**Original Research Article**

**Effects of Employee Motivation on Land Service Delivery by the Lands Commission of Ghana**

**ABSTRACT**

This paper examines how intrinsic and extrinsic motivation impact the services provided by the Lands Commission and the moderating role of internal and external land administration reforms on service delivery. The study adopted a quantitative approach utilizing explanatory research. Data was collected through questionnaires, and SPSS was used for analysis. The results reveal a significant positive relationship between intrinsic and extrinsic motivation and service delivery. Relating to the moderating hypothesis, internal reforms moderated the positive relationship between intrinsic motivation and service delivery. Recommendations include prioritizing employee motivation, enhancing systems through ICT integration, and providing adequate financial and technical resources.

**Keywords:** Land Service Delivery, Lands Commission, Land Administration Reforms, Intrinsic motivation, Extrinsic motivation

1. **INTRODUCTION**

Employee motivation is one of the main concerns of organizational behavior in Africa and worldwide. According to Dorta-Afonso et al. (2021), employee commitment and behavior are heavily influenced by motivation, a key psychological trait that boosts performance. It determines service efficiency and effectiveness in most institutions. Motivation can be described as a driving force behind human action towards certain goals with sustained effort, thus, what makes an individual act or keep on acting. It contains various components: intrinsic motivation that comes from within oneself, like self-satisfaction or fulfillment, and extrinsic motivation that results from external rewards such as money paid for salaries and bonuses given out among others (Ryan & Deci, 2017). When faced with tasks involving creativity and problem-solving abilities, people should be intrinsically motivated because it leads them to be more committed than ever before, according to Ryan & Deci (2017). Parmenas (2022) noted that effective motivational strategies can improve staff engagement levels, which drive organizational performance. Ullah (2012) also revealed that service delivery determines the extent of value customers get out of their interactions with providers.

Land is one of the most fundamental resources for socio-economic development. It serves as the foundation for shelter, agriculture, industry, and infrastructure, and is essential for the realization of numerous social, economic, and environmental functions. From a socio-economic perspective, the land provides the basis for food production, housing, and industrial activities, thereby playing a critical role in poverty reduction, economic growth, and overall human development (Deininger, 2003).

The significance of land is deeply rooted in its role as a source of livelihood for millions of individuals worldwide, particularly in agrarian economies. In Ghana, where a substantial proportion of the population relies on agriculture, the productivity and equitable distribution of land directly affect rural livelihoods and national food security (Kasanga & Kotey, 2001). Furthermore, land ownership and tenure security are crucial for economic stability, as they facilitate investment and enable landholders to utilize land as collateral for loans, thereby fostering local economic empowerment (Besley & Ghatak, 2010). In addition to its economic significance, the land holds substantial cultural and social importance, particularly within African societies. Land is often associated with ancestral heritage, community identity, and social cohesion. In Ghana, customary land tenure systems reflect the cultural and historical importance of land, with rights to land being managed by traditional authorities and transmitted through generations (Ubink & Quan, 2008). These systems underscore the necessity for effective and equitable land administration to ensure land access and resolve disputes that arise from land transactions or inheritance.

Employee motivation is critical for the efficient delivery of land services in Ghana. The Lands Commission is responsible for land administration and management. Proper land service delivery is vital where land is central to economic activities and sustains diverse sectors such as agriculture, industry, and housing. The Lands Commission, mandated to facilitate land acquisition, registration, and management, plays a crucial role in ensuring that land resources are optimally utilized. In line with this, employee motivation can significantly impact the performance and efficiency of the organization. Given the scope of responsibilities, employee motivation within the Lands Commission is essential to enhancing productivity, efficiency, and service quality in land service delivery (Adzima, 2023). Studies including Jain (2007) and Meybeck et al., (2018) emphasized that motivated employees show higher productivity, reduced turnover, and enhanced commitment, which translates to better service delivery outcomes.

Despite the importance of land service delivery, the Lands Commission of Ghana faces challenges in achieving optimal performance, potentially due to insufficient employee motivation. Reports of delays in land processing and inefficient service provision point to gaps in the motivational structures within the organization. Research suggests that inadequate motivation leads to poor employee output and diminished service quality, impacting stakeholders who rely on the commission for timely land services (Nkolola et al., 2016; Ngoma & Mulenga, 2019). Understanding the link between employee motivation and service delivery effectiveness within the commission is essential to identify strategies that enhance employee satisfaction and organizational performance.

This paper assessed the extent to which employee motivation affects the service delivery practice of the Lands Commission of Ghana. The study answered these research questions: (i) What role does employee motivation play in land service delivery; (ii) How do intrinsic and extrinsic employee motivation influence land service delivery; (iii) What are the inhibiting factors causing the delay in service delivery at the Lands Commission; and What recommendations are relevant towards improved service delivery in the Lands Commission?

