

The Impact of Strategic Leadership, Human Resource Capacity Building and Stakeholder Engagement on Kenya Smallholder Tea Industries Performance

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ABSTRACT

This study examines the relationships among strategic leadership, human resource capacity building, stakeholder involvement, government policy, and the performance of smallholder tea factories in Kenya. The study is motivated by the need to understand why performance varies across factories operating within a common industry and regulatory environment. Drawing on Transformational Leadership Theory, Human Capital Theory, Stakeholder Theory, and Contingency Theory, the study adopted a quantitative cross-sectional design. A target population of 213 key informants was identified across 71 KTDA-managed factories, and 198 completed responses were retained for analysis, representing a 92.9% response rate. Data were collected using a structured five-point Likert questionnaire and analysed using descriptive statistics, Pearson correlation, multiple regression, and PROCESS-based mediation and moderation analysis. The results show a positive and significant association between strategic leadership and human resource capacity building ($r = 0.60$, $p < 0.01$), and between strategic leadership and factory performance ($r = 0.46$, $p < 0.01$). Human resource capacity building was the strongest predictor in the full regression model ($\beta = 0.484$, $p < 0.001$), while stakeholder involvement and the government policy context were also significant positive predictors. The indirect effect of strategic leadership on factory performance through human resource capacity building was 0.309, with a 95% bootstrap confidence interval of [0.222, 0.406]. The interaction between stakeholder involvement and the focal predictor was significant ($B = 0.185$, $p = 0.0004$). The study concludes that leadership is most useful when translated into employee capability and supported by constructive stakeholder relationships within the prevailing regulatory environment. The findings provide practical implications for factory management and policy, while the cross-sectional design requires that the reported relationships be interpreted as associations rather than definitive causal effects.

Keywords: strategic leadership, human resource capacity building, stakeholder involvement, organizational performance, Kenya

INTRODUCTION

Organizational performance in agricultural processing depends on how effectively organizations interpret changes in their operating environment, mobilize internal capabilities, and coordinate relationships with actors who influence or are affected by operations. In competitive commodity industries, leadership is relevant not only to strategic direction but also to implementation, resource allocation, employee development, and adaptation. Strategic leadership emphasizes long-term direction, alignment of organizational resources, communication, innovation, and the capacity to translate strategy into coordinated action (Bass, 1985; Burns, 1978; Northouse, 2022).

Kenya's smallholder tea-processing subsector provides a useful setting for examining these relationships. Tea factories depend on a continuous supply of green leaf from growers, reliable factory operations, effective governance, skilled employees, and market access. KTDA-linked factories operate within a network that includes farmers, factory boards, employees, regulators, buyers, and other value-chain actors. This creates a

management environment in which operational outcomes can be affected by both internal capabilities and external relationships.

The sector also operates within a formal regulatory framework. The Tea Act, 2020 provides for regulation, development, and promotion of the tea industry and includes provisions concerning registration, licensing, governance, value-chain monitoring, pricing, safety, transport, and standards (Republic of Kenya, 2020). The associated Crops (Tea Industry) Regulations provide additional requirements for activities within the tea value chain. These requirements make organizational capability and regulatory responsiveness relevant components of factory management. (Ministry of Agriculture, Livestock, Fisheries and Cooperatives, 2020)

The contemporary market environment adds further complexity. Kenya remains a major international tea exporter, while producers face changes in export demand, prices, exchange rates, weather conditions, and operating costs. Recent industry reporting has also highlighted pressure on earnings and profitability despite strong export volumes, illustrating why factory-level capability needs to be studied alongside broader market conditions (Tea Board of Kenya, 2025).

This study responds to these conditions by examining strategic leadership, human resource capacity building, stakeholder involvement, and factory performance within one empirical framework, while treating government policy as a contextual institutional condition.

Study context

The empirical context is the smallholder tea factory system associated with the Kenya Tea Development Agency (KTDA). The study identifies approximately 71 KTDA-managed factories and a planning population of 213 management-level respondents. The study focuses on personnel with direct knowledge of factory operations and strategic decisions, including Factory Unit Managers, departmental heads, and senior operational supervisors.

Research gap

Prior Kenyan studies have examined strategic leadership, human capital development, process reviews, and stakeholder management, but these strands have generally been investigated separately. The contribution of the present study is therefore integrative: it evaluates whether leadership is associated with performance directly and indirectly through human resource capacity building, and whether stakeholder involvement changes the strength of the leadership-performance relationship.

