

The Implications of Farmer – Herder Conflict on cost of Agricultural Production in Benue State, Nigeria, (1999 - 2023)

Kwaghmande Joseph Iorhen, Apenda Tersoo Isaac

Department of Sociology, Umaru Musa Yar'Adua University, PMB 2218, Katsina Corresponding Author: Kwaghmande Joseph Iorhen <u>joekwamans@gmail.com</u>,

Abstract

Violent conflict between farmers and herders in Benue State have in recent times assume disastrous dimensions that have affected the livelihood of both groups. This has increased the calls for a wholesome evaluation of the nature and general character of the phenomenon. Though conflict is an inevitable phenomenon in any human society, its dimensions must not be seen to threaten the very existence of humanity. The farmer – Herder conflict in Benue state has defiled all known solutions towards its de-escalation. These clashes have led to loss of lives, destruction of properties and displacement of people mainly farmers in the area. While many cannot go to farm, the few that venture into farming experience staggering hikes in cost of producing Agricultural products. This study therefore seeks to investigate the farmer – Herder conflicts in Benue State focusing particularly on its impact on cost of Agricultural production. Data was collected using questionnaires, Focus Group Discussions and key informant interviews. The questionnaires were administered on 445 respondents. At the end of the analysis of the empirical data it was found that farmer – Herder conflict has led to forced migration of labour from the communities. It was further found that farmer – Herder conflict has led to increase in cost of Agricultural production in the state. Also found was the fact that the increases in cost of production has made farmers to reduce their cultivable lands. It was therefore recommended amongst others the intensification of security in the area so as to nipe perpetrators of the conflict in the bud; the release and enforcement of white papers on similar previous conflicts and the constitution of a standing committee involving traditional rulers on both sides and members of the divide, Miyetti Allah cattle breeders Association of Nigeria. The committee should be holding meetings regularly as to address issues that may escalate into open conflict.

Keywords: Farmers, Herders, Conflict, Agriculture. Food Production

Introduction

The farmers and herders have for a long time lived together peacefully. According to Uji (2016) these two groups lived together for over two hundred years in the Benue valley where each ply their trade. Tyubee (2006) insisted that the current conflicts between the groups emanates from the paucity of land and grazing fields mainly due to population growth, desertification and land grabbing activities of politicians and land speculators. According to Marshall & Gurr (2005), Farmer-Herder conflicts have manifested in both arid and semi-arid regions of America, Africa and Asia, among others. Historically,

farmers and herdsmen have competed over the use of resources and in some cases engaged in conflicts in other continents of the world like Europe, America and Asia but due to modern technology and proper management, it has since become history. In Africa, farmer-herder conflict is still persistent. It is an age long problem, and it has escalated in the last three decades and has assumed a very deadly dimension. It is mostly prevalent in the Great Lake Regions of West, East and Central Africa, in countries such as Nigeria, Ghana, Chad, Ethiopia, Kenya, Tanzania and Cameroon among others. In West Africa, according to Tonah (2006), conflicts between



farmers and herders have been a common feature of economic activities for centuries. The Northern region of Ghana has been experiencing increase violent clashes between farmers and herders over access to land resources (Olaniyan, Francis & Okeke-Uzodike, 2015).

In Nigeria, both South and Northern States are affected. Central Nigerian States like Plateau, Nassarawa, Taraba and particularly Benue State among others are seriously affected. The groups involved in the violent conflicts over resources are crop farmers and herders. Both the farmers and herders are completely dependent on land for the cultivation of crops and rearing of animals respectively. The two occupations are expected to be complementary to each other but the groups in Nigeria, particularly Benue State are always in constant violent conflicts with each other in the recent times. The good relationship they used to have, had transformed into irreconcilable antagonism, which always result in displacement of persons that constitute labour for Agricultural production.

In the recent times, the conflict between farmers and herders have escalated, taking a political, banditry and ethnic- religious dimensions, threatening the country's security and stability, with the estimated death toll of approximately 2500 people only in 2006 and the displacement of 3million others (International Crisis Group, 2017). These conflicts are becoming as potentially dangerous as the Boko Haram in the north eastern part of Nigeria, with little efforts from the Federal, State governments, non-governmental organizations, communities and traditional leaders to address the problem. Adisa (2012) observed that the farmer-herder conflict has remained the most recurring resource-use conflict in Nigeria. Traditionally, the herders used to move their cattle to the North Central States in the dry seasons and returned to their base during raining seasons and at this point in time there was insurgency at the base and they tended to remain in North Central and even advance further South coupled with the population explosion and environmental degradation of the drying up of lake Chad basin. Their large number of cattle inevitably became

competition for land with the crop farmers in the area leading to killings and reprisal killings.

Cases of farmer - herder conflicts are widespread in Benue State in recent times. For instance, Azahan (2015) reported that on 11th April, 2013, violent conflict erupted between herdsmen and farmers in Adaka village, Makurdi Local Government Area of Benue State. Azahan (2015) also reported that on March 7, 2014 herdsmen attacked Guma local Government Area Headquarters, while on October 5, 2014, there was violent conflict between herdsmen and farmers in Zongo village in Guma Local Government Area of Benue State. Vande-Acha (2014) also documented that on 25th May, 2015 herdsmen invaded Egba settlement of Agatu Local Government Area of Benue State. The major source of these conflicts is land which the two groups compete over farming and grazing respectively.