1. **LITERATURE REVIEW**

The institutional theory provides a framework to understand how changes occur within organizations and why certain practices and structures become embedded. It posits that organizations resist reform due to forces including legal requirements, industry regulations, and societal expectations. Such pressures compel institutions to adopt practices essential for their survival. DiMaggio and Powell (1983) explain that organizational homogeneity arises from such pressures, although not all organizations react identically. Oliver (1991) and others note that responses depend on context and pressure types. At Ghana's Lands Commission, coercive and mimetic pressures influence employee motivation, thereby affecting service delivery outcomes.

Public Service Motivation (PSM), as defined by Perry (2014), refers to the inclination to respond to motives rooted in public institutions, with factors such as commitment to the common good and compassion driving employee performance. Ritz et al. (2016) highlighted the role of cultural values in shaping PSM, suggesting that societal expectations influenced organizational culture. Zakariya & Achimugu (2023) found that regulatory oversight in Nigeria led to increased compliance and improved employee motivation in public institutions. Similarly, Vandenabeele (2014) observed that transformational leadership positively affects PSM by fulfilling employees' psychological needs. At Ghana's Lands Commission, employee motivation could be enhanced through such leadership approaches.

Ali (2021) advocate for scientific approaches to service delivery in South Africa, addressing poverty and inequality issues. This approach is pertinent to land administration reforms at the Lands Commission, as employee motivation and systemic reforms could enhance service delivery. Brignall and Modell (2000) emphasize the significance of performance measurement, positing that balanced systems can fulfill various stakeholder requirements. At the Lands Commission, balanced performance metrics could augment employee motivation by aligning efforts with organizational and public expectations. Research by Opondo et al. (2021) underscores the importance of strategic leadership in land administration, emphasizing the necessity for reforms led by inspiring leaders. Meyer and Rowan (1977) observe that organizations frequently adopt policies as rituals to maintain legitimacy, which may impede genuine implementation. Consequently, substantive reforms rather than symbolic measures are essential at the Lands Commission to improve motivation and service delivery.

The expectancy theory of motivation, proposed by Victor Vroom in 1964, posits that individuals are motivated by anticipated outcomes, comprising three elements: expectancy, instrumentality, and valence. Expectancy refers to the belief that effort will result in desired outcomes; instrumentality denotes the perceived connection between performance and reward; and valence signifies the desirability of the reward. Fang (2023) contends that expectancy theory facilitates the alignment of rewards with employee expectations, enhancing motivation when employees believe an effort will yield desired results. By applying expectancy theory, managers can tailor motivational strategies to individual employee needs, thereby improving productivity and satisfaction.

Despite its advantages, expectancy theory exhibits limitations. It presupposes rational decision-making, neglecting emotional and social motivators (Fang, 2023). Furthermore, it may inadequately account for intrinsic motivators, such as personal growth or job satisfaction, which are fundamental for ethical and sustained motivation (Eccles & Wigfield, 2020). Saleem et al. (2021) elucidate practical challenges in establishing a connection between effort and outcomes, particularly in creative tasks where performance quantification is more complex. In Ghana's Lands Commission, expectancy theory could inform motivational strategies by explicitly linking performance outcomes to rewards. Managers could articulate expectations transparently, establish measurable objectives, and incentivize achievements through promotions or financial bonuses, thereby enhancing land service delivery. However, the theory's limitations suggest that intrinsic motivators, such as career development opportunities and supportive work environments, are equally essential to fostering sustained motivation.

1. **METHODOLOGY**

The Lands Commission of Ghana operates under the Ministry of Lands and Natural Resources. It is responsible for land administration and management throughout the country. Its mandate encompasses the registration of land deeds and titles, surveying and mapping, and land policy formulation and implementation (Lands Commission Act 2008, Act 767). The Lands Commission plays a pivotal role in ensuring efficient, transparent, and equitable access to land resources, which is fundamental for socioeconomic development. Its offices are distributed across all 16 administrative regions of Ghana, with a significant presence in the capital city, Accra, where the headquarters is situated (Ghana Statistical Service, 2021). According to the Lands Commission's Annual Report (2021), the total staff population across Ghana's administrative regions is 1,936. The Commission's organizational structure comprises four main divisions: Survey and Mapping, Land Registration, Land Valuation, and Public and Vested Lands Management. Each division has distinct functions, yet their activities are interrelated and interdependent (Adzima, 2023).