Problem Statement

Smallholder tea factories must balance processing efficiency, product quality, operating costs, employee capability, farmer relationships, and regulatory compliance. Differences in performance remain important because factories operating in broadly similar institutional environments can experience different outcomes in efficiency, quality, costs, and farmer-related results. However, performance variation cannot reasonably be attributed to a single factor because tea production and processing are influenced by weather, market conditions, technology, human capability, governance, and regulation.

Research conducted in Kenya has generated useful evidence on individual components of this problem. Awino et al. (2025) examined strategic leadership and competitiveness in KTDA factories. Kiptum, Wasike, and Jemaiyo (2025a) examined human capital development and organizational performance, while their related study considered process reviews (Kiptum et al., 2025b). Kariuki, Wario, and Odhiambo (2018) examined stakeholder-management strategies and operational performance in the smallholder tea sector. These studies provide a valuable foundation but do not fully integrate the mechanisms proposed in the current model.

The unresolved issue is therefore not whether leadership, employee development, or stakeholder relations matter in isolation. It is whether strategic leadership is associated with factory performance through human resource capacity building, and whether stakeholder involvement changes the strength of the relationship. Addressing this issue is important for factory boards and managers because investments in leadership

development and employee capability have costs, while stakeholder engagement also requires managerial attention and organizational resources.

The problem addressed by the study is consequently a relational and explanatory problem. The study does not seek to identify one universal cause of factory performance. Rather, it evaluates a set of theoretically motivated relationships within a defined Kenyan tea-factory context.

Objectives of the Study

The general objective was to examine how strategic leadership, human resource capacity building, and stakeholder involvement relate to the performance of smallholder tea factories in Kenya, while accounting for government policy as a contextual variable.

1. To examine the relationship between strategic leadership and the performance of smallholder tea factories in Kenya.
2. To assess the mediating role of human resource capacity building in the relationship between strategic leadership and factory performance.
3. To determine whether stakeholder involvement moderates the relationship between strategic leadership and factory performance.

Research Hypotheses

H01: Strategic leadership has a significant positive relationship with the performance of smallholder tea factories in Kenya.

H02: Human resource capacity building significantly mediates the positive relationship between strategic leadership and factory performance.

H03: Stakeholder involvement significantly strengthens the positive relationship between strategic leadership and factory performance.

Significance of the Study

For factory management and boards, the study provides empirical evidence on the relative importance of leadership, employee capability, and stakeholder relationships in explaining performance. This can inform decisions about management development, training priorities, communication practices, and engagement mechanisms.

For regulators and policy actors, the study draws attention to the fact that organizational performance is embedded within a broader institutional setting. Understanding how management capabilities operate alongside regulatory requirements can support more practical implementation and policy review.

For researchers, the study contributes to literature on strategic leadership and human capital in an agricultural-processing setting in a developing economy. It also provides a basis for future longitudinal and multi-level research that can test whether the relationships observed in this cross-sectional study persist over time

LITERATURE REVIEW

Theoretical framework

The study is anchored on four complementary perspectives: Transformational Leadership Theory,

Human Capital Theory, Stakeholder Theory, and Contingency Theory. Together, these theories explain leadership behavior, the role of employee capability, the importance of affected and influential actors, and the influence of external conditions.

Transformational Leadership Theory

Burns (1978) distinguished transformational leadership from transactional exchange, emphasizing the capacity of leaders to elevate motivation and orient followers toward shared goals. Bass (1985) developed the approach into a more systematic framework that includes idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. In a tea factory, these behaviors can support strategic direction, communication, continuous improvement, and employee development. The theory therefore provides the main rationale for examining strategic leadership as an antecedent of both capability development and factory performance.

Human Capital Theory

Human Capital Theory treats knowledge, skills, education, and experience as productive resources in which organizations and individuals can invest (Becker, 1993). Factory employees require technical knowledge of processing equipment, quality management, maintenance, safety, and operating procedures. Leadership decisions regarding training, skills development, knowledge transfer, and career development can therefore affect the productive capacity of the organization. This logic supports the use of human resource capacity building as a mediating construct.

Stakeholder Theory

Stakeholder Theory broadens organizational analysis beyond owners to include groups that can affect or are affected by organizational activity (Freeman, 1984). In the smallholder tea system, relevant stakeholders include growers, factory boards, employees, regulators, buyers, and other value-chain actors. Constructive participation, consultation, communication, and feedback can support coordination, while persistent stakeholder conflict may complicate operations. The theory therefore provides the basis for testing stakeholder involvement as a moderator.

