

Pastoral conflict and supplying Nigeria with meat: how can the paradox be resolved?



Field investigations on pastoralist-farmers crises areas

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Keywords: Nigeria; ranching; policies; livestock production

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The central region of Nigeria has seen a major increase in conflict between cattle-herders and farmers in the last two decades. At the same time, a rapidly rising population has meant increasing demand for meat and milk, which is more and more expensive to import. Ranching has been widely suggested as the solution to this problem; this working paper discusses whether this is practical and if not, what are the alternatives.

Nomadic herders have long been present in Nigeria and were formerly the main source of milk and meat for settled farmers in the North and Middle Belt. The rise of the cattle trade meant that they also now supply the large city markets in the South. When the human population in rural areas was low, farmers and herders could co-exist in relative peace. But in modern times, the population of Nigeria has been rising rapidly, leading to ever more bush areas being taken over for farming, especially the land along rivers where the herders formerly grazed their cattle. The fall in the price of oil is making it more and more difficult to make up the food shortfall by imports. So competition for land can only get worse and conflict is likely to increase.

Currently, the main strategy for providing separate places for herders and farmers to pursue their livelihoods is Grazing Reserves and cattle-tracks. The reserves and tracks are not supposed to be farmed, and the tracks are intended to join together the reserves by avoiding farmland. This system is in breakdown; in many areas farmers have entered the reserves, refusing to recognise their gazetted status. In addition, few reserves have had the infrastructure development originally projected; water or other facilities attractive to herders are not functional.

It has been widely proposed that 'ranching' is the solution to these problems. The term is not clearly defined and can refer to many types of enterprise including large-scale open grazing and zero grazing systems. Properly speaking, ranching is where rangeland is fenced off and the cattle fed with improved pasture. In principle, because the cattle do not move, they grow more quickly and fetch a higher price at market. However, ranching has a long history of failure in Nigeria. It was first tried in the 1910s, and then in the 1960s and again in the 1990s. All these ranches are now deserted, essentially because of management problems. Around the world, ranches are well established in the United States, Australia and South America. These areas all have a number of features in common. The extensive land required was either bought cheaply (or stolen from the foragers who lived there). These countries have a highly functional infrastructure, social insurance, effective transport links and wealthy urban populations. *None of these conditions are met in Nigeria.*

Some of the difficulties in establishing such systems in Nigeria include;

- a) acquiring the land from farmers to consolidate into ranches
- b) providing reliable infrastructure in terms of electricity, water and veterinary supplies
- c) providing adequate protection against rustling
- d) ensuring stable land tenure, so that political change would not involve land seizures

Even supposing this were to happen, it would not resolve the problems of the nomadic herders, since they would be excluded from the process.

Nonetheless, the issue of conflict urgently needs to be resolved, both for considerations of human security and because the declining oil economy will require more local production of meat and dairy products. The only feasible solution is an upgraded system of grazing reserves and cattle routes that join them. These would be substantially cheaper than ranches, because in many cases the land has already been gazetted. They would be more flexible, if herders were not confined to an individual reserve in case of drought. If the boundaries were respected, they would reduce conflict. Most importantly, government would only have a role in putting in and maintaining infrastructure such as water points, not implementing a complex management plan that has had such a poor record of success.

Any solution to the problem of nomadic herders must be based on a realistic appraisal of what can work in the Nigerian situation, not a fantasy about the mid-west of the United States

1 1. Introduction: background to pastoral conflict

The main producers of livestock in Sub-Saharan Africa are nomadic herders, in West Africa principally the FulBe, although in Nigeria, there are also Shuwa and Koyam. Within this category, herders may be more or less nomadic, either constantly on the move, or semi-settled, with the herds going on seasonal migration. Despite many attempts to encourage or compel herders to settle, these have never been successful anywhere in West Africa. There is a reason for this, and it is not a perverse desire to move, some genetic propensity to wander, as is often portrayed in the Nigerian press.

Nomadic herders have long been present in Nigeria and were formerly the main source of milk and meat for settled farmers in the North and the Middle Belt. The rise of the cattle trade has meant that they also now supply the large city markets in the South. When the human population in rural areas was low, farmers and herders could co-exist in relative peace. But in modern times, the population of Nigeria has been rising rapidly, leading to ever more areas of bush being taken over for farming, especially the land along rivers where the herders formerly grazed their cattle. The fall in the price of oil is making it more and more difficult to make up the food shortfall by imports. So competition for land can only get worse and conflict is likely to increase.

