

# Stone CONROY

<http://www.ifra-nigeria.org/IMG/pdf/land-conflict-lethal-violence-nigeria.pdf>

# Land conflicts and Lethal Violence in Nigeria: Patterns, Mapping and Evolution (2006 - 2014)



Stone CONROY\*

## **Land Conflicts and Lethal Violence in Nigeria: Patterns, Mapping and Evolution (2006 – 2014)**

### *Summary*

Nigeria is a country rife with conflict, and disputes over land issues constitute a significant number of conflict events and the violent deaths that result from them. Land issues vary from region to region, although there are some cross-cutting themes; pastoralists and farmers in the north and Middle Belt, clashes between communities and oil companies in the south-south and south-east, and urban and peri-urban conflicts in major cities are all affected by politics, legal issues, and possibly, by climate change. This paper seeks to explore patterns and trends in land conflicts in Nigeria by exploring the existing literature and parsing through data provided by the Nigeria Watch database, a research project that monitors lethal violence, conflicts, and human security in Nigeria. The data is examined from June 1, 2006 when the project started.

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## POLITICAL, ECONOMIC, LEGAL AND SOCIAL CONTEXT OF VIOLENT LAND CONFLICTS IN NIGERIA

Conflicts surrounding land issues in Nigeria are multi-faceted and complex, with dynamics that change over time and depending on the area of the country where they occur. To fully understand land conflicts in Nigeria—especially those that result in violence—one must map out the various types of land issues found in the country and examine the historical context in which these conflicts were born and the current environment in which they continue to exist. As Gausset et al. point out, “the same territory, landscape or resource can be perceived very differently by different people, and what has been interpreted as conflict over scarce resources often appears to be conflict of perspectives, over the definition of resource, and over the resource management rules.”<sup>1</sup>

In that spirit, this paper seeks to go beyond Malthusian and Neo-Malthusian conceptions of population growth and increasing scarcity as the primary driver of land and other resource conflicts, and instead examine the “social, cultural and political construction of the territories through which competition occurs and livelihoods operate.”<sup>2</sup> By looking at conflict through the lens of political ecology, one can see that conflicts over resources are often due to distribution, management, and control, rather than scarcity.<sup>3</sup> Still another school of thought with regard to natural resources and conflict argues that relative abundance of a resource (including

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<sup>1</sup> Gausset, Quentin, Michael Anthony Whyte, and Torben Birch-Thomsen, eds. *Beyond territory and scarcity: Exploring conflicts over natural resource management*. Nordic Africa Institute, 2005. Foreword

<sup>2</sup> Gausset, Quentin, Michael Anthony Whyte, and Torben Birch-Thomsen, eds. *Beyond territory and scarcity: Exploring conflicts over natural resource management*. Nordic Africa Institute, 2005. p.8

<sup>3</sup> Peluso, Nancy Lee, and Michael Watts, eds. *Violent environments*. Cornell University Press, 2001.

land) may lead to conflict, the “resource curse” idea championed by scholars such as Mehlum and Ross.<sup>4 5</sup> In the Nigerian context, Quentin Gausset argues that the abundance of resources in the Adamawa region of north-western Cameroon and south-eastern Nigeria “has never prevented the existence of agro-pastoral conflicts, just as it has never prevented tenure conflict among agriculturalists or among pastoralists”<sup>6</sup>

In addition to these socio-cultural and political factors of land conflict, this paper parses through the data on climate change and seek to answer whether or not shifts in ecological and environmental factors have a significant effect on violent conflict in the context of Nigeria. The data for land conflicts will come from the Nigeria Watch database, which tracks conflict events in the country as well as the number of violent deaths resulting from these events. The database’s “land issues” category of event type will serve as the primary source for tracking trends and patterns of land conflict in Nigeria.

## HISTORY OF LAND CONFLICT IN NIGERIA

Nigeria is a country of 175 million people.<sup>7</sup> Although some of the modern land conflicts have their roots in pre-colonization struggles between the various ethnic groups for land, most modern issues stem from the establishment of a British protectorate in 1901 and the creation of administrative boundaries that did not reflect cultural and ethnic realities.

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<sup>4</sup> Mehlum, Halvor, Karl Moene, and Ragnar Torvik. "Institutions and the resource curse\*." *The Economic Journal* 116, no. 508 (2006): 1-20.

<sup>5</sup> Ross, Michael L. "The political economy of the resource curse." *World politics* 51, no. 02 (1999): 297-322.

<sup>6</sup> Gausset, Quentin, Michael Anthony Whyte, and Torben Birch-Thomsen, eds. *Beyond territory and scarcity: Exploring conflicts over natural resource management*. Nordic Africa Institute, 2005.

<sup>7</sup> Nigeria Demographic and Health Survey 2008

When northern and southern Nigeria were merged together by the British in 1914, the dominant ethnic groups in each region were confronted with an influx of people from other regions of the newly formed country as migration increased dramatically. In an effort to discourage ethnic clashes in Northern cities, the British and the emirs persuaded Igbo and Yoruba people to live in separate parts of the city known as *sabon gari*, or stranger's quarters.<sup>8</sup> "By cobbling the different Nigerian groups into a culturally artificial political entity...the British stimulated inter-group competition and mobilization for power and resources in the new state." The ethnic and political structures imposed by the British set the stage for decades of conflict in Nigeria.