Contingency Theory

Contingency Theory argues that there is no single organizational arrangement that is optimal under all conditions; effectiveness depends on fit between organizational choices and contextual demands (Donaldson, 2001). Tea factories operate within regulatory, market, technological, and environmental constraints. Government policy is consequently treated as a contextual condition that shapes the boundaries within which leadership and human resource practices are implemented.

Empirical evidence on strategic leadership

Awino, Otinga, and Miroga (2025) examined strategic leadership and competitiveness among KTDA-managed factories in the West of Rift Valley region. Their findings reported positive associations between leadership dimensions and factory competitiveness. The study supports the relevance of strategic leadership but focuses primarily on direct relationships. The present study extends this line of work by examining an internal capability mechanism through human resource capacity building and a boundary condition through stakeholder involvement.

Human capital and process capability

Kiptum, Wasike, and Jemaiyo (2025a) reported a significant positive relationship between human capital development and organizational performance in KTDA factories. Their findings emphasize training effectiveness, employee engagement, and career development. A related study by Kiptum et al. (2025b) found a significant positive relationship between process reviews and organizational performance. Together, these studies suggest that employee capability and operational discipline matter for factory outcomes, while leaving room to examine how leadership may contribute to these capabilities.

Stakeholder involvement

Kariuki, Wario, and Odhiambo (2018) investigated defensive and swing stakeholder-management strategies in Kenya's smallholder tea sector. Their published results indicate that stakeholder engagement has a moderating role in the relationship between stakeholder-management strategies and operational performance. This provides a useful basis for the present study's focus on stakeholder involvement, although the constructs and analytical model differ.

Synthesis and research gap

The literature therefore suggests three linked propositions. First, leadership can influence organizational direction and implementation. Second, employees translate strategic choices into operational behavior and therefore provide a plausible internal pathway. Third, stakeholder relationships can alter the environment in which internal capabilities are deployed. The current study tests these propositions together rather than treating them as independent themes.

Conceptual Framework

The conceptual framework positions strategic leadership as the independent variable, human resource capacity building as the proposed mediator, stakeholder involvement as the proposed moderator, and factory performance as the dependent variable. Government policy is incorporated as a contextual institutional condition. Strategic leadership is operationalized through direction setting, alignment, communication, innovation, and control; human resource capacity building through training, skills development, knowledge transfer, and career development; stakeholder involvement through participation, consultation, communication, and feedback; and factory performance through efficiency, productivity, quality, financial outcomes, and farmer-related indicators.

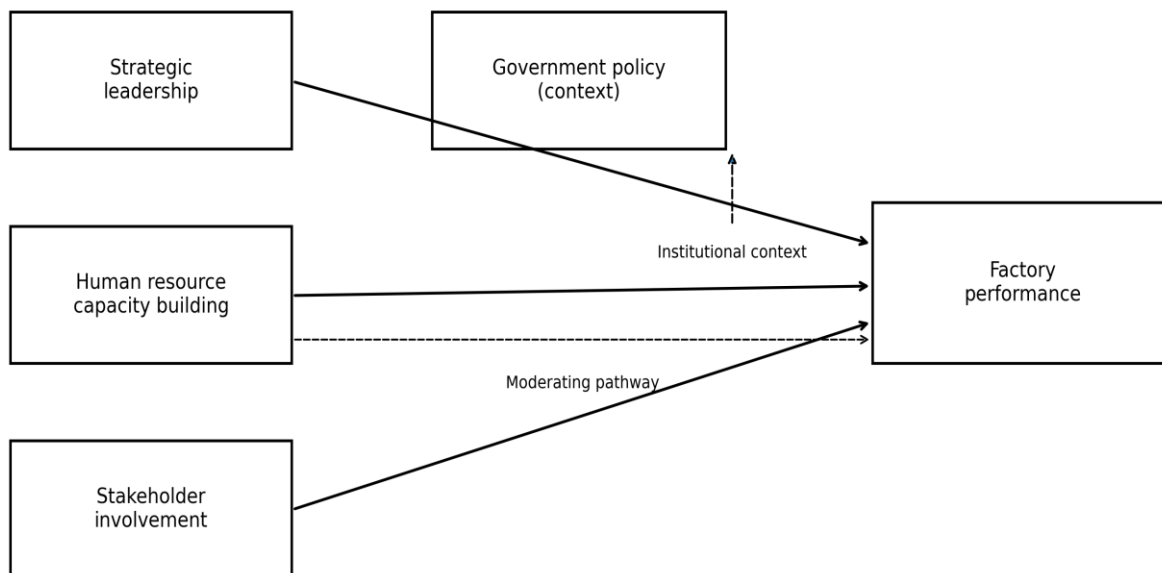


Figure 1: Conceptual framework linking strategic leadership, human resource capacity building, stakeholder involvement, government policy, and factory performance.

