

Original Research Article

POLITICAL ECONOMY OF UNDERUTILISATION OF RANCHING WITHIN THE CATTLE VALUE CHAIN IN KANO STATE, NIGERIA (2015-2025)

OSUWA Abdullahi¹, USMAN Mohammed¹, ALIU Monday¹, ODIJI Okpanachi Linus^{1*}

¹ Department of Political Science, Faculty of Social Sciences, Prince Abubakar Audu University, Anyigba, Kogi State, Nigeria

ORCID:  [OLO 0009-0001-9064-0241](https://orcid.org/0009-0001-9064-0241)^{1*}

Correspondence should be addressed to ODIJI Okpanachi Linus: okpasspecial@gmail.com

Article No: 002 | **Accepted:** 11 August 2026 | **Published:** 10 September 2026

Abstract: This study examines the political economy of ranching underutilisation within the cattle value chain in Kano State, Nigeria (2015-2025). Despite decades of policy advocacy, ranching adoption remains persistently low. Grounded in Political Economy Theory, the study employed an explanatory sequential mixed-methods design, combining a survey of 400 respondents across five LGAs with 18 Key Informant Interviews. Findings reveal that underutilisation is not a technical failure but a politically efficient equilibrium serving powerful interests. Land tenure insecurity emerged as the single most important barrier—respondents with secure land access were over six times more likely to adopt ranching, yet the Land Use Act centralises land authority in the Governor's office, creating a patronage-based allocation system. Policy awareness is abysmally low at 22%, with 63.6% of aware respondents rating policies as ineffective, and only 12% of budgeted funds actually released. Market structures are dominated by an oligopsonistic Jabal cartel of 20-25 major merchants who exercise price control and use credit as debt bondage. Distributional implications are stark: traders and politically connected elites are the primary beneficiaries, while smallholder pastoralists, women, and youth bear the costs of conflict and environmental degradation. The study concludes that meaningful livestock transformation requires addressing land tenure reform, policy implementation accountability, and market governance rather than merely promoting ranching as a technical solution.

Keywords: Political Economy, Ranching Underutilisation, Cattle Value Chain, Land Tenure, Kano State

Introduction

Livestock production is globally central to economic, social, and political systems, serving as sources of food, income, status, and cultural identity. The sector is undergoing a "livestock revolution" driven by rising protein demand and urbanisation, generating opportunities alongside intensified resource competition and environmental concerns (Delgado et al., 1999; Thornton, 2010). Crucially, livestock development is never merely technical but deeply political, shaped by land tenure, market institutions, and power relations (Scoones, 1995; Turner, 2004; Homewood, 2008).

In Africa, cattle are repositories of wealth and authority (Galaty & Johnson, 1990), yet pastoral systems face mounting pressures from demographic growth, climate variability, and land-use competition. This has intensified policy advocacy for ranching as a pathway to productivity, conflict reduction, and value-chain integration (FAO, 2019; ILRI, 2021). In Nigeria, cattle production is economically vital, supporting millions via extensive pastoral systems. The National Livestock Transformation Plan (NLTP, 2018) explicitly promotes ranching, yet practical adoption remains limited.

Kano State offers a critical case study. As a populous commercial hub with major livestock markets, Kano has strategic advantages and demonstrated policy commitment to livestock development (Kano State Government, 2023). However, ranching remains marginal; extensive systems still dominate supply. This underutilisation is not merely a technical or capital deficit but reflects the interplay of land governance, market power, informal institutions, and entrenched actor interests (ILRI, 2021; World Bank, 2020). This study adopts a political economy framework to examine why ranching remains underutilised and its implications for value-chain transformation in Kano State.

Statement of the Problem

Despite sustained federal and state policy advocacy, ranching remains weakly integrated into Kano State's cattle value chain. This persists despite growing urban meat demand, market advantages, and formal government commitment, presenting a paradox. Existing discourse attributes underutilisation to inadequate infrastructure or credit, but such explanations overlook the political and economic context.