After Nigeria gained independence in 1960, the country witnessed years of tumultuous conflicts between the primary ethnic groups; the first Nigerian Democratic Republic was overthrown in 1966, and the Biafran War of 1967 lasted two and a half years and claimed one million lives; in the end, the secessionist movement failed and the Nigerian state held together. Inter-ethnic clashes around the country have continued ever since, with ebbs and flows in violence as the country has progressed into what is now the Fourth Democratic Republic. With the exception of the Islamist uprising of Boko Haram, the current landscape of violence in the north and the Middle Belt region of the country is dominated by clashes between Fulani pastoralists and farmer groups and sporadic inter-ethnic clashes in the major cities; in the south, the fight is between the oil companies and local communities, a decades-long battle that has spawned a number of rebel groups including the Bakassi Boys and the Movement for the Emancipation of the Niger Delta (MEND).<sup>9</sup> In major cities around the country, youth

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<sup>8</sup> Osaghae, Eghosa E., and Rotimi T. Suberu. *A history of identities, violence and stability in Nigeria*. Centre for Research on Inequality, Human Security and Ethnicity, University of Oxford, 2005.

<sup>9</sup> Idemudia, Uwafiokun, and Uwem E. Ite. "Demystifying the Niger Delta conflict: towards an integrated explanation." *Review of African Political Economy* 33, no. 109 (2006): 391-406.

groups known as “area boys” are also a cause of urban violence and crime. Terrorism in the north led by Boko Haram has intensified dramatically over the past few years, adding another element of destabilization. According to the Nigeria Watch database, the country as a whole has witnessed 11,640 violent deaths in 2014 (up until August, at the time of writing), more than in all of 2013.<sup>10</sup>

Land issues are one facet of the conflict dynamic in Nigeria. Access to land has been shown to be important to poverty reduction, economic growth, and the empowerment of the poor.<sup>11</sup> The importance of territory is perhaps why land conflicts are so prevalent, and why they are more difficult to solve than other conflict issues.<sup>12</sup> Timing is crucial; “if two adversaries are unable to settle their territorial questions early in their relationship, the resulting dispute is likely to last for many years.” If a dispute lasts for years, a legacy of conflict is constructed that makes any type of peacebuilding effort much more difficult.

## CURRENT REGIONAL ISSUES

### **Farmer and Pastoralist Clashes in the North:**

Fulani pastoralists and farmers represent “the most significant focus of herder/farmer conflict in Nigeria.”<sup>13</sup> Prior to the twentieth century, the Fulani were constrained to the semi-arid land in northern Nigeria, mostly due to

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<sup>10</sup> These violent deaths stem from land issues, crime, political issues, car accidents and natural disasters, among others. See [www.nigeriawatch.org](http://www.nigeriawatch.org) for a full methodological explanation.

<sup>11</sup> Fabusoro, E., T. Matsumoto, and M. Taeb. "Land rights regimes in southwest Nigeria: implications for land access and livelihoods security of settled Fulani agropastoralists." *Land Degradation & Development* 19, no. 1 (2008): 91-103.

<sup>12</sup> Olabode, A. D., and L. T. Ajibade. "Environment Induced Conflict and Sustainable Development: A Case Of Fulani-Farmers' Conflict In Oke-Ero LGAs, Kwara State, Nigeria." *Journal of Sustainable Development in Africa* 12, no. 5 (2010): 259-2743. At 263

<sup>13</sup> Blench, Roger. "The Transformation of Conflict between Pastoralists and Cultivators in Nigeria." *Africa* (2003). p.2

the presence of trypanosomoses and other diseases that made cattle-rearing in more humid environments in the south impossible without significant losses to the herds. A study in the late 1970's showed the southward movement of Fulani based on slaughterhouse records and trade records<sup>14</sup>; two subsequent studies by the Nigerian government (one in 1984 and one in 1992) supported Fricke's research that the Fulani were moving south in large numbers.<sup>15 16</sup> According to the Blench (2003), the pastoralist-farmer conflict began in earnest in the 20<sup>th</sup> century with two major changes: the introduction of affordable veterinary drugs that allowed pastoralists to increase the health of their cattle, and thereby herd size and land requirements for grazing; and increased farming due to increasing population pressures.<sup>17</sup> Blench (2010) points to four major factors affecting conflict between pastoralists and farmers, three of which can be categorized as land issues: the collapse of the traditional *burti* system of cattle routes, the declining importance of dairy production, migration and disease, and the intensification of agriculture in riparian areas known as *fadama* cultivation.<sup>18</sup>

Ironically, another major reason for the southward movement of the Fulani was an increase in peace and security in the colonial era. The sheer size of the Fulani pastoralist population made this southward movement a significant demographic phenomenon; since the Fulani moved east into Nigeria in the 14<sup>th</sup> century, they have

<sup>14</sup> Fricke, W. 1979. Cattle husbandry in Nigeria: a study of its ecological conditions and social-geographical differentiations. Heidelberg Geographischen Arbeiten, Heft 52. Heidelberg: Geographisches Institut der Universität.

