Dwivedi and Dwived (2021), and Ngumi and Seselwa (2021) that stakeholder engagement promotes performance, success, and the sustainability of projects. The principle of stakeholder theory that stakeholder engagement must be a dedicated process that promotes collaboration in effective and sustainable decision-making is also upheld in this study. According to Harrison et al. (2012), projects whereby stakeholder participation is integrated with decision-making processes, stand to be responsive in their deliveries. When deliverables are responsive, stakeholders stand to reap gains that satisfy their needs in the long term. The same finding was in line with the responses of the project managers that resolution to disputes enhanced project operations. Whereas unresolved disputes have potentially negative effects on the implementation of the project, effective dispute resolution is empirically claimed to promote productivity and performance (Omondi & Kimutai, 2018; Gyan & Ampomah, 2016). Stakeholder theory lays emphasis on cooperation and collaboration with stakeholders in resolving disputes. Therefore, stakeholder theory supports the findings that effective resolution to stakeholder disputes leads to more sustainable impacts. Accordingly, the finding upholds that sustainability theory dispute resolution smoothens grounds for cooperation toward realizing sustainable impacts. The finding that institutional factors moderates the relationship between stakeholders' management practice and the sustainability of Ugweri Dairy Project in Embu County is a knowledge added to the findings from a study by Wamuyu (2021) and Musyoki and Gakuu (2018) that institutional factors have a linear relationship with project performance and execution. Therefore, sustainability theory, stakeholder theory, and institutional theory defended the findings.

5. Conclusion and Recommendations

5.1. Conclusion

The first objective established the extent to which stakeholders' management practice influences the sustainability of Ugweri Dairy Project in Embu County. According to the findings from both inferential and descriptive statistics, stakeholders' management practice was found to significantly influence the sustainability of Ugweri Dairy Project in Embu County. Thus, it was concluded that stakeholders' management practice is an essential factor to consider while strategizing sustainable project delivery.

The second objective examined the moderation of institutional factors on the relationship between stakeholders' management practice and the sustainability of Ugweri Dairy Project in Embu Count. The results from stepwise regression showed that the interaction between institutional factors and stakeholders' management practice triggered or catalyzed a change in the sustainability of Ugweri Dairy Project in Embu County. It was, thus, concluded that institutional factors moderate the relationship between stakeholders' management practices and the sustainability of Ugweri Dairy Project in Embu County.

5.2. Recommendations

Project managers can gain greater benefits in stakeholder management by considering the institutional factors that regulate the practice of engaging stakeholders. Achievement of sustainable project impacts should be structured along the gains that meet stakeholders' needs and project context. The findings from the current study provide empirical evidence upon which the government can develop operational guidelines on stakeholder participation in development discourses. In particular, the government can institute measures for aligning the needs of the public with the development goals through stakeholders' need analysis. This process can further be strengthened by setting up operational rules for engaging stakeholders in all stages of project development.

5.3. Suggestions for Further Study

Future studies can advance the findings from the present study by exploring the following areas:

- Interaction of stakeholders' management practices with organization processes performance and project sustainability
- Mediation role of institutional factors on stakeholder management and project sustainability
- Institutional factors, stakeholders' management, and project performance and success

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