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SEASONAL PATTERN OF RESOURCE CONFLICT BETWEEN FARMERS AND HERDSMEN IN BENUE STATE, NIGERIA

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ABSTRACT

There is sparse literature on seasonal pattern of farmers and herdsmen conflict in Benue State, Nigeria despite numerous links between climate change and resource conflict. Thus, this study was designed to assess the seasonal occurrence of armed conflict in Benue State and analyze the monthly death casualties of armed conflict in Benue state from 2010-2019. Data were collected from secondary sources such as report of Nigeria Police Force, Nigeria watch data base and Newspapers. Data were presented in tables and analyzed using descriptive statistic such as range, mean, standard deviation and coefficient of variation. Result shows that monthly occurrence of armed conflict ranged from 0-20 times with mean value of 4.92 and 98% coefficient of variation. March has the highest number (20) of armed conflict occurrence followed by April and, then July. October had zero (0) record of armed conflict from 2010-2019. Similarly, the monthly conflict death was higher in dry than rainy season. Monthly death ranged from 0-590 with mean value of 106 deaths and 95 % coefficient of variation. It was concluded that both the frequency and death casualties of resource conflict in Benue State have seasonal pattern and were more in dry than rainy season. Intensification of resolution mechanisms and ranching were recommended.

KEYWORDS: Resources, Conflict, Farmers, Herdsmen, Seasonal pattern

1. INTRODUCTION

Resource conflict between herders and farmers has existed since the beginnings of agriculture, but in Nigeria, the prevalence of tsetse fly and low settlement densities in middle belt due to Slave Trade kept the incidence of clashes low and bearable until recently.

Other factors that aggravated the conflicts between herders and farmers in Benue State in recent years include the spread of Boko Haram in the North East, the relocation of the Federal capital territory to the middle belt, southward migration of herders, bad governance, tribalism, religion, unemployment, expansion of farmland, increase in herds, poverty, cattle rustling,

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destruction of crops by herds, proliferation of arms and land grabbing (McGregor, 2014; Chukwuma et al, 2014; Amadi et al , 2019).

The decline of water in Lake Chad basin, climate change, desert encroachment in Northern parts of Nigeria and the introduction of cheap trypanocides are some of the factors that encouraged southward migration of herders (Madu & Nwankwo, 2020). Moreover, improved human health has increased overall population and thus, pressure on arable land and resource conflict (Blench, 2004). Resource conflicts are disagreements and disputes over access to, and control and use of, natural resources. These conflicts often emerge because people have different uses for resources such as forests, water, pastures and land that are vital to their livelihoods. Disagreements arise when these interests and needs are incompatible, or when the priorities of some user groups are not considered in policies and actions. Such conflicts of interest are an inevitable feature of all societies (F A O, 2 0 0 0).

Thus, the issue of famers/ herdsmen conflicts is not new, clashes between different groups of Fulani herders and farmers have killed thousands of people in Nigeria over the past two decades (Omeje, 2018). The Global Terrorism Index classified Fulani herders the world's fourth deadliest militant group (Duru, March 4, 2019). The menace posed by Fulani Herdsmen in the different communities they migrate to, for the purposes of grazing their cattle is quite alarming that most of the affected States had cried out for help from the Federal Government, international communities and Non-Governmental Organizations who are unable to abate the conflicts and resultant deaths. Their outcry had attracted the attention of researchers, Government and Non-Governmental Organizations (NGOs).

Thus, lots of findings have been made in relation to farmers/herdsmen conflicts. From a historical point of view, certain scholars refer to the fact that resource conflicts resulting from cattle grazing have existed for as long as the practice of agriculture (Blench 2010; Abbass, 2012). 'However, the advancing nature and scope of farmers/herdsmen conflicts is worrisome'. The primary cause of these conflicts in Nigeria is well documented (Adamu, 2007; Adebayo & Olaniyi, 2008; Ofuoku & Isife, 2009; Alhassan, 2013; Audu, 2013; Ubelejit, 2016; Akov, 2017; Shehu, 2018).