Construct	Role	Illustrative dimensions
Strategic leadership	Independent	Vision, alignment, communication, innovation, control
Human resource capacity building	Mediator	Training, skills, knowledge transfer, career development
Stakeholder involvement	Moderator	Participation, consultation, communication, feedback

Construct	Role	Illustrative dimensions
Government policy	Contextual	Regulation, governance, standards, institutional rules
Factory performance	Dependent	Efficiency, productivity, quality, financial and farmer outcomes

Operationalization of the conceptual framework.

Analytical logic

The framework implies that leadership may be associated with performance partly because it shapes the development and deployment of employee capability. It also proposes that stakeholder involvement may alter the strength of the leadership-performance relationship. Because the data are cross-sectional, these pathways are evaluated statistically and are not treated as definitive causal sequences.

METHODOLOGY

Research philosophy and design

I adopted a positivist research philosophy and a quantitative cross-sectional design. I selected this approach to test predefined relationships among measurable constructs using statistical procedures. I used an explanatory orientation for hypothesis testing; because I measured the variables at one point in time, I interpret the findings as associations rather than definitive causal effects. (Creswell & Creswell, 2018)

Population and unit of analysis

I constructed the planning frame from approximately 71 KTDA-managed factories and three eligible respondent categories per factory, yielding 213 potential key informants. This was a census-oriented planning frame rather than a sample derived from a power formula. I defined the target population as management and senior technical personnel within KTDA-managed smallholder tea factories in Kenya. My planning frame identified approximately 71 factories and 213 potential key informants. I targeted Factory Unit Managers, departmental heads, and senior operational supervisors with direct knowledge of leadership, employee development, stakeholder relationships, and factory performance.

Sampling procedure

I used a census-oriented approach at the factory level to seek coverage across the KTDA-managed factory population, while purposively selecting respondents who met the inclusion criteria. This combination enabled me to capture knowledgeable respondents while maintaining representation across the factory network.

Sample and response rate

I dispatched 213 questionnaires and retained 198 fully completed questionnaires for analysis, yielding a response rate of 92.9%. My analytical sample therefore comprises 198 observations. I interpret the study conclusions within this population and sampling context.

Data collection instrument

I collected primary data using a structured self-administered questionnaire with five-point Likert-type responses ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). I included sections covering strategic leadership, human resource capacity building, stakeholder involvement, government policy context, and factory performance.

Pilot testing and validity

I conducted a pilot study involving 20 respondents from factories excluded from the main analysis. I used the pilot to assess clarity, completeness, and completion time. I supported content and construct validity through expert review involving academic supervisors and tea-sector practitioners.

Reliability

I assessed internal consistency using Cronbach's alpha (Cronbach, 1951). The reported coefficients for strategic leadership ($\alpha = 0.811$), human resource capacity building ($\alpha = 0.894$), stakeholder involvement ($\alpha = 0.884$), and factory performance ($\alpha = 0.896$) exceed the conventional 0.70 threshold. Government policy recorded a lower alpha ($\alpha = 0.569$), but I retained it as a contextual institutional index rather than treating it as a core psychometric scale. This decision is deliberately cautious: methodological literature notes that alpha is affected by the number of indicators and that lower reliability thresholds may be defensible in exploratory or early-stage measurement, although values below 0.60 should still be treated as fragile. Hair et al. (2019) identify 0.60–0.70 as a lower limit of acceptability in exploratory applications, while Nunnally's early-stage guidance has been cited for tolerating approximately 0.50–0.60 during initial research. I therefore use the government policy measure only as a contextual covariate, avoid fine-grained interpretation of its coefficient, and retain its low reliability as an explicit limitation.

