

Contradictions of Cattle Herding Behaviour in Twenty First Century Nigeria

Okechi Dominic Azuwike1*

¹Department of Geography and Environmental Management, Imo State University, Owerri Nigeria,

*Corresponding author: okedazuwike@vahoo.com; azuwike@imsu.edu.ng

Abstract

Nigeria's pastoral production of cattle has endured from pre-colonial times to the present. It has however not greatly evolved from its classical roots in transhumance. Cattle invasion of forbidden urban spaces is a regular occurrence. Events of the past few decades on the grazing trail also show a conflicted relationship with other land uses that increasingly manifests a very violent component. The issue has attracted great attention in terms of empirical investigations. It also requires new academic insight from theoretical perspectives. Using a framework of cross-disciplinary ideas in the literature, the current effort interrogates the idealism of an isotropic grazing plane expected to optimize nomads' business plans which is not reconciled with the realism of heightening 'topomorphic revolution'. Based on analysis of narratives on herdsmen's experiences and those of conflicted alternative land uses, it looks at the herdsman as a 'landscape luddite' fighting a losing war against a helpless landscape evolution of fences and barricades in his fixation with a romantic open field ideal of time past. The paper examines the notion of the land developer as an irritant aggressor in herdsmen's worldview. The paper concludes that denial of the reality of landscape evolution is at the heart of the conflicted cattle production business across Nigeria and is therefore an unsustainable position in the light of emerging challenges.

Keywords: Pastoral; Transhumance; Cattle; Theoretical; Landscape

1.0. Introduction

Nigeria just like many West African countries, is in the twenty first century grappling with a thirteenth century mode of production, transhumant cattle herding which entails constant movement of cattle stocks across spaces in pursuit of factors that can enhance their survival such as pasture and water or in avoidance of pests, cropped areas, conflicts, rustlers, restive communities, daytime, roadways and barricades (Azuwike, 2018).

The history of pastoral production has been one of slow evolution. There has been a tendency to retain the classical form of human attachment to animals shown in Rawles (2006) which has evolved as a cultural artifact among the cattle production groups. Prato-Previde, Ricci and Colombo (2022) also showed that people can be negatively affected by strong human-animal relationships. For some groups, their entire existence revolves around the pastoral system and therefore any attempts at reforms have cultural change value (Matthews, 2006; Greiner, 2022). Ambivalence about change characterizes such pastoral groups globally as they are traditional people with well formed conservative philosophy that pits them against accepted modern notions of development. They are in some way as described by Bodley (1990) victims of progress. In some other way they may be interpreted as obstacles to progress (Abalogu & Ojukwu, 2022). Their experiences in Nigeria bear out both interpretations as they are a major factor in Nigeria's great internal displacement crisis (Internal Displacement Monitoring Centre, 2017); reaching 4.6m displaced

persons by end of 2022 attributed to conflict and violence (Internal Displacement Monitoring Centre, 2023). It has also become contradictory that Nigeria in her development of modern cultural forms and built environment has retained incompatible anachronistic cultural forms such as transhumance.

2.0. The Problem

Nigeria is not counted among the world's greatest producers of beef; nor is she counted among the greatest producers of dairy products which are both products of cattle. These sectors are led by countries such as Brazil and Australia. Oldfield (2016) noted the fact of Brazil's climb in the global beef industry. The country produced 9.9 metric tons in 2019 and became world's largest beef exporter (Zia, Hansen, Hjort & Valdes, 2019). Nigeria with marginal cattle productivity, remains mired in pastoral crises unknown to the major cattle producers such as Brazil. As shown in Olayokun (2016), cattle grazing has come to imply violence. Over 15,000 deaths have resulted in West and Central Africa since 2010 (Brottem, 2021). The Nigerian cattle production problem has mainly remained due to the fact that it is only but a cultural expression that has not been made amenable to modern cattle production systems. It has remained itinerant and subject to vagaries of nature and increasingly those of human societies. The transhumant cattle rearing style precludes the production of healthy stocks with foot journeys that retard quality of their products and overall development. It becomes clearer then why the country fails to leverage on the stock of local cattle to attain high productivity. Cattle heads are estimated at only 18.2 million 'predominantly managed in large herds by semi-sedentary and transhumant pastoralists' (Food and Agriculture Organization (n.d).