In practice, Kano's cattle value chain is governed by a complex mix of formal regulations and informal institutions that advantage established traders and pastoral networks while disincentivising structural change. Land tenure insecurity, competing land uses, and regulatory ambiguities further constrain the secure, long-term investment required for ranching. Meanwhile, dominant market intermediaries may resist shifts that threaten existing power relations and profit margins.

A critical gap exists in scholarship and policy: most studies focus on technical efficiency or conflict mitigation, neglecting systematic political economy analysis of how power, institutions, and market governance shape ranching uptake. Without such analysis, interventions risk misdiagnosing the problem. This study addresses this gap by

interrogating the political, institutional, and market forces constraining ranching, aiming to inform more effective and equitable livestock policy.

Objectives of the Study

The main objective of this paper is to examine the political economy of ranching underutilisation within the cattle value chain in Kano State, Nigeria. The specific objectives are to:

1. Analyse the political, institutional, and economic factors accounting for ranching underutilisation.
2. Assess the influence of federal and Kano State livestock policies on ranching adoption and performance.
3. Examine how land tenure, access to resources, and regulatory frameworks shape incentives for ranching production.
4. Evaluate the role of market structures, governance, and key actors in shaping ranching viability and integration.
5. Assess the distributional implications of ranching underutilisation for stakeholder groups across the value chain.

Literature Review

The literature on ranching underutilisation in cattle value chains reveals that this phenomenon is fundamentally a political economy problem rather than a technical or market failure. Drawing on classical and Marxist perspectives from Smith (1776), Ricardo (1817), and Marx (1867), political economy analysis interrogates how power relations, institutional arrangements, and distributional conflicts shape production outcomes, challenging neoclassical approaches that treat underutilisation as mere market distortion (Marshall, 1890). Contemporary frameworks, particularly New Institutional Economics (North, 1990) and political settlements theory (Khan, 2010), deepen this analysis by examining how institutions either facilitate efficiency or serve to protect rents for dominant coalitions. Empirically, studies across Sub-Saharan Africa, including Nigeria, demonstrate that ranching policies like the National Livestock Transformation Plan often function as "isomorphic mimicry" (Andrews, 2013), adopting modern policy forms without substantive implementation—due to bureaucratic fragmentation, elite capture, and strategic subversion by powerful actors including cattle merchants (*Jabal*), traditional rulers, and politicians who benefit from opaque, informal systems (Lind et al., 2019; Obi & Okoye, 2018; Agrocentric, 2025).

In Kano State specifically, hybrid land governance systems create paralyzing tenure insecurity; customary and statutory regimes overlap, discouraging the long-term investment that ranching requires while favouring the flexible but insecure access of pastoralism (Benjaminsen et al., 2019; Turner, 2014; Ayantunde et al., 2016). Market structures compound these constraints, as intermediary-dominated value chains with informal pricing mechanisms fail to reward quality production (Akinyoade & Uche, 2018; ILRI, 2020), and credit markets exclude livestock producers due to perceived risks and collateral

requirements (Rekwot et al., 2022). The economic logic of pastoralism remains rational within this context, as its low-capital, mobility-based strategy disperses risk across space and social networks, whereas ranching concentrates capital and vulnerability in single locations without insurance or institutional support (Thornton et al., 2020). Policy implementation at the state level follows a logic of "projectised intervention"—visibility-driven, short-term initiatives tied to electoral cycles that lack scalability or continuity (Musa et al., 2019)—while hollowed-out extension services and weak regulatory enforcement further undermine adoption (Ayantunde et al., 2016; Ibrahim et al., 2020). Crucially, socio-cultural factors including cultural attachment to pastoral identity, risk perceptions, social network dynamics, gendered household decision-making, and institutional distrust mediate producers' responses, often resulting in strategic non-compliance or ceremonial adoption (Ibrahim et al., 2020; Musa et al., 2019; Oladele & Adebayo, 2021; ILRI, 2020; Muntari, 2025).