Ethical considerations

I obtained ethical clearance from the Institutional Review Board before collecting data and research authorization from the National Commission for Science, Technology and Innovation (NACOSTI). For blind peer review, the identifiers are anonymized as follows: IRB Clearance No. [Blinded for Review]; NACOSTI Research Permit No. [Blinded for Review]. I obtained informed consent from participants in accordance with the approved research protocol and maintained confidentiality of participants and their responses.

Data analysis

I screened the dataset for missing values, outliers, and key statistical assumptions before analysis. I summarized the constructs using descriptive statistics, assessed bivariate associations using Pearson correlation, and estimated the unique contribution of the predictors using multiple regression. I tested simple mediation and simple moderation using the PROCESS macro, with bootstrap resampling for the indirect effect.

Interpretation framework

I evaluated statistical significance at the 5% level and focused interpretation on effect direction, magnitude, and confidence intervals rather than significance alone. Because my design is cross-sectional and based largely on respondent perceptions, I do not interpret the observed relationships as proof of temporal causation.

RESULTS AND DATA ANALYSIS

Descriptive statistics

Table 2 reports the central tendency and dispersion of the principal constructs. Strategic leadership recorded the highest mean score ($M = 3.37$, $SD = 0.61$), while factory performance recorded the lowest among the central organizational constructs ($M = 3.11$, $SD = 0.77$). Human resource capacity building and stakeholder involvement were also rated above the midpoint of the five-point scale.

Construct	Mean	SD	Minimum	Maximum
Strategic leadership	3.37	0.61	1.60	4.80
Human resource capacity building	3.28	0.75	1.00	5.00
Stakeholder involvement	3.30	0.72	1.40	5.00
Government policy context	3.22	0.39	2.00	4.40
Factory performance	3.11	0.77	1.40	5.00

Table 2: Descriptive statistics for the principal constructs.

Reliability analysis

The reliability results indicate acceptable to strong internal consistency for the core constructs. The government policy context measure has lower internal consistency ($\alpha = 0.569$) and is therefore interpreted as a

fragile contextual index rather than as a core psychometric scale.

Construct	Cronbach's alpha
Strategic leadership	0.811
Human resource capacity building	0.894
Stakeholder involvement	0.884
Government policy context	0.569
Factory performance	0.896

Table 3: Internal consistency reliability coefficients.

Pearson correlation analysis

Strategic leadership was positively associated with human resource capacity building ($r = 0.60$, $p < 0.01$) and factory performance ($r = 0.46$, $p < 0.01$). Human resource capacity building showed the strongest reported bivariate association with factory performance ($r = 0.60$, $p < 0.01$). Stakeholder involvement was also positively associated with factory performance ($r = 0.42$, $p < 0.01$).

Multiple regression analysis

The full regression model was statistically significant and explained 44.9% of the variance in factory performance ($R^2 = 0.449$; adjusted $R^2 = 0.438$; $p < 0.001$). Human resource capacity building was the strongest statistically significant predictor in the model, followed by stakeholder involvement and the government policy context.

Predictor	Standardized β	SE	t	p
Strategic leadership	0.078	0.066	1.17	0.243
Human resource capacity building	0.484	0.065	7.44	<0.001
Stakeholder involvement	0.241	0.056	4.30	<0.001
Government policy context	0.156	0.052	3.02	0.003

Table 4: Multiple regression predicting factory performance

Strategic leadership was positively correlated with factory performance at the bivariate level, but its coefficient was not statistically significant once the other variables were entered into the regression model ($\beta = 0.078$, $p = 0.243$). This pattern is consistent with an indirect pathway through human resource capacity building, but the cross-sectional design does not by itself establish complete mediation in a causal sense.

Mediation analysis

The mediation analysis estimated an indirect effect of strategic leadership on factory performance through human resource capacity building of 0.309. The 95% bootstrap confidence interval was [0.222, 0.406], which does not include zero. This provides statistical evidence of an indirect association consistent with the hypothesized mediation

Moderation analysis

The interaction between stakeholder involvement and the focal predictor was statistically significant ($B = 0.185$, $p = 0.0004$).

This result supports the conclusion that the strength of the modeled relationship varies with stakeholder involvement. The practical interpretation is that stakeholder conditions matter when leadership and internal capability are translated into factory outcomes.

