

Non-Inclusive Regulo-Administrative Ergonomics of Land Management System and Its Impacts on Sustainability of Nigeria's Land Markets

¹Kazeem B. Akinbola; ²Lukuman Musibau, ³Jacob A. Babarinde

¹Department of Estate Management, The Federal Polytechnic, Ilaro, Nigeria

²Department of Estate Management, The Federal Polytechnic, Ede, Nigeria

³Department of Surveying and Land Studies, The Papua New Guinea University of Technology, Lae, Papua New Guinea

¹akbolayemi@gmail.com; ²lukmanmusibau@gmail.com; ³jbabarin@hotmail.com

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Abstract

Undebatably, smoothness and mutuality of approach ultimately buoy every system, land management system inclusive. They also help LMS to enduringly deliver and sometimes surpass the statutory mandates, with which it is saddled, as it resultantly soars the delivery and accessibility of urban lands in Nigeria, nay globally. Sadly, complementarity and symbiotism that are hallmarks of a smoothly and mutually operated system are either non-existent or at an appallingly poor state among land management systems in Nigeria with consequences in terms of retardation in the speed and volume of land delivery and accessibility. Hence, assessing the immediate and remote impacts on stakeholders of the parlous state of inclusive regulo-administrative ergonomics of land management system, in terms of supply and demand of land in Nigeria, is the purpose of this paper. Being quantitative research, the plethora of factors that are innate to the issues involved are scripted into 12 impact-measuring constructs: responsiveness+responsibility, bureaucracy, effectiveness+efficiency, people-centredness, elegance, institutionalism, trustworthiness, speed, pedigree-posterity, fairness, citizenship, and multi-dimensionality. These constructs are then used to prepare 69 copies of 5-Likert scaled questionnaire, which were distributed through purposive and simple random sampling techniques among land regulators, land administrators, independent land consultants, NGOs with land mandates, and registered land developers within southwest Nigeria. Out of this number, 56 completed questionnaires were retrieved, translating to a distribution-retrieval rate of 81.16%, while 48 copies were valid and used for data analysis. Percentile, multiple regression, exploratory factor analysis and mean item score were adopted to measure the degree by which inclusiveness of land's regulo-administrative ergonomics impacts the land management system, and the delivery and accessibility of land in Nigeria. Based on an excellent output of 0.835 for Kaiser-Meyer-Olkin, together with good Bartlett's Test of Sphericity value at $p < 0.05$ and 0.863 for average Cronbach alpha values for the totality of the 24 description measurement factor statements, the results show that the non-people centredness of government's land MDAs, is the worst hit aspect of land management system, closely followed by bureaucratisation aspects occasioned by the non-inclusiveness question surrounding regulo-administrative ergonomics, which by extension has great adversity on the dynamics of land delivery and accessibility in Nigeria. Consequently, the land management system and the supply and demand aspects of land spectrum in Nigeria continually experience the ugliness that is heralded by the regulo-administrative ergonomics inclusiveness issues. The paper recommends, among other things, that drastic, decisive, and concerted measures

allowing for increased mutuality among all hierarchical units and divisions of land management system be adopted to promote sustainability of land markets in Nigeria.

Keywords: *Non-inclusiveness, ergonomics, regulo-administrative, land management, land markets, Nigeria*

1. Introduction and rationale

The vibrancy of the land management system has been recognised as a product of quite several factors. These include the extent to which statutory functions of controlling the use of land, regulating the development of land, and legislating against the abuse of land, have all been shaped by the dual philosophy of complementarity and symbiotism as the most commanding of them all. This is because the factors and the philosophy, among other things, do not only help to stir a very strong synergy among all the departments, units, sections, and divisions within the hierarchy of any land management system, with which impressive multi-directionality that outstanding delivery of services to an array of citizens in their multi-dimensional quests for land resources requires. They also assist in ensuring the attainment of every single goal set by the law and government, with most pristine cost-effectiveness and material cum human efficiency (Hull, 2014). It further stands to reason that, if not well managed, they tend to end up constituting a few of the challenges being faced by a teeming population of land needing Nigerians, including land agencies and land users / developers, in terms of clogs in delivery and hardship in accessibility, and by extension to that, the need to measure the degree by which the formal land markets is being impacted by all arrays of underlying reasons (Akinbola *et al*, 2020).

The present research is conceived within the context that, regardless of how decisive and serious a land management system is, to attain the much-expected workings of a truly world-rated and much sought-after system, it must address the evolving land requirements and other complicated needs of every citizen of Nigeria. It must also address the land needs of Nigerians in respect of their expectations in delivery of services, which has implications for the dynamics of land delivery and accessibility (De Zeeuw & Lemmen, 2015). It then comes across as a vantage position that an efficient land management system capable of delivering land in desirable quantum for socio-economic development to all arrays of developers, requires an enduring established arsenal of a rich tradition of internal democratic ideals, which engender culture of multi-directionality that is built on philosophies of symbiotism and complementarity. Such philosophies must rely on the depth, breadth, and height of the dimensions of synergistic tendencies among the institutional units, divisions, and departments of land management across any country for that matter (Drexhage & Murphy, 2010).

Also, it would not be out of place to submit that, part of the vestiges of challenges being heralded by inclusiveness issues around which ergonomics of land's regulo-administrative functions have been shrouded, have given rise to a broad-based enablement for the not-so-formally transacted land dealings which have erupted everywhere, leading to manners of unwholesomeness, sometimes, with few of such ugliness that have succeeded in painting the very formal organised land management system in bad light, with far reaching consequences of immeasurable magnitudes (Enemark, 2018). Hence, efforts were made to thoroughly x-ray some of the underlying issues for which this research tries to bring to the fore by driving through its centreline, to mould the very basis upon which it stands, the outcome of which contributes to generation of the following research queries, viz: i. Are there regulo-administrative ergonomics in existence and of what complexions are they? ii. How non-inclusive are these regulo-administrative ergonomics? iii. In what ways and to what extent has the land management system been affected by the non-inclusiveness questions? iv. How has

land delivery and accessibility been resultantly impacted by the above and by what means are these been measured? v. How best can (iii and iv) above be addressed?