Theoretical Framework

Political Economy Theory (PET) provides the analytical framework for this study by rejecting the separation of politics and economics, positing that economic outcomes are shaped by power relations, institutions, and distributional conflicts rather than market forces alone. The framework synthesises insights from Classical political economy (Smith, 1776; Ricardo, 1817) on distribution; Marxist political economy (Marx, 1867) on exploitation and structural conflict; New Institutional Economics (North, 1990) on transaction costs and property rights; and Political Settlements Theory (Khan, 2010) on why inefficient institutions persist by generating rents for dominant coalitions.

PET is relevant across four dimensions: first, it reframes ranching underutilisation as a politically efficient equilibrium that protects rents for merchants (Jabal), land gatekeepers, and political patrons, shifting focus from technical inefficiency to maintenance of the status quo; second, it dissects livestock policy as political contention, examining how bureaucratic politics, federal-state rivalries, and elite capture shape policy outcomes (Andrews, 2013; Lind et al., 2019); third, it maps the value chain as a governance structure revealing nodes of power, rent streams, and exclusionary mechanisms that constrain producers (Gereffi et al., 2005); and fourth, it integrates how political power shapes institutions, which determine incentives, filtered through social and cultural contexts to produce underutilisation. The study applies four core assumptions: economic outcomes are socially embedded (Polanyi, 1944); institutions are crystallised power serving dominant interests (Khan, 2010); policy and markets are arenas of contestation (Oladele & Adebayo, 2021); and access to innovation is mediated by institutional and social filters (North, 1990). This synthesised framework moves beyond describing barriers to providing a causal explanation of the system that sustains ranching underutilisation, making PET a methodological necessity for understanding why ranching remains marginal despite decades of policy advocacy in Kano State.

Methodology

This study adopted an explanatory sequential mixed-methods design to investigate the political economy of ranching underutilisation in Kano State's cattle value chain. Kano State was purposively selected as a "critical case" for its strategic position as West Africa's largest livestock market hub, its complex formal and informal governance structures, and its visible policy-performance gap. The study population comprised multi-layered actors, including pastoralists (over 60% of rural households), ranchers (≈ 150 registered), cattle merchants (over 500 at Dawanau), transporters, officials at federal, state, and local government levels, traditional rulers, and civil society actors.

For the quantitative strand, 400 respondents were sampled using Cochran's formula ($n_0=384$) at 95% confidence level, distributed across five LGAs: Dawakin Kudu, Bunkure, Rano, Gwarzo, and Sumaila, with 80 respondents per LGA. For the qualitative strand, 18 Key Informant Interviews were conducted across nine value-chain nodes to achieve thematic saturation. Quantitative data were analysed using SPSS version 27 through descriptive and inferential statistics, including chi-square tests, correlation, and binary logistic regression. Qualitative data were analysed using thematic analysis following Braun and Clarke's (2006) six-phase approach, supported by NVivo 14, employing both inductive and deductive coding informed by Political Economy Theory.

Data Presentation and Analysis

A total of 400 structured questionnaires were administered face-to-face by six trained enumerators across the five selected LGAs. All 400 questionnaires were fully completed and returned, representing a 100% response rate.

Table 1: Distribution of Survey Respondents by Local Government Area

LGA	Frequency (n=400)	Percentage (%)
Dawakin Kudu	92	23.0
Bunkure	78	19.5
Rano	85	21.25
Gwarzo	74	18.5
Sumaila	71	17.75
Total	400	100

(Source: Field Work, 2026)

Justification: Dawakin Kudu, hosting the Dawanau International Market, understandably has the highest concentration of value-chain actors.

