

## Effects of Institutional Characteristics on the Performance of Climate Change Adaptation Projects in Kenya

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### ABSTRACT

#### Keywords

*Institutional Characteristics*

*Climate Change*

*Adaptation*

*Project Performance*

Climate change poses a major threat to Kenya's socioeconomic development, particularly in sectors like agriculture. Consequently, a number of climate change adaptation projects have been implemented across the country. However, these efforts have not shown results community impact. The objective of this study was to establish the effect of institutional characteristics on the performance of climate change adaptation projects in Kenya. Both quantitative and qualitative methods were used to analyze data. The target population was climate change adaptation projects in Marsabit and Isiolo, counties, Kenya, with a total of 2,021

target population. Using Slovin's Formula, a sample of 334 respondents was derived. Data collection tools included interviews with key informants, questionnaires for beneficiaries, and field observations. Data was analyzed using SPSS and Microsoft Excel. A positive correlation was found between stakeholder participation and project performance, (correlation = 0.531, p=0.000). The regression analysis indicated a statistically significant effect (F = 97.929, p = 0.000) with a coefficient  $B1 = .199$ , which suggests that institutional characteristics positively influences project performance. The study concludes that sound institutional characteristics is a critical factor in enhancing performance of climate change adaptation projects. It recommends cultivation of transformative leadership styles, adoption of project implementation structures with clear flow of command, and use communication technology in implementation of the projects.

#### Introduction

The institutionalization of strategy is a step in its implementation. This is the process of aligning a strategy with an organization's institutions. According to Palmer D. & Biggart M. (2005), organization's institutions can be described as the internal systems of an organization. An organization's institutions include, but are not limited to, its leadership, organizational structure, culture, procedures, operational

support systems, and policies. These are elements that are inherent in an organization and they vary from one organizational to another (Robinson L. W. & Berkes F., 2010). Different organizations implement various strategies that are thought appropriate to help them realize the goals and objectives they have been given. In cases where this is not so, organizations should adjust the institutional factors to support the strategies.

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Leadership roles are vital for implementing strategies since they have authority and responsibility. The persons in those jobs are also important. An important quality for those in positions of leadership is the capacity to persuade others to act in a particular way through collaboration or team spirit, and a person's personality, style, dedication, reputation, attitude, aptitude, talents and experiences all contribute to this effect (Pearce J. A. & Robinson R. B., 2007). Implementing a strategy typically necessitates deviations from the usual (Thompson et al., 2015). As a result, the leadership of an organization, starting with the Chief Executive Officer (CEO) and senior management, should set a clear course through initiative, inspiration, and motivation in order to lead an organization to make the necessary changes for strategy implementation. Instead of conservative leaders, transformational leaders may be better suited for implementing a strategy (Mgqibi, 2019).

The structure of an organization informs of the tasks and responsibilities in the organization and their interrelationships. The structure therefore should be able to support a strategy being implemented for it to be successful. In addition, not all forms of organization structures are supportive in implementing a given strategy. According to Thompson et al (2015), every strategy has a unique set of essential success determinants referred to as Key Success Factors (KSF) and value chain activities, so it is appropriate to have a customized organizational structure. Thus, consideration should be made by the organization to either change the structure to accommodate the said strategy, to change the strategy altogether to fit it in the existing structure, or to change both the structure and the strategy simultaneously. If this is not done, then problems are expected to be experienced in the implementation of the strategy due to disorder, friction, malperformance and malfunctions.

There are many routine tasks performed in a company to ensure efficient operations. How well these basic tasks are completed has a big impact on how well an organization performs. It is crucial to remember that everyday tasks performed within an organization also have an impact on whether a strategy is implemented successfully or unsuccessfully (David & David, 2016). The effectiveness and efficiency of the support systems in place are linked to the efficiency and effectiveness of routine tasks and Information Communications Technology

(ICT) is a critical support system in an organization (Nureni Y., 2014). An organization needs to be informed of technological developments that could affect its industry in order to prevent obsolescence and foster innovation (Pearce & Robinson, 2007).