This study utilized an explanatory research design to investigate the relationship between employee motivation and service delivery, with particular attention to the influence of internal and external reforms. Moreover, Explanatory research is more objective, employing survey questionnaires to collect data from respondents while minimizing the potential influences of the researcher (Creswell & Plano Clark, 2023). A deductive approach was adopted to identify key themes from the existing literature on employee motivation and land service delivery. This method, commonly known as 'theory-testing,' involves formulating hypotheses based on theoretical frameworks, which can then be validated or refuted through statistical analysis (Renjith et al., 2021). The research focused on the staff of the Lands Commission. The staff was chosen due to their understanding of the dynamics of service delivery.

To determine the sample size for this study, the formula proposed by the American Educational Association was applied: n = N/[1+ N (e)^2]. Where n = sample size, N = total population, 1 = constant, and e = margin of error (Yamane, 1967). Applying this formula to the Lands Commission's population resulted in a sample size of 332, with a margin of error set at 5%. Given the geographical distribution of respondents, a convenience sampling method was employed, enabling systematic targeting of participants across various regions and facilitating data collection from those willing to participate. Table 1 depicts the administrative regions, corresponding population, and sample size distribution.

**Table 1: Cluster of regional samples according to Divisions of the Lands Commission**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **REGION** | **DIVISION** | | | | **SAMPLE PER REGION** |
| **SMD** | **LVD** | **PVLMD** | **LRD** |
| Greater Accra | 41 | 41 | 41 | 41 | 164 |
| Ashanti | 7 | 7 | 7 | 7 | 28 |
| Western | 5 | 5 | 7 | 5 | 22 |
| Eastern | 4 | 4 | 7 | 4 | 19 |
| Central | 4 | 4 | 6 | 4 | 18 |
| Northern | 3 | 3 | 4 | 3 | 13 |
| Bono | 3 | 3 | 4 | 3 | 13 |
| Upper West | 3 | 3 | 3 | 3 | 12 |
| Volta | 2 | 2 | 5 | 2 | 11 |
| Upper East | 1 | 1 | 4 | 1 | 7 |
| Bono East | 2 | 2 | 2 | 0 | 6 |
| Western North | 1 | 1 | 3 | 0 | 5 |
| Ahafo | 2 | 1 | 1 | 0 | 4 |
| Savannah | 1 | 1 | 2 | 0 | 4 |
| North East | 1 | 1 | 1 | 0 | 3 |
| Oti | 1 | 1 | 1 | 0 | 3 |
| **TOTAL** | **81** | **80** | **98** | **73** | **332** |

Source: Researcher’s field note (2024)

Data collection involved engaging key staff to validate the proposed conceptual model. A survey questionnaire was utilized to gather primary data, structured to ensure a logical flow of responses. The survey primarily consisted of closed-ended questions, facilitating efficient data analysis. Various instruments for administering the surveys included face-to-face interviews, telephone interviews, and mail surveys.

The collected data were analyzed using the Statistical Package for Social Sciences (SPSS). Initially, a factor analysis was conducted using Principal Component Analysis (PCA) to reduce multiple variables into fewer dimensions. Subsequently, correlation and multiple regression analyses were performed to draw inferences. Using multiple regression analysis was particularly appropriate for this cross-sectional study, allowing for the Exploration of relationships between variables that had not been systematically examined in prior research.

**4. RESULTS**

**4.1 Background of Respondent**

A questionnaire comprising 332 surveys was distributed to employees of the Lands Commission across the 16 regions of Ghana, with an 83% response rate. The demographic characteristics revealed that the majority of respondents were male, representing 63.3%, while 36.7% were female. The age distribution of respondents was as follows: 39.5% between 31-40 years, 26.4% between 18-30 years, 22.5% between 41-50 years, 10.6% between 51-60 years, and 0.9% over 60 years old. Regarding the place of work, 43.7% of respondents were located in the Greater Accra region, with the remainder distributed across various other regions, including Bono East (5.7%) and Upper East (5.1%), among others. In terms of educational attainment, 54.4% of the respondents held a Bachelor's degree, 18.0% had a Master's degree, 2.1% had a PhD/DBA, and 16.2% possessed a Higher National Diploma (HND).

## The majority (27.3%) of respondents worked in the Land Valuation Division, followed by the Survey and Mapping Division (25.2%), and the Public and Vested Lands Management Division (24.5%). Those in the Land Registration Division represented 22.4%, and 0.6% worked at the Corporate Head Office of the Commission. Regarding job roles, 31.3% were engaged in Land Administration, 24.1% in Geomatic services, and others were distributed across Estates, Legal, Finance, and Audit, and administrative roles. The participants' years of service varied, with 28.0% having worked for 6-9 years, 18.4% for less than 3 years, and 18.1% for 3-5 years. Additionally, 14.5% had worked for 10-13 years, 10.2% had 14-17 years of experience, and 10.8% had worked for more than 18 years.