PROCESS result	Effect / B	SE	p	BootLLCI	BootULCI
Indirect effect: strategic leadership $\rightarrow$ HR capacity building $\rightarrow$ factory performance	0.309	Not reported	Not reported	0.222	0.406

PROCESS result	Effect / B	SE	p	BootLLCI	BootULCI
Stakeholder involvement × strategic leadership	0.185	Not reported	0.0004	Not reported	Not reported

Table 5: PROCESS results for the mediation and simple moderation analyses.

Hypothesis-testing summary

Table 6: Summary of hypothesis-test results.

Hypothesis	Result	Decision
H01	Strategic leadership was positively associated with factory performance at the bivariate level ($r = 0.46$, $p < 0.01$), but its unique coefficient was not significant in the full model ($\beta = 0.078$, $p = 0.243$).	Not supported
H02	Indirect effect = 0.309; 95% bootstrap CI [0.222, 0.406], excluding zero.	Supported
H03	Interaction between stakeholder involvement and strategic leadership: $B = 0.185$, $p = 0.0004$.	Supported

The regression pattern separates bivariate association from the unique contribution of each construct in the full model. Strategic leadership is positively associated with performance at the bivariate level, but its unique coefficient is not statistically significant once the other variables are entered. Human resource capacity building has the largest standardized coefficient, indicating that it is especially important in the multivariable model.

Result interpretation

The government policy context measure has lower internal consistency ($\alpha = 0.569$) than the other constructs. I therefore treat that measure as a fragile contextual index and interpret its coefficient cautiously. The self-reported cross-sectional design also creates a risk of common-method variance. These limitations do not erase the reported associations, but they constrain the strength of the conclusions that can be drawn from them.

Robustness and measurement considerations

Because the government policy context measure has $\alpha = 0.569$, I treat that construct as a fragile contextual index and avoid using its coefficient for strong substantive claims. I also recognize the possibility of common-method variance arising from self-reported, cross-sectional measurement.

DISCUSSION

The findings support the study's broad theoretical proposition that leadership, employee capability, stakeholder relationships, and institutional conditions should be considered together when examining factory performance. The strongest multivariable predictor is human resource capacity building, while strategic leadership becomes non-significant after the capability variable is introduced. This is consistent with a mechanism in which leadership matters partly through its influence on employee capability, rather than implying that leadership alone is sufficient.

The significant interaction between stakeholder involvement and strategic leadership indicates that stakeholder involvement changes the strength of the leadership-performance relationship. This finding is consistent with Stakeholder Theory because the effectiveness of leadership decisions may depend on the quality of coordination, consultation, communication, and feedback among growers, boards, employees, regulators, and other relevant actors. The present analysis supports simple moderation of the leadership-performance relationship.

The government policy coefficient is positive and significant in the regression model. This finding should not be interpreted as evidence that policy is inherently beneficial. Rather, the result indicates that respondents who

perceive the policy context differently also report different performance levels. The direction of that relationship may reflect clarity, compliance capability, governance arrangements, or other contextual factors that require further investigation.

Taken together, the results fit a contingency perspective: the value of leadership and capability investments depends on how they are embedded within the broader organizational and institutional environment.

Comparison with prior studies

The results are broadly consistent with Kenyan evidence that links strategic leadership and human capital development with tea-factory outcomes (Awino et al., 2025; Kiptum et al., 2025a). They also complement Kariuki et al. (2018), whose study highlights the relevance of stakeholder engagement in the smallholder tea sector. The principal difference is that the present study integrates these strands into a single model with mediation and moderation.

THEORETICAL IMPLICATIONS

Transformational Leadership Theory

The non-significant direct effect of strategic leadership in the full regression model, alongside the significant indirect effect through human resource capacity building, suggests that leadership may be more consequential as an enabling mechanism than as an isolated performance driver. This refines rather than rejects transformational leadership logic: leadership behaviours matter when they are translated into organizational capabilities and execution.

Human Capital Theory

The strong coefficient for human resource capacity building and the significant indirect pathway provide empirical support for the proposition that workforce knowledge and skills are productive resources. For tea factories, technical competence is closely connected with processing quality, equipment use, maintenance, quality assurance, and problem solving.

Stakeholder Theory

The significant stakeholder interaction supports the idea that organizational performance is shaped by relationships with groups that influence or are affected by factory decisions. The result is especially relevant in a smallholder system where growers and factory boards are integral to supply, governance, and accountability.

Contingency Theory

The significant government policy coefficient illustrates the relevance of contextual fit. Management practices are not implemented in a vacuum; their consequences depend partly on regulatory requirements and the institutional environment. The policy context should therefore be incorporated into strategy and capability planning rather than treated solely as an external constraint.