ICT is not merely a tool but an institutional characteristic that can determine the adaptability and success of projects in dynamic environments. Adoption and integration of ICT within project frameworks are necessary for achieving efficiency and scalability, particularly in sectors like climate change adaptation, infrastructure development, and humanitarian projects (Nureni, 2014).

Institutional characteristics elements cannot be ignored since they have an impact on implementation of strategies and projects in organizations, and this is attested across the world. Ahmady G. A., Gholam A., Mehrpour M., and Nikooravesh A. (2016) in a study brought out the significance of various organizational structures used by various organizations, and the effect they have on the performance of the organizations. A study by Raziq M. M., Borini F. M., Malik O. F., Ahmad M. and Shabaz M. (2018) showed that found that project performance tends to improve when leaders use the contingent reward aspect of transactional leadership, while it declines when the active management-by-exception approach is applied.

Regionally, institutional characteristics such as leadership had been found to affect implementation of strategies, which ultimately had an effect on organizational performance (Gasela, 2021), in a study on strategy implementation South African Northern Cape public entities. Leadership and organizational structure were also identified as having an impact on the ability of municipalities in addressing climate change in Durban region, South Africa (Roberts D., 2010).

Locally, institutional characteristics were noted to have an effect on implementation of strategies and consequently, the performance of an organization. A case of Red Cross Kenya revealed that strategy operationalization, organizational structure, and strategy communication had an effect on the extent to which the NGO was able to achieve its objectives (Machoka, 2019). Further, the leadership of the organization played a role on the success of implementation of the Country Programs. Usage of Information and Communications Technology (ICT) in implementing projects locally had also been established to have a positive impact on

the success of the projects (Mwangi E. N., 2015)  
Statement of the Problem

Kenya's socioeconomic development is seriously threatened by climate change, especially in areas like agriculture, water resources, and health (GoK, 2010). As a result, several climate change adaptation initiatives have been launched nationwide, frequently with backing from both local and foreign partners (National Irrigation Authority, 2025; Safaricom, 2023). Nevertheless, the effectiveness, sustainability, and community impact of these efforts has not been felt (OCHA, 2022; Reliefweb, 2022). Technical, environmental, and financial issues have been the subject of most studies on project performance, and there has been little concentration on how institutional traits affect the results of these adaptation efforts.

Project performance is seen to be influenced by institutional elements such as leadership styles, project implementation structures and use of communication technology. Project underperformance has frequently been attributed to a combination of bureaucratic inefficiencies, implementation team conflicts, and weak institutional frameworks. Consequently, this study aims to establish the effect of institutional characteristics on the performance of climate change adaptation projects in Kenya.

*Research Objective:* To examine the effect of institutional characteristics on the performance of climate change adaptation projects in Kenya.

*Research Hypothesis:* Ho: Institutional characteristics has no significant effect on the performance of climate change adaptation projects in Kenya.

## Literature Review

### *Theoretical Framework*

This study is anchored on the Institutional Theory. The theory was developed by John Meyer and Brian Rowan in the late 1970s (Meyer J. W. & Rowan B., 1977), as a way to look into how organizations fit into, relate to, and were molded by their social, political, economic, and environmental contexts. According to this theory, the processes via which organizational structures, organizational culture, rules and regulations, norms and routines, and so on, get to be established as authoritative standards for social behavior. This theory provides a framework for comprehending how organizations maneuver around in-

ternal processes, social structures, and laws of governance in order to exist.

The elements that organizations deal with include external influences including cultural differences, regulatory constraints, expectations from suppliers, and customer demands. Therefore, in order for organizations to survive, they must be able to adapt to the ongoing changes in their environment. Nevertheless, institutional theory has been criticized due to its static nature such as the use of "institutionalization" notion, describing institutional structures, and generating better institutional explanations (Mohamed I. A. H., 2017).

Silva L. C., Macedo I. M., and Thompson M. (2024) tested institutional theory through a study that critically evaluated the contributions made to institutional theory by Douglass North and Ha-Joon Chang, while highlighting the theory's usefulness in tackling the socioeconomic and institutional issues that the globe was currently facing. The study established that use of institutional theories had proven to be relevant and were necessary in the public administration domain to address the challenges posed by modern phenomena like the COVID-19 pandemic, the long-term effects of climate change worldwide, and the recent conflict between Russia and Ukraine.

