

Declining Grazing Resources: the State and Future of The Livestock Economy in Zamfara

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Abstract: The livestock sector occupies an important sector of the economy of Zamfara. The greater part of its population resides in the rural areas and depends on livestock economy for the sustenance of their households. However, the livestock sector is currently bedeviled with multiple constraints which have affected its productivity. This paper intends to examine some of these challenges ranging from dwindling pasture resources in the open rangeland and grazing reserves, encroachment into the grazing reserves, cattle routes, and insecurity among others. These challenges had been on the increase per day and have constituted a very serious threat to the state and the future of livestock economy. The paper further proffered recommendations on these problems facing the livestock sector in Zamfara, the methodology adopted include ; visits to the affected areas for sight assessments and documentaries, oral interviews and focused group discussions across the sampled areas in the state and use of relevant literature.

Keywords: *Cattle routes, Declining, Future of livestock Economy, Grazing Resources, The state*

Date of Submission: 09-11-2017

Date of acceptance: 30-11-2017

I. INTRODUCTION

Agriculture provides a source of livelihood to people more than any other industry in rural areas of Zamfara, and by extension in most parts of the rural areas in developing countries [1];[2]. The livestock sector is an important component of agricultural production, because the two occupations have very strong linkages [3] for example, the agricultural sector provides feeds for livestock management, while livestock provides organic manure and animal traction[4]. The trade in livestock gradually developed forward linkages with other economic activities like, transportation,[5], the over land cattle transporters, vehicular animal transportation, rope makers, animal feeds and meat sales, animal bones processing, sales of dairy products, animal traction, etc.[6] Other economic activities related to the livestock industry include: the trade in livestock and livestock products hides and skin, organic fertilizer, dried fat, which have all consistently provided households with incomes to augment expenditures in agricultural production and other basic necessities of life. Agriculture and the livestock sector in particular have therefore, played a key role in reducing poverty since most of the world's poor live in rural areas and are largely dependent on agriculture production for survival, with the livestock sub - sector as a leading driver[7].

Zamfara (the study area) is located in the wider region of the Rima Basin and it is known for its agricultural lands and rich forest reserves, such as (Anka forest, Maradun, Shamushalle/Dunburum, Damri - (Bakura), and Maru-Bungudu forest reserves. The existence of these forests reserves and subsequent formal policies administered on the protection of these reserves and grazing routes have on a large scale facilitated livestock production in Zamfara Area of northern Nigeria. The climate of the area records a temperature rising up to 38⁰C (100.4⁰F) between March and May. Raining Season starts in late May to September/October, while cold season or harmatan starts from December to February/March, depending on climatic variations [8].