PRACTICAL IMPLICATIONS

Factory boards and managers should prioritize capability development that is directly connected to operational requirements. Training plans should be linked to processing technology, quality assurance, maintenance, safety, supervisory skills, data use, and continuous improvement rather than relying only on generic professional development.

Stakeholder engagement should be treated as an ongoing management process. Regular consultation, clear feedback channels, and transparent communication can improve coordination and reduce avoidable conflict. The objective should be structured participation that supports factory decisions while maintaining appropriate managerial accountability.

Leadership development should emphasize strategy implementation, communication, employee coaching, evidence-based decision-making, and change management. The findings do not justify replacing technical competence with leadership programmes; rather, they suggest that the two should be developed together.

Policy Implications

The regulatory environment should be considered when evaluating factory performance. The Tea Act, 2020

gives the legal framework for regulation, development, governance, licensing, monitoring, pricing, standards, and other elements of the tea value chain (Republic of Kenya, 2020). From a management perspective, the practical issue is not whether regulation exists, but how clearly requirements are communicated and how efficiently factories can comply.

Policy actors and industry institutions can support performance by improving regulatory clarity, maintaining consistent implementation guidance, and using stakeholder consultation when regulations affecting factory operations are revised. Such measures can reduce avoidable compliance uncertainty while preserving farmer-protection objectives.

STUDY LIMITATIONS

First, the cross-sectional design limits temporal inference. The study cannot determine whether changes in leadership or employee capability precede changes in performance. Second, the principal measures are based on respondents' perceptions, which may introduce common-method variance and social-desirability bias. Third, the study is focused on KTDA-managed smallholder tea factories, limiting generalization to estate agriculture, independent processors, or other agricultural industries. Fourth, the government policy measure has lower internal consistency ($\alpha = 0.569$) than the other constructs, which limits confidence in fine-grained interpretation of that contextual measure.

The present study is scoped to simple moderation and does not test whether the indirect effect of strategic leadership through human resource capacity building varies across levels of stakeholder involvement.

Future Research

Future studies should use longitudinal or panel designs to establish temporal ordering among leadership, capability building, stakeholder involvement, and performance. Researchers should also incorporate objective factory indicators such as processing efficiency, tea quality grades, downtime, energy use, training hours, and farmer payment measures where access permits. Multi-level designs could distinguish individual perceptions from factory-level performance and test whether relationships vary across regions or factory characteristics.

Further research could also compare KTDA-managed factories with independently managed processors and evaluate whether digitalization, organizational culture, or board governance changes the strength of the observed relationships.

CONCLUSION

This study examined strategic leadership, human resource capacity building, stakeholder involvement, government policy, and the performance of smallholder tea factories in Kenya using a quantitative cross-sectional framework. The evidence indicates that the constructs are related, but they do not contribute in identical ways. Human resource capacity building is the strongest predictor in the full regression model, strategic leadership has a significant bivariate relationship with performance but not a significant unique coefficient after the other variables are introduced, and stakeholder involvement shows a significant interaction with the focal pathway.

The significant indirect effect through human resource capacity building is consistent with the proposition that leadership can influence performance by developing employee capability. The significant interaction involving stakeholder involvement indicates that the organizational environment surrounding leadership and capability

also matters. Government policy is positively associated with performance in the model, underscoring the relevance of the institutional context.

The central practical implication is that factory performance should be approached as a socio-organizational outcome. Leadership development, employee capability, stakeholder engagement, and regulatory responsiveness should be coordinated rather than treated as separate administrative activities. At the same time, the cross-sectional design and perceptual measures require cautious interpretation, and the study should not be presented as establishing definitive causal effects.