The style of production seems to make the enterprise a marginal one – an enterprise that depends on spaces left over by mainstream activities. With these, cattle herding tends to force itself on spaces that have been already appropriated by other activities. Hence, on the face value, it seems to lack legitimacy in these spaces. Efforts at validating it in these spaces also fail to fly in the face of current realities of development. Cattle keep invading forbidden spaces across Nigeria and are therefore simply ruled out of place by the public. As developments improve, the spaces in which cattle would be considered 'in place' and not 'out of place' has shrunk. Herdsmen' s insistence on herding across all configurations of space graduated in the context of cattle negative aesthetics from the sacred to the profane in Nigerian cities and rural areas might be considered unrealistic. Can the industry reclaim lost spaces through sheer assertiveness? As is expected there are conflicting land uses and land use change (Ihemezie & Dallimer, 2021) a nuisance factor and an image deficit (Nartey and Ladegaard, 2021) in accommodating cattle in the wrong spaces. These have bred resistance through, for instance, cattle poisoning (Ogunyemi, 2017), which the herdsman desirous of pushing his trade has countered at times with violence. Nigerian government policy position has proposed at times a 6000km exclusive grazing route and at other times Rural Grazing Areas (Agbegbedia, 2022) and other measures in apparent promotion of itinerant grazing. Is there an endorsement of the extant contradictions and a possible grazing subterfuge?

3.0. Theoretical Framework

The issues being canvassed in this paper can benefit from a reading of Walter (1988) in Theory of the Human Environment otherwise referred to as Placeways. In the broad theory of the Human Environment, Walters engaged diverse subthemes such as the theory of Topistics and the theory of Topomorphic Revolution. These theories are important for understanding the challenge of securing occupational space for herdsmen who are fixated on traditional practices in a changed and changing world where these traditional lifestyles appear not only anachronistic but also incompatible with progressive designs and developments. The theory of Topistics interrogates the idea of place as special spaces; spaces imbued with special meanings, feelings and powers. The distinction between spaces and places which is important in defining ranges of activities, from the profane to the sacred, that might fit into specific spatial contents or otherwise might be lost in a herdsman desperate to find food and water or shelter and refuge for his herd. Hence the general complaint about herdsmen in modern cities of places like Nigeria is his apparent lack of appreciation of this distinction and readiness to treat all spaces in the same way without regard to the demands of aesthetics that require he keeps off certain politically and socially significant places (spaces) for the optics and politics of it.

Topistic differentiation of spaces is at the heart of placemaking which is violated by herdsmen who reckon only with simplistic utilitarian derivatives from spaces in the form of forage and water. The herdsman is at a loss why efforts are made to keep him away from inviting greenery in at times the midst of fodder shortage. Added to the crisis of topistic differentiation is the challenge of Topomorphic revolution. The landscape is not static as landscape evolution is a constant. Rustic areas available for transhumance are readily lost to fences, barricades, roads and railtracks, residential states and industrial plants. The interpretation of the evolved landscape filled with developmental clutter that challenges transhumant navigation as index of insensitivity among non-cattle groups and elitist conceptualization of development is replete in herdsmen's narratives. The varying readings of topomorphic revolution between cattle groups and non-cattle groups is at the heart of pastoral conflicts and as such a politically challenged discourse.

4.0. Method and Study Area

The study relied on exploratory research design to illuminate issues behind conflicted nature of cattle herding behavior in modern Nigeria. The study engages the subject at a highly theoretical level and as such the exploration of the subject analysed selected existing literature on the subject. The study is based on the experience of Nigeria. The study area has a distinct gradation of ecological zones in which temperature and humidity tend to follow a gradient from the coastal south bordering the Gulf of Guinea (the Atlantic Ocean) to the arid North with high level continental effects just south of Niger Republic. While maritime influence looms large in the south, the Sahara desert effects can be noticed in the North. The gradation presents Nigeria with diverse ecological systems that can prove beneficial for production. Hence the Nigerian vegetation is broadly graded from coastal mangrove swamp (salt water ecosystem) to fresh water ecosystems, rainforests, guinea savanna, Sudan Savanna and Sahel Savanna to the extreme North. This ecological setting has historically created for a complementarity that sees Northern herdsmen or those of other countries who carry out transhumance in Northern wetlands in the rainy season migrating down south with their flock during the dry season for the stock to survive on the fodder resources and water of the wetter south before return to the North at the onset of rains. In carrying out these foot journeys, a number of challenges are encountered including cattle transgression of cultivated plots and damage of crops; killing and seizure of offending cattle, fines and cattle rustling as punitive measures; reprisal killings and marching orders and legislations by affected communities to stem the tide of grazing tragedy. These occurrences however tend to have heightened with changes in population, expansion of settlements, diversification of landuses, and a changing climate.