Therefore, it is imperative to state that steps that were taken to accurately respond to the research queries listed above, assisted in properly contextualising the extent by which land management system is being impacted by inclusiveness question revolving around regulo-administrative ergonomics, thus situating clearer its adversity on land delivery and accessibility, and more importantly is the area of possible ways provided by this research in addressing some of the issues raised by this study among others.

2. Review of the literature

Foremost, it becomes imperative to state that, issues of ergonomics with which the regulo-administrative functions, for which land management system is configured, which is now being haunted by them, could be said not to be far from that philosophy that is espoused by institutional economics, which fortunately and convincingly helps to situate the footholds of the core of the issue of ergonomics as trajectories of the organisational body of knowledge scope that is situated within the larger institutional economics (Potel, 2014). It is very important to say that this is so, simply because it assists in making a case for better understanding of the multi-directionality of all aspects of land management system as an organisational whole. This exemplifies such things as nuances of internal dynamics among various departments, divisions, units, and sections, with which all the gamut of the responsibilities, statutory and otherwise, are being recognised for the purpose of systematised evaluation, assessment of their performances (Mulliner *et al*, 2013). Also, it allows for measuring of their impacts on the system of land administration and regulation itself and the array of stakeholders, as well as the larger society in general, together with the necessary reviews of their actions and inactions, all of which are meant to attain the overall desirable goal of national socio-economic development.

Furthermore, it happens as well that, steps need to be taken towards ensuring that series of menus of both literary and schematic prisms are birthed for the purpose of buoying system of land management, essentially to push forward the body of knowledge which is being well supported and understood by deep and broad knowledge of institutional economics, with a view to be imbued with transferable context which readily captures the ergonomics of regulo-administrative functions, as well as their inclusiveness or otherwise (Ashaolu and Akinbola, 2019). It also calls for an understanding of the fact that land management system as an organisation which has life of its own that it breathes, requires a dynamic and highly contemporary knowledge base that equips its actors, both of the rank and file, so as to be skilled in the art and science of situating internal workings of the units, sections, departments and divisions, in such a manner to perfectly understand the intrigues that are innate to the resulting superficial manifestations of the inclusiveness issues, with which land management as an institution is destined to confront (Akinbola and Salau, 2021). There is no doubt that, to get this realised, there is every need to fully be of adequate awareness, simply because it engenders impressive recognition of a brand known as institutional economics, which is a cocktail of essential branches of knowledge that have roots in the social sciences and law (McNeil *et al*, 2014). It is most gladdening to also state that the possession of such capacity truly offers platforms for the study of the institutional organisations such as land management system, as independent variables alongside their rights and responsibilities, as well as the nature of contributions they make in transactions cycles (Simbizi, 2014).

Also, it is noteworthy to emphasise that land management system is driven through the major dual tools of land administration and land regulation, which are fundamental mechanisms of institutional architecture for efficient and effective land management, simply because they are of deeper and more comprehensive appreciation of the philosophy and

rudiments of institutional arrangements (Akinbola *et al*, 2016a). It is undoubtful that this philosophy is a cherished and basic requirement for robust and living inclusiveness that strongly binds and continually breathes life into all stakeholders and components of land management system, such as land policies, land administration, land regulation, land valuation and appraisal, land taxation and rating, to mention but a few, vis-à-vis their ergonomics. Further to this, is the fact that, the fundamentality of the functions that are being discharged by organisational systems such as land management systems are easily templated for extensive understudying, as well as carefully footing them for properly situated basis, as they are being considered for betterment in all ramifications, without firstly subjecting them to evaluation on sterling productivity measurement via intensive assessment in respect of variables of impacts that inclusiveness of ergonomics has on various stakeholders and the components of land management system on the one hand, as well as that of land delivery and accessibility on the other hand, together with the extension of these impacts on overall socio-economic growth and development (Yilmaz *et al*, 2015).

Additionally, it is pertinent to aver that in the face of all the litany of challenges, especially those ones that are adduced to inconsistencies in the internal workings, in terms of their being affected by impropriety and / or non-existence of multi-directionality of ergonomics of regulo-administrative functions, land management system in Nigeria continues to evolve in stronger terms, in terms of ensuring that there are unending ways of bettering the present state of things, especially in the areas of adversity, which is being launched upon delivery and accessibility that by extension end up affecting overall socio-economic development of citizens at individual realm and Nigeria as a whole (Akinbola *et al*, 2018). Nonetheless, it is important to state here that, much as this whole effort of aiming to get globally-entwined with best practises in land administration and regulation functions, the retardation and non-impacting extents by which these two most important statutory mandates have been, which by extension has narrowed the pathways for the delivery and accessibility of land, are caused by so many factors, chief of which this research concerns itself with is the non-inclusiveness of the internal ergonomics and workings of the land management system, for which an array of stakeholders are affected (Hak *et al*, 2012) . It is then imperative to state that all stakeholders' decisiveness in addressing these challenges requires more than on-the-surface physical measures, as soft under-the-scene approach psycho-cultural and emotional strategies are highly cherished (Enemark *et al*, 2014).