Objective 1: Factors Limiting Ranching Utilisation

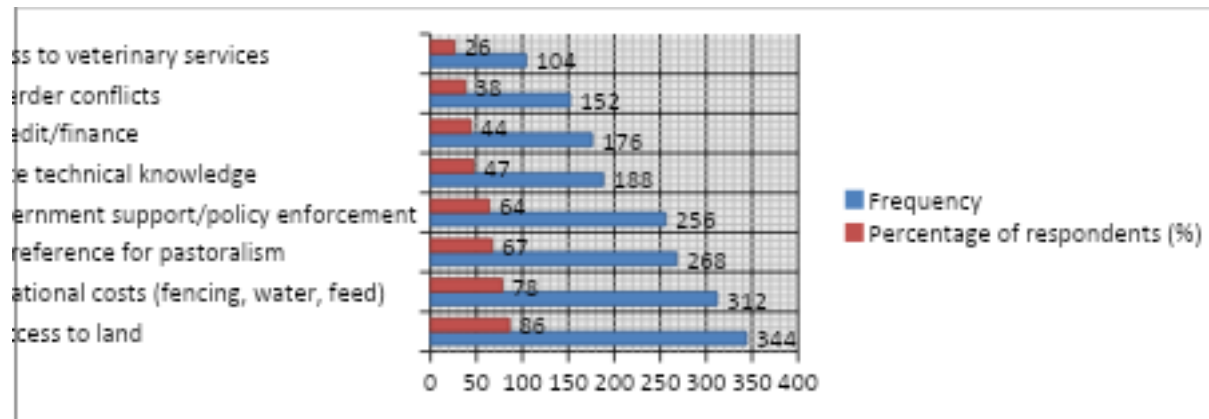


Figure 1: Factors Limiting Utilisation of Ranching (Multiple responses, n=400)

The most frequently cited limiting factor is limited access to land (86%), confirming that land tenure insecurity is the single most important structural barrier to ranching adoption in Kano State. This finding is consistent across all five LGAs but is particularly acute in Bunkure (91%) and Sumaila (89%), where grazing reserves formally exist but are contested and encroached upon.

Objective 2: Awareness and Effectiveness of Livestock Policies

Table 2: Awareness of Federal or State Ranching Policies

Response	Frequency (n=400)	Percentage (%)
Yes	88	22.0
No	276	69.0
Not sure	36	9.0

(Source: Field Work, 2026)

Only 22% of respondents (88 out of 400) reported awareness of federal or state-level livestock policies such as the National Livestock Transformation Plan (NLTP, 2019) or Kano State's Livestock Development initiatives. This extremely low level of policy awareness reveals a profound disconnect between policy formulation in Abuja and Kano government circles and the lived reality of cattle producers and traders in the field.

The lack of awareness is particularly acute in Sumaila (16%) and Bunkure (18%), LGAs that are geographically distant from the state capital and have less government presence. Even in Dawakin Kudu (32%), where the famous Dawanau market is located and government officials frequently visit, less than one-third of respondents knew about policies ostensibly designed to help them.

Objective 3: Land Tenure, Resources, and Regulatory Frameworks

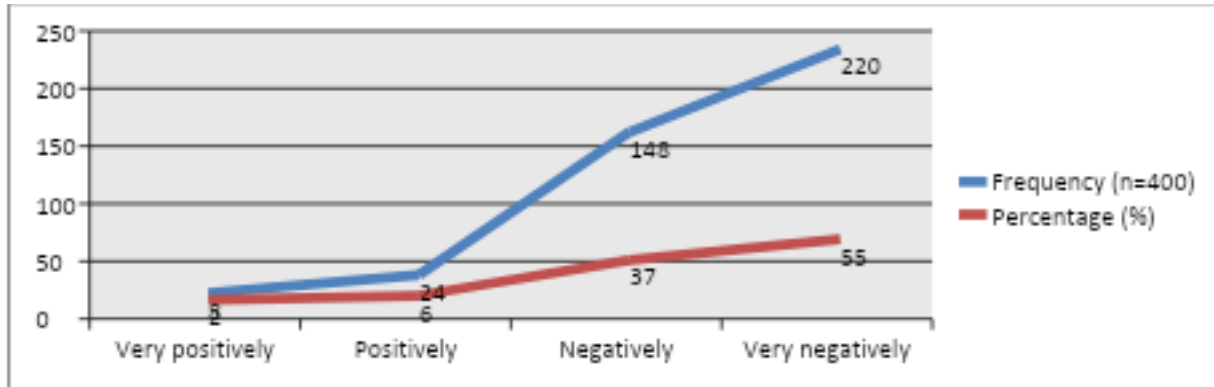


Figure 2: Influence of Land Tenure on Cattle Production Practices

A combined **92% of respondents** (37% + 55%) reported that land tenure arrangements affect their cattle production practices **“negatively”** or **“very negatively.”** Only 8% reported a positive or very positive influence. This is one of the most powerful findings of the entire study.