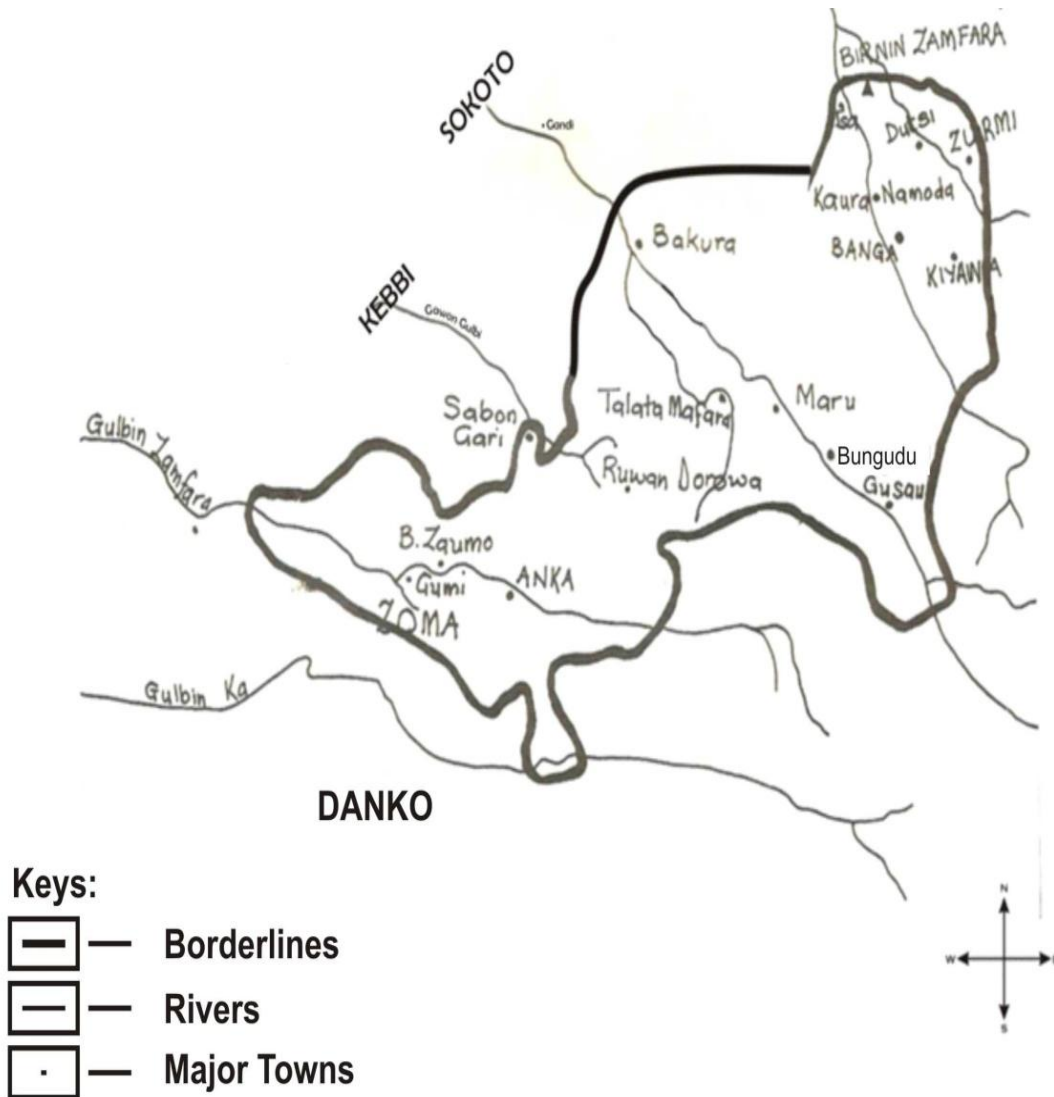


Figure 1: Map of the study Area

Sources: Zamfara State History & Culture Bureau, State Library, Ministry for land and Housing, Field Work, 2017

The map shows the land of Zamfara and its boundaries (demarcated in dark bold). The people of the land are referred to as Zamfarawa. Boundary adjustments have inflicted some changes on the boundaries of Zamfara area. The Area extends up to the bend of River Rima to the North-West and River Ka in the South-West[9], several boundary adjustment exercises took place in the area until 1st October 1996, when Zamfara state was created out of the former Sokoto State [10].

II. AN OVERVIEW OF THE LIVESTOCK SECTOR IN ZAMFARA

Zamfara area is known for its livestock potentials and has a large scale indigenous marketing system operating across international boundaries which has productively engaged significant number of its people in different capacities. i.e. as producers, marketers, consumers, animal drovers, middlemen, merchants, commission agents, trade unionist, butchers, transporters, rope makers, domestic and modern tanneries, animal feed sales, dairy and hides and skin processing, etc. [11]. Livestock production in Zamfara has not been limited to rural areas but has extended to semi-urban households; where stakeholders from different professional backgrounds partake in livestock production and trade either in full or part time capacities to diversify their income base[12]. However, the dominant livestock production groups are the pastoralists whose primary reasons for keeping livestock is to serve as a source of wealth, symbol of social status and life insurance [13]. The dominant livestock production systems in Zamfara include; total nomadism, agro - pastoralism, partial ranching, livestock fattening and compound dairying [14]

The marketing activities are however, dominated by large scale rural and urban traders who buy in bulk and sell in retail and whole. These groups are the major players in the transportation of livestock to markets in Southern parts of Nigeria [15]. Vast of the population of the people of Zamfara are largely settled in agrarian enclaves and are predominantly farmers, livestock raisers and traders, [16]; [17]; [18]. Incomes generated by households from livestock production and trade constitute a significant proportion of the household and individual living expenses [19]. Activities such as marriages, naming ceremonies, construction of new houses, and investments are largely financed from livestock proceeds. These incomes generated from livestock management in the rural areas were also utilised to support the financial needs of family members from the end of the harvest period to another farming season [20]; [21]. Importantly, food stuff were not often sold to meet up major financial obligations instead livestock were marketed, and most of the existing literature on livestock agrees that livestock are kept as a final resort and for insurance purposes in events of financial constraints [22].

III. THE STATE OF FOREST RESERVES, CATTLE RANCHES AND THE RANGELAND MANAGEMENT CENTRES

Zamfara area is endowed with enormous forest and pasture resources which were developed since the pre – colonial period. Considering the significance of the livestock sector towards the generation of cattle tax and other revenues for colonial administration, laws were enacted for the provision of veterinary services, protection and development of these grazing resources [23]. In the colonial period, some of these grazing and forest reserves like the GidanJaja - Tsabre- Dumburum-Shamushalle, Maru - Bungudu and Damri forests were mapped and protected [25].

The former Sokoto state (comprising of the present Sokoto, Kebbi and Zamfara States) had a livestock population of more than five million in 1976, with Zamfara area (the study area) having more than 47 % of the total number of the livestock. Human population was put at about 4.5 million and to meet up with daily protein requirements of the state; (Sokoto State) about 700,000 animals were to be slaughtered annually, the implication of this was that Zamfara area was to produce about 330, 000 animals per year. There has already been a setback in the livestock production following a prolonged drought period in the Sahel and the status of pastures and other grazing resources had declined [26]. Consequently, the state government considered the condition of livestock production recovering from the drought disaster resolved to establish the Sokoto Livestock Development Corporation prior to the creation of Zamfara state. The corporation was saddled with the responsibility of improving livestock production and marketing, through the development of the grazing reserves, ranches and livestock water projects in the state. [27].