Despite various measures taken by stakeholders in the country to forestall the occurrence of these violent conflicts particularly in Benue State, there has been an escalation of violent conflicts between the farmers on one hand, and the herders, on the other. While studies on farmer-herders' violent conflict exist in the study area (Genyi, 2014; Uji, 2016; Fefa & Tough 2016; Idowu, 2017; Hagher, 2016; Vande-Acha, 2014) none has however focused on the dimension of the implications of the conflict on cost of Agricultural productivity. From the foregoing, this study was therefore undertaken to fill the gaps by providing empirical data on farmer-herders' violent conflict in Benue State in order to specifically assess the implications of farmer – Herder conflict on cost of Agricultural production.

Conceptual clarification

a) Conflict

It is imperative to conceptualize and examine conflict. The contemporary world is built around conflict. In fact, it exists in all societies. No society; be it modern or traditional, is devoid of conflict. However, conflicts vary in degree and form of expression which could be verbal, ideological, psychological or physical. Onuaha



(2008) defined conflict as a situation in which two or more human beings desire goals which is obtainable by one of them. Each party mobilizes the energy to obtain the desired object and perceive others as threats to be removed. Coser (1956) perceived conflict in terms of the struggle between parties over desirable values. According to Coser, conflict refers to: Struggle over values or claims to status, power, and scarce resources, in which the aims of the conflicting parties are not only to gain the desired goals, but also to neutralize, injure or eliminate their rivals. Such conflicts may take place between individuals and collectivities. Although conflict may be conceived from different perspectives, one crucial defining element of it is the presence of two or more actors. The benefit that goes with access to or control of the 'valuable' and the deprivation or insecurity that follows denial of access underlie all conflicts. For the purpose of this study, farmers'-herders' violent conflict refers to violent struggles or disagreements between farmers and herders over access to fertile land and water for farming and grazing respectively.

b). Farmers

The farmers are the Tiv who are known to have settled in this area as far back as the 15th century (Hagher, 2016).

Historically, the peasant farmers have been known to be very good friends of the herders particularly the Tiv farmers who as playmates, often joked over possession of livestock. The Fulani would call the Tiv, MUNCHI, in reference to the story that the Tiv were given cows, but due to their high appetite for meat ate all the cows. When their Fulani counterpart asked them where their Cows, they answered "Munchi", meaning "we have eaten them". All these have changed and the Fulani-Tiv brotherhood nexus and relationship which these two groups had enjoyed in the past as pastoralists and farmers have been marred leading to frequent violent conflicts. What is even more worrisome is that, recently these conflicts have metamorphosed into full blown wars with very horrifying bloodshed (Hagher, 2016)

c). Herders

The Herders (Fulani) who are predominantly Muslims from the northern parts of Nigeria are pastoralist group who are by occupation traditional cattle herders. Their search for conditions conducive to raising their herds, keeps them continuously on the move from one place to another, and specifically to areas with pasture and water availability and no tsetse fly infestation (Iro, 1994; Blench & Dendo 1994). The Fulani are said to have originated from the Arabian Peninsula and migrated into West Africa. According to Iro (2010), the Fulani use mobility as a production strategy to access water and pasture and possibly markets. This movement takes the pastoralists to as much as 20 countries in sub-Saharan Africa, making the Fulani the most diffuse ethno- cultural group (on the continent), and seen as only slightly impacted by modernity in regards to pastoralists' economic activity. The nomadic Fulani in Nigeria move southwards into the Benue valley with their cattle seeking pasture and water from the onset of the dry season (November to April). The Benue valley has two major attractive factors—water from the Benue rivers and their tributaries, such as River Katsina-Ala, and a tsetse fly -free environment. The return movement begins with the onset of rains in April and continues through June. Once the valley is saturated with heavy rain and movement is hampered by muddy areas threatening the very survival of the herds and shrinking passage due to farming activities, leaving the valley become inevitable.

The Fulani, who live in 21 countries in Africa, are concentrated in Northern Nigeria, especially Kano, Sokoto, Katsina, Kebbi, Zamfara, Kaduna, Adamawa and Jigawa States. They are a majority only in Guinea, constituting about 40% of the country's population (Anter, 2011). In Nigeria, they constitute about 9% of the country's population; with a heavy concentration in the North West and North East (Ethnic demographic statistics are difficult because national population census does not capture ethnic origin).



d). Cost of Agricultural Production

This is a reference to the unit cost of input for producing an Agricultural product. As a variable factor of production, cost of production differ from one place to another. These variations in cost are due to differences in labour demand and supply amongst other factors. For this work, Cost of Agricultural production is defined as the unit cost of production of crops and livestock by farmers within a cropping season.

Objectives of the Study

The study was guided by the following objectives

- To determine the factors for Farmers-Herders Conflict in Benue State
- To analyze the Implication of Farmers-Herders Conflict on labour cost for Agricultural production in Benue State.

Theoretical Framework The Eco-Violence theory

The Eco-violence theory was postulated by Thomas Homer-Dixon in 1998. The theory has engaged the minds of scholars such as Baechler (1998), Percival (1998), Odoh and Chilaka (2012), Gleditsch (2001), Mwamfupe (2015) to extensively explain the issues of violent conflicts and environmental resources. The fundamental theoretical assumption of the theory is that resource scarcity is the product of an insufficient supply, too much demand or unequal distribution of a resource as a result of environmental hazards or degradation will force some sectors of a society into a condition of deprivation and violence. Homer-Dixon and Percival (1998) argued that large populations in many developing countries are highly dependent on four key environmental resources that are very fundamental to herding and crop production: fresh water, cropland, forests and fish. Scarcity or shrinking of these resources as a result of misuse, over-use or degradation under certain circumstances will trigger off conflicts.