In addition, herders are being pushed out of the northern, Sahel regions, where they were formerly concentrated. The reasons are many, especially climate change leading to lack of pasture, human population expansion and conflict, especially Boko Haram. This led to many herds being captured, sold or eaten and herder villages being burnt down, especially in the Lake Chad region. As unfamiliar herds enter the Central Zone, this has put pressure on existing resources, and the incoming herders have not so far formed relationships with the resident farmers.

2 2. The current situation

The movement of cattle has long been recognised as a potential source of conflict. As far back as the 1960s, the main strategy for providing separate places for herders and farmers was the establishment of Grazing Reserves and cattle-tracks. These were intended to be gazetted by the Federal Government and maintained by the states. The reserves and tracks are not supposed to be farmed, and the tracks are intended to join the reserves by avoiding farmland. This system is in breakdown; in many areas farmers have entered the reserves, refusing to recognise their gazetted status. In addition, few reserves have had the projected infrastructure development; they have no water or other facilities attractive to herders. So more and more herds are finding their own way in a landscape where new farms are being established. Conflict is inevitable and especially since the 'Jos Crisis' of 2001, there have been violent confrontations between farmers and herders, leading for calls for government and civil society action. However, the conflict is not as simple as first appears. On both sides, extremely sophisticated weapons are being used, beyond the usual means of herders and ethnic militias or youth groups responsible for much of the killing. These weapons must have been purchased and distributed by unnamed powerful people, who stand to benefit from the chaos.

Anti-pastoralist legislation. One consequence of the heightened conflict is that State Governments are being pushed into passing legislation restricting the movement of herders. The first to do this was Ekiti State, which passed a law forbidding open grazing in November 2016, and authorised vigilantes to shoot cattle seen in open land. In Benue State similar laws have been read in the State House of Assembly. These entirely forbid open grazing and propose that the State Government will establish ranches, where herders will be entitled to lease land. Fines of up to one million Naira are envisaged for contraventions of the grazing law. It is likely that other southern States will follow suit.

This has led to many official pronouncements on possible solutions, and in particular much has been said about 'ranching'. Unfortunately, no detail is given, so it is unclear exactly what is intended. The remainder of this paper explores the way enclosed livestock systems work in the rest of the world and whether they could be effective in Nigeria.

3 3. What is 'ranching'?

3.1 3.1 Overview of enclosed livestock production systems

It has been widely proposed that 'ranching' is the solution to these problems. The term ranching is not usually clearly defined in these discussions. There are essentially three different types of enclosed livestock production that might fall under this term;

- a) **Ranching.** A very large area of rangeland is enclosed and the livestock migrate freely within its boundaries, finding their own food.
- b) **Intensive livestock production.** The animals are kept in paddocks, and graze partly on natural pasture, partly on intensive feedstock.
- c) **Zero grazing.** The animals are kept in stalls and fed entirely on purchased feeds. They are subject to intensive veterinary care, and often given diet supplements to enable them to fatten quickly.

At present, none of these are practised anywhere in Sub-Saharan Africa except parts of Ethiopia, Kenya and South Africa. The following sections describe these in more detail and discuss their relevance for Nigeria.

3.2 3.2 Ranching

Ranching systems are most common in countries with very large areas of open rangeland, where the owner can be sure of uncontested title to land. Large herds of cattle are allowed to move freely in this space. It is only suitable for meat production. Water is either from a natural source or provided by borehole and the pasture is sometimes sown with improved species. When they are required to be sold or to undergo veterinary procedures, the animals must be rounded up, which was traditionally on horseback, but in modern times, four-wheel drive vehicles and helicopters are usual. Ranching systems reflect modern economies where the transport infrastructure is well developed, so animals can be moved rapidly from remote areas to urban markets. Fencing is a high cost in a ranch operation. Hardy breeds must be used compared with the other two systems.

Ranches of this type are typical of the United States, Australia and the rangelands of South America, particularly Uruguay and Argentina. They function in areas of low human population, where land tenure is secure. In other words, farmers are not usually trying to access the same land for crops. Ranches are mainly operative Africa in Botswana, Namibia and parts of South Africa, where the rainfall is so low or poorly distributed that ordinary agriculture is impossible.

The record of ranches or any type of intensive livestock production in Nigeria is not encouraging, indeed ranching has a long history of failure in Nigeria (Dunbar 1970). Dunbar recounts the establishment of a large-scale ranch in Western Borno in 1914, which collapsed during the Great Depression of the 1930s. Understanding the trajectory of Nigerian ranches is not always easy, since although they were established with great fanfare, their decline and collapse is undocumented. Gefu (1992) has a listing of some of these ranches, but no comment on their failure. Table 1 shows a table of Nigerian ranching enterprises in the twentieth century. Except for the first, all have been visited by the author and it has been ascertained that they are no longer functional. All that remains are rusting signboards.