Therefore, reforms on land use like the 1965 Grazing Reserve Law [28] and 1978 Land Use Decree (Act) of 29 March 1978 [29] respectively provided a convenient platform for these projects. The Land Use Act of 1978 swept away previous statutory and customary land tenure systems in the country. It nationalized all land and vested it under the control of the military governors of each state who were given the authority to manage land for the benefit of all Nigerians. Management of rural land was given to local governments (Act. 2). They have the power to grant customary rights of occupancy for agricultural, residential, grazing or other purposes (Act. 6 (1)).

The Act also placed strict restrictions on the transfer of statutory and customary land rights [30] (Hoffmann 2004). Consequently, demonstration cattle ranches and rangeland management centres were established at DakiTakwas (Gummi District) and GidanJaja (Zurmi District) in 1977. A cattle ranch is a large area rich in pasture demarcated for professional breeding and management of cattle and other animals of same family. It is limited in size and operation compared to a range management centre. A ranch could be private, public or commercial [31]. The major objective of establishing cattle ranches was to explore avenues for limited grazing and the management of stock as models for wider adoption by the pastoral and agro-pastoral groups. With wider practice of ranching therefore, seasonal movements of herds will gradually be minimised. In Zamfara two cattle ranches were established at Faru (Zurmi District) and Kebbe then (before 1996) in Gummi Local Government Area, which is now part of Zamfara State [32] (Sokoto 1985).

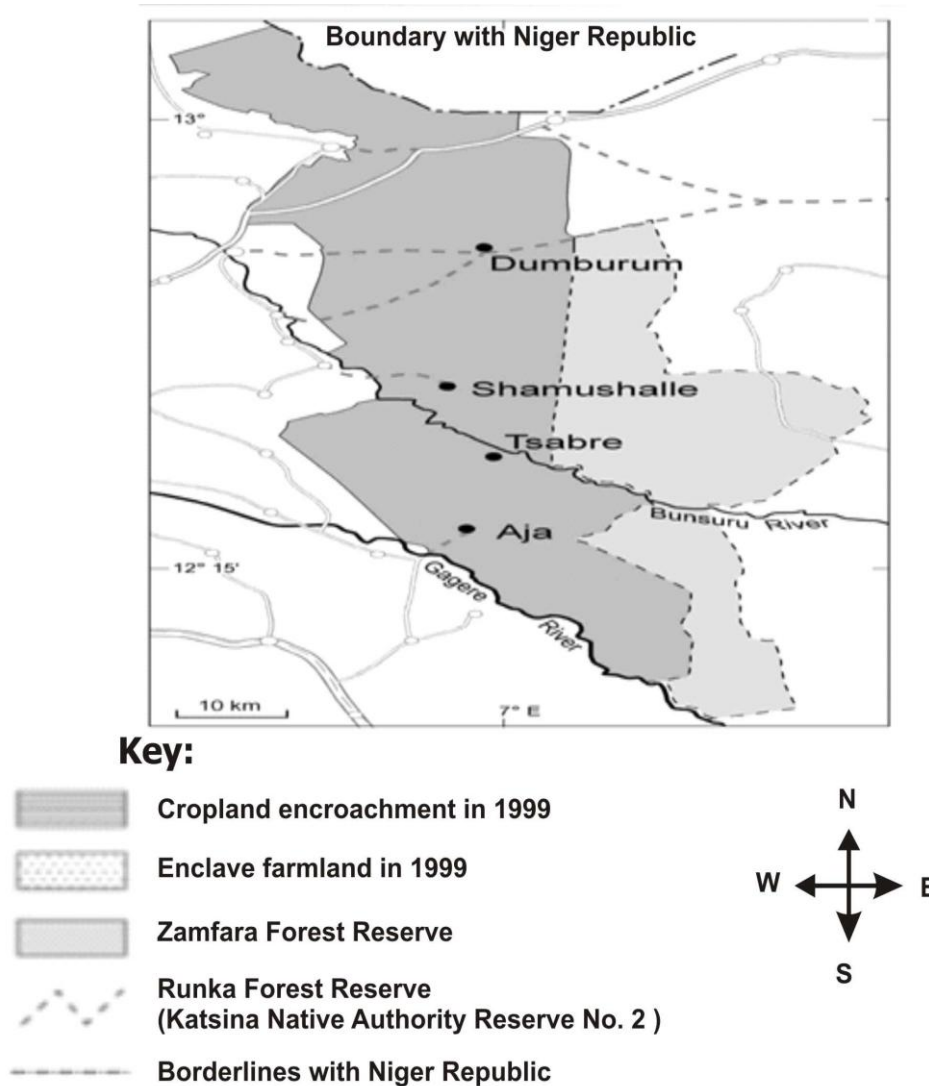


Figure 2: Zamfara Forest Reserve, 2000

Source: Hoffmann, 2004

A range land management centre is usually a spacious rangeland rich in pasture and water resources, demarcated for the management, improvement and preservation of forest resources for animal production, a rangeland is bigger than a cattle ranch. The wisdom for the establishment of the rangeland was to provide alternative grazing pastures (grass and water) for livestock owners amidst dry season when the potency of pastures in the open grazing land starts to deplete or degenerates. These range management centres had also provided extension services to livestock raisers in the surrounding areas of GidanJaja and DakiTakwas. The rangeland were also established to provide alternative grazing land in order to reduce farmers – herdsman clash, which had been common in the area, a yearly phenomenon, which had caused loss of lives and properties in Zamfara [33].