<sup>15</sup> RIM 1984. Livestock and land use in southern Gongola State. (3 vols). Unpublished report by Resource Inventory and Management Limited (RIM) to LPU, Kaduna.

<sup>16</sup> RIM 1992. Nigerian National Livestock Resource Survey. (6 vols). Unpublished report by Resource Inventory and Management Limited (RIM) to FDLPCS, Abuja, Nigeria.

<sup>17</sup> Blench, Roger. " The Transformation of Conflict between Pastoralists and Cultivators in Nigeria." *Africa* (2003).

<sup>18</sup> Blench, Roger. " Conflict between Pastoralists and Cultivators in Nigeria." *DFID* (2010).

grown to an estimated population of 18.7 million in Nigeria.<sup>19</sup>

Fulani struggle to pursue their way of life in regions where land is contested; as one scholar notes, the Fulani way of life is “becoming increasingly difficult or nearly impossible for lack of access to land in the wake of degrading grazing resources, conflict as a result of farm encroachment and lack of policy support to protect grazing routes.”<sup>20</sup> Fulani herdsmen have indicated in one study that conflict arising from land use is the most important problem that they encounter as pastoralists,<sup>21</sup> and land rights and tenure lie at the heart of this problem. As some Nigerian scholars note, “insecure land tenure impedes fair resource management - which could lead to conflict.”<sup>22</sup> The issue of land tenure with regard to pastoralists revolves around fundamental differences in ideas of land ownership; private ownership of land is something foreign to the pastoralist society and has “been

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<sup>19</sup> Van Driel, A. (1999) “The End of the Herding Contract and Decreasing Complementary Linkages between Fulbe Pastoralists and Dendi Agriculturalists in Northern Benin. in V. Azarya, et al (eds.) *Pastoralists Under Pressure*. Leiden: Brill. Kaberry P.M. 1959. Report on Farmer-Grazier relations and the changing pattern of agriculture in Nsaw . Mimeo report. Blench, R.M. 2001 *Pastoralism in the New Millennium* . Animal Health and Production Series, No 150. Rome: FAO Tonah, S. 2000. State policies, local prejudices and the cattle rustling along the Ghana-Burkina Faso border. *Africa* , 70(4):551-567.

<sup>20</sup> Fabusoro, E., and C. I. Sodiya. "Institutions for Collective Action among Settled Fulani Agro-Pastoralists in Southwest Nigeria." *Journal of Agricultural Education and Extension* 17, no. 1 (2011): 53-68, at 53

<sup>21</sup> Van't Hooft, K., D. Millar, and S. Django. "Endogenous livestock development. Report from a workshop in Cameroon." *Compas magazine for endogenous devleopment* (2005)

<sup>22</sup> Van't Hooft, K., D. Millar, and S. Django. "Endogenous livestock development. Report from a workshop in Cameroon." *Compas magazine for endogenous devleopment* (2005)



serious and catastrophic on pastoralist societies” due to restriction of movement throughout the country.<sup>23</sup>

According to one pastoralist from Plateau state,

*“our herd is our life because to every nomad life is worthless without his cattle. What do you expect from us when our source of existence is threatened? The encroachment of grazing fields and routes by farmers is a call to war... Wherever we turn we find the land reserved for our cattle to feast, taken over by farmers... It becomes difficult for our herd to move and graze without veering into crop fields... Once that happens, the farmers confront us and we have no option but to fight back.”*<sup>24</sup>

On the part of the farmers, the complaints are similar in nature. One farmer from Sokoto state had this to say:

*“In the past the migration use to be more in the middle of the dry season and after harvest but nowadays it is throughout the year. Worst of all during planting season, they (Fulani herdsmen) walk on seeds planted, and in most cases a lot of the seeds fail to germinate. This has caused huge loss to us. The damage is usually the cause of our conflicts with the Fulani herdsmen. It is a yearly battle between us”*<sup>25</sup>

Although most of the land conflict issues regarding farmers and pastoralists in Nigeria revolve

<sup>23</sup> Roma, Lesotho. "Climate change, population drift and violent conflict over land resources in northeastern Nigeria." *J. Hum. Ecol* 23, no. 4 (2008): 311-324 at 317

<sup>24</sup> Odoh, S. I., and Chilaka Francis Chigozie. "Climate change and conflict in Nigeria: a theoretical and empirical examination of the worsening incidence of conflict between Fulani Herdsmen and farmers in northern Nigeria." *Arabian Journal of Business and Management Review* (2012): at 113

<sup>25</sup> Odoh, S. I., and Chilaka Francis Chigozie. "Climate change and conflict in Nigeria: a theoretical and empirical examination of the worsening incidence of conflict between Fulani Herdsmen and farmers in northern Nigeria." *Arabian Journal of Business and Management Review* (2012): at 121

around the Fulani herders and farmer groups in the Middle Belt region, the Koyam, Shuwa, Yedina, and Uled Suleiman groups in the north-east need to be discussed as well. Because these groups operate in an ecological zone more affected by desertification and climate change, they have been forced to push further south to graze their livestock in recent years.<sup>26</sup> The relatively small size of the herds of these groups combined with the lack of large-scale farming operations in the areas in which they roam has prevented land conflict on the same scale seen further south between the Fulani and farmer groups.