It is important to note that, one major feature of herders in Nigeria is migration and at the heart of migration are conflicts. In this study of farmers'/herders' violent conflict, the eco-

violence theory is applicable in the sense that it explains the intricate linkages that have developed between resource scarcity as a result of climate change and these violent conflicts in Benue State. This is because the four environmental resources (fresh water, cropland, forests and fish) as earlier identified by Homer-Dixon are resources that are affected by climate change at the lake Chad Basin. The lake has dried up leading to shortage of fish and fresh water. Drought and desertification have dried up crop lands and forest in the far Northern Nigeria thereby making these environmental resources in short supply. To cope with these challenges, herders migrate to North Central Nigeria particularly Benue State where they can get moderate weather, market opportunities, green -vegetation, forage and food, thereby threatening the means of production and reproduction of farmers in the area, who also depend on these resources for their livelihood. This in itself engenders violent conflicts in the area.

This theory has been criticized for analyzing violent conflicts between farmers and herders paying more attention to climate change and resource scarcity without giving equal consideration to socio-political and ethnoreligious factors. According to Mwamfupe (2015) ethnic and religious differences may not be very significant factors in explaining farmers'/herder's violent conflicts, but are very important in understanding the persistence of the violent conflict.

Despites the above criticisms, the Ecoviolence theoretical premises will be used for the analysis of farmers'-herders' violent conflict in Benue State because its premises fit into the various aspects of the objectives of the study. The ability of the theory to identify the factors responsible for conflicts between farmers and herders underscores its explanatory value. Again, the ability of the theory to identify effects of the environment and the violent conflict on the farmers and herders which particularly makes farm labour to migrate to other locations thereby creating scarcity is an added asset to the study which underscores the choice of the theory.



Methodology

The study was conducted among selected rural communities in Benue State, Nigeria. The State has a projected population of 4,253,641 (National Population Commission Projections, 2016). Both primary and secondary sources of data were utilized. Primary data were collected through the use of indepth interview (IDI) and questionnaires that were administered on respondents. The secondary sources of data used here include, government policy documents, technical committee reports on insecurity and agriculture, gazettes, and expert reports. The multi stage probability cluster sampling technique was used to select study locations from which respondents were finally selected using a combination of systematic, simple random, purposive and snowball sampling techniques. The total sampled families for the study was 445. The data collected were then presented in tables using frequencies, percentages and cross tabulations.

Literature Review

Under this section, literature relating to the study will be reviewed. The review will be done in themes and sub themes in line with the objectives of the study.

Defining Factors for farmer – Herder conflicts

There has been a long-standing debate on the factors responsible for violent conflicts between farmers and herders. A variety of possible causes have been empirically tested. Prominent in the literature is the debate on the effects of ethnic diversity on the initiation of the conflict. Adejoh (2004) argued that diversity in ethnicity is a breeding ground for conflict. Collier and Hoeffler (1998) rejected this argument and suggested that a more polarized society has a lower likelihood of being involved in conflict. Folger, Poole & Stutman (2009) assert that, the likelihood of conflict is maximized when there are two ethnic groups. Furthermore, there is enough evidence to show that although all countries on the African continent are ethnically divided, only a fraction of them have experienced civil war, especially that which is initiated on ethnic grounds. This observation has led Ottite & Albert (1999) to the

conclusion that the core of the problem is failure of the state to reconcile differences, not ethnic diversity in itself. In summary, a rather popular argument is that countries with moderate ethnic diversity seem to be most at risk of conflict, whereas both homogeneous and more ethnically diverse societies face lower risks.

It is observed that, where there is competition for the use of resources, some amount of conflict must emerge. The insecurity and drying up of lake Chad Basin had led to the migration of over 700 pastoralists from Borno State in the Northeast in May 2009 while some migrated in April 2000 from Plateau State, according to local authorities (Yahuza, 2017). These expanded conflicts were mainly due to resource scarcity and divergent value systems in the places of destination. Odoh & Chilaka (2012) attributed farmer – Herder lent conflict in Nigeria to environmental resource scarcity as being the major issue that induces conflict involving three main factors namely: the degradation and depletion of renewable resources water and vegetation, the increased consumption of such resources, and their uneven distribution. According to Odoh & Chilaka (2012), the relationship between environmental resource scarcity and conflict is a complex one. That is, the renewable resource scarcity can produce conflict. The inability of a particular group to have optimal access to the desired natural resources is likely to create conflict in a given environment. Viewing conflict in the same environmental or ecological perspective (Blench, 2004; Onuoha, 2008; Abass; 2012; Okunola & Ikunmola, 2016) in their various studies have attributed the cause of the prevailing farmer - Herder conflict to climate change which gives rise to certain ecological changes and outcomes. They further stated that some of the conditions responsible are environmental degradation, desertification/desert encroachment, loss of wetlands, inadequacy of rainfall/droughts and extreme climate variability and volatility. With particular emphasis to the farmer - herder conflicts (Blench, 2004; Homer-Dixon, 1999) opines that the ecological dynamics engendered by climate change tend to drag various land users into conflictive relations in the



context of resource scarcity and want. This situation has been made worse by the claims and contestations over land ownership and/or tenure rights. Hence farmers take up more of the riverbank for farms; they come into conflict with the other users, especially the herders and fishermen. The herders have been coming to the river for many years for the grass and tend to consider they have ownership rights. When they arrive and find their grazing land covered by tomatoes, they become angry. The farmers, often desperate to feed their families in a situation where the old rain-fed systems no longer work regard the herders as trespassers (Blench, 2004).