Objective 4: Market Structures and Value-Chain Governance

Table 3: Factors Affecting Participation in Cattle Market (Multiple responses, n=400)

Factor	Frequency	Percentage of respondents (%)
Influence of middlemen/merchants	356	89.0
Price fluctuations	324	81.0
Market access and transport challenges	268	67.0
Lack of storage/processing facilities	192	48.0
Regulatory barriers (checkpoints, fees)	156	39.0

(Source: Field Work, 2026)

The most dominant market constraint is the influence of middlemen/merchants, cited by 89% of respondents. This reflects the oligopsonistic structure of Kano's cattle market, particularly at the Dawanau International Market in Dawakin Kudu LGA, which handles an estimated 2,000–3,000 cattle daily.

Objective 5: Distributional Implications

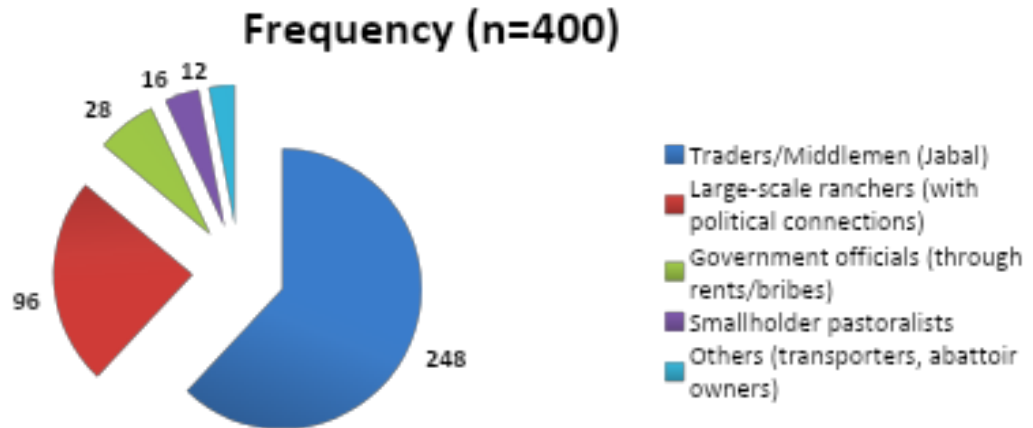


Figure 3: Perceived Primary Beneficiaries of Current Ranching/Pastoral System

Analysis (Objective 5):

There is a strong consensus among respondents that traders/middlemen (Jabal) are the primary beneficiaries of the current configuration of the cattle value chain, cited by 62% of respondents. Large-scale ranchers with political connections are perceived as the second major beneficiaries (24%), while only 4% believe smallholder pastoralists benefit.

Summary of Open-Ended Questionnaire Responses

Of the 400 respondents, **312 (78%)** provided written responses to the open-ended questions, indicating strong engagement with the research topic.

Question: "In your view, what are the main challenges that hinder effective ranching in Kano State?"