Studies on land conflict in Nigeria indicate that the majority of violence in the Middle Belt is due to land issues.<sup>27</sup> Of the violent deaths related to land issues in the Nigeria Watch database, 58.4% (1657 out of 2839) occurred in the Middle Belt from June 2006 to May 2014.<sup>28</sup> The Nigeria Watch database indicates that between 2006 and 2014, violent deaths over land issues and cattle grazing accounted for only 3.79% of all violent deaths across the country (See Graph 1).

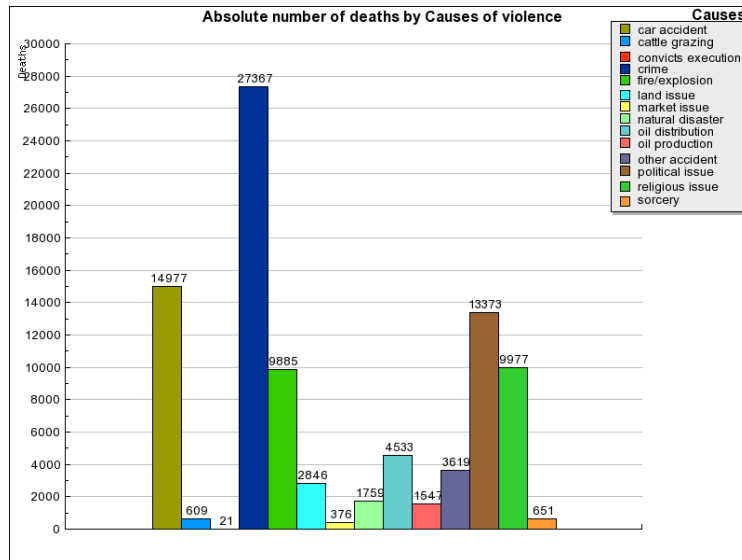
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<sup>26</sup> Blench, Roger. "The Transformation of Conflict between Pastoralists and Cultivators in Nigeria." *Africa* (2003).

<sup>27</sup> Jibo, Mwendaga, Simbine, Antonia & Galadima, Habu [2001], *Ethnic Groups and Conflicts* :

*The North Central Zone of Nigeria* , University of Ibadan, Programme on Ethnic and Federal Studies, vol.4, pp.11, 12, 121 & 146

<sup>28</sup> Nigeria Watch database



**Graph 1 - Causes of Violent Deaths in Nigeria, June 2006-May 2014**

The low percentage here could be due to a few reasons: the first is that land conflicts tend to be underreported in comparison to ethnic, oil, and religious conflicts, which are often exaggerated.<sup>29</sup> The second could be the way that land issue conflicts are coded in Nigeria Watch's database, which may identify more conflicts as "criminal" or "political" rather than over land issues, even though land may well play a role in these conflicts. Since Nigeria Watch uses newspaper reports to identify conflict events, the aforementioned tendency to underreport land issues and over-report other issues may be a factor here. One of the difficulties in tracking land conflict events is that in Nigeria "this conflict has now been subsumed into a broader dichotomy of religion and disputes over access to resources are now framed in religious terms."<sup>30</sup> Issues that may be reported as ethnic or religious clashes often have their roots in struggles

<sup>29</sup> Nigeria Watch, First Annual Report on Public Violence (2006-2007)

<sup>30</sup> Blench, Roger. "Conflict between Pastoralists and Cultivators in Nigeria." *DFID* (2010). Summary

over land or resources, and any research into these events needs to note this phenomenon.

Another important consideration is that not all land conflicts in the Middle Belt and the north are between pastoralists and farmers. In Benue and Taraba states, the Tiv are also in conflict with the Jukun, another farming group. This dispute arises from differing concepts of land use and farming; the Tiv practice a shifting cultivation pattern wherein they move from plot to plot each season, while the Jukun remain in the same farm plots year after year. When the Tiv encroach upon Jukun land, conflict ensues.<sup>31</sup>

### **Urban and Peri-Urban Conflict**

Although land tenure and land rights are a major issue in rural areas, some researchers believe that “the greatest urgency is in urban areas, where unplanned, sprawling informal settlements without public water or sanitation facilities have continued to expand” and lay the groundwork for increased violence.<sup>32</sup>

Studying urban issues is important because over half of the population lives in urban areas, and 80% of Nigeria’s urban residents live in informal settlements that are devoid of proper sanitation and clean water. Lack of proper land rights means that these settlements can be destroyed if the government wants to develop the land for other uses; since 2003, more than 800,000 homes have been destroyed by the government.<sup>33</sup>