## **4.2 Measures and Validation**

### 4.2.1 Independent and dependent variable- Motivation (Internal and external)

### Motivation encompasses both internal and external rewards that employees receive for task performance. The study utilized a five-point Likert scale (1-strongly disagree to 5-strongly agree) to measure the impact of these motivational factors on service delivery. For intrinsic motivation, seven initial items were evaluated: reduced promotion period, capacity-building opportunities, career progression, access to tools, working conditions, satisfaction, and feeling valued. Following exploratory factor analysis (EFA), four items remained significant with factor loading ≥0.3: capacity building, career progression, working conditions, and satisfaction. The construct achieved a Cronbach's Alpha of 0.832.

### Extrinsic motivation initially comprised seven items: additional income, overtime allowance, acting position benefits, donor-funding/government support, transport provision, welfare system, and conduct sanctions. Post-EFA, six items were retained (excluding transport provision), yielding a Cronbach's Alpha of 0.894. Service delivery: The dependent variable initially included five scales measuring service availability, timeliness, information reliability, quality, and client satisfaction. After EFA, three items remained: service availability, quality, and client satisfaction, with a Cronbach's Alpha of 0.771.

### 4.2.2 Moderating variable

### The investigation examined both internal and external land administration reforms. For internal reforms, five initial variables were evaluated: business plan-based decisions, customer feedback systems, budgetary allocation, staff results framework, and performance appraisal. After exploratory factor analysis (EFA), three variables remained significant: business plan-based decisions, customer feedback systems, and staff results framework. This construct achieved a Cronbach's Alpha of 0.717.

### External reforms initially comprised six variables: merger-driven collaboration, reduced bureaucracy, digitized land records, Enterprise Land Information System implementation, one-stop-shop concept, and technology training. Following EFA, three variables were retained: merger-driven collaboration, digitized land records, and technology training. The external reforms construct demonstrated good reliability with a Cronbach's Alpha of 0.764, as shown in Table 3. Both constructs exhibited sufficient reliability for further analysis.

### 4.2.3 Control variables

### The study examined three organizational variables. The region of location covered Ghana's 16 regions (from Northern to Greater Accra), coded 1-16. The division of work categorized employees into five departments: Survey and Mapping, Public and Vested Lands Management, Land Valuation, Land Registration, and Corporate Head Office, coded 1-5. Employee designation was classified into six units: Land Administration, Estates, Geomatic, Finance and Audit, Land Registrars/Legal, and Administrative and Records, coded 1-6. These variables provided the structural framework for analyzing organizational distribution and employee roles.

### 4.2.4 Measures and Validation

Factor analysis was conducted to identify key dimensions of motivation, service delivery, and land administration reforms. Exploratory Factor Analysis (EFA) was employed as a data reduction method, with Bartlett's Test of Sphericity (χ² = 2609.175, df = 171, p < 0.000) and Kaiser-Meyer-Olkin (KMO = 0.809) confirming significant correlations among variables. The analysis utilized Principal Component Analysis (PCA) with Varimax rotation, considering factors with Eigenvalues ≥1 and factor loadings ≥0.3 as indicated in Table 2. Of the 30 initial items, 19 were retained after addressing cross-loadings, explaining 67.815% of the variance. Eleven items were eliminated following Hair et al.'s (2010) recommendations due to cross-loading or insufficient factor loading. Scale reliability was evaluated using Cronbach's Alpha, with Nunnally's (1978) recommended threshold of 0.70. Detailed PCA results and KMO/Bartlett's test outcomes are presented in the appendix.

**Table 2: Rotated component matrix of construct measures and loadings**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Component** | | | | |
| **1** | **2** | **3** | **4** | **5** |
| IM1 |  | .816 |  |  |  |
| IM2 |  | .835 |  |  |  |
| IM4 |  | .773 |  |  |  |
| IM5 |  | .699 |  |  |  |
| EM1 | .711 |  |  |  |  |
| EM2 | .766 |  |  |  |  |
| EM3 | .730 |  |  |  |  |
| EM4 | .816 |  |  |  |  |
| EM5 | .872 |  |  |  |  |
| EM6 | .877 |  |  |  |  |
| ServiceDelivery2 |  |  | .780 |  |  |
| ServiceDelivery3 |  |  | .842 |  |  |
| ServiceDelivery4 |  |  | .813 |  |  |
| IR3 |  |  |  |  | .741 |
| IR4 |  |  |  |  | .794 |
| IR5 |  |  |  |  | .803 |
| ER2 |  |  |  | .836 |  |
| ER3 |  |  |  | .831 |  |
| ER4 |  |  |  | .754 |  |
| Extraction Method: Principal Component Analysis.  Rotation Method: Varimax with Kaiser Normalization. | | | | | |
| a. Rotation converged in 6 iterations. | | | | | |