Table 4: Content analysis of responses

Content analysis of responses revealed the following themes (multiple codes per response):

Challenge	Frequency (n=312)	Percentage of open-ended respondents (%)
Land insecurity / no access to land	268	85.9
Government neglect / no support	244	78.2
High cost of fencing and water infrastructure	212	67.9
Conflict with farmers / fear of destruction	176	56.4
Lack of credit / no loans for ranchers	156	50.0
Cultural attachment to open grazing	132	42.3
Middlemen exploitation	124	39.7
No veterinary services / poor animal health	88	28.2

Lack of technical knowledge/training	76	24.4
--------------------------------------	----	------

Representative Quotations from Open-Ended Responses:

“The problem is land. The government gives land to politicians and businessmen. The Fulani get nothing. How can we ranch without land?” (Respondent #57, Pastoralist, Rano)

“We have been promised ranching for 20 years. Each election, they bring the same promises. We are tired of words. We need action – land, water, fencing.” (Respondent #203, Rancher, Gwarzo)

“Even if I build a ranch, the middlemen will still cheat me. They control the market. The government must regulate the Jabal or create government buying points.” (Respondent #341, Trader-turned-rancher, Dawakin Kudu)

“The conflict is killing us. My brother was killed in 2022 over grazing land. If we had ranches, we would be safe. Both farmers and herders would benefit.” (Respondent #119, Pastoralist, Sumaila)

Question: "Suggest ways to improve ranching adoption and optimise the cattle value chain in Kano State"

Table 5: Suggest ways to improve ranching

Suggestion	Frequency (n=312)	Percentage of open-ended respondents (%)
Government should provide land for ranching	276	88.5
Provide low-interest loans / credit for infrastructure	244	78.2
Build water boreholes / dams near ranching zones	208	66.7
Regulate middlemen / create direct market channels	184	59.0
Provide training and extension services	144	46.2
Establish model ranches as demonstration sites	112	35.9
Enforce laws against encroachment on grazing reserves	96	30.8
Form cooperative ranching societies	68	21.8

Conclusion

This study investigated the political economy of ranching underutilisation within the cattle value chain in Kano State, Nigeria, examining why ranching remains persistently marginal despite decades of policy advocacy. The findings robustly demonstrate that ranching underutilisation is not primarily a technical problem—stemming from inadequate

knowledge, poor breeds, or insufficient veterinary services—but rather a political economy equilibrium sustained by the convergence of powerful actor interests, asymmetric power relations, and institutional arrangements that systematically favour the status quo.

The study concludes that political and institutional factors are the primary drivers of underutilisation, with 80% of respondents rating these dynamics as significant and land tenure insecurity emerging as the single most important barrier. Respondents enjoying secure land access were over six times more likely to adopt ranching, yet the Land Use Act of 1978 centralises land authority in the Governor's office, creating a patronage-based allocation system that systematically excludes ordinary pastoralists while benefiting politically connected elites. Even designated grazing reserves remain legally ambiguous and encroached upon, with Bunkure LGA—which hosts formal reserves—paradoxically reporting the highest negative perception of land tenure at 97%.

Federal and Kano State livestock policies, including the National Livestock Transformation Plan, have failed to achieve their objectives due to fundamental design and implementation flaws. Policy awareness is abysmally low at 22%, with 63.6% of aware respondents rating these policies as ineffective. Budget allocations are approved but frequently not released—only 12% of the 2023 livestock budget was actually spent—and federal-state coordination failures are endemic. Policies function largely as "performance" documents for donors and political constituencies rather than genuine implementation blueprints.

Market structures and value-chain governance are characterised by oligopsonistic concentration, with a Jabal cartel of approximately 20-25 major merchants exercising effective price control and using credit as a mechanism of debt bondage that prevents producers from seeking alternative market channels. Value-chain coordination is rated as "poorly coordinated" or "uncoordinated" by 86% of respondents, with a moderate positive correlation between coordination and profitability indicating that improved governance could yield direct economic benefits.

The distributional implications are stark: traders and politically connected large ranchers are the primary beneficiaries of the current system, while smallholder pastoralists, women, and youth bear the costs. Farmer-herder conflict (47 deaths documented in 2023) and environmental degradation (60-70% vegetation loss in parts of Bunkure and Sumaila) represent significant human and ecological costs directly attributable to the failure to transition to ranching. The study thus concludes that meaningful livestock transformation requires addressing these underlying political and institutional constraints rather than merely promoting ranching as a technical solution.