3. Materials and methods

The breakdown of the details of empirical efforts as represented through various methodological undertakings that were deployed are reported under this section, and the discussions that follow are broken down to main titles and sub-titles for better and logical understanding, viz:

The geo-enviro-physical milieu where this research was conducted, is the southwestern part of Nigeria, which is comprised of six states of Lagos, Ogun, Oyo, Osun, Ondo, and Ekiti States. This zone was chosen because of so many reasons, which include but are not limited to its being a zone of greatest socio-economic and politico-cultural influence on the one hand. On the other hand, is its possession of Nigeria's strongest land acquisition demographics, with tendencies for all manners of regulo-administrative concerns for land management systems to contend with, together with greatest propensity to have adversity on land delivery and accessibility in Nigeria, among others. Therefore, the map below showcases further, the research case-study setting, within which the study areas are located, for better understanding, via the map of Nigeria that is contained in Figure 1, which is presented as follows:

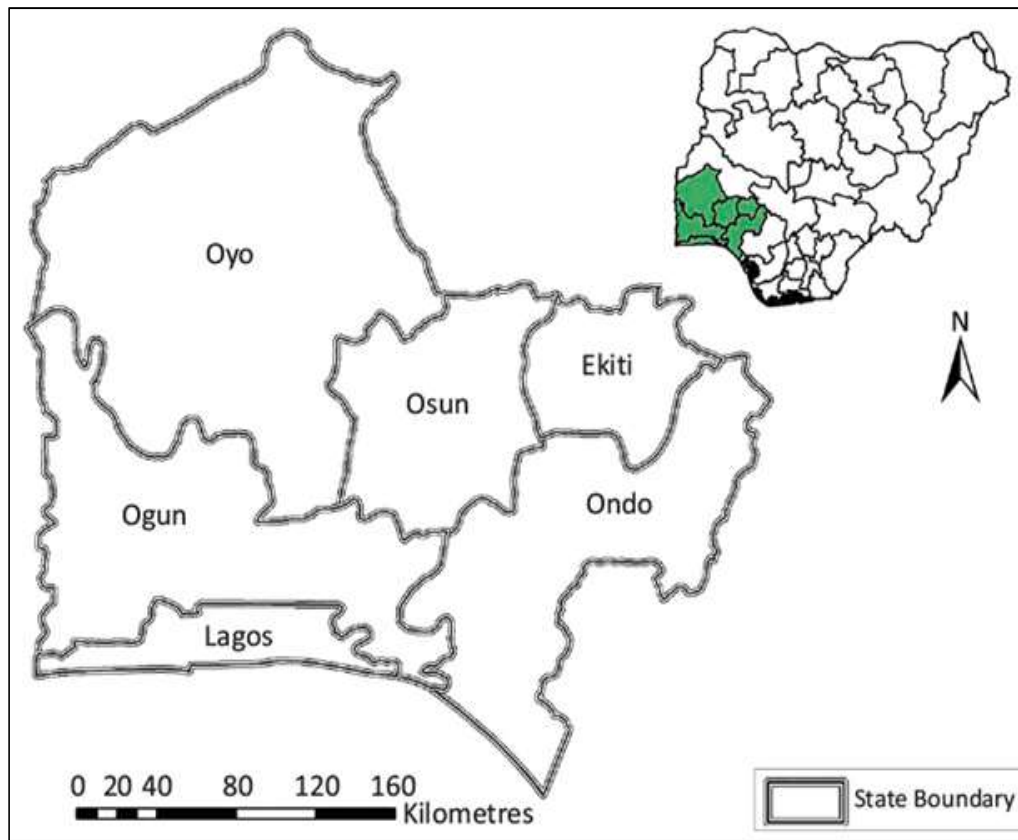


Figure 1: Map of Nigeria showing the setting for the case-study and the study areas of the research.

From the average total of 658 individuals, MDAs, firms and groups that are classified together as qualified target respondents for sample space, which are further made up of land regulators, land administrators, independent land consultants, NGOs with land mandates and registered land/property developers, 136 were eligible for the sampling frame, from which 69 were eventually chosen for administration of a 5-point Likert scaled questionnaire survey through purposive and simple random sampling techniques. Each of the questionnaires consisted of 24 issue-capturing items of queries, which are quotient factor statements that were subsumed under 12 measuring constructs or parameters for complete understanding and full assessment of the issues of the research, out of which 56 copies were retrieved, translating to a distribution-retrieval rate of 81.16%, and 48 copies were valid, thus forming the basis of data analysis, using percentile, correlation, multiple regression, exploratory factor analyses and mean item score, so as to understand and measure the degree by which inclusiveness of land's regulo-administrative ergonomics impacts the land management system and the delivery and accessibility of land in Nigeria.

4. Data analysis and findings

Essentially, data collected was analysed using version 2.0 of the SPSS package, with which the thorough weighting of the 24 quotient factor statements that were couched and subsumed under the twelve research constructs was done, with a view to measuring the impacts of the non-inclusiveness of regulo-administrative ergonomics of land management system and by extension, its impact on land delivery and accessibility, as well as the associated plagues

experienced by the stakeholders. Basically, the empirical milestones were brought to the fore, to obtain the Varimax rotation scales for principal components, as they are fundamentals that are needed for obtaining the quotients that were required for the research’s factor analysis, though this was preceded by the generation of associated averages for the calculation of percentages through percentile tool for all the respective responses of the research queries on the 5-point Likert scale.

This action was performed to ventilate the degree to which stakeholders align or distant themselves from issues of non-inclusiveness and its various adversity on array of the society’s strata, which this research investigated. Thereafter, measurement of internal consistency was done which birthed values for Cronbach alpha, that were deployed to ascertain the respective values that are corresponding in breadth and scope in respect of the 24 items of quotient factor statements which measured the impacts of non-inclusiveness of regulo-administrative ergonomics of land management system and by extension, its adversity on land delivery and accessibility, as well as the degree of its negative implications on array of stakeholders and society at large.

Also, relevant analyses using the mean item score were carried out, to assess the extent of the level of impacts that were being commensurately felt by each of the 12 constructs and to situate the extent by which the non-inclusiveness of the regulo-administrative ergonomics and its fangs were borne by land management system in Nigeria. This was done by upholding ethically the stipulation of at least 9:1 ratio of factor quotients, which in this present study has been established by having 12 items, with factor ratio 11:1, a stipulated requirement that was suggested by (Real *et al*, 2006). Table 1 sheds light on the responses of the stakeholders, as sieved from the completed questionnaires that were considered valid for analyses. This was combined with an application of *average* of the responses from the two determinant quotient factor statements about each of the 12 measuring constructs, to evolve relevant deductions that are not only judgemental but logical from the data displayed in Table 1.