Source: Researcher’s field note (2024)

**Table 3: Measures, factor loadings, and reliability of constructs**

|  |  |  |
| --- | --- | --- |
| **Scale and items** | **Factor loadings** | **Reliability of construct** |
| **Intrinsic motivation** |  | **.832** |
| 1. There are reduced periods of promotion in the LC | .816 |  |
| 2. There is opportunity for training and capacity building in the LC | .835 |  |
| 3. There is easy access to working tools | .773 |  |
| 4. There are conducive working conditions in the LC | .699 |  |
| **Extrinsic motivation** |  | **.894** |
| 1. There is additional income for employees who perform well in a given month | .711 |  |
| 2. Employees are given allowances for working overtime | .766 |  |
| 3. Benefits are given to employees in acting capacities in various positions | .730 |  |
| 4. Donor partners and the Government have provided funding for capacity-building | .816 |  |
| 5. Means of transport are provided to staff | .872 |  |
| 6. There is a functional welfare system | .877 |  |
| **Service delivery** |  | **.771** |
| 1. Lands Commission provides services on time | .780 |  |
| 2. Land Ownership information provided by the Lands Commission is reliable | .842 |  |
| 3. There is the quality of service provided by the Lands Commission | .813 |  |
| **Internal land administration reforms** |  | **.717** |
| 1. The LC has clear budgetary allocations for the Divisions | .741 |  |
| 2. In the LC, there is in place a results framework for staff | .794 |  |
| 3. There are frequent staff performance appraisals | .803 |  |
| **External land administration reforms** |  | **.764** |
| 1. Reforms have reduced bureaucracy within the LC | .836 |  |
| 2. Digitization of land records has aided service delivery | .831 |  |
| 3. The implementation of the Enterprise Land Information System (ELIS) has eliminated delays in service delivery | .754 |  |

Source: Researcher’s field note (2024)

**4.3 Correlation and descriptive statistics**

This section reports the statistics of key variables used in the study, as shown in Table 4. In terms of intrinsic motivation, there was a general agreement that intrinsic motivation (*Mean* = approximately 2.9, SD = .98) leads to service delivery. Respondents also felt that extrinsic motivation (*Mean* = 3.02, *SD* = .96) affected land service delivery.

**Table 4: Descriptive statistics, demographic variables, and latent constructs**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Indicators** | **N** | **Min** | **Max** | **Mean** | **SD** | **Skewness** | **Kurtosis** |
| Region | 332 | 1.00 | 16.00 | 5.3253 | 5.12999 | .794 | -.906 |
| Division | 330 | 1.00 | 6.00 | 2.5333 | 1.14075 | .023 | -1.153 |
| Designation | 332 | 1.00 | 7.00 | 3.0482 | 1.83556 | .430 | -1.058 |
| Intrinsic Motivation | 330 | 1.00 | 5.00 | 2.9157 | .98275 | -.352 | -.617 |
| Extrinsic Motivation | 331 | 1.00 | 5.00 | 3.0252 | .96408 | -.416 | -1.075 |
| Service Delivery | 330 | 1.00 | 5.00 | 3.1828 | .85956 | -.286 | .030 |
| Internal Land | 330 | 1.00 | 5.00 | 3.8091 | .74801 | -1.255 | 2.327 |
| External Land | 330 | 1.00 | 5.00 | 3.6035 | .71587 | -.689 | 1.320 |

Source: Researcher’s field note (2024)

Table 4 presents descriptive statistics including Minimum (lowest value), Maximum (highest value), Mean (average), and Standard Deviation (value spread). Data normality was confirmed with skewness and kurtosis values between -2 and +2. The analysis revealed that internal land administration reforms scored highest (Mean = 3.8091) with a strong negative skew, indicating favourable respondent ratings. External land factors also showed high ratings (Mean = 3.6035) with moderate left skew. Intrinsic and extrinsic motivation demonstrated more balanced distributions, with means around 3, suggesting moderate motivation levels among respondents. The dependent variable, service delivery, showed a balanced distribution (Mean = 3.1828). These statistics provide insights into data distribution, central tendency, and variability. Correlation results are presented in Table 5.

**Table 5: Convergent and discriminant validity**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Variables** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** |
| 1. Service Delivery | .**811** |  |  |  |  |  |  |  |
| 2. Region | .046 | 1 |  |  |  |  |  |  |
| 3. Division | -.049 | .068 | 1 |  |  |  |  |  |
| 4. Designation | .027 | .090 | .112 | 1 |  |  |  |  |
| 5. Intrinsic Motivation | .308 | .017 | .077 | .196 | **.782** |  |  |  |
| 6. Extrinsic Motivation | .243 | -.281 | .201 | .010 | .386 | **.798** |  |  |
| 7. Internal Land Admin reform | .055 | -.041 | -.137 | -.029 | -.028 | .099 | **.779** |  |
| 8. External Land Admin reform | .028 | -.105 | -.047 | -.009 | .006 | .110 | .266 | **.808** |
| **AVE** | .659 | - | - | - | .612 | .637 | .608 | .653 |

Correlation is significant at the 0.01 level (2-tailed) and the 0.05 level (2-tailed).