The effects of resource conflict between farmers and herdsmen include loss of lives, displacement of indigenous settlers, food insecurity, hardships, destruction of properties /livelihood sources, famine/mass starvation, loss of herds among others. So many aspects of farmers/herdsmen conflict such as the nature, causes, frequencies and effects have been well elaborated (Fabiyi & Otunuga, 2016). Adisa (2012) observed that the farmers-herdsmen conflict has remained the most preponderant resource-use conflict in Nigeria. Conflict as well as factors driving it has been researched in a multiplicity of areas and methods worldwide. The majority of these researches attempt to explain conflicts by examining socio-economic and demographic aspects (Weisburd et al., 2004; Badiora, 2015). However, these variables change slowly over time and may not be able to effectively explain short-term variations in conflict rates.

The knowledge of seasonal pattern of resource conflict between farmers and herdsmen in Benue state is essential in curbing the occurrence and effects. However, majority of the literature that has investigated seasonal variation in conflict are from advanced countries (Linning. et al., 2016) with very few studies in Africa (Rotton & Cohn, 2004). Although these studies have enhanced understanding of conflict seasonality throughout the world, but very little is known about seasonal variations of conflicts in Nigeria. As seasonal variation in conflict is becoming more prominent in the literature but consist primarily of researches conducted in the United States and Europe, it would benefit through this study from further investigation in a Nigerian context. Besides, Nigeria's location in the tropical zone means that the seasonal patterns are significantly different from those of the United States and Europe.

Melo et al (2017) analyzed seasonal and spatial patterns of crime in Campinas, Brazil the relevance of routine activity theory in a Latin American context. Geo-referenced criminal event data, 2010-2013, was used to analyze the spatial patterns. The use of census tracts and temporal patterns like seasons, months, days, and hours were employed. Statistical techniques include means, count-based regression models, and Kulldorff's scan test. Result showed that crime in Campinas, Brazil, exhibits both temporal and spatial-temporal patterns.

Despite this notable link between season and conflict, few studies have linked season with conflict (Marshall, et al., 2009; Gleditsch, 2012; Hendrix and Salehyan, 2012; Theisen, 2012). Moreover, none of these was done in Benue state. Thus, this research bridged this gap as it

assessed the seasonal pattern of resource conflict in Benue State. The objectives were to assess the seasonal occurrence of resource conflict in Benue State and analyze the monthly death casualties of resource conflict in Benue state.

2. MATERIALS AND METHODS

The Study Area

The study area (Benue state) is located between Longitude 7° 47' and 10° 0' East, and Latitude 6° 25' and 8° 8' North, and is bounded to the North by Nasarawa state, to the West by Kogi State, to the East by Taraba state and the Cameroun Republic, and to the South by Cross-River and Enugu states respectively (Alapa, 2018) (Figure 1).

Figure 1: The Study Area
Source: Martins' Library

The study area has a tropical sub-humid climate, with two distinct seasons, namely wet and dry season. The wet season lasts from April to October with annual rainfall in the range of 1120 to 1500 mm. The dry season begins in November and ends in March with partial rainfall in the months of January, February and March. The climate is characterized by high temperature regime ranging from 27-380C as mean annual. Though, Benue is well drained as it hosts River Benue and its tributaries, population increase and consequent changes in land use that are poorly planned and implemented have exposed the state to flooding in recent times (Abah, 2012; 2013; Shabu & Terese 2013; Peter et al., 2020). However, the availability of water and grassland makes the area good for farmer and herders' activities thereby causing conflict through resource use. The residents of Benue state utilizes land for many socio economic activities including administrative, educational, recreational, commercial, agricultural, transportation and residential land uses. Among these various Land uses agricultural land use especially food cropping is the most recognized land use in Benue state as the authorities like to refer to Benue State as the "food basket of the nation". Benue is a rich agricultural region; some

of the crops grown there are potatoes, cassava, soya bean, guinea corn, flax, yam, groundnut, fruits like mango and orange.