Similarly, Olabode & Ajibade (2010) observed some causes of herders-farmer's conflict as control over scarce resources, incompatible values, pasture searching, proximity, water scarcity, less-diseased region. The emphases on the incompatible values where the herders value their herds and the farmers value their farms, any attempt to encroach on one or the other is a call to war. Haro & Dayo (2005), also asserted that the major causes of farmers/herders conflict is that most at times the Fulani herders wonder into the fields during growing season while their herds eat and trample on the farmers crops, hence tension rise. Hussein (1998) opined that crops, livestock, water resources and other vegetal resources play key roles in the development, maintenance and projection of socio-economic strength of a society. These conflicts therefore do arise as a result of trying to preserve and protect each other (farmers and herders) belonging. The herdsmen strategize on the protection of their livestock while the farmers their farmlands.

Okoli & Atelhe (2014) posited that farmers - Herder conflict in Nigeria is informed by the desperate struggle for survival and subsistence in an environment characterized by ecological scarcity and livelihood insecurity. They observed that the situation has been exacerbated by the phenomenon of climate change, whose dynamics tend to have been aggravating natural resource conflicts across the world. They also identified some interplay of prominent factors such religion and ethnicity,

which according to them engendered conflicts between farmers and herders.

Tonah (2006) also identified factors that account for the increasing farmer-herder conflicts to include the southward movement of pastoral herds into the more humid and sub-humid zones and the expansion of farming activities into areas that hitherto served as grazing land. He further posited that since the 1950s there has been a growth in human and livestock population in the coastal regions of West Africa which gave rise to an increased pressure and competition between farmers and herders on the natural resources. Destruction of crops is likewise a major cause of conflict according to Tonah (2006) who also stated that the most frequent cause of violent conflict between farmers and herders is the destruction of crops by cattle. These cattle enter the farm to feed on the foliage of crop even in the presence of the herders who pretend not to notice such destruction. On the contrary, Ofuoku & Isife (2009), identified rape and bush burning as the major causes of conflict. They stated that rape is a taboo in most societies in the world and in Africa in particular. The herders who mostly move about in solely male group in a bid to satisfy their sexual feelings resort to raping females they come Bush burning as a cause for some instances, according to them, during the dry season, grasses and forage dry up and the nomads believe that if the dried vegetation is burnt, fresh ones would sprout. In the process of burning, the fire spreads into adjourning farms thereby destroying them.

Cases of cattle theft (rustling) according to Adamu (2011) is also known to have caused Farmer-Herder conflicts. In every community, there are miscreants. Some of these have been caught stealing bulls and cows by the nomadic herders. He further observed that there were cases when cattle stray away and destroyed farmers' crops and were slaughtered by the offended parties. This has caused many problems between the farming communities and the nomadic herdsmen who think less of the value of the damaged crops. It is glaring that the various causes are related to clash of interest in the sense that the herders value their cattle and they can kill



for and the farmers too value their farms to a level of killing human beings whose livestock destroy their crops.

Okoli (2014) also asserted that encroachment on grazing fields and routes is one of the immediate causes of Farmer-Herder violent conflict. Herders regard their herd as their life because to them life is worthless without their cattle. Therefore, encroachment on grazing fields and routes by farmers is a call to war and they can do anything possible to defend their means of livelihood.

Implications of Farmer – Herder conflicts on Labour Cost for Agricultural Production in Benue State

The cost of human labour affects the use of farmland in the traditional farming system. Since agriculture in Benue State is manually done, human labour is required in all production processes, accounting for about 90 per cent of all farm operations. Under non-mechanized systems, as found in Benue State including animal traction use, human labour use is as high as 70 per cent of all operations (Usman, 2006). Although farming is largely labour-intensive, farmers experience seasonal labour shortages during peak periods of farming activities. The supply of labour is affected by unending conflicts between famers and Herders especially at peak periods when labour is required for land preparation, weeding and harvesting (Ogunlela & Mukthar, 2009).

Hired labour shortages have driven up the cost of labour making such labour unprofitable to the average smallholder (Oseomeobe, 2012). With the increasing Farmer – Herder conflict the cost of labour has been on the increase. A study carried out by Mgbakor, Uzendu &Usifo (2014) in Aniocha South local government Area of Delta found yFarmer Herder conflict to be a potent factor in the rise of cost of labour. Using 210 respondents drawn from 14 communities, the study further found that labour shortages generates scarcity which in turn brings about hike in the unit cost of hiring labour. The study then recommended that mechanized agricultural practices be introduced so that the rural farmers can hire them.

Farmer – Herder conflict has been found to affect labour cost negatively. As conflict rages, the stock of available labour is depleted and pressure on the available labour results into price hikes. Usman (2006), reported high cost of labour resulting from increased Farmer - Herder conflict. In a study conducted in Bacita, kwara state, Usman (2006), used secondary data from 430 respondents to arrive at his findings. These two efforts though commendable have some serious drawbacks. High cost of labour is not just a product of scarcity arising from conflicts. It may be as a result of excessive demand on the stock of available labour even in the mist of plenty. Under such condition, Farmer - Herder conflict only serves as an exacerbating factor of price rise for labour cost.