Table 1: Some Projects aimed at improving Livestock Production in Zamfara Area, 1965 - 1979

S/no.	Project Title	Location	Area covered	Activities	Beneficiaries	Challenges
1	Grazing and Forest Reserves	1. Maru 2. Bungudu 3. Anka 4. Damri	Thousands of Kilometres	Development & conservation of forest resources	Immediate community, pastoral groups in the state and Niger Republic	Over grazing and depletion of reserves resources, climate change, human and crop land

						encroachment, etc.
2	Range Management Centres	1.Gidan Jaja 2.Daki Takwas	4,000 hectares 1,300 square Kilometres	Development and preservation of pastures and forest resources for animal grazing, extension services for livestock development	Pastoralists and other livestock producers	Crop land encroachment, collapse of major facilities 95% of the rangeland at DakiTakwas had been converted into farmland while operational staff at GidanJaja have been laid off and the range not functional
3	Livestock Investigation and Breeding Centres	K/Koshi T/Mafara Gusau Mada	Not applicable	Research and treatments of livestock diseases and vaccinations	Pastoralists and other Livestock producers	Understaffing and Collapse of major stations
5	Cattle Ranches	Faru Kebbe	1,200 hectares 1,100 hectares	Breeding programs and Extension services to encourage ranching	Livestock producers and general public	Kebbe now in Sokoto state and Faru cattle ranch closed down
6	Afforestation Projects	Across the state	Kilometres across the state	Tree planting and campaign against destruction of forests	The general public	Projects abandoned
7	Shelter Belts and wind breaks	Desert frontline areas	Kilometres across the state	Erosion and desert encroachment control	Pastoralists, other livestock raisers and the general public	Projects suspended following withdrawal of funding partners
8	Veterinary stations	District levels	Not applicable	Treatments and vaccination of livestock	Pastoralists and other livestock producers	Collapse of major stations

Sources: Field work 2017, Zamfara State Ministry for Environment and Solid Minerals, State Ministry for Livestock Production and Animal Health

Table 1 above has shown the state of livestock development projects in the state. The grazing reserves and the forests which had provided pastures to pastoralists in the dry season were constraint by over grazing, climate change, farmland encroachments and massive infiltration of criminals in the forests from and within Nigeria; these have slowed the pace of livestock production. Security concerns in the forests of Jaja, Dumburum, Maradun, Dansadau, Dagwarwa, Duhuwa, Ajja, Tabre, Cigama, etc., have turned these areas unsafe for stable livestock production [34]. A number of nomads have fled for safety and the state has witnessed

several conflicts between farmers and herdsmen over grazing land and blockade of stock routes across the state [35], these conflicts have disorganised the livestock sector by causing decline in the production of livestock and associated by-products [36]. Rehabilitation works were undertaken in some gazetted grazing reserves in order to improve pasture resources, some of these reserves are tabulated below.

Table: 2 Rehabilitation (upgrade) works on some Gazetted Forest Reserves in Zamfara (2008):

S/NO	Name of Reserve	District and location	Hectares of land covered	Nature of upgrade
1	BakinDusti	Gummi	4, 432	Pasture, stock routes, water conservation
2	Pas	Gummi	3,335	Pasture & stock routes
3	Tsakida	Maradun	2,128	Water resources
4	Shamushalle	BirninMagaji	9,878	Stock routes
5	Damri	Bakura	8,760	Pasture
7	Dumburum	Zurmi	6,760	Pasture
8	Ajja	Bungudu	5,650	Pasture, stock routes, water conservation
9	Mutunji	Maru	4,960	Pasture & Stock routes
10	Bingi	Maru	7,220	Pasture
11	Kwaha	Bungudu	2,320	Stock path

Sources: Field Work 2017, Zamfara State Ministry of Livestock Production and Animal Health, Ministry of Environment, and the Zonal offices of the Federal Ministry of Agriculture Gusau, Zonal Forestry offices, Gusau, Kaura - Namoda

The state government in 2008 started upgrade works in the grazing reserves in table 2. The upgrade works include; re-gazetting of the forest reserved areas, improvement of the pasture, water resources and cattle path. The common Forages and vegetation in these Forests are : grassland, shrubs (*Gardenia spp*), Proteaellioti, Wood trees, *AndropogonGayanus* commonly called *Gambain* Hausa language, *Hyparrhenia dissolute* - *Kyara* , *Accaciasiebarana*, *Pennisetumpurpureum* - named *Kyasuwain* Hausa, *plectostachyus* - African star grass, *Heteropogoncontortus* - *SunsurunDaji*, *Eragrostis-Burburwain* Hausa language[37].The upgrade works were completed in 2010.