Table 1. Nigerian ranching enterprises

Name	Dates	Comment
African Ranches	1914-1931	Collapsed due to world economic downturn
Obudu Ranch	1951-1970s	Started as a private enterprise. Cattle production declined due to failure to pay staff and difficulties of exporting stock. Obudu has now become a luxury resort, accessible by cable car, but despite the name is not a livestock production enterprise
Bornu ranch	1963 - ?	Funded by USAID. Intended to be established as a ranch for local breeds. 20,000 acres were fenced. Seems never to have functioned.
Manchok Ranch	1963 - 1980s	Funded by USAID. An area of 5,820 acres was fenced. Intended as a 'fattening ranch' where cattle from the Jos Plateau were fed on supplements such as cottonseed cake. The intention was to export the cattle by rail to the south. Purchasing of inputs never worked as intended. By the 1980s the cattle had all been sold.
Mokwa Ranch	1964 - 1980s	Funded by German aid. Intended as a fattening ranch and research station. Included a modern abattoir. Area was 'ten square miles' and original herd was 600 cattle.

In more recent times, farmers who had been forced to leave Zimbabwe were invited to establish farms and livestock production enterprises by the Government of Kwara State, and were given financial incentives to operate. However, operating conditions and markets in Nigeria proved so difficult to adapt to, that all but a producer of frozen chickens for supermarkets have now left.

3.3 3.3 Intensive livestock production

Intensive livestock production is where the cattle are kept in paddocks, possibly in sheds in winter. They graze natural pastures, supplemented with feeds. They are usually found in high rainfall areas, because the grazing depends on rapid growth of pasture grasses in a small area. These systems have high veterinary costs, because the close proximity of cattle leads to rapid disease transmission. In principle, because the cattle do not move, they grow more quickly and fetch a higher price at market, which is very suitable for dairy production. These systems are typical of Eurasia, peri-urban areas of South and Central America, Kenya and South Africa. Bebe et al. (2002) have provided an account of how these systems work in the highlands of Kenya, and Moll et al. (2007) discuss the comparative situation for smallholders in Kenya, Zambia and Sri Lanka. In all cases, dairy smallholders are supported by a relatively efficient collection and marketing system, as well as consumers prepared to pay a premium for fresh milk. Interestingly, the Vom Dairy Farm, originally a Nigerian Government operation, was taken over by the company behind Peak Milk, a Dutch company mainly selling evaporated milk. After some attempts to create a market for fresh milk in Jos, they reverted to making sweetened yoghurt from imported milk powder. No such systems are currently operative in Nigeria.

3.4 3.4 Zero grazing

Zero grazing systems are where the animals are kept in stalls or sheds and fed entirely on purchased feeds. This is suitable for both meat and dairy production. At least in Europe, there is quite a strong trend from intensive grazing to zero-grazing (Meul et al. 2012). Zero-grazing is expensive to operate and depends on critical infrastructure, including electricity, water, reliable veterinary services, and guaranteed product prices. It is also based on elaborate systems of artificial insemination, which accounts for its high productivity. Such systems are typical of highly developed economies such as Europe and parts of Asia with reliable infrastructure and nearby urban markets. Even so, a comparison of zero-grazing and intensive grazing even in Europe suggests that it is economically less viable due to an inability to recycle waste outputs (Meul et al. 2012). However, where the cost land is extremely high it may still be economically viable. None of the factors which make zero grazing practical in Europe are present in Nigeria and there are no examples of its successful operation.

4 4. Problems of feasibility

4.1 4.1 Economics of livestock production

For livestock production to supply the market reliably with meat and dairy products, the enterprise must be economic. In other words it must compete on price with alternative sources of supply. In Nigeria, most of the meat which reaches the market is brought from outside the country, i.e. it comes from herds in Sahelian countries such as Niger, Chad and Mali. In these low-density countries with open grasslands, the owners have *no costs* of land acquisition, grazing or water supply, which is why the meat is relatively cheap. The high prices for meat in southern markets in Nigeria are due to the extraction of taxes from transporters at checkpoints between north and south. This means that it is difficult for intensive producers in Nigeria to compete on price. Intensive producers in Nigeria are also subject to cost unpredictability, since the Naira fluctuates considerably, though it has only fallen in recent years. This means the price of imported drugs, for example, or spare parts is likely to rise. This is in contrast the Sahelian countries, where the Cfa is tied to the Euro, and therefore costs are relatively stable. The only way a local producer has an advantage is that the distance to market is lower and potential losses in transit are thereby reduced.