Richards (1985) noted that Farmer – Herder conflict has led to increased participation of under aged children in agricultural production. He explains that scarcity of labour in the rural areas has forced families to use under aged children on farm work for wages which are used in supporting their families. This assertion however cannot be taken seriously since no empirical data was collected to validate the claim.

Presentation and Discussion of Findings

The Socio-Demographic Characteristics of Respondents

This section presents and analyzes the socio-demographic characteristics of respondents who participated in the study. Though 445 respondents were sampled and administered questionnaires only 429 were retuned and validated. It is therefore the returned value that is presented here. The socio-demographic characteristics investigated here were type of peasant family, age, sex, marital status, level of formal education, and annual income of respondents. These are presented in Table 1.



Table 1: Socio-Demographic Characteristics of Respondents

Socio- Demographic Characteri	stics Frequency	percentage (%			
Age of Family Heads (Years)					
26-30	48	11.2			
31-35	24	5.6			
36-40	87	20.3			
41-45	151	35.2			
46 or older	119	27.7			
Total	429	100.0			
Gender					
Male	355	82.8			
Female	74	17.2			
Total	429	100.0			
Marital Status					
Single	8	1.9			
Married	251	58.5			
Divorced/separated	57	13.3			
Widowed	113	26.3			
Total	429	100.0			
Level of Educational attainment					
None	231	59.9			
First School Leaving Certificate	121	28.2			
WAEC/GCE/NECO/NAPEC	62	14.5			
ND/NCE/DEGREE	13	3.0			
No Response	2	0.5			
Total	429	100.0			
Estimated Annual Income (₦)					
50,000 or less	24	5.6			
51,000 - 100,000	133	31.0			
101,000 - 150,000	144	33.6			
151,000 - 200,000	30	7.0			
201,000 - 250,000	18	4.2			
251,000 and above	77	17.9			
No Response	3	0.7			
Total	429	100.0			

Source: Field Work, 2023

The first socio-demographic characteristic presented was age. The age distribution of respondents shows that a greater number were found to be aged 41 or older. The implication of this finding on agricultural productivity of families of peasant farmers is that productivity may fall because the older population cannot work effectively on the farm moreso in the prevailing condition of farmer—Herder conflict.

The Gender distribution of respondents reveal that majority (82.8%) of the respondents were male. That the male gender is in the larger number is an indication that the study area is a male dominated society where women are hardly in a position to head families. In such male dominated societies, most decisions relating to agricultural productivity are taken with little or no consultation with the female gender. This may have over the years affected productivity. This is because the contribution of women is often neglected. In rural economies where most

agricultural activities are undertaken by women neglecting them in the decision making process is retrogressive.

The educational distribution of respondents showed that majority of the respondents (59.9%) had no formal education with a fewer number acquiring various secondary and post - secondary certificates. The implication of this finding is that many family members may be forced by farmer – Herder conflicts to migrate to the urban centres to learn a trade, engage in business or acquire western education. The migration of such family members to other areas may affect labour supply.

The distribution of respondents by annual income showed that majority 144(33,6%) of the respondents earn between N101,000 - N150,000 per annum. The income level of the respondents was generally found to be poor. From table 1, the income of the respondents is far below the United Nations minimum bench mark of one dollar per day. This finding has obvious implications on farmer — Herder conflict and Agricultural production. Low annual income at the disposal of respondents means that most agricultural activities may be hampered as their will be less income to hire labourers.

The Implications of Farmer – Herder Conflicts on Labour Cost

This section of the work examines issues relating to farmer – Herder conflict and labour cost. The aim is to ascertain to what extent farmer – Herder conflict has affected the cost of labour per unit of land. In order to determine the stock of available labour, respondents were asked to state the available labour force in their families before and after commencement of conflict for a number of agricultural activities such as land clearing, planting and fertilizer, weeding, harvesting and thrashing, processing, transportation of crops to the house, as well as marketing. The presentation is done on Table 2 below



Table 2: Mean Number of Available Labour for Agricultural Activities Before and after Commencement of farmer herder conflicts in the Study Area

Agricultural activity	Period										
	Mea	ın available	labour bef	ore	Mean available labour after commencement of						
	commenceme	ent of farmer	- H	lerder	farmer -Herder conflict *						
		confli	ct*								
	Families	Families	Total	Mean	Families	Families not	Total	Mean			
	affected	not	mean	differen	affected	affected by the		difference			
	by the	affected		ce	by the	conflict					
	conflict	by the			conflict						
		conflict									
Land clearing	3.32	3.28	6.60	-0.04	0.30	2.00	2.30	1.70			
Planting and fertilizer	2.52	2.62	5.14	0.1	0.10	1.9	2.00	1.80			
Weeding	2.32	2.35	4.67	0.03	0.41	2.11	2.52	1.70			
Harvesting and thrashing	3.01	3.09	6.10	0.08	0.31	2.79	3.10	2.48			
Processing	3.45	3.70	7.15	0.25	2.23	4.28	5.51	2.05			
Transportation of crops to the house	2.45	2.71	5.16	0.26	0.32	1.92	2.24	1.60			
Marketing	2.47	2.54	5.01	0.07	0.41	1.72	2.13	1.31			