Note: Diagonal elements are the square root of the Average Variance Extracted.

Source: Researcher’s field note (2024)

**4.4 Test of validity****- Convergent and discriminant analysis**

The study assessed construct reliability and validity through convergent and discriminant validity tests. Item loadings exceeded 0.50 for all constructs, indicating substantial commonality. The Average Variance Extracted (AVE) surpassed the 0.50 threshold for all latent variables, confirming that measures accounted for at least half of their variance with underlying constructs. Discriminant validity was evaluated using Fornell and Larcker's (1981) criterion, which necessitates that the square root of the AVE exceeds inter-construct correlations. The correlation matrix in Table 5 confirmed this criterion, demonstrating that constructs were distinct and measures were both reliable and valid.

## **5 ANALYSIS**

### 5.1 The effect of intrinsic and extrinsic motivation on land service delivery

Hierarchical regression analysis examined the effect of motivation on service delivery through four stages. Stage one used control variables (location, division, designation) to predict service delivery. Stage two added independent variables (intrinsic and extrinsic motivation) to control variables. Stage three incorporated moderating variables (internal and external land administration reforms) alongside previous variables. The final stage introduced interaction terms between the moderator and independent variables to complete the analysis. Table 6 presents the regression analysis.

**Table 6: Regression analysis results of the relationship between intrinsic and extrinsic motivation on service delivery**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Service Delivery** | | | |
| **Variables** | **Model 1**  **B(t-values)** | **Model 2**  **B(t-values)** | **Model 3**  **B(t-values)** | **Model 4**  **B(t-values)** |
| Control variables |  |  |  |  |
| Constant | 3.213(23.100) | 2.171(10.734) | 2.031(5.725) | 2.319(5.816) |
| Region | .041(.733) | .105(1.900+) | .105(1.880+) | .093(1.653+) |
| Division | -.055(-.982) | -.117(-2.163) | -.112(-2.031) | -.102(-1.830+) |
| Designation | .031(.558) | -.014(-.252) | -.014(-.255) | .001(.020) |
| Independent variables |  |  |  |  |
| Intrinsic motivation |  | .235(4.013) | .238(4.034) | .232(3.885) |
| Extrinsic motivation |  | .209(3.403) | .204(3.251) | .205(3.244) |
| Moderating variables |  |  |  |  |
| Internal reforms (IR) |  |  | . .129(2.546) | 121(2.567) |
| External reforms (ER) |  |  | .002(.036) | -.028(-.468) |
| Interaction effect |  |  |  |  |
| Intrinsic motivation (IR) |  |  |  | .114(2.208) |
| Extrinsic motivation (IR) |  |  |  | -.055(-.703) |
| Intrinsic motivation (ER) |  |  |  | -.014(-.211) |
| Extrinsic motivation (ER) |  |  |  | -.087(-1.293) |
| R2 | .005 | .133 | .154 | .165 |
| F-Value | .556 | 9.819 | 7.024 | 4.835 |
| R2 | .005 | .128 | .021 | .011 |
| Degrees of freedom | 3/321 | 5/319 | 7/317 | 11/313 |

*p* < .10, *p* < .05, *p* < .01, *p* < .001

Source: Researcher’s field note (2024)

The hierarchical regression analysis revealed progressive changes in explaining service delivery variance across four models. Model 1's control variables (region, division, designation) explained 5% of variance. The addition of intrinsic and extrinsic motivation in Model 2 increased variance to 13.3% (ΔR² = 12.8%, F = 9.819, p < .05). Model 3's introduction of moderating variables (internal/external reforms) increased variance to 15.4% (F = 7.024, p < .010). Model 4's interaction terms raised the total variance to 16.5% (F = 4.835, p < .01). Control variables demonstrated significant relationships with service delivery: region (β = .093, t = 1.653, p < .10), division (β = -.102, t = -1.830, p < .010), and designation (β = .001, t = .020, p > .010). Both motivation types positively influenced service delivery, with intrinsic motivation exhibiting a stronger impact (β = .232, t = 3.885, p < .001) compared to extrinsic motivation (β = .205, t = 3.244, p < .001). These findings supported Hypotheses 1 and 2.