This theory enabled the researcher to understand the institutional characteristics of the funding organizations and the project implementers, such as the effect of organizational structure on communication and information flow which was crucial in implementation of the projects under study. Leadership approaches embraced by the implementers of the projects were expected to have an impact on the performance of these projects. The choice and use of communication technology in implementation of the projects would be of essence as well.

### *Empirical Framework*

Leadership is widely recognized as a critical factor influencing project outcomes. Emphasis on the role of transformational leadership was made by Fareed, Su and Aslam (2023) by noting that transformational leadership significantly improved project performance by fostering psychological empowerment among team members. This empowerment, marked by increased confidence, autonomy, and a sense of purpose, acted as a partial mediator, suggesting that effective leadership not only sets direction but also

activates internal team drivers crucial to achieving project goals.

Transformational leadership styles have a tendency to lead to better team collaboration, more successful projects, and more efficient project execution. On the other hand, the study noted that transactional and laissez-faire leadership philosophies have little to no effect on important performance metrics. These results demonstrate how important human and relational factors are in enhancing project management's structural and technology elements (Thoha N and Avandana N. W., 2020).

Literature analysis by Jabbar A. A. & Hussein A. M. (2017) noted that leaders who were accountable ensured that the management process was effective by providing the framework for a well-thought-out strategy plan and by providing a vision that directed the organization's formulation of strategy, and ultimately accomplishment of the strategies.

Gasela (2021) established in a study that the implementation of strategies and organizational performance were negatively impacted by ineffective leadership alongside inadequate financial and human resources. The study noted that most organizations struggled with leadership capacity, while others had weak Boards, which made it difficult to implement strategies.

Management commitment significantly influenced how well a strategy was implemented at KRA, with management demonstrating this commitment through management stability, direction, and stewardship, victories, instilling self-confidence and autonomy, adding value to the resource management process, aligning and allocating resources, decision-making, and flexible controls (Nyong'a T. M. and Maina R., 2019).

Lasrado F. and Kassem R. (2020) opined that when fostered in a culture of involvement/ adaptation, transformational leadership had a direct impact on an organization's financial performance and could optimize performance excellence. Organizational excellence could be attained by embracing a more thorough application of the transformational leadership style.

Strong intra-team knowledge sharing, cohesiveness, and mutual trust are present, shared leadership, where team members collaboratively influence and advise one another—significantly improves project performance. The quality of interpersonal pro-

cesses inside the team had a significant impact on the efficacy of shared leadership, rather than only being structural (Imam H. and Zaheer M. K., 2021).

The structure of project implementation is a critical determinant of project success, as it defines roles, responsibilities, communication pathways, and decision-making authority. Sarhan S. and Dulaimi M. (2022) gave compelling evidence on the negative impact of unplanned changes to project organizational structures during the execution phase. Focusing on construction projects in the United Arab Emirates (UAE), the study demonstrates that such changes often result in role ambiguity, disrupted communication, and reduced team effectiveness, all of which contribute to poor project performance. High-level centralization was considered detrimental to project management and success since it negatively impacted project success and knowledge exchange, (Raziq et al., 2020).

A study discussed the functional structure, projectized structure, also known as pure project organization, the matrix structure, or hybrid structure, which combines projectized and functionalized structures and aimed to tap on the advantages presented by both types of structures, and lastly the mixed organizational structure. This study was undertaken How Organizational Structures affect Project Outcomes, with an aim of understanding the various organizational structures used in project implementation and their impact on implementation of the projects.

Selection of appropriate organizational structure contributed to management of projects with ease, resulting in customer and organizational satisfaction and the elimination of waste because of proper resource management (George C., 2020). Some conflicts that occurred in project environments would not occur if a suitable organizational structure was selected. Shah Nizam O. (2017) noted that a well defined and properly aligned organizational structure makes it easier to communicate, make decisions, and allocate resources, all of which are essential for accomplishing project objectives including cost effectiveness, on-time delivery, and high-quality results.