Figure 1: Nigeria: Physical and political Source: Adopted from www.worldometers.info

Nigeria as shown in figure 1 is located between latitudes 4°N and 14o'N and longitude 2°E to 15°E. It is bordered to the West by Benin Cameroon to the East, Niger to the North and Chad to the North East. It has good hydrological resources with its main rivers as Niger and Benue. The oil/gas rich Niger Delta is the area where its major rivers enter the Atlantic Ocean. Rainfall ranges from 500 to 1500mm in the Savanna North and 1500 to 2000mm in the Southern rainforest zones. (see figure 2)

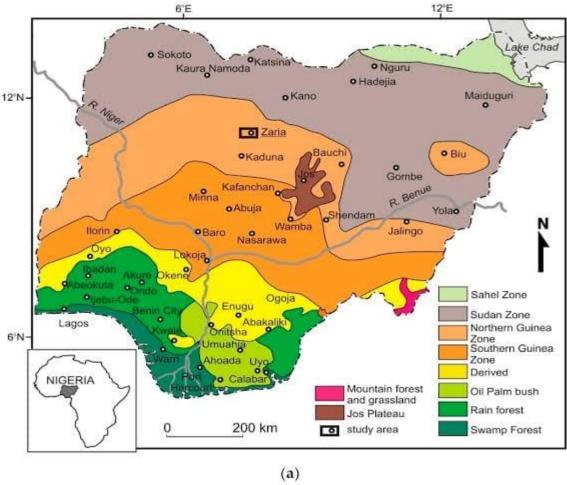


Figure 2: Nigeria: Vegetation

Source: Google.com.

Severely declined capacity of the Chad Basin, Description in much of the Sahalian North and soil erosion particularly in the South are major environmental challenges. Nigeria's land area is 923, 769 sqkm which is 1.4 percent made up of water making it the 37th largest country in the world. Given population of 230 million people, it has a density of 218 persons per km². Nominal Gross Domestic Product is \$574 billion which is \$2,584 per capita. Hence her Human Development Index is low at 0.535 and 163rd in the world. Life expectancy is therefore not surprisingly put at 59 for men 63 for women. In the midst of these social and economic drawbacks is the problem of ethnic tensions among the major groups and resultant high corruption indices experienced in public life.

5.0. A Consideration of some of the Contradictions:

1. A grazing plane in stasis against the reality of landscape change: In the days of Petroleum Trust Fund (PTF) as an interventionist agency in Nigeria's development from the year 1997 to 2000, one of the areas of intervention was the restoration of grazing routes under a Pastoralists

Development Programme which entailed tracing and stocking some 700km of stock routes and installation of large beacons 15 to 20 feet apart along the routes. Incidentally the programme ended with the resting of PTF in the year 2000. The primary assumptions of such efforts at retaining formal and informal grazing routes of time past would be an idealization of a grazing milieu under stasis and therefore a denial of reality and value of developmental change.

stasis and therefore a demar of reality and value of developmental change.