4.2 4.2 The acquisition of land

One of the suppositions on which the proposal for enclosed livestock production is based is that land will be acquired and held by the owner. In Nigerian law, all land is ultimately owned by the State, but can be owned and sold by individuals who acquire a Certificate of Occupancy (FGN 1978). In principle this should guarantee rights to a parcel of land in perpetuity. However, the experience of outsiders who have acquired land legally under this law is discouraging. In Plateau State in particular, herders and horticulturalists bought land along rivers at a time when indigenous farmers saw no value in such land. Since 2001, however, the demand for land has been such that Certificates of Occupancy have been summarily abrogated. Herders have been ejected from long-held land in Forest Reserves in Kaduna State when it was wanted by property developers. Similarly, elsewhere in Nigeria, residents have been thrown off valuable land along the Lagos foreshore. The State has done nothing to defend the rights of legal owners. Why would pastoralists trust that even they buy land according to established procedures, they will be allowed to keep it when pressure on land increases still further? Even a politician acting in good faith cannot guarantee his successors will keep such promises.

Secondly, acquiring the land from farmers in Nigeria to consolidate into ranches would be nearly impossible, as it would involve high levels of compensation. Who would then be the owner of the ranches? If government, then why would a cattle-herder agree to herd his cattle there? If the ranches were then sold to private owners, again, no herder would agree to stay there. Historically, private ranch owners have never made any significant contribution to the national meat supply. Even supposing this were to happen, it would not resolve the problems of the nomadic herders, since they would be excluded from the process.

4.3 4.3 Infrastructure and utilities

All types of enclosed livestock production depend crucially on effective infrastructure and utilities, in other words reliable water and electricity, as well as other services, such as disease control. It is therefore unsurprising that they are typical of modern economies found in Europe, Australasia and the Americas. These countries have a highly functional infrastructure, social insurance, effective transport links and wealthy urban populations. Moreover, they have a developed market infrastructure which can guarantee prices to farmers. In Nigeria, where the supply of water and electricity is haphazard at best, a proposed livestock enterprise will have to invest heavily in generators, wells and pumping.

Photo 1. Closed microfinance bank, Lagos abattoir



Prices and supply of fuel have proven highly variable, making it difficult to predict costs. No open grazing producer in the Sahel has to take any of this into consideration.

5 5. The practicality of these solutions

Government policy in any country does not necessarily arise from a rational consideration of the facts, or a review of past experience. The lack of detail in these proposals does suggest that a strategy has not been thought through, or assessed by technical experts. The livestock production systems of Europe and America have developed over many centuries and have been backed by a formidable body of research in the twentieth century. The conditions for the success of enterprises are well-known. In interviews people say, 'surely Nigeria can be like a modern economy'. If intensive livestock production can work in Europe it can work here. Well yes, if the conditions described are met. But clearly, the unreliable electricity supply, guaranteed market prices, and many other issues remain the same as for the last half-century. Experience shows that wishing something would happen does not make it happen.

6 6. What are the solutions?

The issue of conflict does urgently need to be resolved, both for considerations of human security and because the declining oil economy will require more local production of meat and dairy products. It will not be the same in every part of Nigeria, since land pressure and economy as well as ecological conditions vary a great deal. But a solution that works will be based on a rational assessment of the local economy and a well-founded projection of population increase.

It is important to recognise that enclosed livestock production systems, even if they work, will not solve the problems of nomadic herders. Telling a pastoralist who has been accustomed to move to suddenly become a rational livestock farm manager, with all the hurdles described above, is unlikely to produce any result. Even in Europe, where transhumant pastoralism survived in Italy, Spain and some parts of Eastern Europe until recent times, these herders did not transition into farm managers, but simply sold their herds. The newer types of livestock management outcompeted them. Either herders will simply desert the states along the southern edge of the Central Zone completely, or else they will become more violent and defensive in the quest for grazing.

In states such as Nasarawa, an upgraded system of grazing reserves and cattle routes that join them remains a feasible solution. These would be substantially cheaper than ranches, because in many cases the land has already been reserved and gazetted. They would be more flexible, if herders were not confined to an individual reserve in case of drought. If the boundaries were respected, they would reduce conflict. Most importantly, government would only have a role in putting in and maintaining infrastructure such as water points, not implementing a complex management plan that has had such a poor record of success.

Politically, this is not going to succeed in states such as Benue and Ekiti, where anti-pastoralist sentiment is very high. It is possible for herders and farmers to collaborate and co-operate, but this will take considerable work and goodwill from both sides, a situation which is not yet in evidence. Otherwise, conflict is likely to continue. If the legislation in Benue is indeed passed, this is not going to result in ranches, but further civil insecurity.

Photo 2. Kachia Grazing Reserve signboard



Source: Author

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