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<sup>31</sup> Roma, Lesotho. "Climate change, population drift and violent conflict over land resources in northeastern Nigeria." *J. Hum. Ecol.* 23, no. 4 (2008): 311-324

<sup>32</sup> USAID COUNTRY PROFILE: PROPERTY RIGHTS AND RESOURCE GOVERNANCE: Nigeria at 4

<sup>33</sup> USAID COUNTRY PROFILE: PROPERTY RIGHTS AND RESOURCE GOVERNANCE: Nigeria at 6

In the urban centers of the country, housing conflicts are prevalent and growing.<sup>34</sup> In Jos, the capital of Plateau state, “the trend is towards ethnic and religious cleavages... which exert intense pressure on land and housing markets in some areas and the abandonment of others. The current process is as much the result of rapid urbanization and population growth as it is influenced by the need for security, identity and social solidarity.”<sup>35</sup>

Urban violence and land are connected in several ways; directly when “there is a surge in housing values and rents in some parts of the city and fall in housing and land values in others” due to conflict, and indirectly as “violence impacts on the long term attractiveness of a particular city.”<sup>36</sup> The long-term effect of continued communal violence in urban areas is the self-segregation of neighborhoods along ethnic or religious lines, which is evident in Kano, Kaduna, Jos, and many other major cities in Nigeria. Rent in urban areas tracks with instances of urban violence:

*“most of the crises that have occurred in Jos over time often start from the high density areas which are mostly in the inner city of Jos. People have been compelled to sell their houses in order to relocate to peri-urban areas that are considered more safe by them. Sale values of property in areas affected by crises are not often established through arms length transactions as such values arrived at are usually ‘forced sale values’ and not ‘open market values.’”*<sup>37</sup>

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<sup>34</sup> Dung-Gwom, John Y., and L. S. Rikko. "Urban Violence and Emerging Land and Housing Markets in Jos, Nigeria." In *ISA Housing Conference*, pp. 1-18. 2009.

<sup>35</sup> Dung-Gwom, John Y., and L. S. Rikko. "Urban Violence and Emerging Land and Housing Markets in Jos, Nigeria." In *ISA Housing Conference*, pp. 1-18. 2009. p.1

<sup>36</sup> Dung-Gwom, John Y., and L. S. Rikko. "Urban Violence and Emerging Land and Housing Markets in Jos, Nigeria." In *ISA Housing Conference*, pp. 1-18. 2009. p. 9

<sup>37</sup> Dung-Gwom, John Y., and L. S. Rikko. "Urban Violence and Emerging Land and Housing Markets in Jos, Nigeria." In *ISA Housing Conference*, pp. 1-18. 2009. p. 12

Conflicts in major urban and per-urban areas often have to do with land tenure and land rights, and increasing competition between residential and commercial use of land with agricultural use, as the peri-urban areas continue to expand into traditional agricultural areas.<sup>38</sup> Rural issues concerning land also have knock-on effects for urban areas: “rural decline can cause migration to urban areas, placing increasing demand on urban services and increasing political pressure on the state.”<sup>39</sup>

### **Conflict over Land Rights and Mineral Resources in the South**

The battle over land rights in the south-south and south-east has mostly centered around oil: communities in these areas have been battling the authorities and international oil companies for land rights and mineral rights, in addition to environmental degradation of land used for fishing and farming due to oil spills: “indeed, communities across the Delta are increasingly insistent in their demands for agreements that grant them rights in the exploitation of oil and gas reserves on their land.”<sup>40</sup>

According to a UNEP assessment, there are about 300 sites that may have been adversely impacted by oil operations.<sup>41</sup> Farm yields in Ogoni land have declined 20% in the last twenty years, and the pollution and environmental degradation in Ogoni is “unacceptable and

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<sup>38</sup> Bah, Mahmoud, Salmana Cissé, Bitrina Diyamett, Gouro Diallo, Fred Lerise, David Okali, Enoch Okpara, Janice Olawoye, and Cecilia Tacoli. "Changing rural-urban linkages in Mali, Nigeria and Tanzania." *Environment and Urbanization* 15, no. 1 (2003): 13-24.

<sup>39</sup> Barnett, Jon, and W. Neil Adger. "Climate change, human security and violent conflict." *Political geography* 26, no. 6 (2007): 639-655. At 642

<sup>40</sup> International Crisis Group. "Nigeria: Ogoni land After Shell." *Africa Briefing* N. 54 (2008). p. 1

<sup>41</sup> International Crisis Group. "Nigeria: Ogoni land After Shell." *Africa Briefing* N. 54 (2008). p. 12

has made living in Ogoni land a nightmare.”<sup>42</sup> The 1990 Bill of Rights drafted by the Ogoni people asked for “a fair share of [their] resources for the development of Ogoni land.”<sup>43</sup> Ever since the Land Use Act of 1978 was passed by Major-General Obasanjo (the head of state during military rule), the sub-surface mineral rights belong to the state, and not the people.<sup>44</sup> Land is allocated in a discretionary manor by ruling elites, and customary land tenure agreements continue to be the standard by which land rights are allocated.<sup>45</sup> The government’s land-use administration has progressively expanded development into agricultural areas, leading to widespread environmental destruction and pollution.<sup>46</sup> There have been many calls for the abrogation of the Land Use Act, an event which “will give the people direct control over their landed property, with which they will have the liberty to do business with banks and other organizations, and thus lead to their economic enhancement.”<sup>47</sup> The major legal issue is that the Land Use Act is incorporated into the 1999 Constitution, which makes it difficult to change.