Table 1: Analyses of the Retrieved and Valid Field Data Using Percentiles, Multiple Regression, Exploratory Factor Analysis, and the Mean Item Score

S/ N	Constructs and Quotient Factor Statements Coined for Regulo-Administrative Ergonomics	Responses From Land Management System’s Officials, Independent Land Consultants, Various Categories of Land Users and Relevant NGOs with Land Delivery and Accessibility Mandates.					Measurement Scaling of the Responses on the Determinant Quotient Factor Statements			
		SD	D	U	A	SA	Factor Loading	Cronbach Alpha	Mean Score	Rank
1.	Responsiveness + Responsibility									
a	Absence of inclusiveness in regulo-administrative ergonomics distorts sense of responsive land management system and resultant retardation, delivery, and accessibility of lands.	2 (4.17%)	5 (10.42%)	1 (2.08%)	26 (54.17%)	14 (29.16%)	0.8329	0.914	0.881	3rd
b	Nonexistent inclusiveness of regulo-administrative ergonomics dislodges the sense of responsibility of land	3 (6.25%)	4	2	27	12 (25%)	0.8306			

	management system and resultantly drags delivery and accessibility of lands.		(8.33 %)	(4.17 %)	(56.25 %)					
	$C_1QFS_1^{avPFLCM} =$	5.2 %	9.3 %	3.1 %	55.21 %	27.08 %	0.83			
2 Bureaucracy										
a.	Thorny issues of inclusiveness revolving around land management system renders it non-vibrant and casts all sorts of shadows on it, which resultantly leads to avoidable extension in the discharge of simple tasks of administration and technical, thus stagnates land delivery and accessibility immensely.	2 (4.17 %)	4 (8.33 %)	2 (4.17 %)	28 (58.33 %)	12 (25.00 %)	0.79 14	0.791	0.8 97	12th
b.	The gap being created by lack of inclusiveness in regulo-administrative ergonomics fuels bureaucratic lengthiness, which is highly inimical to elegant land management system and thus poses adversity of greater magnitude to the delivery and accessibility of lands.	1 (2.08 %)	3 (6.25 %)	2 (4.17 %)	33 (68.75 %)	9 (18.75 %)	0.78 65			
	$C_2QFS_2^{avPFLCM} =$	3.13 %	7.2 %	4.1 %	63.54 %	21.88 %	0.78			
3. People-Centredness										
a.	Inclusiveness issues with which land management system's regulo-administrative ergonomics are faced with, made interests of the people to become so insignificant, leading to a civil service which trivialises lands' needs of the people and the socio-economic development associated with land delivery and accessibility aren't of any weight.	2 (4.17 %)	3 (6.25 %)	2 (4.17 %)	26 (54.17 %)	15 (31.25 %)	0.88 76	0.918	0.5 71	1st
b.	Actions that are clear manifestations of inclusiveness crises of regulo-administrative ergonomics which actualise themselves as vestiges of not considering the interest of the people first as it ought to be by land management system, places greater strain on land delivery and accessibility.	1 (2.08 %)	4 (8.33 %)	2 (4.17 %)	24 (50.00 %)	17 (35.42 %)	0.87 59			
	$C_3QFS_3^{avPFLCM} =$	3.13 %	7.2 %	4.1 %	52.09 %	33.34 %	0.88			
4. Institutionalism										
a.	Inclusiveness-less of regulo-administrative ergonomics of land management system exposes it and its	1 (2.08 %)	2	1	31	13	0.81 70	0.876	0.8 63	8th

	weaknesses to the contempt of political class, thus renders it inconsequential in the face of clash of interests, thus trimming its supposed wings of influence and authority to overcome interference from all sorts of politicking, resultantly leading to menu of poor delivery and accessibility outcomes from land agencies.		(4.17 %)	(2.08 %)	(64.58 %)	(27.08 %)				
b.	Over-reliance of governments on land management system as a strong base for revenue generation brews lack of respect for its independence as an important institution, thus widening the inclusiveness crises that affect so immensely its ability to optimally deliver lands for addressing accessibility question.	2 (4.17 %)	3 (6.25 %)	2 (4.17 %)	27 (56.25 %)	14 (29.17 %)	0.7989			
	C₄QFS₄^{avPFLCM} =	3.13 %	5.21 %	3.13 %	60.42 %	28.13 %	0.8080			
5. Effectiveness+ Efficiency										
a.	Effectiveness and efficiency are great hallmarks of measuring the elegance of any performing system, such as the land management system, which inclusiveness issues have greatly eroded due to lack of strong internal dynamics among the actors, which resultantly affects the delivery and accessibility of lands.	3 (6.25 %)	4 (8.33 %)	2 (4.17 %)	24 (50.00 %)	15 (31.25 %)	0.8175	0.895	0.958	5th
b.	Versatility and creativity which are natural beauties of an inclusive organisation that is effective and efficient are lacking, which thus places land management system at a mildly harmed position that resultantly warps the land delivery and accessibility pathways.	1 (2.08 %)	3 (6.25 %)	1 (2.08 %)	25 (52.08 %)	18 (37.50 %)	0.8346			
	C₅QFS₅^{avPFLCM} =	4.17 %	7.29 %	3.13 %	51.08 %	34.38 %	0.8261			
6. Elegance										
a..	As a huge hallmark of a system with stable internal dynamics, elegance is battered by the lack of inclusiveness of the regulo-administrative ergonomics of land management system, which deals so immensely on its ability to deliver land optimally and resultantly affects land accessibility.	1 (2.08 %)	3 (6.25 %)	2 (4.17 %)	29 (60.42 %)	13 (27.08 %)	0.7685	0.792	0.973	11th
b.	Lack of elegance poses land management system risk of several types, be financial, operational,	2 (4.17 %)	5	1	24	16	0.8287			