Iroha, E. V., Watanabe, T., & Satoshi, T. (2024), highlighted that systemic institutional challenges such as corruption, political interference, and weak governance, significantly undermined the role and authority of project managers. This often compro-

mised the effectiveness of formal project implementation structures in place.

Use of digital communication technologies were noted to improve project performance. In addition, it was noted that digital tools that are easy to use were more likely to be used effectively, which improves project outcomes. The support of top management also contributed, albeit at a minimal percentage, suggesting that leadership endorsement promotes the uptake and efficient application of communication technologies (Afridi K., Turi, J. A., Zaufishan, B., and Rosak-Szyrocka, J., 2023).

Megha A. K. and Zaware N. (2019), argue that the mere adoption of technology was insufficient; rather, alignment between ICT initiatives and organizational goals was essential to realizing performance gains. The study reinforced the view that technology was not a stand-alone solution but a component that must be integrated into the broader organizational system to drive performance improvement.

Joshi R. R. (2021) noted that use of software application could facilitate and speed up decision-making because they provided instant access to information, easy identification and rectification of errors and cut down on time spent on repetitive tasks. Further, a variety of cutting-edge technologies and tools, including Gantt, Microsoft Project, and Primavera, which could be utilized for planning, implementation, monitoring, control, and risk management as applicable. Meetings could be held via tele and video conferencing, storing and sharing of working documents through cloud and shared devices often improved communication between teams and clients.

Krell N. T., Giroux S. A., Guldo Z., Hannah C., Lopus S. E., Caylor K. K., & Evans T. P. (2020) opined that mobile phones was a form of technology use that created an avenue for dissemination and access to information and when used effectively could impact on productivity. Kenyan farmers' had a tendency to use mobile services for purchasing and selling goods, receiving notifications regarding agricultural or livestock activities, and getting information on agriculture and livestock.

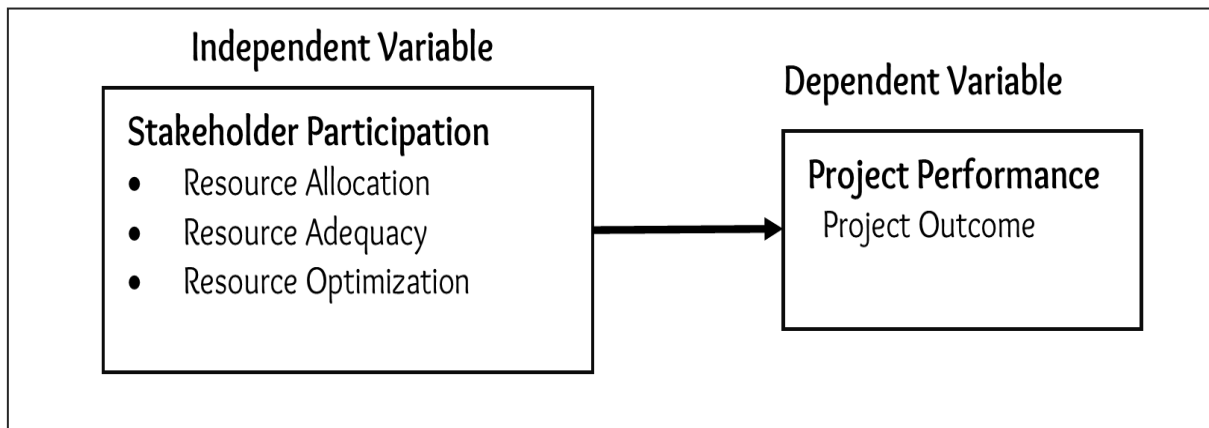
In contemporary project management, the utilization of ICT was becoming increasingly critical for enhancing project performance. As noted by Eliwa, H. K., Jelodar, M. B., and Poshdar, M. (2022), argued that ICT integration within construction organizations led to improvements in communication, coordination,

and real-time decision-making, thereby positively impacting project execution and outcomes. Effective use of ICT tools, such as project management software, mobile applications, and data-sharing platforms, ensured better information flow and enabled seamless collaboration among various stakeholders, including contractors, clients, and suppliers, which reduced delays, enhanced resource allocation, and improved overall project management.