Various international organizations that rate or score countries based on land rights and access have given Nigeria less than satisfactory marks: Nigeria scored a 0.397 (range: 0-1, 1 being the best) in Land Rights and

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<sup>42</sup> International Crisis Group. “Nigeria: Ogoni land After Shell.” Africa Briefing N. 54 (2008). p. 12

<sup>43</sup> “Ogoni Bill of Rights; Presented to the Government and People of Nigeria with an Appeal to the International Community”, MOSOP, Port Harcourt, December 1991.

<sup>44</sup> Ibeanu, Okechukwu. “Oiling the friction: Environmental conflict management in the Niger Delta, Nigeria.” *Environmental change and security project report* 6 (2000): 19-32.

<sup>45</sup> Brieger, W. R., I. O. Albert, A. Achike, and S. Schwenke. “Strategic Analysis of Development Constraints and Priorities for Action in Southern Nigeria.” *Evaluation IQC, Washington, USAID/Management Systems International, juillet* (2004).

<sup>46</sup> USAID COUNTRY PROFILE: PROPERTY RIGHTS AND RESOURCE GOVERNANCE: Nigeria

<sup>47</sup> Dode, Robert O. “The political economy of resource curse and the Niger Delta crisis in Nigeria: Matters arising.” *European Journal of Sustainable Development* 1, no. 2 (2012): 235-248, at 248

Access according to the Millennium Challenge Corporation Scorebook of 2009; a 4.4 in the Physical Property Rights Index (range: 0-10, 10 being the best) according to the International Property Rights Index of 2009; 4.2 in Property Rights (range: 1-7; 1 being poorly defined/not protected by law) according to the World Economic Forum's Global Competitiveness Index, 2008-2009; 2.7 in Access to Land (range: 1-7, 1 being unsatisfactory access) according to the International Fund for Agricultural Development, Rural Sector Performance Assessment in 2007; and 30 on the Index of Economic Freedom-Property Rights (range: 0-100; 0 being no private property) according to the Heritage Foundation and Wall Street Journal in 2009.

The violent conflicts in the south are not only caused by the actual destruction of resources and displacement from land, but also by the perceived destruction of agricultural resources by outside actors. It is important then that the agricultural sector be developed in order to manage conflict and "ultimately lead to improved access to land and markets."<sup>48</sup> The issue is about more than access to resources; for people in many parts of the south-south and south-east, "the belief is that the land is their ancestral home and must be revered. Hence, any attempt to displace a community or dispossess them of their land even for positive developments is usually a source of conflict and disenchantment."<sup>49</sup>

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<sup>48</sup> Brieger, W. R., I. O. Albert, A. Achike, and S. Schwenke. "Strategic Analysis of Development Constraints and Priorities for Action in Southern Nigeria." *Evaluation IQC, Washington, USAID/Management Systems International, juillet* (2004) at 12

<sup>49</sup> Brieger, W. R., I. O. Albert, A. Achike, and S. Schwenke. "Strategic Analysis of Development Constraints and Priorities for Action in Southern Nigeria." *Evaluation IQC, Washington, USAID/Management Systems International, juillet* (2004).



## MAPPING OF VIOLENT LAND CONFLICTS

### Methodology

The data on individual conflict events and the number of resulting violent deaths comes from the Nigeria Watch database. The Nigeria Watch database is a research project that monitors lethal violence, conflicts, and human security in Nigeria. The project began in 2006 in Paris, but moved to the French Institute for Research in Africa (IFRA-Nigeria) in 2013, which is located at the University of Ibadan. The mission statement of Nigeria Watch is as follows:

*“This database aims to compile and monitor homicides and violent deaths (including accidents) in Nigeria in order to provide statistics, analyse trends and draw maps that can help to localise dangerous spots and secure transport of passengers and goods. The data relies on a thorough reading of the Nigerian press (15 dailies & weeklies) and reports from human rights organisations. The two main objectives of the database are 1) to set up a GIS (Geographic Information System) to localise dangerous spots; 2) assess the rise, decline or stabilisation of violence in Nigeria (all things being equal).”<sup>50</sup>*