	security, socio-psychological, etc, which are caused and driven by poor regulo-administrative ergonomics, by which land delivery and accessibility have been adversely impacted.		(10 .42 %)	(2. 08 %)	(50 .00 %)	(33 .33 %)				
	C₆QFS₆^{avPFLCM} =	3.13 %	8.3 4 %	3.1 3 %	55. 21 %	30. 21 %	0.79 86			
7. Trustworthiness										
a.	Inclusiveness crises being experienced by regulo-administrative ergonomics weakens trust fabrics that binds all stakeholders together for all-round progress, the absence of which plaques the land management system and thus clogs land delivery and accessibility.	2 (4.17 %)	5 (10 .42 %)	2 (4. 17 %)	24 (50 .00 %)	15 (31 .25 %)	0.78 92	0.796	0.9 87	10th
b.	Trust issues that are being birthed due to inclusiveness gap in the regulo-administrative ergonomics brews withdrawal of esteemed supports needed for a virile land management system and thus slows the land delivery and accessibility process.	1 (2.08 %)	4 (8. 33 %)	2 (4. 17 %)	25 (52 .08 %)	16 (33 .33 %)	0.81 73			
	C₇QFS₇^{avPFLCM} =	3.13 %	9.3 8 %	4.1 7 %	51. 04 %	32. 29 %	0.80 33			
8. Speed / Volume										
a.	Ergonomically non-inclusive land management system lacks bogus strength that togetherness breeds and upon which immense speed is templated which determines so much of the volume of tradable transactions on land, which are lacking and adversely impact on land delivery and accessibility.	1 (2.08 %)	5 (10 .42 %)	2 (4. 17 %)	25 (52 .08 %)	15 (31 .25 %)	0.83 54	0.902	0.8 79	4th
b.	Inclusiveness gap that is being experienced by land management system's regulo-administrative ergonomics drags the pace with which lands' transactions are conducted and thus hampers the speed of flow that impressive volume that land delivery and accessibility require.	2 (4.17 %)	6 (12 .50 %)	2 (4. 17 %)	24 (50 .00 %)	14 (29 .17 %)	0.81 79			
	C₈QFS₈^{avPFLCM} =	3.13 %	11. 46 %	4.1 7 %	51. 04 %	30. 21 %	0.82 67			
9. Fairness										
a.	Justice and equity are the hallmarks of a fair and balanced system, which are lacking in the present situation of ergonomically non-inclusive land management system and thus creates a	2 (4.17 %)	4 (8. 33 %)	3 (6. 25 %)	23 (47 .92 %)	16 (33 .33 %)	0.79 85	0.869	0.9 65	9th

	lot of unfortunate mismatches in land delivery and accessibility.									
b.	Land management system's inclusiveness crisis places the regulo-administrative ergonomics in a disparaging manner with the favoured being considered for some roles with or without due cognisance for requisite wherewithal to discharge the statutory roles, which thus adversely impacts land delivery and accessibility.	3 (6.25 %)	7 (14.58 %)	2 (4.17 %)	23 (47.92 %)	13 (27.08 %)	0.81 68			
	$C_9QFS_9^{avPFLCM} =$	5.21 %	11.46 %	5.21 %	47.92 %	30.21 %	0.80 77			
10. Pedigree + Posterity										
a.	Land is a living spirit with a soul that recognises its profitable development and must submit to acknowledgement of pre-historic belief system as having a positive hold on meaningful socio-economic development, a clear gap in an ergonomically inclusive-challenged regulo-administrative land management system, which impacts adversely on land delivery and accessibility.	2 (4.17 %)	3 (6.25 %)	4 (8.33 %)	24 (50.00 %)	15 (31.25 %)	0.87 28	0.916	0.8 57	2nd
b.	Posteriorly configured land delivery and accessibility mechanisms thrive on statutorily functional land management system that is built upon a pedigree-balanced system that is devoid of ergonomically defined regulo-administrative non-inclusiveness.	2 (4.17 %)	5 (10.42 %)	3 (6.25 %)	25 (52.08 %)	13 (27.08 %)	0.86 59			
	$C_{10}QFS_{10}^{avPFLCM} =$	4.17 %	8.34 %	7.29 %	51.04 %	29.17 %	0.86 94			
11 Citizenship										
a.	Bi-directionalising of intervention as a key indicator of measuring goodness of interventionist agency, which land management system signposts shows the gap in inclusiveness of regulo-administrative ergonomics is not almost inexistent and strength removing, it has impacted poorly on the delivery and accessibility of lands.	3 (6.25 %)	4 (8.33 %)	2 (4.17 %)	24 (50.00 %)	15 (31.25 %)	0.82 67	0.878	0.9 38	7th
b.	Sustainability as a hallmark of self-driven, future-looking and response built around civic engagement as a philosophy of citizenship, which are clear gaps of inclusiveness issues plaguing regulo-administrative ergonomics of land management	1 (2.08 %)	5 (10.41 %)	2 (4.17 %)	23 (47.91 %)	17 (35.42 %)	0.79 95			

	system and constitute great adversity on land delivery and accessibility.									
	C₁₁QFS₁₁^{avPFLCM} =	4.17 %	9.3 %	4.1 %	48.96 %	33.34 %	0.81 31			
12	Multi-Dimensionality									
a	A people-serving and need-meeting system requires prism that strives to attain the expectations of all stakeholders and land management system is not supposed to be less multi-dimensional, which sadly is battered due to inclusiveness crises revolving around regulo-administrative ergonomics and thus places greater adversity on land delivery and accessibility.	2 (4.17 %)	4 (8.33 %)	3 (6.25 %)	24 (50.00 %)	15 (31.25 %)	0.83 96	0.885	0.7 82	6th
b	Interests and aspirations are diverse and requires no less a system but with robust multi-dimensionality, which serves all the requirements of stakeholders with completeness and fulfilment, which presently is almost non-existent in land management system, due to inclusiveness issues plaguing the regulo-administrative ergonomics and its adversity on land delivery and accessibility is inestimable.	2 (2.08 %)	3 (8.04 %)	1 (4.60 %)	26 (54.17 %)	16 (33.33 %)	0.79 86			
	C₁₂QFS₁₂^{avPFLCM} =	3.13 %	8.1 %	5.4 %	52.09 %	32.29 %	0.81 91			