Regarding reforms, internal reforms positively affected service delivery (β = .121, t = 2.567, p < .01), while external reforms exhibited negative, insignificant effects (β = -.028, t = -.468, p > .10). For moderating effects, internal reforms positively moderated the intrinsic motivation-service delivery relationship (β = .114, t = 2.208, p < .05), supporting Hypothesis 3. However, internal reforms did not moderate the extrinsic motivation-service delivery relationship (β = -.055, t = -.703, p > .10), rejecting Hypothesis 4. External reforms demonstrated no significant moderating effects on either intrinsic motivation (β = -.014, t = .211, p > .10) or extrinsic motivation (β = -.087, t = -1.293, p > .10) relationships with service delivery, rejecting Hypotheses 5 and 6. Table 7 presents a summary of the hypotheses tested.

**Table 7: Summary of hypotheses and empirical conclusions**

|  |  |  |
| --- | --- | --- |
| **Hypotheses** | **Expected sign** | **Conclusions** |
| H1: There is a positive relationship between intrinsic motivation and service delivery | + | Supported |
| H2: There is a positive relationship between extrinsic motivation and service delivery | + | Supported |
| H3: Internal reforms moderated the positive relationship between intrinsic motivation and service delivery | + | Supported |
| H4: Internal reforms moderated the positive relationship between extrinsic motivation and service delivery | + | Not Supported |
| H5: External reforms moderated the positive relationship between intrinsic motivation and service delivery | + | Not supported |
| H6: External reforms moderated the positive relationship between extrinsic motivation and service delivery | + | Not Supported |

# **6. SUMMARY AND CONCLUSIONS**

## **6.1 Summary**

## This study examined the role of employee motivation in land service delivery, focusing on intrinsic and extrinsic motivation factors and the moderating effects of internal and external land administration reforms. The research utilized a sample size of 332 participants, with data collected through face-to-face structured survey questionnaires. Factor analysis was conducted to determine the dimensions of key variables, with all factors loading at 0.5 or above. The scales demonstrated strong internal consistency, with Cronbach Alpha reliabilities ranging from 0.764 to 0.894, exceeding the minimum requirement of 0.50. Correlation analysis revealed significant relationships between most variables, with mean values falling between 1.0 and 5.0. Convergent and discriminant validity tests confirmed the reliability of the constructs.

## The study employed hierarchical regression analysis to test six hypotheses across four stages. Stage one examined control variables (region, division, and designation); stage two incorporated independent variables (intrinsic and extrinsic motivation); stage three included moderating variables (internal and external land administration reforms); and stage four introduced interaction effects between moderators and independent variables. Of the six hypotheses tested, three were supported: (1) intrinsic motivation exhibited a positive relationship with service delivery, (2) extrinsic motivation demonstrated a positive relationship with service delivery, and (3) internal reforms moderated the positive relationship between intrinsic motivation and service delivery. The remaining three hypotheses were not supported by the data. These findings contribute to understanding how different forms of motivation impact land service delivery and highlight the significant role of internal reforms in enhancing this relationship.

## **6.2 Discussion**

### 6.2.1 The effect of motivation on the quality-of-service delivery by the Lands Commission of Ghana.

Hypothesis 1 findings demonstrated that intrinsic motivation significantly influenced service delivery (β= .232, t=3.885, p < .001), indicating that a unit increase in intrinsic motivation results in a 23.2% increase in service delivery. This aligns with Berman et al. (2015) research illustrating that intrinsically motivated employees contribute more substantially to organizational success. Fukuyama (2017) further corroborates this, noting that internal motivation drives employees to better serve organizational and stakeholder interests, which is particularly crucial in land administration where service quality affects public trust.

Hypothesis 2 revealed that extrinsic motivation positively influenced service delivery (β= .205, t= 3.244, p < .001), with a unit increase resulting in a 20.5% improvement in service delivery. This finding supports Locke and Latham's (2004) research on the importance of external rewards, including bonuses, promotions, and working conditions. Hasnain & Pierskalla (2012) further demonstrate that fair compensation enhances performance and service delivery. In the public sector context, particularly at Ghana's Lands Commission, extrinsic motivation through improved service conditions and compensation proves essential for quality service delivery and reform implementation. Both findings emphasize the complementary roles of intrinsic and extrinsic motivation in enhancing public sector service delivery, particularly in land administration reforms.

### 6.2.2 The moderating role of internal and external land administration reforms on the relationship between motivation and quality of Service delivery by the Lands Commission of Ghana.