IV. THE STATE OF THE STOCK ROUTES

Stock route occupies strategic position in the management of livestock in Zamfara because livestock production systems like scavenging, pastoralism, agro-pastoralism solidly relies on the availability of spacious and safer stock routes. Animals move around to close and distant places in the rangeland to feed on pasture and water consequent to climatic variations. This is because transhumance is a system of animal production characterized by seasonal and cyclical migration between different ecological zones. The climatic conditions in Zamfara area varies from one location to another. The northern parts of the area records low amount of rainfall while the extreme southern parts witness higher down pours and therefore had richer pastures and sources of water than the northern parts. This development has encouraged seasonal movements of the pastoral groups to southern parts of Zamfara areas of Magami, Wanke, Bindin, Bingi, Dansadau, Dankurmi, Mutunji, Gulbin Ragam, Dangulbi, Gobirawar Chali. Maimurahu, Kuyambana.

Despite the significant of these stock routes, they are presently in a pathetic condition consequently to encroachment. The stock routes across the major rangeland and the greater part of the forest where livestock are grazed in the critical period of dry season when pastures in the northern part of Zamfara have dried are either blocked or encroached as indicated in Table 3 below thereby creating difficulty for livestock grazing.

Table 3: Extent of Encroachments into some selected Stock routes in the State

S/NO.	Name of the Cattle Route	District	L.G.A.	Position from 1960 – 1975 (Meters)	Position in 2017 (Meters)	Date of visit & Assessments
1.	Burtalin Tashar Tsoho	Birnin Magaji	Birnin Magaji	600-700m	200m	27/3/2017
2.	Burtalin Dajin Tagguwa	Birnin Magaji	Birnin Magaji	800-900m	300m	27/3/2017
3.	Burtalin Asiri	Birnin Magaji	Birnin Magaji	350m	120m	27/3/2017
4.	Burtalin Dogon Fako	Birnin Magaji	Birnin Magaji	300-400m	200m	27/3/2017
5.	Burtalin Yallah	Birnin Magaji	Birnin Magaji	1,000m	270-300m	27/03/2017
6.	Burtalin Sisawa	Birnin Magaji	Birnin Magaji	800m	300m	27/3/2017
7.	Burtalin Dangeji	Masama	Bukuyyum	2,700-3,000m	700m	22/4/2017
8.	Burtalin Takallafiya/Karam	Gummi	Gummi	500m	400m	22/4/2017
9.	Abaniyawa/Kabaye	Sakajiki	K/Namoda	300m	70-80m	1/4/2017
10.	Gidan Saleh	Sakajiki	K/Namoda	90m	30m	1/4/2017
11.	Tullukawa/Dokai	Sakajiki	K/Namoda	400m	90-120m	1/4/2017
12.	Kwalabdawa/Gebon Kaiwa	Sakajiki	K/Namoda	700m	100m	1/4/2017
13.	Burtalin Gidan Jajjaye	K/Namoda	K/Namoda	1,000m	350m	1/4/2017
14.	Kunburici	K/Namoda	K/Namoda	1,000m	400m	1/4/2017
15.	Gidan Daniye	K/Namoda	K/Namoda	1,100	300m	1/4/2017
16.	Burtalin Butulu	Kungurki	K/Namoda	600m	150m	1/4/2017
17.	Badarawa Karkara	Badarawa	Shinkafi	1,000	400m	2/4/2017
18.	Farin Dutse	Kware	Shinkafi	500m	120m	2/4/2017
19.	Dankalgo/Yango/ Kagara	T/Mafara / Anka	T/Mafara / Anka	700-1,000m	90-150m	22/4/2017
20.	Manya/Inyawa	T/Mafara / Maru	T/Mafara / Maru	300m	100m	22/4/2017
21.	Sangamawa/Bakon Gebe	Zurmi	Zurmi/Dauran	1,200	270 -300	09/4/2017
22.	Gobirawa/Rukudawa	Rukudawa	Zurmi	900	270	06/4/2017
23.	Kaface/Koniyal	Mayasa	Zurmi	600-700	370-200	08/4/2017
24.	Kware/Mahema	Mashema	Zurmi	900	300	8/4/2017
25.	Runfar Aki	Dauran	Zurmi	700-00	450-500	8/4/2017

Table 3 above indicates the extent of encroachment into some selected stock routes across the State in 2017. Most of the routes were either encroached by crop cultivators (farmers), or blocked by government projects in the area or rangeland sold to large scale farmers. The problems of blockage, trespass and encroachment have constituted a challenge to livestock production and these have led to several conflicts between herdsman and farmers. It has also been responsible for widespread migration of pastoralists outside Zamfara State to southern parts of Nigeria. See, the Maps of the cattle routes in the Appendixes. The state governments in southern parts of Nigeria in recent years and at present are on the stage of passing legislations to restrict and prohibit transhumance activities in their states. Therefore, the phenomenon is about reaching a stage of statement, hence the quest for ranch and the establishment of additional grazing reserves and improvement of the existing ones.