*Multiple Responses

Source: Field Work, 2023

Table 2 above shows the number of available labour by families before and after commencement of farmer - Herder conflicts in the study area. It can be observed that before commencement of the conflicts, there were no significant differences in the stock of available labour for both family types. For example, an agricultural activity such as land clearing before migration has a total available labour of 6.60. A breakdown of this stock along family types based on level of effect shows that families that were affected has a value of 3.28 stock of available labour while families that stated that they were not affected has a number of 3.32. The absolute difference between both family types was -0.04. It can be observed that before commencement of conflict in the study area, there were no significant differences between the family types in terms of stock of labour available to them since each has most of their family members available. However, the commencement of conflict saw a drop in labour available to families. During this period, the stock of labour dwindled as the total stock dropped to a value of 2.30. The distribution of this value among the types of families within

this period shows that families affected have a value of 0.30 while families not affected have a value of 2.00. This represents a difference of 1.70. From the table it is evident that after the conflicts, families not affected have a larger stock of labour available to it since most of its members were intact. The stock of labour available to families affected by the conflicts dropped significantly during this period since most of its members moved to other areas and IDP camps. On the whole all agricultural activities dropped in available labour after commencement of conflicts. The inference one can draw from this trend of action is that the onset of conflict has created labour shortages for agricultural activities. The implication is that many families that have their members move to other areas as a result of conflict are likely to cut down their farm size or use money which would have been used for other family commitments to hire labour. Evidence from the literature reviewed tend to support this finding. This is exemplified by the works of Osemeobo, (2012); Okoli, & Atelhe, (2014) and Momale, (2014) amongst others.

The data obtained from the focus group discussion and indepth interview tended to support the above finding with few divergences. Participants at most of the focus group discussion sessions were unanimous that conflict between farmers and Herders has left families with fewer labourers for agricultural activities. A farmer during one of the IDI sessions in Adaka, Makurdi local government area stated that:

We used to have enough labour before our children began moving to the urban areas. Then our farmlands were large and would be cultivated on time. But all that is now history. Our children have all moved to the city and as such we have fewer available labourers for agricultural activities. The problem is even compounded by the fact that we have no money to hire labour.

Respondents were further asked to estimate the cost of hiring labour per hectare for cultivation of



a number of crops especially for rice, maize, sorghum, yam and cassava. The intention here was to determine whether the commencement of farmer – Herder conflict has any direct impact on cost of hiring labourers. The responses are presented in Table 3.

Table 3: Average Cost of Hiring Labour for the Cultivation of Five Crops (per hectare in thousands of Naira). Before and After Commencement of Farmer – Herder conflict in two Rural Communities in the Study Area

Name of Community Period																
Crops	Adaka							Aune								
	Cost of hiring labour before Cost of hiring labour after							Cost of hiring labour before Cost of hiring labour after								
	commencement of conflicts			icts	commencement of conflicts				commencement of conflicts				commencement of conflicts			
Ì	Families	Families	Absolute	%	Families	Families	Absolute	%	Families	Families	Absolute	%	Families	Families	Absolute	%
	affected	not	difference	difference	affected	not	difference	difference	affected	not	difference	difference	affected	not	difference	difference
	by conflicts	affected by			by conflicts	affected			by conflicts	affected by				affected		
	contincis	conflicts			connicts	by conflicts			connicis	conflicts						
Rice	25000	24300	-700	60.87	45000	25000	-20000	30.82	20450	21300	850	242.86	27200	21300	-5900	18.73
Maize	20000	19750	-250	21.74	30000	20000	10000	15.41	19000	18500	-500	-142.86	21500	18500	-3000	9.52
Sorghum	20000	20000	00	00	30000	20000	-10000	15.41	18000	18800	800	228.57	21500	18500	-3000	9.52
Yam	28500	27800	-700	60/87	48500	28500	-20000	30.82	26800	26400	-400	-114.29	41000	26500	-14500	46.03
Cassava	16000	16500	500	-43.48	21400	16500	-4900	7.55	17700	17300	-400	-114.29	22600	17500	-5100	16.19
Total	109500	108350	-1150	100	174900	110000	-64900	100	101950	102300	350	100	133800	102300	-31500	100

Source: Field Work, 2023

Table 3 shows respondent's estimated cost of hiring labour per hectare in naira for five crops before and after commencement of conflicts in their families in two communities covered by the study. From the table, it can be observed that the cost of hiring labour for the cultivation of various crops increased significantly after commencement of conflicts in the study area. In Adaka, among the crops, the pre-conflict costs of hiring labour amongst families affected by the conflicts for the cultivation of yams is the highest (N28500 per hectare) while the lowest pre – conflict cost of cultivation is that of cassava (N16,000 per hectare). The highest cost of hiring labour in Adaka for the cultivation of crops for the post conflict period amongst families affected by conflicts is that of yams (N48500 per hectare) while the lowest cost for crop cultivation for the post conflict period amongst families affected is that of cassava (N 21,400 per hectare). On the whole, it was observed that no significant differentials in labour cost exist among families

before commencement of hostilities. However, significant cost differences were noticed after conflicts commenced amongst families in Adaka. For Aune, no significant cost differentials among the family types were observed before commencement of conflict. From the table, before the conflict commenced in the area, families with affected and those not affected shared almost similar labour cost. For example, the cost differences for hiring labour for the production of rice (N 850), maize (N-500), sorghum (-400), and cassava (-400) does not indicate significant cost differentials. This is further indicated by the total absolute difference in cost put at N350.00.

After commencement of conflicts however, significant cost differentials were noticed among the family types. Here, the cost of hiring labour amongst the various family types changed. The crop with the highest cost differential is yam (N-14500), with a percentage difference of 46.03%. The lowest cost differential is that of sorghum and maize (N-3000) indicating a percentage change of 9.52%.