Sahamir, S. R., Ismail, N. A. A., Rooshdi, R. R. R. M., and Zainordin, Z. M. (2021) highlighted barriers including organizational resistance to change, high costs of implementation and insufficient technical expertise that impeded the widespread use of ICT within the construction industry. Korunovska J and Spiekermann S. (2021) noted that while ICT could enhance connectivity and streamline communication, its excessive use could lead to user fatigue, reduced cognitive energy, and a decline in overall productivity.

Institutional characteristics are the essential traits, organizational frameworks, and operational dynamics that characterize an institution and impact its operations, decision-making, and interactions with the outside world. Three sub-constructs viz leadership style, project implementation structure and use of communication technology were identified through literature review for this study as indicators of institutional characteristics. Leadership style influences project performance through coordinating, directing, supervising, empowering and inspiring the project implementation team towards effective implementation of the projects. Some leadership styles enhance project performance, while other styles cause poor performance of projects.

The project implementation structure gives a clear guidance to the team on the flow of command and roles to be played by each team member in the implementation process. A structure that clearly gives a direction on flow of command ends up supporting project performance, and vice versa. Communication technology is used by the all the players in the projects implementation to ensure timely and effective passing of information, generation and sharing of reports and documents, holding meetings, exchanging of ideas and receiving of feedback during implementation of the projects. Use of communication technology has been noted to enhance project performance.



## Conceptual Framework

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## Research Methodology

In order to provide both numerical accuracy and a more thorough understanding of the experiences of the respondents, this study employed a mixed-methods

approach, integrating quantitative and qualitative methodologies. While the qualitative approach investigated non-numerical data to comprehend respondents' perspectives, the quantitative design concentrated on measurement through numerical data. The status, impacts, and results of the climate change adaptation efforts were examined using both descriptive and inferential statistical methods initiatives (Leavy, 2017).

### Target Population

The study focused on the people who implemented and benefit from climate change adaptation projects in ASAL regions. Community beneficiaries, identified through local administrators were considered beneficiaries, while implementers included government ministries, project officers, and expert participants were considered implementers. The Integrated Phase Classification (IPC), which classifies food emergencies, was used to classify the study population. The counties of Marsabit and Isiolo, shown to be significantly impacted by climate change, were the focus of the study impacts (FEWS NET, 2022; IPC, 2022)

### Sample Size and Sampling Techniques

The sample was chosen using a combination of simple random selection using Slovin's formula (Ellen, 2020) and purposive sampling for key informants (KIs). With 2,021 total population, 334 respondents made up the sample size. Project chairpersons provided beneficiary lists from which respondents were selected randomly. The sample size in this study was determined using Slovin's Formula:

$$n = \frac{N}{1 + Ne^2}$$

Where:

$n$  = sample size

$N$  = total population (2,021)

$e$  = margin of error (0.05)

While maintaining a specified level of confidence, this formula guarantees that the sample is sizable enough to accurately represent the population. By using it, a sample size of 334 was obtained, which is adequate for trustworthy statistical analysis.

#### Data Collection Tools

Questionnaires and interviews were used to collect primary data in order to evaluate the impact of institutional characteristics on project performance. In addition, observations provided further information on the performance of the projects.

#### Data Processing and Analysis

Descriptive statistics (mean, standard deviation) were used to process quantitative data using Excel and SPSS. The relationship between project performance (dependent variable) and institutional characteristics (independent variable) was assessed using statistical regression using the model:

$$Y = B_0 + B_1X_1 + E$$

Where  $Y$  represents project performance,  $X_1$  is institutional characteristics, and  $B_i$  is the regression coefficient.

#### Ethical Considerations

The National Commission for Science, Technology, and Innovation (NACOSTI) (license number: NACOSTI/P/24/414768) and the Meru University Institutional Research and Ethics Review Committee (MIRERC) (permission number: MIRERC 051/2024) provided their ethical approval. The goals of the study were explained to the participants, and confidentiality was maintained at all times of research process.