Source: Authors' Field Work, 2021

5. Discussion

Table 1 abundantly captures and displays the contents of the responses from various categories of respondents and stakeholders, as distilled from the survey and eventually analysed using the above mentioned statistical tools, with the outputs as results that are reported hereunder as interpretations of all the 12 constructs and their associated 24 quotient factor statements that serve as parameters, against which the impacts of inclusiveness crises revolving around regulo-administrative ergonomics of land management system are being felt by land delivery and accessibility spectra, as well as most especially how they are being measured, thus:

- 1) Responses to the first construct [Responsiveness + Responsibility] show that Nigeria's land management system is faced with challenges of regulo-administrative ergonomics and this affects so adversely its ability to respond as swiftly as expected, coupled with poor sense of responsibility which is being displayed, with 26 of the 48 total respondents, translating to 55.21% averagely agreeing and 13 of the 48 total respondents, translating to 27.08% strongly agreeing averagely, with just 2 of the 48 total respondents, translating to 5.2% strongly disagreeing averagely, as well as average factor loading of 0.8318 and Cronbach alpha value of 0.914 to the two determinant quotient factor statements of this first construct of measurement parameter; the totality of which impacts so gravely as the third most important aspect by which ergonomically non-inclusive land management

- system has affected the delivery and accessibility of land to all arrays of stakeholders in Nigeria.
- 2) Responses to the second construct [Bureaucracy] show that Nigeria's land management system is faced with challenges of regulo-administrative ergonomics and this unnecessarily drags the processing of the supply of land applications as submitted by array of prospective land users by elongating the period unduly with exploitative costs therewith, with 30 of the 48 total respondents, translating to 63.54% averagely agreeing and 10 of the 48 total respondents, translating to 21.88% strongly agreeing averagely, with just 1 of the 48 total respondents, translating to 3.13% strongly disagreeing averagely, and an average factor loading of 0.7890 with Cronbach alpha value of 0.791 to the two determinant quotient factor statements of this second construct of measurement parameter; the totality of which impacts so adversely as the twelfth most important aspect by which ergonomically non-inclusive land management system has affected the delivery and accessibility of land to all arrays of stakeholders in Nigeria.
 - 3) Responses to the third construct [People Centeredness] show that Nigeria's land management system is faced with challenges of regulo-administrative ergonomics and this culminates to treating of interests of the people as being so insignificant, leading to a civil service which trivialises lands' needs of the people and the socio-economic development associated therewith, with 25 of the 48 total respondents, translating to 52.09% averagely agreeing and 16 of the 48 total respondents, translating to 33.34% strongly agreeing averagely, with just 1 of the 48 total respondents, translating to 3.13% strongly disagreeing averagely, as well as average factor loading of 0.8818 and Cronbach alpha value of 0.918 to the two determinant quotient factor statements of this third construct of measurement parameter; the totality of which impacts so adversely as the first most important aspect by which ergonomically non-inclusive land management system has affected the delivery and accessibility of land to all array of stakeholders in Nigeria.
 - 4) Responses to the fourth construct [Institutionalism] show that Nigeria's land management system is faced with challenges of regulo-administrative ergonomics and this exposes the system and its contents to the vagaries of politicians' contempt, which further weakens its realm of influence, thus waters down its strength to overcome all manners of undue political interference, with 29 of the 48 total respondents, translating to 60.42% averagely agreeing and 13 of the 48 total respondents, translating to 28.13% strongly agreeing averagely, with just 1 of the 48 total respondents, translating to 3.13% strongly disagreeing averagely, as well as average factor loading of 0.8080 and Cronbach alpha value of 0.876 to the two determinant quotient factor statements of this fourth construct of measurement parameter; the totality of which impacts so adversely as the eighth most important aspect by which ergonomically non-inclusive land management system has affected the delivery and accessibility of land to all array of stakeholders in Nigeria.
 - 5) Responses to the fifth construct [Effectiveness + Efficiency] show that Nigeria's land management system is faced with challenges of regulo-administrative ergonomics, as reflected in the way and manner with which promptness and thoroughness which are the hallmarks of measuring the effectiveness and efficiency of any optimally performing system, such as the land management system, that inclusiveness issues have greatly eroded due to lack of strong internal dynamics among the actors, have been put in a coma, with 24 of the 48 total respondents, translating to 51.08% averagely agreeing and 16 of the 48 total respondents, translating to 34.38% strongly agreeing averagely, with just 2 of the 48 total respondents, translating to 4.17% strongly disagreeing averagely, as well as average factor loading of 0.8261 and Cronbach alpha value of 0.895 to the two determinant quotient factor statements of this fifth construct of measurement parameter; the totality of which impacts so adversely as the fifth most important aspect by which ergonomically