The data gathered through indepth interview and focus group discussion sessions indicated that the cost of hiring labour is on the increase. A prominent farmer in Ainu lamented the rising cost of hiring labour during an IDI session thus:

For many of us who rely on hiring labour for our agricultural activities, life has been very difficult. This is due to the rising cost of hiring workers from clearing the land to cultivation through harvesting everything has changed in terms of cost. Gone are the days when we used little money to get workers on our farm. Today, when the rain comes, everybody engages himself on their farm and the few who are free charges exorbitant prices for their services which are usually out of reach of the poor.

From all indications, hiring labour for farm work has been very expensive for farm families. As revealed by both the quantitative and qualitative



data, the farmilies in the study area are charged huge amounts of money before their pieces of lands are cleared, cultivated or harvested. Many families cannot afford such money thereby making them cultivate less land which inevitably leads to decline in the stock of food available for consumption

Concluding Remarks

Farmers – Herders conflict has persisted in Benue state for a long period of time. The conflict has led to serious challenges in the Agricultural enterprise. While production may have may have declined over the period, this study examines the dimension of cost of Agricultural production emanating from shortages of labour owing largely to force migration of the labour population to some other areas or into IDP camps. This has led to food shortages been experienced in Nigeria today since Benue is the food basket of the nation. From the empirical data collected and analyzed it can be concluded that Farmers – Herders conflict has led to increases in the unit cost of production of Agricultural products in the State. Both tubers and grain cost of production has increased tremendously. The evidence from the data collected has indicated that tuber crops such as yams and cassava cost of production has risen astromilocally in the state with the pre conflict and post conflict production cost indicating divergences.

Recommendations

Based on the findings above the study made the following recommendations for policy change that will guarantee peace among the warring factions so as to ensure the return of the forced farmer migrants to their communities and hence lower cost of Agricultural production.

1. The study recommended that Government should establish permanent security task force comprising of all the security agencies and marine police outpost along the riverine communities where attackers always attacked, such police outpost when established should be manned by well-equipped officers to patrol the water ways of River Benue and Katsina- Ala which attackers have been using for attacks. It further

recommended that both the farmers and herders should organise a local security network to help forestall conflicts and also report the presence of strange faces (foreigners) in their communities to security agents.

- 2. The study further recommended that Federal government should address the environmental challenges that are forcing herders southward by building dams, refilling & dragging of Lake Chad, watering of grasses and trees to create more grasses in order to provide better facilities for ranching of livestock in order to make herders comfortable in the far Northern Nigeria to curtail their movement southward.
- It is also recommended that security agencies should tighten security in the affected communities to ensure that peace is fast tracked, so that the internally displaced persons (IDPs) can return to their various places of abode. In addition, government should build internally displaced persons' hostels in each Local Government where people displaced under any circumstances can be accommodated. Such hostels should be equipped with facilities such as schools, health facilities, water and electricity for ease of life. In doing this, herders should also be considered. The destroyed Schools and hospitals should rebuild and furnished with standard facilities. This is to ensure that the displaced persons are not left to suffer unduly as a result of the conflict. Damaged water and electricity facilities should also be revamped. Also, houses destroyed as a result of the conflict should be rebuilt and furnished by the Government. In collaboration with the State and Federal Government, a committee should be set up to carryout census of houses destroyed, property, crops and animals lost to pay compensation to the affected persons.
- 4. The study also recommend that traditional institutions in collaboration with the government should revamp the inter-cultural carnivals and encourage inter-tribal marriages among farmers and herders in order to bring lasting peace in the study area. Believing that this will strengthen the social integration of the two parties



References

- Abass, I.M. (2012). No retreat no surrender conflict for survival between the Fulani pastoralist and farmers in Northern Nigeria. *European Scientific Journal*, 8(1), 331-346.
- Adamu, A. (2011). "Fulani pastoralists, farmers' clash returns to Jigawa". In: Nigerian *Tribune Newspaper Sunday*, 27 November. Available at and retrieved on 23rd July, 2016
- Adejoh, A.M. (2004). "History, conflict resolution and national unity in Nigeria" in Ochefu, Y.A (Ed) *Journal of the Historical Society of Nigeria. Special Edition 1 (1):82-97.*
- Adisa, R. S. (2012). Land use conflict between farmers and herdsmen Implications for agricultural and rural development, *Journal of Department of agricultural extension and rural development*, University of Ilorin, Ilorin, Nigeria. 2(2): 23-48.
- Adisa, R.S. & Adekunle, O.A. (2010). Farmer herdsmen conflicts: A factor analysis of socio-economic conflict variables among arable crop farmers in North central Nigeria. *Journal of Human Ecology*, 30 (1): 1-9.
- Adisa, R.S. (2011). Management of farmer-herdsmen conflicts in North-central Nigeria: Implications for collaboration between agricultural extension service and other stakeholders. *Journal of Social and Management Sciences* 2(3):10-25.
- Aliyu, A.A. (2004). "Conflicts in Nigeria". In: Olabode A.D., Impact of Fulani-Farmers' Conflict on Agricultural Production, *B.Sc. unpublished Dissertation*, University of Ilorin, Ilorin, Nigeria.
- Aule, O. (2015) "Causes and Effects of Communal and Ethnic Conflicts in Tiv-Land". A Journal of Developing Country Studies vol.5, No.9, 2015 available @www.iiste.org or Available online accessed 22/10/2015
- Awogbade, M.O. (1983). Fulani Pastoralism: Jos case study. A.B.U. Press Zaria, Kaduna State, Nigeria.