Recommendations

A. Federal Government

Immediate: Commission an independent audit of Land Use Act implementation in Kano and other northern states to document patterns of allocation, encroachment, and non-enforcement.

Medium-term: Amend the Land Use Act to create a specific legal category for "ranching land" with transparent allocation criteria, fixed-term leases (25-50 years), and automatic renewal provisions. Link federal NLTP funding to state-level land allocation reforms, requiring states to demonstrate transparent application processes and minimum leases issued. Establish a dedicated Livestock Development Bank offering single-digit interest rates, flexible collateral requirements (including cattle and group guarantees), and medium-term loans (5-10 years) bundled with technical assistance.

B. Kano State Government

Immediate: Comprehensively map and gazette all grazing reserves, demarcate boundaries on the ground, and develop a phased removal plan for illegal occupants. Establish a transparent Ranching Land Application Unit within the Ministry of Livestock with published criteria, standardised forms, fixed 90-day processing timelines, a public register, and an appeals process.

Medium-term: Convert selected grazing reserves (e.g., Bunkure or Gwarzo) to ranching cooperatives, providing secure leasehold titles, initial fencing and water infrastructure, and three years of extension support. Establish a Livestock Marketing Board to buy cattle directly at published minimum support prices and supply major abattoirs, breaking the Jabal cartel's price-setting power. Mandate price transparency at Dawanau International Market through daily public price boards and mobile phone dissemination.

Long-term: Invest in borehole drilling with solar-powered water systems in ranching zones, cattle troughs at 5-kilometre intervals, veterinary clinics in each LGA, and a mobile veterinary outreach programme.

C. Local Government Authorities

Immediate: Establish LGA-Level Land Dispute Resolution Committees comprising the LGA Chairman, District Head, pastoralist and farmer representatives, and a community development officer to mediate conflicts.

Medium-term: Maintain public registers of all land allocations within each LGA, including allottee name, land size, purpose, date of allocation, and current status.

D. Development Partners and NGOs

Immediate: Prioritise funding for pastoralist and women's cooperative formation, providing legal registration, governance training, financial management, collective marketing, and advocacy skills development.

Medium-term: Establish pilot ranching demonstration sites (minimum 100 hectares) in Bunkure and Gwarzo with secure leasehold tenure, full fencing, water infrastructure, and intensive extension support over three years. Fund rigorous longitudinal research, including randomised controlled trials of intervention packages and cost-benefit analyses, to generate evidence for advocacy and policy influence.

E. Market Actors and Trade Associations

Immediate: Establish quarterly dialogue fora between the Amalgamated Union of Food and Cattle Dealers of Nigeria, abattoir associations, and rancher/pastoralist representatives to address price transparency, quality grading, contract arrangements, and conflict resolution.

Medium-term: Develop voluntary quality grading standards based on weight, body condition, health status, and fattening history, with premium prices for higher-grade animals to incentivise investment in feeding and veterinary care.