METHODS OF DATA COLLECTION AND ANALYSIS

This study relied extensively on secondary sources of data. Data on frequency of resource conflict and death casualties were collected for the study. Data were collected from secondary sources such as report of Nigeria Police Force, Nigeria watch data base and Newspapers. Firstly, request was made to the Nigeria Police Force Benue State command for records of resource conflicts between 2010 and 2019 and report was complimented with Nigeria watch data base, Christian Association of Nigeria (CAN) conflict timeline and Newspapers. To ensure zero repetition of count, frequency and casualties were collected on monthly basis. Data were presented in tables and analyzed using descriptive statistic such as range, mean, standard deviation, coefficient of variation, bar chart and linear graph.

3. RESULT AND DISCUSSION

The monthly occurrence of armed conflict in Benue State (2010-2019) is presented in table 1

Table 1: Monthly Occurrence of Armed Conflict in Benue State (2010-2019)

Month	Frequency	No of Person Killed
January	9	294
February	11	432
March	20	590
April	10	347
May	7	247
June	1	7
July	0	0
August	3	3
September	1	6
October	0	0
November	4	34
December	2	93
Total	68	2053
Range	0-19	0-590
Mean	4.92	106
Standard Deviation(SD)	6.38	132.55
Coefficient of Variation(CV)%	98	95

Table 1 shows the monthly occurrence of armed conflict and the number of people killed in Benue State between2010 and 2019). It shows that March has the highest number of resource conflict occurrence followed by April and that July and October had no record of armed conflict in Benue state from 2010-2019. It also show that the monthly occurrence of armed conflict ranged from 0-20 times with mean value of 4.92 and 98% coefficient of variation. The range and coefficient of variation being 0-20 times and 98% respectively indicate high disparity in the monthly occurrence of armed conflict in Benue state see between 2010 and 2019. Thus, some months have more incidence than others. Similarly, the monthly death due to resource conflict in the study area within the study period varies. The monthly occurrence of resource conflict death ranged from 0-590 death with mean value of 106 deaths and 95 % coefficient of variation. The range and coefficient of variation being 0-590 death and 95% respectively indicate high disparity in the monthly death from resource conflict in Benue state between 2010 and 2019. These suggest that occurrence of resource conflict in Benue state and resultant death between 2010 and 2019 have monthly pattern (Figure 2 and 3).

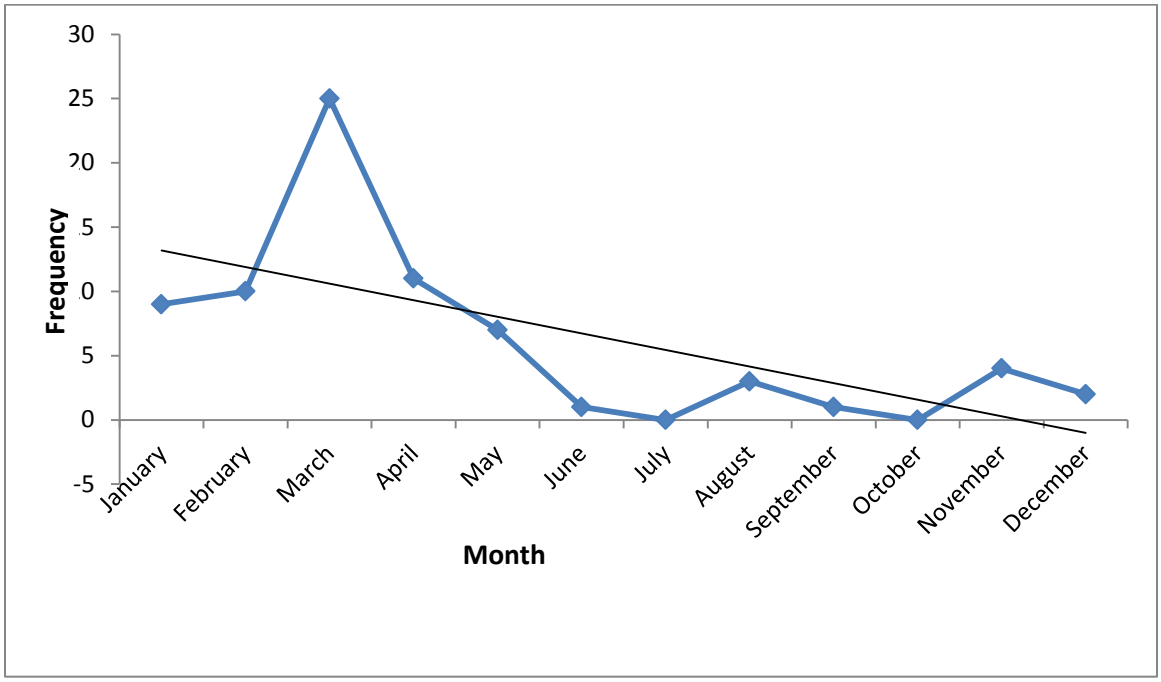

Figure 2: Monthly Pattern of Armed Conflict in Benue State (2010-2019)