V. THE FUTURE OF LIVESTOCK ECONOMY IN ZAMFARA

Pastoralism has been the major system of livestock production in Sub-Saharan Africa (SHA) where herdsman managed their flocks in arid and semi-arid zones. This pastoral mode of production in Zamfara and other parts of Nigeria involves sending part or the entire herd to access crop residue in farms at the end of the harvest period or graze in open range/forests. The movement with herds further southwards as the dry season becomes more severe in the extreme northern parts of Nigeria has become an annual survival strategy which has sustained livestock in the area. Herdsman return home (North) at the start of the rains for animal to graze and drink water as well as participate in crop cultivation [38].

This system of southwards movement with herds from the northern parts of Nigeria has become a widespread annual routine and has over the years been quite a successful strategy in coping with several challenges like unpredictable conditions of climate change, [39], animal diseases, shortage of water for animal consumption and other related challenges [40], [41]. These climatic variations had also caused shorter wet seasons for regular land cultivation, which has led to decline in crop yields and livestock feed resources for livestock production [42]. Pastoral production have succeeded in Zamfara for a very long period of time, precisely since the pre-colonial period up to the post independent Nigeria, except in recent years from 2014 when the sector was threatened by rural bandits and cattle rustlers and these type movements became restricted [43]. Herdsmen became discouraged to move around with their herds and stationing the livestock around the homestead have resulted to overgrazing in the rangeland.

The only possible solution as popularised by the Nigerian public has been the resort to ranching. Ranching is an intensive enclosed pastoral production system that obtains in the Americas, Australia and few African countries like South Africa, Botswana, Kenya, Namibia and Zimbabwe which has unfortunately not been quite successful in SHA. It was attempted in Zamfara at two locations as shown in table 1, but it failed. Even though these failures were attributed to underfunding and withdrawals of World Bank counterpart funds for ranching to many SHA countries including Nigeria. This amongst other reasons explains why the Economic Community of West African States (ECOWAS) Head of States to endorse transhumance activities in 1998 [44]; [45].

Similarly, the growth in human population, the use of tractors, herbicides, fungicides, insecticides, and genetically modified seeds, organic and inorganic fertilizers, had improved the cultivation of land and this development had prompted farmers to open up farm-plots into marginal or borderline areas used for grazing and path for cattle passages, because of the benefits from improved productivity [46]. Farmers following this development encroached into cattle routes and grazing reserves to establish farmlands, an act which had on many occasions resulted into deadly conflicts between farmers and herdsmen. With improved technology, hectares of farm lands formerly cultivated by a hundred farmers using traditional tools such as hoes and cutlasses can now be cultivated by a single farmer using a tractor and the process has been less time consuming [47].

Traditional rulers have played a negative role in the deterioration of the forests resources and grazing reserves in Zamfara. This interference and influence had been in existence since the pre-colonial period. All the previously enacted land acts in the colonial and post independent period had not deterred village, districts and emirates authorities from granting informal ownership of land to privileged and influential people in Zamfara, especially during civilian regimes. The land use decree of 1978 further compounded the problem, because it granted state governors the absolute rights of control on all land under their jurisdiction [48].

The challenges facing the livestock sector raises the fears that the sector is bound to in the near future face additional threats and constraints that may cause a drastic decline in the production of livestock, livestock by-products and animal traction potentials and on wider note agricultural production. The relationship between farming and livestock production has been enormous; the two sectors have a symbiotic relationship. Therefore, the implication of this decline, will multiply on the local economy of the state and the national economy of Nigeria in terms of income earnings by the people and revenue generation by the government [49].

Similarly, these devastating conditions have compelled quite a number of pastoralists from the following pastoral communities of Shanawa, Kwaren Shinkafi, Moriki, Bingi, Jangeru, Badarawa, Galadi, Jaja, Ajja, Dumburun, Kaya, Maradun, Tabanni, Kuturu, Kwamcewa, Dokau, Bindin, Dansadau and several other villages to flee from Zamfara to safer parts of Nigeria and the neighbouring republics of Chad, Cameroun, Benin and Niger. The north eastern parts that should have been an alternative settlement zone have been devastated by the Boko Haram insurgency [50] (Walker A., 2012). The displacement of these pastoral communities did not only affect livestock production but have also disrupted the provision of nomadic education to pastoral and agro-pastoral communities in the state [51].