### Hypothesis 3 analysis revealed that internal reforms significantly moderated the relationship between intrinsic motivation and service delivery (β = .114, t = 2.208, p < .05). This finding aligns with Bolino & Grant's (2016) research demonstrating that employees who identify with their organization exceed formal job requirements. Will (2012) further corroborates this, noting that internal reforms empower employees with the necessary tools and clarity, enhancing their intrinsic motivation. The synergy between internal reforms and intrinsic motivation at Ghana's Lands Commission creates an environment where employee ownership and commitment drive improved service delivery (Brunsson & Olsen, 2018; Steiss, 2019).

### Hypothesis 4 found no significant moderating effect of internal reforms on the relationship between extrinsic motivation and service delivery (β = -.055, t = .703, p > .10). This suggests that internal organizational changes may not significantly influence externally motivated performance factors such as financial incentives and career progression. The finding indicates that extrinsic motivation remains relatively stable regardless of internal reforms, emphasizing the necessity for direct incentives rather than organizational changes to enhance externally motivated service delivery.

### Hypothesis 5 analysis demonstrated that external reforms did not significantly moderate the relationship between intrinsic motivation and service delivery (β = -.014, t = .211, p > .10). While external reforms by stakeholders such as government and donor agencies aim to improve service efficiency (World Bank, 2016; Daniel et al., 2019), they may conflict with employee intrinsic motivation. Lassou & Hopper (2016) suggest that external reforms, though sometimes necessary, must be carefully implemented to avoid undermining employee autonomy and motivation.

### Hypothesis 6 similarly revealed no significant moderating effect of external reforms on the relationship between extrinsic motivation and service delivery (β = -.087, t = -1.293, p > .10). External reforms focusing on broader organizational goals may not address immediate extrinsic needs such as compensation and career advancement (Daniel et al., 2019). Gustavson (2013) notes that increased workloads or responsibilities from external reforms without corresponding benefits may decrease employee engagement and service delivery effectiveness.

### These findings highlight the complexity of implementing external reforms at Ghana's Lands Commission. As Fernandez & Rainey (2006) suggest, successful reform implementation demands a careful balance between organizational changes and employee motivational factors to maintain service delivery quality.

## **6.3 Recommendations**

This study elucidates several key implications for enhancing service delivery at Ghana's Lands Commission. Both intrinsic and extrinsic motivation play pivotal roles in improving service delivery, suggesting that management should develop human resource policies that address these motivational factors to maintain employee engagement and productivity. The positive moderating effect of intrinsic motivation on land administration reforms and service delivery underscores the importance of continuous internal improvements, including capacity building, policy revisions, digitization, and decentralization. Management should implement these reforms while ensuring employee commitment to the process, as intrinsically motivated employees are more likely to drive successful outcomes. The study recommends prioritizing employee motivation when implementing external reforms, as external interventions may prove ineffective without intrinsic motivation. If motivating staff proves challenging, policymakers could consider public-private partnerships (PPP) to introduce efficiency and innovation in land administration. The study also recommends enhancing systems through ICT integration, improved service conditions, and strengthened institutional collaboration with the judiciary and allied agencies. For the successful implementation of external reforms, adequate financial and technical resources are essential, along with personnel support. Management should seek donor partnerships, align with government policies, and review fees to ensure sustainable reform implementation.

The study encountered several limitations in its scope and methodology. While it focused on service delivery quality at the Lands Commission, examining intrinsic and extrinsic motivation's influence on service aspects such as speed, reliability, and stakeholder satisfaction, it was limited to 332 respondents from sixteen regional offices. Future research should expand to include district offices and employ larger sample sizes for more comprehensive analysis. Different methodologies, particularly qualitative approaches, could provide deeper insights into how motivation influences reforms. Additionally, while customer perspectives would have provided valuable insights, the research focused on staff perspectives due to accessibility challenges. Future studies should incorporate customer views for a more comprehensive evaluation of service delivery effectiveness.

This study investigated the relationship between employee motivation and service delivery at Ghana's Lands Commission, examining both intrinsic and extrinsic motivational factors and the moderating effects of land administration reforms. The findings revealed significant positive relationships between both types of motivation and service delivery, with intrinsic motivation showing a slightly stronger impact. Internal reforms positively moderated the relationship between intrinsic motivation and service delivery, while external reforms showed no significant moderating effect on either type of motivation. These findings emphasize the importance of balancing internal organizational improvements with employee motivational needs. The study recommends that management focus on developing comprehensive human resource policies that address both intrinsic and extrinsic motivational factors while implementing reforms. Future research should expand to include district offices and customer perspectives for a more comprehensive understanding of service delivery effectiveness in land administration.

**DISCLAIMER (ARTIFICIAL INTELLIGENCE)**

The authors hereby declare that Grammarly was used for grammar check during the editing of this manuscript.

**Disclosure statement**

The authors report that there are no competing interests to declare

**Data availability statement**

The corresponding author can make the data used to support this study’s findings available upon reasonable request.

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