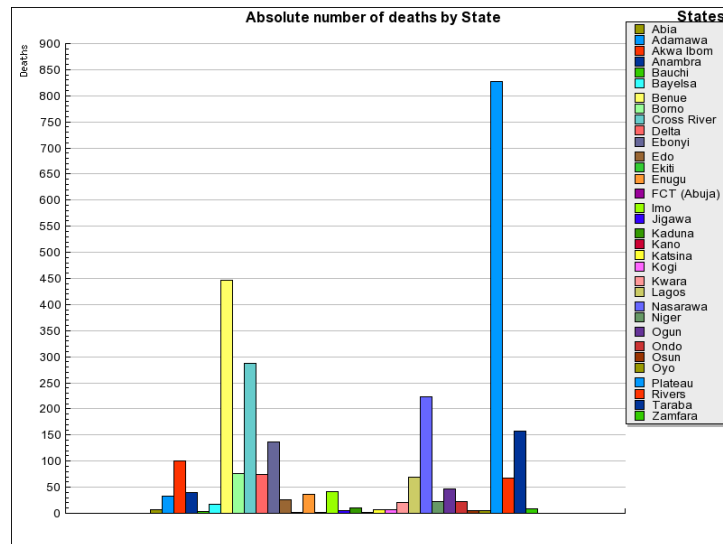
### Comparing Violent Deaths by Geopolitical Region

The six geopolitical zones of Nigeria exhibit different land conflict issues. In the north-east, north central, and north-west the primary land conflict issue is between farmers and pastoralists competing for land access. According to the Nigeria Watch database, 68% of all violent deaths due to land issues from 2006 to 2014 have occurred in these three geopolitical zones; Plateau State alone

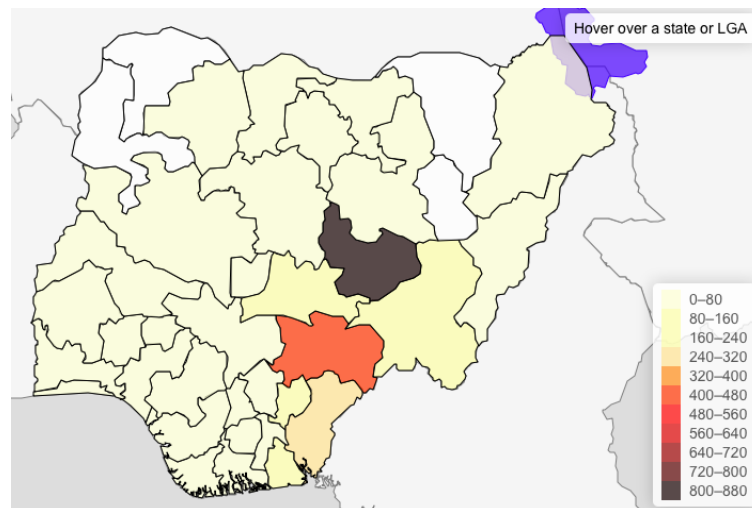
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<sup>50</sup> See <http://www.nigeriawatch.org/index.php?html=3>

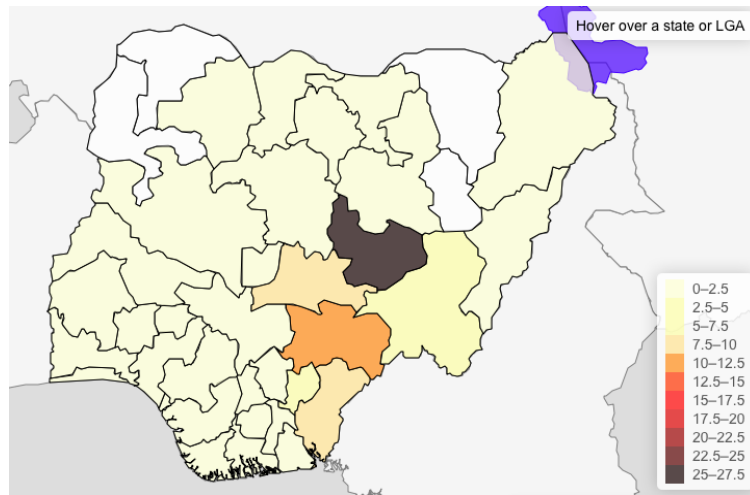
accounts for 29% of violent deaths due to land issues during this period of time (Graph 2; Maps 1 and 2).



**Graph 2** - Number of Violent Deaths in Nigeria Caused by Land Conflicts, per State, Cumulated Figures, June 2006-May 2014



**Map 1** - Violent Deaths Caused by Land Conflicts in Nigeria, per State, June 2006-May 2014



**Map 2** - Violent Deaths Caused by Land Conflicts in Nigeria, per State and per 100,000 inhabitants, June 2006-May 2014

The vast majority of these conflicts are ethnic in nature, and the vast majority of protagonists are community members. In Plateau, 520 deaths were from community vs. Islamic group clashes; Nasarawa, Ogun, Enugu, and Ebonyi recorded a handful of violent deaths resulting from community vs. police conflicts; and Borno was the only state to record violent deaths over land issues where Islamic groups and the army were the main protagonists. In the south-south and south-east, there are only two states (Akwa Ibom and Anambra) that recorded violent deaths resulting from land issues where the main relations were “community v. oil companies,” but Cross River, Imo, Lagos, Ogun, Enugu, and Delta states all have several violent deaths resulting when the main protagonists were major oil companies (42 deaths from 2006-2014). Overall, the major theme across all regions was inter-communal violence where ethnicity plays the key role in conflicts over land.