Figure 3: Herdsman and his herd on the move Source: PR, Nigeria prnigeria.com

Where open grazing advocates make reference to legislations such as Northern Nigeria Law No. 4 of 1965 otherwise known as Grazing Reserve Law, they fail to point out the necessity for reviews of laws in the light of developments that is equally recognized in jurisprudence. Can Nigeria of the twenty first century operate on the model of grazing route reservation? Does it maximize her land economy and is it compatible with her activity spectrum? The fact that the grazing environment has changed from what obtained in 1965 negates the tendency for fixation to the idea of a landscape stasis that favours open grazing. There have been rail lines and highways expansion since the 1960s; airports, markets, stadia, new capital territories, forest reservations, expanded cropping under various campaigns such as Operation Feed the Nation and Fadama programmes (Africa Development Fund, 2003); new industrial zones, housing and urban expansion (Hir, 2016). The constriction of open grazing space under this situation is a logical happenstance with which many, including Nigerian government are yet to come to terms. Denial does not however change the fact of what Whittlesey (1929) described as sequent occupance which has the capacity to change landscapes. Incidentally. Nigeria appears divided along the lines of its usual ethnic and religions faultlines over the propriety or otherwise of sustaining open grazing. It has become one of the most contentions political issues in popular intellectual and social discourse. Clarity on the issue is also not helped by the apparent biases of people in power at any given time and the failure to objectively engage the subject by stakeholders.

2. Imagination of Ideal Environments and Reality of Clutter: The herdsman appears to inhabit a romanticized ideal of boundless open space existing without inhibitions. This is also the model that best satisfies his objectives. Mental image of open spaces that maximize pastoral navigation does not agree with the reality of clutter and barricades, visible and invisible, material and non-material encountered in the field by nomadic herders. The herdsman has little regard for landscape development processes that raise up structures and navigational obstacles which Walters (1988)

showed to emerge through the process of 'Topomorphic revolution'. He therefore fights against these structures and has the enablers of these structures to contend with. Herdsmen are known to break into fenced compounds kept by absentee landlords to access pasture. They tend to interpret efforts to lock away pasture as vindictiveness.

3. Contradictory Projections and Visuals: The aesthetics of urban built spaces in the cases of city invasions by cattle that are being recorded in Nigeria is contradicted by the visuals of herds in these spaces. Where many see an absurdity in cows on Bus Rapid Transit (BRT) lanes in Lagos, or on National Assembly complex grounds in Abuja, their sentiment may not be shared by herdsmen who are essentially driven by utilitarian concerns. What are in conflict are therefore apparently valuations of landscape aesthetics projected by contrasted groups – the corporate world; state power and the urbane non-cattle rearing groups on one hand and invading cattle rearing groups from rural wetlands on the other hand. Much like it is in every other circumstance of conflict, the issues involved resolve into a power play among groups. The groups tend to diverge on cultural relativism in aesthetic judgement or in general terms aesthetic relativism. What is considered ugly becomes a function of the inclinations of the critic or judge (Doran, 2022); a matter of intuition (Andow, 2022) and taste (Mark, 2014).



Figure 4: Cattle out-of-place on major road

Source: The Sun, Nigeria

4. Development as Aggression and Luddite Narratives: Luddites in popular narrations fought against mechanization of industrial processes in a quixotic attempt to retain their manual engagements in the machine age. The herdsman has also positioned himself as a somewhat landscape Luddite desperate to retain his anachronistic open grazing style against the currents of physical and Cultural Revolution. In this wise, just as the Luddite interpretation of machines as irritants, and their adoption as aggression against their livelihoods, the herdsmen see development as threats to their occupations and therefore aggressive designs. Properties fenced off in formerly open grazing zones do not only rob herdsmen of swaths of grazing lands but denies them

navigation. It is contradictory that the pursuit of development which is a cardinal objective of Nigeria as a developing country is countered by aspirations of sections of the country. Neo-Luddites tend to exercise agency to sabotage the very technologies of which they are afraid (Desertis, 2013; Manghani, 2023). Is cattle destruction of farm crops a Luddite gambit from herdsmen to entrench their interests while obstructing social progress?

6.0. The Place of Government's Interventions

6.1. The Kano Offer in a Geographical Context

Kano State government has in advancing a solution to debilitating herders-farmers conflicts across Nigeria, offered for Kano to host all nomadic pastoral people that are ill-adjusted across Nigeria (Muhammad, 2018). The offer has not been taken. This has also steered public commentary to conclusions about the existence of a grazing subterfuge. Certain responses from herdsmen dismissing the Kano offer are however interesting in a geographical context. The position is that Nigeria's brand of cattle that feeds on wet pasture requires large expanses to roam free and is therefore not amenable to restricted spaces. Along this line of analysis, limited spaces such as Kano has offered will be degraded by the sheer intensity of usage in only a short time and the idea is therefore deemed unsustainable by herdsmen. There is subtle irony in the fact of Kano accepting to host herdsmen. Herdsmen who are apparently stranded are rejecting the overtures; while these same herdsmen pressure states that reject them for access to the point of deaths. Possibly the greater aridity of Kano than the Middle Belt State of Benue for instance fuels among herdsmen feeling of insecurity about a place in Kano.