References

1. Agrocentric. (2025). *National Livestock Transformation Plan: Policy and implementation review*. Abuja: Agrocentric Publications.
2. Akinyoade, A., & Uche, C. (2018). Development and its discontents: The cattle economy of Nigeria since the 1960s. In *African Economic Development* (pp. 365-382). Routledge.
3. Andrews, M. (2013). *The limits of institutional reform in development: Changing rules for realistic solutions*. Cambridge University Press.
4. Ayantunde, A., et al. (2016). Land tenure and livestock production in northern Nigeria. *Land Use Policy*, 55, 284–291.
5. Benjaminsen, T. A., & Ba, B. (2019). Why do pastoralists in Mali join jihadist groups? A political ecological explanation. *The Journal of Peasant Studies*, 46(1), 1-20.
6. Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.
7. Delgado, C., Rosegrant, M., Steinfeld, H., Ehui, S., & Courbois, C. (1999). *Livestock to 2020: The next food revolution*. IFPRI, FAO, and ILRI.
8. FAO (Food and Agriculture Organization). (2019). *The state of food and agriculture 2019: Moving forward on food loss and waste reduction*. FAO.
9. Flyvbjerg, B. (2006). Five misunderstandings about case-study research. *Qualitative Inquiry*, 12(2), 219-245.
10. Galaty, J. G., & Johnson, D. L. (1990). *The world of pastoralism: Herding systems in comparative perspective*. Guilford Press.
11. Gereffi, G., Humphrey, J., & Sturgeon, T. (2005). The governance of global value chains. *Review of International Political Economy*, 12(1), 78–104.
12. Homewood, K. (2008). *Ecology of African pastoralist societies*. James Currey.
13. Ibrahim, A., Ahmed, A., & Musa, I. (2020). Challenges of livestock transformation programmes in northern Nigeria: Evidence from Kano and Kaduna States. *Nigerian Journal of Agricultural Economics*, 10(1), 45-59.
14. ILRI (International Livestock Research Institute). (2020). *Mapping cattle value chains in West Africa*. Nairobi: ILRI.
15. ILRI (International Livestock Research Institute). (2021). *Nigeria livestock sector review: A focus on policy and institutions*. ILRI.
16. Kano State Government. (2023). *Kano State livestock development strategy*. Kano State Ministry of Agriculture and Natural Resources.
17. Khan, M. H. (2010). *Political settlements and the governance of growth-enhancing institutions*. SOAS, University of London.
18. Lind, J., Okenwa, D., & Scoones, I. (2019). *The politics of pastoralist resilience: New directions for development and change*. Routledge.
19. Marshall, A. (1890). *Principles of economics*. Macmillan.

20. Marx, K. (1867). *Capital: A critique of political economy* (Vol. 1). Verlag von Otto Meissner.
21. Muntari, I. (2025). *Livestock transformation and empowerment schemes in Kano State*. Kano State Government Press.
22. Musa, I., Ibrahim, A., & Bello, M. (2019). Socio-economic and institutional factors affecting ranching adoption in northern Nigeria. *Journal of Arid Agriculture*, 5(2), 112-125.
23. North, D. C. (1990). *Institutions, institutional change and economic performance*. Cambridge University Press.
24. Obi, C., & Okoye, J. (2018). The political economy of herdsman-farmers conflicts in Nigeria. *African Journal of Peace and Conflict Studies*, 7(1), 55-72.
25. Oladele, O. I., & Adebayo, C. F. (2021). Policy implementation gaps in Nigeria's livestock transformation plan: Evidence from Kano State. *Journal of Policy and Development Studies*, 15(2), 33-48.
26. Polanyi, K. (1944). *The great transformation: The political and economic origins of our time*. Farrar & Rinehart.
27. Rekwot, P. I., Ogundijo, D. S., & Bawa, G. S. (2022). Analysis of financing constraints in livestock value chains: Evidence from smallholder cattle production in northern Nigeria. *African Journal of Economic and Management Studies*, 13(1), 89-104.
28. Ricardo, D. (1817). *On the principles of political economy and taxation*. John Murray.
29. Scoones, I. (1995). *Living with uncertainty: New directions in pastoral development in Africa*. Intermediate Technology Publications.
30. Smith, A. (1776). *An inquiry into the nature and causes of the wealth of nations*. W. Strahan and T. Cadell.
31. Thornton, P. K. (2010). Livestock production: Recent trends, future prospects. *Philosophical Transactions of the Royal Society B*, 365(1554), 2853-2867.
32. Thornton, P. K., & Herrero, M. (2020). Climate and livestock transition pathways in sub-Saharan Africa. *Global Environmental Change*, 60, 102027.
33. Turner, M. D. (2004). Political ecology and the moral dimensions of "resource conflicts": The case of farmer-herder conflicts in the Sahel. *Political Geography*, 23(7), 863-889.
34. Turner, M. D. (2014). Political ecology I: An alliance with resilience? *Progress in Human Geography*, 38(4), 616-623.
35. World Bank. (2020). *Nigeria livestock sector development: Challenges and opportunities*. World Bank Group.



© 2026 by the authors. Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by-nc-sa/4.0/>).