Figure 2 shows that armed conflict in Benue state within the study period have a seasonal pattern as it increases from January to March where it reached peak and started descending in April till November when it starts to rise again. It shows that the occurrence of armed conflict is more in dry season than in the rainy season. The possible reason for this pattern is due to conflict over water resource in dry season and land space during the time of land preparation in March and beginning of planting in April. It can be attributed to scarcity of grasses in dry season leading to intrusion of herds in farmland. The implication is that early planting is interrupted and harvest is affected. For instance, the killing of seventy- three residents of Benue State on January 1st, 2018 happen in harvest season and Farmers flew away (Gänsler, 2019). Agbegbedia (2013) also reported higher incidence of conflict between the farmers and herdsmen in Benue state. In his words, "the conflict between the pastoralists and farmers are always prevalent during the dry season when farmers burn grasses in preparation to farming and the pastoralists burn in order to induce the growth of fresh grasses for their cattle.

This pattern of occurrence usually leaves the victims in mourning during land preparation season as death per month also follows same pattern (Figure 3)

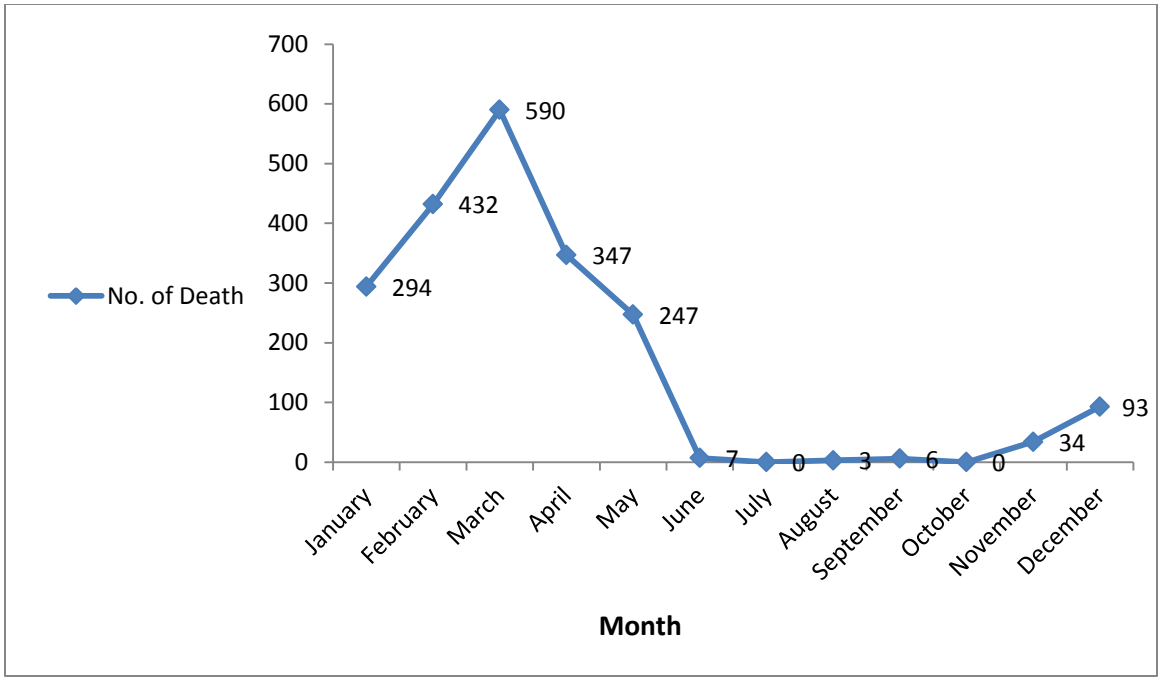

Figure 3: Monthly Pattern of Resource Conflict Death in Benue State (2010-2019)

Figure 3 shows that death casualties were concentrated mostly in dry season especially in the month of March. This indicates seasonal variation in death casualties from armed conflict in Benue. The frequency of conflict incidence and death also vary among the twenty-three Local Government Areas in Benue state (Table 2). Table 2 presents the spatial pattern of resource conflict in Benue State between 2010 and 2019.