Also historically the best cattle markets exist outside of the major production zones of Northern Nigeria and increasingly in Southern urban centres. The need to serve these markets has tended to lure herdsmen into functional change of southern markets into grazing zones to where cheaper non-market ready stocks are transported and nurtured over a long time into best-price, slaughter-house-ready cows.

6.2. Governments Proposals for all States in a Geographical and Economic Context

One of the proposals made by the Nigerian government is for all States to get involved in cattle rearing by each providing some 50,000 hectares for cattle grazing enclaves (Vanguard Editorial, April 12, 2016). It is hardly conceivable that this approach can find justification in all States. In the first place it is most unlikely to satisfy the requirements for comparative cost advantage which varies from State to State and most States do have other plans for such amount of land in the Federal Structure Nigeria operates. Profitability will vary according to the State's set of circumstances. It is therefore to be expected that a business case for the proposed project cannot be established in some States.

Incidentally establishment of a business case is a critical element in the initiation of projects which in turn is essential for project sustainability. Hence the Federal Government of Nigeria meets resistance selling idea of grazing land reservation in the South while all of 11 states that volunteered 55,000 hectares for ranches viz Plateau, Kaduna, Kano, Gombe, Katisina, Niger, Adamawa, Jigawa, Sokoto and the Federal Capital Territory, Abuja (Ogbe, 2016) are all northern. The basis, geographical or otherwise for uniformitarian policy designs and implementation across Nigeria's 36 States and Abuja that neither satisfies formal non functional regionalization principles hardly exists. Nigerian government can therefore be said to go against the currents of geographical principles which distil opportunities and profits from diversity and regional specializations. An enforced reversal of regional disparities is unnatural and can upstage extant salutary forms of dependency and existing complementarities that drive exchange relationships disrupting whole transportation and ancillary industries.

An issue which Nigerian authorities have not factored is the varying landmasses among states. Whereas 50,000 hectares may easily be affordable by some States, particularly in Northern Nigeria many states do not have the landmass to accommodate that. This also puts paid to the one-size-fits-all model canvassed by the Federal Ministry of Agriculture and Rural Development. While agencies of government are encouraged to identify the core competences of Nigeria's regions as a way of tailoring interventions for effective

development, the agricultural sector is being subjected to a counter-intuitive and unrealistic model. This tends to indicate an official endorsement of the herding contradictions.

6.3. The Case of a Grazing Subterfuge

A major public relations challenge for open grazing in present Nigeria is the conclusion among sections of the population that supportive official positions as well as those of cattle rearing groups fall short of demands of objectivity. This failure leaves justifications for the trade under subjective considerations in public consciousness. It can be said therefore that the efforts made to prop-up open grazing operate within bounded rationality. This has fuelled the suspicion which has gained currency in the last decade that there is more to open grazing in Nigeria than is in the public domain. In other words open grazing is only a tolerable façade for a sinister maneuver to dispossess landowners, convert their land to grazing zones and establish alien culture areas throughout the country. In Nigeria's national assembly, efforts to legislate uniform grazing policies across the country failed on account of these fears of domination. There was the National Grazing Routes and Reserve (Establishment) Bill of 2015 and National Grazing Reserves Establishment bill 2016. They were strongly resisted by Southern lawmakers. The thinking that prevails in much of the south takes open grazing campaigns as a subterfuge. This thinking does not seem to buy into the narratives of climate change as a form of pressure on herdsmen. It rather interrogates the concept of environmental refuge as a product of ecological change. How far can itinerant transhumance go if it is truly a tool of political deception and geopolitical dominance in the twenty first century? Modern Nigeria has developed structures that should pacify groups and allay such primordial fears. Unfortunately, these concerns of domination and marginalization loom large fuelling crisis of interaction and wounding social relations.