## Results and Discussions

### Descriptive Analysis

The items on institutional characteristics had a mean score range from 4.00, that the PIs did not allow the participation of beneficiary representatives in decision making during implementation of the project, to 2.05, that the technology used in implementation of the project was user friendly to the beneficiaries. The standard deviation of all items on institutional characteristics was low, from 1.12 on the item that the technology used in implementation of the project was user friendly, to 1.82, on the item that a single person (senior leader) was responsible for implementation of the project. The dispersion of the responses was thus low, meaning that most of the respondents had the same opinion about the implementation of the projects.

41% of the interviewed Key Informants (KIs) indicated that they used autocratic style of leadership, while 37% indicated that they used bureaucratic style. These two leadership styles are dictatorial and do not give room for integration of beneficiaries ideas. 15% used democratic style and only 7% used coaching, which allowed integration of inputs from beneficiaries, and their participation in implementation of the projects. The major challenge experienced by the Project Implementers (PIs) during implementation of the project was stand-offs with the beneficiaries. This was resolved through use of intermediaries mainly the local administration.

53% of the KIs interviewed indicated that they employed project-based implementation structure, where a lead implementer had the formal authority of the implementation of the projects. 27% adopted matrix structure, which allowed knowledge sharing by implementers, and participation of stakeholders as need be. Only 20% indicated that they used functional structure, which allowed experts to focus on their areas of expertise during implementation. The major challenge experienced was disagreements between the different PIs due to conflicting views and approaches. This was resolved by allowing the experts to focus on their areas of expertise, as well as involvement of intermediaries who included county and government leadership.

All the KIs interviewed indicated that they used mobile phone calls, e-mails, social media, and video conferencing technologies for their communication with donors and amongst themselves during imple-

mentation of the project. There was 0% indication that artificial intelligence was used during implementation of any of the projects. The KIs indicated that they experienced a challenge of communication with the beneficiaries due to their lack of exposure to technology, as well as technical challenges such as lack of power installation to the communities. This challenge was resolved by use of emissaries and spokespeople in passing information to the beneficiaries. Chief barazas were also used as a communication forum.

83% of the beneficiaries indicated that they used mobile phone calls for their communication during implementation of the project. However, they indicated that they experienced challenges in the use of the mobile phones due to poor network coverage, lack of power installations to the homesteads and lack of airtime.

The research sought to know the views of the beneficiaries towards institutional characteristics factors on the implementation of the projects through open-ended questions. From the data collected, 38% of the beneficiaries indicated that there were conflicts between the PIs and the communities due to their approach in implementing the projects, ranging from poor leadership and lack of clear direction. 32% indicated that the PIs did not integrate well with the community, hence there was a gap which caused the beneficiaries to have poor interest in the projects. Likewise, 16% respondents indicated that the PIs did not involve the community in the implementation of the project. Only a handful, 8%,

felt the PIs led implementation of the projects in a good manner.

Observation of the project sites deduced feelings of dissatisfaction from the beneficiaries, towards the implemented projects. These feelings arose due to the leadership from the PIs, which lacked integration of the communities in the implementation of the projects and the flow of command was not inclusive. Comments such as "Implementation of an irrigation project was not our choice, but it was forced unto us, since we had lost all our livestock to the drought", were expressed. The research also observed that there was no electricity connectivity to majority of the communities. Very few homesteads had solar power connections. This was an indication that use of communication technology was likely to be a challenge in these communities.

#### *Inferential Statistics*

**Table 1** shows the correlation between institutional characteristics had a coefficient of correlation of 0.531, and a significance of .000. There was a fair positive correlation between institutional characteristics and project performance at <0.01 level of significance. This implies that institutional characteristics fairly impacted project performance.

The Adjusted R Squared is 0.279, which implies that the variability in institutional characteristics explains 27.9% of the variability in project performance. Thus, institutional characteristics alone has a poor effect in explaining project performance.