Ironically, some states in central and southern parts of Nigeria have in different occasions resisted the penetration of pastoralists from the northern parts of Nigeria. The states of Benue and Enugu have passed legislation prohibiting cattle movements and this will have a very serious implication on national security, [52] because the states in the northern parts of Nigeria who are the largest livestock producers have not made any preparation for the pastoral groups in the region to ranch. Nigeria has an estimated 19.7 million Cattle besides goats, sheep, camel, donkeys, horses, etc. and the biggest consumer of meat in the ECOWAS, therefore, any problem or threat to its livestock sector should be of serious concern [53]. There has been several threats and warning from bandits to farmers instructing farmers not to attempt tilling their land for plantation as the farm lands will be used as passages and bases for operations by cattle rustlers [54].

Similarly, the exit of the Fulani people from Zamfara state due to the increasing rates of attack against their settlements and livestock remain one of the most critical economic challenges of the livestock sector in Zamfara. This will amount to decline in livestock off-take which will seriously affect production and marketing.

Some herdsmen who were victims joined the bandits to secure herds and to protect their properties as members. There have been reports that Fulani in Zamfara contributes up to about 18 % of the state GDP and contributes about 24% of the state internally generated revenue – IGR [55]; [56].

The crises have grossly affected the provision of basic education for the children of the nomads in the state as most of the Nomadic education basic schools have been vacated. Herdsmen and their wards have fled the state. The few that made the supreme sacrifice to stay no longer feel secured to attend schools. This is very dangerous for a growing state like Zamfara with the least enrolment at basic education level and high number of school dropouts especially, Girl - child [57].

VI. CONCLUSION/RECOMMENDATIONS

Livestock production is not only a significant aspect of agriculture in Nigeria's quest to diversify its economy but also remain a source of livelihood for pastoral communities particularly the nomadic groups and other interested investors in the livestock economy. This therefore informed the evaluation that there is hardly any nation in the world that has been able to guarantee food security through one system of agricultural production (rain fed or irrigation farming), to this end the need to improve the cultivation of animal feeds becomes imperative in order to sustain the livestock sector. These types of feeds include; red sorghum called *Jar - Dawa*, *Madobiyya* tree, groundnut and white beans hay, etc. which has been very helpful during the dry season, cultivation of Soybean which remains the most important and preferred source of high quality protein for local animal feed production.

The safety of the environment is vital and fundamental in livestock production, because pasture grows on land. An erosion, desert and drought threatened land cannot sustain pasture for livestock production. This has therefore informed the conclusion that the condition of the pastures in the rangeland has only been able to sustain the livelihoods of increasing numbers of farmers and livestock-keepers at a very low but sustainable levels. Ranching should be encouraged with a view to reduce seasonal cattle movement in the country. The ranches could be private and commercial. This effort can be complemented through rain water harvesting. Rain water harvesting will improve crop production and the development of pastures in the ranches for animal grazing. There should be a constant check on the country's borders to check infiltration of criminals. This can be done by integrating accredited community based vigilante groups.

ACKNOWLEDGEMENTS

The authors wish to acknowledge the support of the Nigerian Tertiary Education Trust Fund (tetfund) for sponsoring this research work. We are also indebted to the management of the Federal University Gusau for facilitating this research work. The authors also wish to appreciate the editorial contributions of Professor Ibrahim Muhammed Jumare, the Head of Department of History and International Studies, Federal University Gusau, Zamfara State, Nigeria, and Professor Muhammad Tukur Usman, Head of History Department, Usmanu Danfodiyo University, Sokoto, Nigeria.

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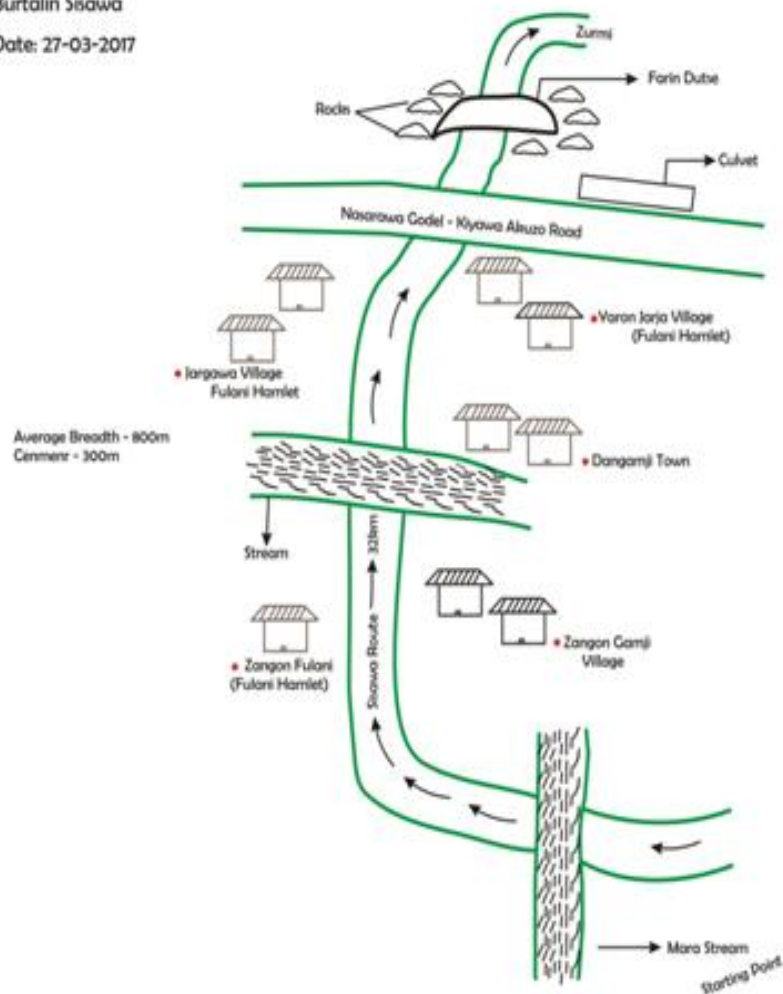
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Appendices