Table 3: Spatial Pattern of Resource Conflict Occurrence and Resultant Death in Benue State (2010-2019)

S/N	LGA	**Frequency**	**%**	**No. of Death**	**%**
1	Ado	3	4.41	0	0
2	Agatu	19	27.94	788	38.38
3	Apa	1	1.47	4	0.19
4	Buruku	3	4.41	15	0.73
5	Gboko	0	0	0	0
6	Guma	10	14.7	659	32.1
7	Gwer-East	2	2.94	10	0.49
8	Gwer-West	6	8.82	50	2.44
9	Katsina-Ala	2	2.94	29	1.41
10	Konshisha	0	0	0	0
11	Kwande	3	4.41	16	0.78
12	Logo	8	11.76	211	10.28
13	Makurdi	4	5.88	233	11.35
14	Obi	1	1.47	2	0.09
15	Ogbadibo	1	1.4	3	0.15
16	Ohimini	1	1.47	15	0.73
17	Oju	1	1.47	2	0.09
18	Otukpo	2	2.94	10	0.49
19	Tarka	1	1.47	6	0.3
20	Ukpokwu	0	0	0	0
21	Ukum	0	0	0	0
22	Ushongo	0	0	0	0
23	Vandeikya	0	0	0	0
Total		**68**	**99.9**	**2053**	**100**
Mean		**4.82**		**128**	
Standard Deviation		**4.55**		**236.5**	
Coefficient of Variation		**87**	**94**		

Table 2 shows the occurrence of armed conflicts in the twenty-three Local Government Area in Benue State within the study period. It shows that armed conflicts have occurred in seventeen(17) Local Government Areas (Agatu, Apa, Buruku, Guma, Gwer-East, Gwer-West, Katsina-Ala, Kwande, Logo, Makurdi, Obi, Ogbadibo, Ohimini, Oju, Otukpo, Tarka and Ado) but have not occurred in six (6) Local Government Areas (Ukpokwu, Ukum, Ushongo, Vandeikya Konshisha and Gboko).

It shows that armed conflicts have occurred sixty -eighty (68) times in a decade (2010 to 2019) and have claimed two thousand and fifty-three (2053) lives in seventeen (17) Local Government Areas, Benue State. It shows that the mean occurrence of resource conflict per ward was 4. 82 times and loss of lives per Local Government Area was one hundred and twenty-eight (128). However, the coefficient of variation being 87% and 94% for resource conflict occurrence and death casualty respectively indicate high disparity in both occurrence and death casualty among the twenty- three (23) Local Government Area in Benue State.

The conflict occurrence is highest in Agatu followed by Guma, Logo, Gwer-West and Makurdi Local Government Areas. The death casualties were also highest in Agatu followed by Guma Local Government Areas. For examples Agatu recorded nineteen (19) incidences and 788 deaths representing 27.94% and 38.38% of occurrence and death casualties respectively. Guma recorded ten (10) incidences and 659 deaths representing 14.7% and 32.1% of occurrence and death casualties respectively. Moreover, Local Governments with one or few incidence have low death casualties too

4. CONCLUSION AND RECOMMENDATIONS

The conclusion of this study is that both the frequency and death casualties of resource conflict in Benue State within the study period has seasonal pattern. The occurrence and casualties to armed conflict in Benue state were

more in dry than rainy season. Majority of the armed conflict took place in March followed by April and the months of July and October did not record any conflict or death within the study period (2010-2019). There is also spatial variation in the occurrence of resource conflict in Benue state. It was recommended that more security personnel should be deplored to Benue state during dry season to prevent conflict. Peace talk and conflict investigation should also be intensified in dry season.

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