		<b>Institutional Characteristics</b>	<b>Project performance</b>
<b>Institutional Characteristics</b>	<b>Pearson Correlation</b>	<b>1</b>	<b>.531**</b>
	<b>Sig. (2-tailed)</b>		<b>.000</b>
	<b>N</b>	<b>252</b>	<b>252</b>
<b>Project performance</b>	<b>Pearson Correlation</b>	<b>.531**</b>	<b>1</b>
	<b>Sig. (2-tailed)</b>	<b>.000</b>	
	<b>N</b>	<b>252</b>	<b>252</b>

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

**Table 1:** Correlations for Institutional Characteristics

Source: Research Data (2025)



Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.531 <sup>a</sup>	.281	.279	12.70623

a. Predictors: (Constant), Institutional Characteristics

Table 2: Model Summary for Institutional Characteristics

Source: Research Data (2025)

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	15810.390	1	15810.390	97.929	.000 <sup>b</sup>
	Residual	40362.039	250	161.448		
	Total	56172.429	251			

a. Dependent Variable: Project performance

b. Predictors: (Constant), Institutional Characteristics

Table 3: Analysis of Variance for Institutional Characteristics

ANOVA

#### Coefficients<sup>a</sup>

Model		Unstandardized		Standardized		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	-6.409	4.613		-1.389	.166
	Institutional Characteristics	1.199	.121	.531	9.896	.000

a. Dependent Variable: Project performance

Table 4: Coefficients for Stakeholder Participation

Source: Research Data (2025)

The regression analysis results from Table 4 confirm the strength of the relationship between institutional characteristics and project performance. The simple linear regression model is  $Y = -6.409 + 1.199X_1$ . This shows a perfect relationship between institutional characteristics and project performance in such a way that an increase in institutional characteristics by 1 unit leads to a corresponding increase in project performance by 1.199.

## Hypothesis

The hypothesis tested was that institutional characteristics has no significant effect on the performance of climate change adaptation projects in Kenya. The results confirmed that institutional characteristics had a substantial impact on project performance ( $p < 0.05$ ), leading to the rejection of the null hypothesis. The construct founded on the Institutional Theory, agreed with the theory stipulations that organizations deal with internal processes (such as organizational structures, rules and regulations, norms and routines) as well as external influences (such as cultural differences, customer demands), and thus must learn how to maneuver and adapt to these situations in order to survive.

In addition, (Eliwa et al., 2022; Fareed et al., 2023; Gasela, 2021; Jabbar & Hussein, 2017; Lasrado & Kassem, 2020; Nureni, 2014; Nyong'a & Maina, 2019) in their various studies confirmed that leadership was an institutional characteristic that influenced the performance of organizations either negatively or positively. (George, 2020; Korunovska & Spiekermann, 2021; Raziq et al., 2020; Roberts, 2010; Sarhan & Dulaimi, 2022; Shah Nizam, 2017) confirmed through their studies that structures, whether organizational or project greatly affected the outcome of strategy or project implementation. Use of communication technology was deemed to influence as well as have an impact on the implementation and management of projects, as opined by (Afridi et al., 2023; Joshi, 2021; Krell et al., 2020; Megha & Zaware, 2019; Mwangi, 2015) through their various studies on use and impact of communication technology.

## Conclusions and Recommendations

### Conclusions

The study established that institutional characteristics had a significant positive impact on the perfor-

mance of climate change adaptation projects. The research confirmed that climate change adaptation projects which applied sound institutional characteristics had the prospects of improving their performance. In this respect, climate change adaptation projects that used coaching and democratic styles of leadership had a high performance rate than those that used autocratic and bureaucratic styles. Likewise, those that had a matrix project implementation structure had clear flow of commands and tended to perform well. Technology used was largely mobile phones for communication, and whereas it was available to majority of the respondents, its use was hindered by affordability of airtime, lack of electricity and poor network connectivity.

### Recommendations

Based on the findings of the first objective, project implementers should ensure they adopt sound institutional characteristics that would result in positive project outcomes. Democratic or coaching leadership style was readily embraced by the beneficiaries. Matrix structure gave better outcome since it allowed experts to participate in their line of expertise. Pls should also use technology that is effective due to affordability and convenience to all participants, especially for communication purposes.

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