- Coser, L.A. (1956) The Functions of Social Conflicts. The Free Press, Gleucoe.
- Dambazau, I. (2016). Nigerian Government is doing the needful to curb the farmerherder Clashes. The Daily Trust, 25 March 2016.
- Fefa. J. & Tough B.T. (2016). The socioeconomic effect of the conflict between Tiv farmers and Fulani herdsmen in Benue State. Being a paper presented at the first international conference organized by the Department of Political Science, Benue State University, Makurdi: November 5-7, 2016
- Folger, J. P., Poole M. S. & Stutman, R. K. (2009). Working through Conflict Strategies Relationships, Group and Organizations. USA: Pearson Education, Inc.
- Genyi, G.A (2014) Being a paper presentation at the first Annual International Conference on the Ethnic and Religious Conflict Resolution and Peace building, October1, 2014 in New York City.
- Gleditsch, N.P. & Urdal, H. (2002). "Ecoviolence? Links between Population Growth, Environmental Scarcity and Violent Conflict" *Journal of International Affairs* 56 (1), 122-148.
- Gleditsch, N.P. (2001). "Environmental Change, Security and Conflict", in C. Crocker, and
- Hagher, I. (2016). The Nomad vs Farmer in the Attainment of Rural Peace in Northern Nigeria. Management of Social Conflict in Plural Society. Kaduna: Arewa Consultative Forum.
- Haro, G.O & Dayo, G.J. (2005). Linkages between community, environmental, and conflict management: Experiences from Northern Kenya. J. World Dev. 33 (2): 285-299.
- Homer-Dixon, T. F. & Percival, K (2007). Global Warning, Environment and violence. Princeton, NJ: Princeton University Press.
- Homer-Dixon, T.F. & Blitt, J. (1998). Ecoviolence: Links among environment, population and security. Lanham: Rowman and Littlefield.



- Hussein, K. (1998). Conflicts between farmers and herders in the semi-arid Sahel and East Africa: Areview, IIED.
- Idowu, D.L (2017). Causes, consequences and resolution of environmental conflict in Nigeria. *In International Journal of Social Science and Economic Research*, 02(01)
- Iro, I. (1994). The Fulani Herding System, Washington, African Development Foundation.
- Justino, P. (2006). "On the links between violent conflict and chronic poverty. *In International Journal of Social Science Research*, 02, (01)
- Mattee, A.Z. & Shem, M. (2006). Ambivalence and Contradiction: A Review of the Policy Environment in Tanzania in Relation to Pastoralism. Drylands Issue Paper No. 140.IIED, London, UK.
- Mbah, E.N., Ezeano, C. I., & Agada, M.O. (2016). Effects of rural urban migration on families in Benue State. *International Journal of Agricultural Resources and Innovation* 6(1), 14-20.
- Momale, S. B. (2014). Pastoralists' Mobility and Access to Resources in North Western Nigeria, a PhD Thesis, Department of Dry-Land Agriculture Bayero University, Kano.
- Mwamfupe, D. (2015). "Persistence farmerherder conflicts in Tanzania". International Journal of Scientific and Research Publications, Volume 5, Issue 2, February 2015 1 ISSN 2250-3153
- Nmadu, J.N, Eze, G.P, & Jirgi, A.J. (2012).

 Determinants of Risk Status of Small
 Scale Farmers in Niger State, Nigeria.

 British Journal of Economics,
 Management and Trade. 2(2) Pp92–108
- Ogunlela, Y.I. & Mukhtar, A.A. (2009). "Gender Issues in Agriculture and Rural Development in Nigeria: The Role of Women", *Humanity & Social Sciences*

- Journal, 4(1). Pp124-135
- Okoli, A & Atelhe, G.A. (2014). "Nomads against natives: A political ecology of herder/farmer conflicts in Nasarawa state, Nigeria". American International Journal of Contemporary Research. 4.(2).
- Olabode, A.D. & Ajibade, L.T. (2010). Environment induced conflict and sustainable development. A case of Fulani-Farmers conflicts in Oke-Ero LEDs, Kwara State. Journal of sustainable Development in Africa, 12(5) 289-266.
- Onuoha, F.C. (2008). "Environmental Degradation, Livelihoods and Conflicts: A focus on the Implications of the Diminishing Water Resources of Lake Chad for North-Eastern Nigeria." *African Journal on Conflict Resolution*, 8 (2); 35–62.
- Osemeobo, G.J. (2012). Impact of Nigerian agricultural policies on crop production and the environment. *Environmentalist*, 12(2) Pp101-108.
- Robbins, Paul. (2000). "The rotten institution: corruption in natural resource management" in *Political Geography*, (9), 423-443.
- Tyubee, B.T. (2006). "Influence of extreme climate on common disputes and violence in Tiv Area of Benue state". In Timothy T. Gyuse and Oga Ajene (eds.) *Conflicts in the Benue valley*, Makurdi, Benue state University Press.
- Uji, W.T. (2016). "Forced migration: The displacement of Tiv people of central Nigeria in contemporary times". In *International Journal of arts and Humanities Bahir Dar-Ethiopia. 5(2)*.
- Yahuza, M. (2017). Pastoralist: A national dilemma. The Daily Trust, Tuesday, September 12, 2017