Recommendations

1. Institutionalize targeted capability development. Factory management should connect training budgets to documented technical and managerial capability gaps, with clear links to processing quality, maintenance, safety, supervision, and continuous improvement.
2. Strengthen structured stakeholder engagement. Factories should maintain regular, documented mechanisms for consultation, feedback, and issue resolution with growers, boards, employees, and relevant value-chain actors.
3. Develop implementation-focused leadership. Leadership programmes should emphasize strategic alignment, communication, coaching, problem solving, change management, and evidence-based decision-making.
4. Improve regulatory responsiveness. Factory management should maintain clear internal responsibilities for monitoring regulatory requirements, translating them into operating procedures, and communicating implementation changes to affected personnel.
5. Strengthen performance measurement and financial controllership. Factory managers should monitor a balanced set of indicators covering productivity, quality, costs, equipment reliability, employee capability, stakeholder relationships, and farmer-related outcomes, and should partner routinely with financial controllers to conduct cost-variance analyses on human resource capacity-building investments. These reviews should apply KASNEB-aligned management accounting principles, including budgetary control, standard costing, and variance analysis, so that training and capability-development decisions can be assessed against cost efficiency, operational outcomes, and the factory's bottom line (KASNEB, 2024). This multidisciplinary linkage enables leadership and human resource decisions to be evaluated not only as people-management activities but also as measurable investments in operational efficiency and financial performance.

RESEARCH ETHICS, DATA AVAILABILITY, AND AUTHOR DECLARATIONS

Research ethics

I obtained ethical clearance from the Institutional Review Board before collecting data and research authorization from the National Commission for Science, Technology and Innovation (NACOSTI). For blind peer review, the identifiers are anonymized as follows: IRB Clearance No. [Blinded for Review]; NACOSTI Research Permit No. [Blinded for Review]. I obtained informed consent from participants in accordance with the approved research protocol and maintained confidentiality of participants and their responses.

Data availability

The underlying research dataset is not included with this article. Access to anonymized data, instruments, or analysis syntax should be governed by the permissions and data-sharing conditions applicable to the study.

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Conflict of interest

The author declares no conflict of interest.

Author contribution

I am the author and corresponding author of this study and assume responsibility for its conceptualization, methodology, data collection, analysis, interpretation, writing, revision, and final approval.

REFERENCES

1. Awino, K. O., Otinga, H. N., & Miroga, J. (2025). Strategic leadership and competitiveness of Kenya Tea Development Authority factories in the West of Rift Valley Region, Kenya. *The Strategic Journal of Business & Change Management*, 12(2), 283–312. <https://doi.org/10.61426/sjbcm.v12i2.3211>
2. Bass, B. M. (1985). *Leadership and performance beyond expectations*. Free Press.
3. Becker, G. S. (1993). *Human capital: A theoretical and empirical analysis, with special reference to education* (3rd ed.). University of Chicago Press.
4. Burns, J. M. (1978). *Leadership*. Harper & Row.
5. Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE.
6. Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16(3), 297–334. <https://doi.org/10.1007/BF02310555>
7. Donaldson, L. (2001). *The contingency theory of organizations*. SAGE. <https://doi.org/10.4135/9781452229249>
8. Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Pitman.
9. Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate data analysis* (8th ed.). Cengage.
10. Kariuki, J. N., Wario, G., & Odhiambo, R. (2018). Role of defensive and swing stakeholder management strategies on operational performance of smallholder tea sector in Kenya. *Strategic Journal of Business & Change Management*, 5(4), 1921–1931. <https://doi.org/10.61426/sjbcm.v5i4.998>
11. Kenya Accountants & Secretaries National Examinations Board (KASNEB). (2024). *Certified Public Accountants (CPA) examination - Revised syllabus June 2024*. KASNEB.
12. Kiptum, C., Wasike, S., & Jemaiyo, B. (2025a). Relationship between human capital development and organizational performance of KTDA factories in Kenya. *CUEA Journal of Business and Economics*, 2(1). <https://journal.cuea.edu/ojs1/index.php/cjb/article/view/146>
13. Kiptum, C., Wasike, S., & Jemaiyo, B. (2025b). Relationship between process reviews and organizational performance of KTDA factories in Kenya. *CUEA Journal of Business and Economics*, 2(1). <https://journal.cuea.edu/ojs1/index.php/cjb/article/view/147>
14. Ministry of Agriculture, Livestock, Fisheries and Cooperatives. (2020). *The Crops (Tea Industry) Regulations, Legal Notice No. 97 of 2020*. Government of Kenya.
15. Northouse, P. G. (2022). *Leadership: Theory and practice* (9th ed.). SAGE.
16. Nunnally, J. C. (1967). *Psychometric theory*. McGraw-Hill.
17. Republic of Kenya. (2020). *Tea Act, 2020 (Cap. 343)*. Government Printer <https://new.kenyalaw.org/akn/ke/act/2020/23/eng@2020-12-31>
18. Tea Board of Kenya. (2025). *Kenya tea industry performance report: May 2025*. Government of Kenya.