7.0. Conclusion

Current Nigerian official position on her grazing debacle that has led to the death of thousands of Nigerians appears contradictory to the extent that it seems to validate the case for continued transhumant open grazing. It has supported recovery of colonial era grazing routes for use by itinerant herdsmen prompting an interrogation of the existence of a grazing subterfuge in Nigeria. Contradictions have been observed in perceptions of a grazing plane in stasis as against the reality of landscape change; imaginations of ideal open fields against realized anthropogenic clutter on the grazing trail; projections and visuals of a cattle culture contrasting among various publics and development as aggressive act in traditional economies and counter currents of a landscape Luddite narrative. The offer from Kano State Government for a massive relocation of troubled herdsmen to a large haven in Kano is found to fall short of herdsmen's expectations of a solution while Governments bid to nationalize and key in every Nigerian State in the pastoral enterprise through suggestions of 50,000 hectare allocations is also seen to fall short of a business case. It cannot therefore scale a sustainability test. The fear that grazing in Nigeria has become subterfuge is real.

8.0. Recommendations

- 1. There is need to insulate cattle production in Nigeria by providing exclusive ranches for cattle away from incompatible landuses.
- Nigeria should climate-proof cattle production by introducing breeds that can tolerate aridity. For
 instance cattle breeds that feed on dry fodder rather than the wet-fodder breeds found in Nigeria.
 This will keep the cattle production business away from stranded vegetal matter in cities where
 they usually encounter resistance.
- 3. Nigeria's cattle value chain should be developed in such a way that distinct activities can be engaged by the various states in line with comparative cost advantage. Government should desist from imposing a uniform production template across the entire country.
- 4. The model of sedentarization championed by Kano State should be adopted by the Federal Ministry of Agriculture and Rural Development to check the brigandage that has followed open grazing.

- 5. Sub national laws against open grazing should be supported by the federal government and executed by law enforcement agencies.
- 6. There is need for campaigns on awareness creation among the herdsmen and other stakeholders on managing the negative fallouts of cattle production.

Acknowledgements

The Department of Geography and Environmental Management, Imo State University provided source materials for this study. Professor U.M. Igbozurike and Dr. Anthony Onwumerobi assisted with their useful insights. Miss Kelechi Awuzie helped with the typing. I am grateful to all of them.