- non-inclusive land management system has affected the delivery and accessibility of land to all array of stakeholders in Nigeria.
- 6) Responses to the sixth construct [Elegance] show that Nigeria's land management system is faced with challenges of regulo-administrative ergonomics, as there exists a huge display of a lack of robustness, enduring ruggedness and stability, as reflected in series of troubled internal dynamics being experienced by the system and its stakeholders, with 26 of the 48 total respondents, translating to 55.21% averagely agreeing and 14 of the 48 total respondents, translating to 30.21% strongly agreeing averagely, with just 1 of the 48 total respondents, translating to 3.13% strongly disagreeing averagely, as well as average factor loading of 0.7986 and Cronbach alpha value of 0.792 to the two determinant quotient factor statements of this sixth construct of measurement parameter; the totality of which impacts so adversely as the eleventh most important aspect by which ergonomically non-inclusive land management system has affected the delivery and accessibility of land to all array of stakeholders in Nigeria.
 - 7) Responses to the seventh construct [Trustworthiness] show that Nigeria's land management system is faced with challenges of regulo-administrative ergonomics, as trust fabrics that galvanises the concerned actors together for all-round progress, are weakened by the absence of mutual cooperation the plaguing of which deals a blow on the land management system, with 24 of the 48 total respondents, translating to 51.04% averagely agreeing and 15 of the 48 total respondents, translating to 32.29% strongly agreeing averagely, with just 1 of the 48 total respondents, translating to 3.13% strongly disagreeing averagely, as well as average factor loading of 0.8033 and Cronbach alpha value of 0.796 to the two determinant quotient factor statements of this seventh construct of measurement parameter; the totality of which impacts so adversely as the tenth most important aspect by which ergonomically non-inclusive land management system has affected the delivery and accessibility of land to all array of stakeholders in Nigeria.
 - 8) Responses to the eighth construct [Speed / Volume] show that Nigeria's land management system is faced with challenges of regulo-administrative ergonomics, as the system is bereaved of commanding stamina which is the product of inclusiveness and with which great velocity is brewed and upon which much enduring and voluminous tradable lands' transactions rely, with 24 of the 48 total respondents, translating to 51.04% averagely agreeing and 14 of the 48 total respondents, translating to 30.21% strongly agreeing averagely, with just 1 of the 48 total respondents, translating to 3.13% strongly disagreeing averagely, as well as average factor loading of 0.8267 and Cronbach alpha value of 0.902 to the two determinant quotient factor statements of this eighth construct of measurement parameter; the totality of which impacts so adversely as the fourth most important aspect by which ergonomically non-inclusive land management system has affected the delivery and accessibility of land to all array of stakeholders in Nigeria.
 - 9) Responses to the ninth construct [Fairness] show that Nigeria's land management system is faced with challenges of regulo-administrative ergonomics, as the system is exhibits all shackles and shades of injustice heralding inequitable dealings, which are clearly at variance with the hallmarks of a just and balanced system and thus creates a lot of unfortunate mismatches, with 23 of the 48 total respondents, translating to 47.92% averagely agreeing and 14 of the 48 total respondents, translating to 30.21% strongly agreeing averagely, with just 2 of the 48 total respondents, translating to 5.21% strongly disagreeing averagely, as well as average factor loading of 0.8077 and Cronbach alpha value of 0.869 to the two determinant quotient factor statements of this ninth construct of measurement parameter; the totality of which impacts so adversely as the ninth most important aspect by which ergonomically non-inclusive land management system has affected the delivery and accessibility of land to all array of stakeholders in Nigeria.

- 10) Responses to the tenth construct [Pedigree+Posterity] show that Nigeria's land management system is faced with challenges of regulo-administrative ergonomics, as the system which is a configuration of soul-maintaining and spirit-expanding platform for land as a human being to flourish, recognises that lands' profitable development must submit to acknowledgement of pre-historic belief system as having a positive hold on meaningful socio-economic development, which is a clear gap in the present land management system, with 24 of the 48 total respondents, translating to 51.04% averagely agreeing and 14 of the 48 total respondents, translating to 29.17% strongly agreeing averagely, with just 2 of the 48 total respondents, translating to 4.17% strongly disagreeing averagely, as well as average factor loading of 0.8694 and Cronbach alpha value of 0.916 to the two determinant quotient factor statements of this tenth construct of measurement parameter; the totality of which impacts so adversely as the second most important aspect by which ergonomically non-inclusive land management system has affected the delivery and accessibility of land to all array of stakeholders in Nigeria.
- 11) Responses to the eleventh construct [Citizenship] show that Nigeria's land management system is faced with challenges of regulo-administrative ergonomics, it thus makes sustainability which an hallmark of self-pushing, prosperity-envisioning and swiftness-thirsty philosophy that revolve around civic engagement as a cardinal principle of citizenship poorly existent, which are resultantly plaguing land management system, with 23 of the 48 total respondents, translating to 48.96% averagely agreeing and 16 of the 48 total respondents, translating to 33.34% strongly agreeing averagely, with just 2 of the 48 total respondents, translating to 4.17% strongly disagreeing averagely, as well as average factor loading of 0.8131 and Cronbach alpha value of 0.878 to the two determinant quotient factor statements of this eleventh construct of measurement parameter; the totality of which impacts so adversely as the seventh most important aspect by which ergonomically non-inclusive land management system has affected the delivery and accessibility of land to all array of stakeholders in Nigeria.
- 12) Responses to the twelfth construct [Multi-dimensionality] show that Nigeria's land management system is faced with challenges of regulo-administrative ergonomics, meanwhile interests and aspirations are diverse and require no less a system but with robust multi-dimensionality which serves all the requirements of stakeholders with completeness and fulfilment, which presently is almost non-existent in land management system, with 25 of the 48 total respondents, translating to 52.09% averagely agreeing and 15 of the 48 total respondents, translating to 32.29% strongly agreeing averagely, with just 2 of the 48 total respondents, translating to 3.13% strongly disagreeing averagely, as well as average factor loading of 0.8191 and Cronbach alpha value of 0.885 to the two determinant quotient factor statements of this twelfth construct of measurement parameter; the totality of which impacts so adversely as the sixth most important aspect by which ergonomically non-inclusive land management system has affected the delivery and accessibility of land to all array of stakeholders in Nigeria.