Kiyawa - Birnin Mogaji

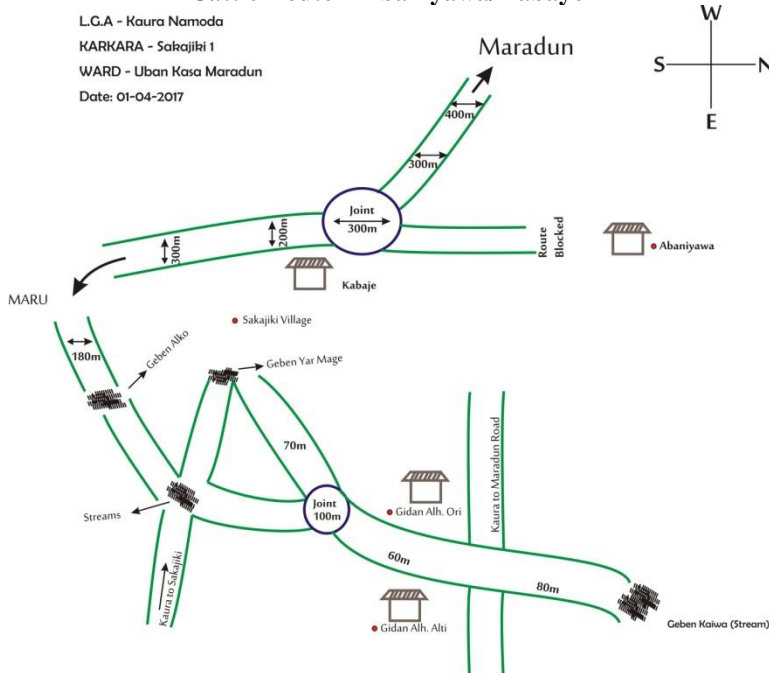
Burtalin Sisawa

Date: 27-03-2017



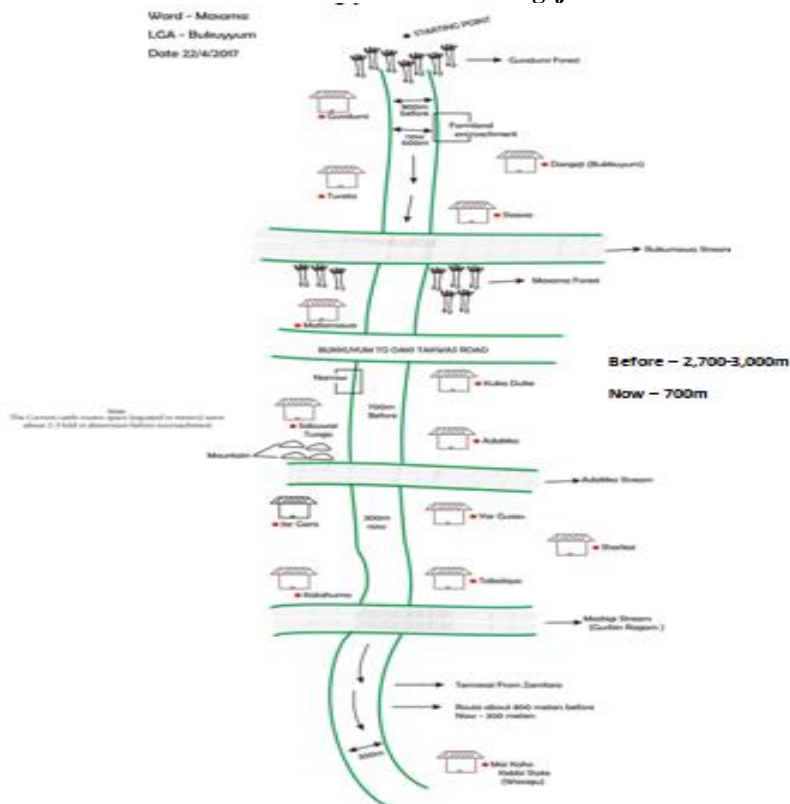
Appendix 1: Burtalin Sisawa

Cattle Route – Abaniyawa/Kabaye



Appendix 2: Abaniyawa/ Kabaye

Cattle Route – Burtalin Dangeji



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