References

- Abalogu, D.M. & N.P. Ojukwu (2022). Socio-religious Implications of Farmers-Herders Conflict in Nigeria: A Security Challenge, *Ohazurume: UNIZIK Journal of Culture and Civilization*, Vol. 1, No. 1 pp. 141-148.
- Africa Development Fund (2003) Republic of Nigeria, Fadama Development Project. Appraisal Report, September 2003.
- Agbegbedia, A.O. (2022). Rugaism: A Challenge to National Sustainability or a Solution? *Albertine Journal of Philosophy*, Vol. 6, July, 2022.
- Andow, J. (2022). Further Exploration of Anti-Realist Intuitions about Aesthetic Judgment, *Philosophical Psychology*. Vol. 35. Iss. 5, p. 621-661.
- Azuwike, O.D. (2018). Barricades against Insurgent Transhumance. The Human Ecology of Securing Occupational Space for Nomadic Cattle Herders in Parts of Nigeria's South and Middle Belt, Conference Paper for the 2018 Nomadic Africa Days, Uppsala, Sweden.
- Bodley, J. (1990). Victims of Progress, California: Mountain View
- Brottem, L. (2021). The Growing Complexity of Farmer Herder Conflict in West and Central Africa, Africa Centre for Strategic Studies, Brief No. 39, July 12, 2021.
- Desertis, M. (2013). Is Anonymous A New Form of Luddism? A Comparative Analysis of Industrial Machine Breaking, Computer Hacking, and Related Rhetorical Strategies. *Radical History Review*, 2013 117: 33-48.
- Doran, R.P. (2022). Ugliness is in the gut of the Beholder. *Ergo: An Open Access Journal of Philosophy*, Vol. 9, Issue 5: 88-146.
- Food and Agriculture Organization of the United Nations (nd). Africa Sustainable Livestock 2050. Livestock Production Systems, Spotlight Nigeria Dairy Cattle and Poultry Chicken Sector, FAO.
- Greiner, C. (2022). African Pastoralism: Plus ca Change? From Constant Herders to Social Differentiation. In C. Greiner, S.V. Wolputte and M. Bollig (eds) African Futures, Africa-Europe Group for Interdisciplinary Studies, Vol. 27, pp. 36-46.
- Hir, J., 'Tracing Old Grazing Reserves, Routes in Nassarawa', Daily Trust, May 1, 2016.
- Ihemezie, E.J., Dallimer, M. (2021). Stakeholders' Perceptions on Agricultural Land-Use Change and Associated Factors in Nigeria Environment 2021, 8 113. https://doi.org/10.339denvironments8110113.
- Internal Displacement Monitoring Centre (2023). Nigeria. Country Profile Overview of 2022, internal.displacement.org. Accessed 08/07/2023.
- Internal Displacement Monitoring Commission (2017). *Global Report on Internal Displacement*, IDMC and Norwegian Refugee Council.
- Manghani, S. (2023). AI and the Neo-Luddites? Published in *Electronic Life*, Apr. 5 2023. www.medium.com.
- Mark, C. (2014). Towards a Science of Criticism: Aesthetic Values, Human Nature, and the Standard of Taste in Cognition, Literature and History. Routledge pp. 229-242.
- Matthews, L. 'The Battle for Cattle', Cultural Survival Quarterly Magazine, June 2006, Issue 30-2.
- Muhammad, A. (2018). Gov. Ganduje asks Fulani Herdsmen to Relocate to Kano. *Vanguard Newspaper*, Feb. 5th 2018.
- Narty, M. and H.J. Ladegaard (2021). Constructing Undesirables: A Critical Discourse Analysis of Othering of Fulani Nomads in the Ghanaian News Media. *Discourse and Communication*, Vol. 15, Issue 2, http://doi.org/10.1177/1750481320982095.
- Ogbe, A. (2016). States Donate 55,000 Hectares for Cattle Grazing Project'. News Conference, Abuja 26, May 2016. Ogunyemi, T. Farmers Poisoning Crops to Kill Herdsmen's Cows, Nov. 30, 2017, *Todayng*.
- Olayokun, A. (2016). Trends and Patterns of Cattle Grazing and Rural Violence in Nigeria (2006-2014), In Perouse de Montclose, M. (ed). 2016. *Violence in Nigeria. A Qualitative and Quantitative Analysis*, IFRA Nigeria, African Studies Centre, Leiden.

- Oldfield, L., The Brazil Beef Industry's Slow Climb could be a Nightmare for Australia. *The Weekly Times*, March 29 2016. https://weeklytimesnews.com.aufagribusiness/decisionag/thebrazilian.beef.industrys.slow.climb.couldbeanightmareforaustralia.
- Proto-Previde, E., E. B.Ricci and E.S. Colombo (2022). The Complexity of the Human-Animal Bond: Empathy, Attachment and Anthropomorphism in Human-Animal Relationships and Animal Hoarding, *Animals*. Vol. 12, Iss 20, 2835.
- Rawles, K. (2006). 'Sustainable Development and Animal Welfare: The Neglected Dimension', In Turner and J.D' Silva (eds) *Animal Ethics and Trade. The Challenges of Animal Sentience*, London: Earthscan pp. 208/9, 216.
- Vanguard Newspaper Editorial, April 12 2016 cited In Dumebube (2016). "Creating a Fulani Territory in Each State of the Federation" Grazing Reserves: When Trouble Sleeps ... Oblong.media.net.
- Walter, E.V. (1988). Placeways: A Theory of the Human Environment, Chapel Hill: The University of North Carolina Press.
- Whittlesey, D., (2009). Sequent Occupance, *Annals of the Association of America Geographers*, Volume 19, Issue 3, 1929 pp. 162-165. Published online: 19 Feb.
- Zia, M., J. Hansen, K. Hjort & C. Valdes (2019). Brazil Once again becomes the World's Largest Beef Exporter. In USDA Economic Research Service, Nov., 2022.