6. Conclusion and recommendations

In specific terms, it must be stated as a form of concluding remarks, that the land management system as it were, as well as the supply and demand aspects of land spectrum in Nigeria stand to continually experience the present unimpressive and unctemporary situations, which are being brought to the fore by the non-inclusiveness regime of the regulo-administrative ergonomics inclusiveness on the one hand, and on the other hand is are the impacts of the adversities therefrom, that hang upon the delivery and accessibility of land in Nigeria. However, it is imperative to state that, much daunting as these challenges may seem, the frantic

efforts and laudable measures being birthed by government and other stakeholders, some of which are listed below, are some of those areas of respite for everyone in Nigeria. Such laudable efforts, which are suggested as recommendations hereunder to tackle some or all the issues that were studied, as well as findings emanating therefrom, are as follows:

- 1) The need arises urgently than ever before, that government should do everything within her powers to improve on the multi-directionality of all organogramic spectra of land management system in such a manner that all the regulo-administrative functions, both statutorily and non-statutorily defined are ergonomically webbed, to address such issues as, efficiency, effectiveness, speed, volume, to mention but a few.
- 2) It is important to evolve a system for the land management which allows for a configuration that engenders beneficial interconnectedness among all the units and division in such a manner that duplication and unnecessary role dragging are removed.
- 3) Fairness as a virtue of highly performing system should be inculcated into the minds of all actors that are driving land management system, through infilling of the system's rank and file with such attitudinal mental-plain of balanced treatment of others as this will help to check role jettisoning and duty pegging that are associated with partiality, injustice, inequity, etc.
- 4) A mechanism must be evolved to address any of the vestiges of political interference that is caused by non-inclusiveness of regulo-administrative ergonomics, which thus gives room to interest-driven system of land management that arrogates importance to the selected few as against the citizenry's interests and aspirations, to remove issues of people-centredness and civic engagement.
- 5) Outright redefinition and issuing of specific IDs for carefully evolved roles, tasks and functional duties as well as ensuring that they are being keyed to a well-ordered system of evaluation, that so much of the time and resources are devoted to ascertaining the truism of weaving likely tasks and login them together to increase speed, volume, etc., through ergonomically platformed weighting matrix that gives the exactitude of robustness, vibrancy, and inclusiveness of the system.
- 6) It is most imperative that measures are taken urgently to birth a mechanism that promotes synergy-driving and buoying, in such a manner that releases strength inherent in collaboration among different stakeholders and actors, to confront challenges associated with non-inclusiveness of regulo-administrative ergonomics.
- 7) It was confirmed from the survey, that the ugliness of the non-inclusiveness of regulo-administrative ergonomics is being brought to the fore because of the excessive greed of the actors driving the land management system. Hence, it is most important that the welfare of the entire workforce and especially of the land agencies' officials be done in a manner that grants them the pride of being distinguished government workers, as this will address issues of ill-responsiveness and shallow level of exhibiting a sense of responsibility.
- 8) It is as well quite suggestive to aver that the incorporation of experienced and perhaps retired but not tired veterans in the regulatory arm of the land management system, as well as on-the-serving career officers, so as to breathe life into the system, in such a way that inclusiveness is naturally birthed, hence the smoother progression of all regulo-administrative personnel of statutory and non-statutory functions, hence the land delivery and accessibility are better boosted via it.
- 9) Also, it is important to ensure that the land management system is designed, mounted, and operated in a way that within the centrality of every part of the actions taken is impact-building and country-development focused. This stands to wage war against any unimpressive outcomes of non-inclusiveness, which has strength of lasting solution provider to end all manners of discordance, through signalling of potential areas of crisis-ignition in the structure and arrangement of functions among several of the units and

divisions, thereby increasing the vantage position of land management system in the delivery and accessibility of lands in Nigeria.

- 10) It is hereby suggested that the land management system as it were, and the supply and demand aspects of land spectrum in the country shrouded in mutuality of purpose and collective progress mentality among the ranks and files of the land MDAs, should rise up to improve on the inclusiveness of ergonomics of regulo-administrative functions of land management drivers and stakeholders through drastic, decisive and concerted measures of less hierarchicalising the earmarking of duties and roles in a disparaging manner.

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Author Biographies

Kazeem Bolayemi AKINBOLA holds a PhD in Real Estate and Facilities Management from Tun Hussein Onn University in Malaysia, MSc in Project Development and Implementation from Parit Raja in Malaysia, MSc in Urban and Regional Planning from the University of Ibadan, and a BSc in Estate Management from Obafemi Awolowo University, Ile-Ife, Nigeria. He is a Nigerian academic and multidisciplinary built environment professional and works as a Senior Lecturer in Land Management and Valuation at the Federal Polytechnic, Ilaro, Ogun State, Nigeria. He has served as an external post-graduate examiner for program accreditation at several universities in Africa. He enjoys full affiliations with several Professional Bodies in Estate Surveying and Valuation, Quantity Surveying, Urban and Regional Planning, and Project Management, Development and Sustainability.

Lukuman MUSIBAU holds a PhD in Real Estate from Universiti Teknologi Malaysia, Johor, Malaysia and an MSc in Housing from the University of Ibadan, Nigeria. He is a full Member of the Nigerian Institution of Estate Surveyors and Valuers (ANIVS) and a Registered Estate Surveyor and Valuer (RSV). He is Head of Department of Estate Management, Federal Polytechnic, Ede; with public service experience as Senior Special Assistant (SSA) / Sub-National Consultant in the Office of the Deputy Chief of Staff (DCoS) to the Executive Governor, Osun State, Nigeria, Technical Assistant on MDGs and Sustainable Development Goals (SDGs) to the Government of the State of Osun, Nigeria; and external examiner for MSc and Doctorate Research candidates at Nelson Mandela University, South Africa. Until recently, he was an Executive Secretary at the Centre for Environmental Diplomacy and Ecological Civilization (CEDEC).

Jacob Adejare BABARINDE, PhD & MURP (Ibadan), BSc Estate Management and Valuation (East London, UK), Fellow-Royal Institution of Chartered Surveyors-UK, Fellow-International Society for Development and Sustainability, and Member, Canadian Institute of Planners/Ontario-Registered Professional Planner (MCIP/RPP). He is also a Chartered and Registered Valuation Surveyor, Ontario-Licensed Realtor, Certified Publons Academy Peer Reviewer, and Professor/Head of Department of Surveying and Land Studies, PNG University of Technology, Lae, Papua New Guinea. He has extensive international experience in urban policy analysis, forced intra-urban relocation analysis, and Higher Education focusing on real estate valuation, management and brokerage, urban and regional planning, and applied research.