### **Comparing Violent Deaths due to Cattle Rearing and Land Issues**

The Nigeria Watch database indicates that land conflicts as a whole account for 2846 violent deaths in Nigeria from June 2006 to May 2014, while cattle grazing deaths in particular account for 609 violent deaths (Graph 1). These relatively smaller numbers may be due to conflation of land and ethnic or political conflicts; pastoralist and farmer conflicts that result in violent deaths often fall under other categories and are recorded as such in the Nigeria Watch database (for example, a search of all land issue conflicts returns 291 events during the 2006-2014 period, and yet there are 322 events involving Fulani herdsman, which may fall under ethnic conflict rather than land conflict even though land is a core issue). The primary distribution of deaths due to cattle grazing was in the Middle Belt, with Benue and Nasarawa accounting for the most and second most deaths (as opposed to Plateau and Benue, the number one and two states for land issue deaths).

There were no recorded deaths due to cattle grazing in seven states: Gombe, Bauchi, and Yobe in the north-east, Lagos, Ondo, and Ekiti in the south-west, Edo in the south-south, and Abia in the south-east. Gombe, Yobe, Sokoto and Kebbi did not record any land issue deaths from 2006-2014 (See Maps 1-4 in Annex 1). 2012 marked the highest number of violent deaths due to cattle grazing in all of Nigeria at 126, with the trend being an increase in overall deaths since 2011, but relatively few so far in 2014.

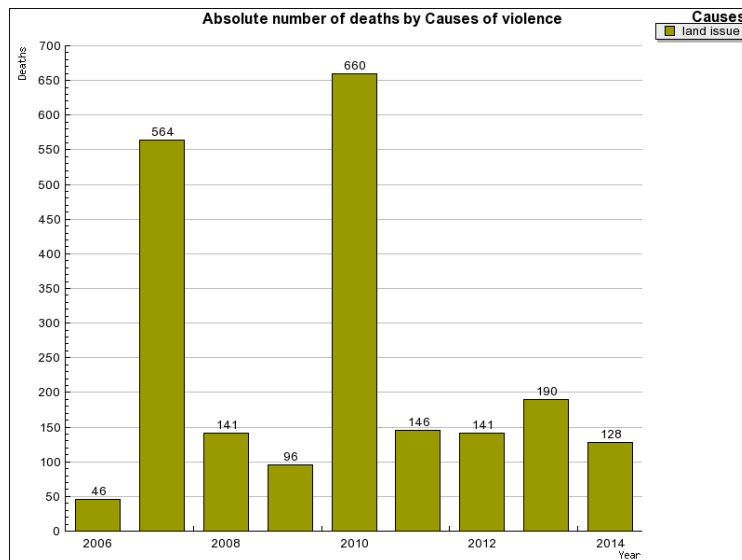
### **Comparing Violent Deaths due to Political Issues and Land Issues**

According to the Nigeria Watch database, there were 2846 violent deaths caused by land conflicts from 2006 to 2014, as opposed to 13,149 deaths due to political issues, which accounts for 22% of all violent deaths in Nigeria during that time period. Deaths due to political issues remained relatively steady year-over-year from

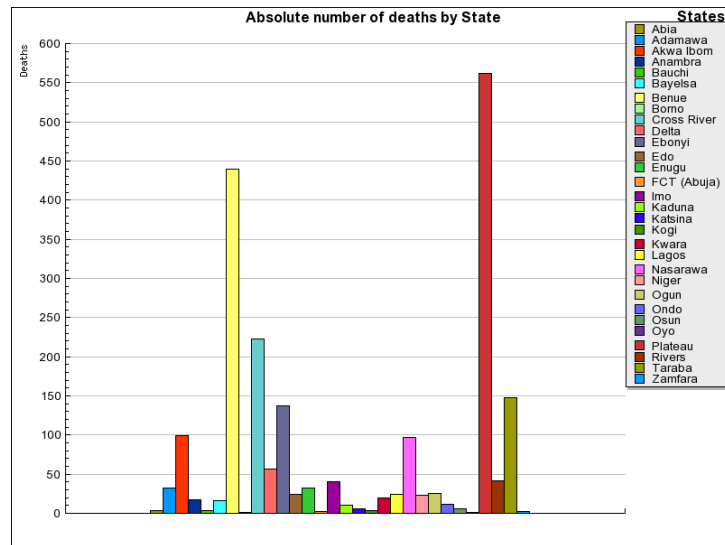
2006 to 2012, but nearly tripled in 2013. The trend for 2014 remains on par to surpass 2013, maintaining the dramatic increase in politically related deaths.

From 2006-2014, there were 28 conflict incidents classified as political issues that involved land, resulting in 450 deaths. As with land issue conflicts in general, most of these occurred between 2007 and 2010, and mostly in Plateau state.

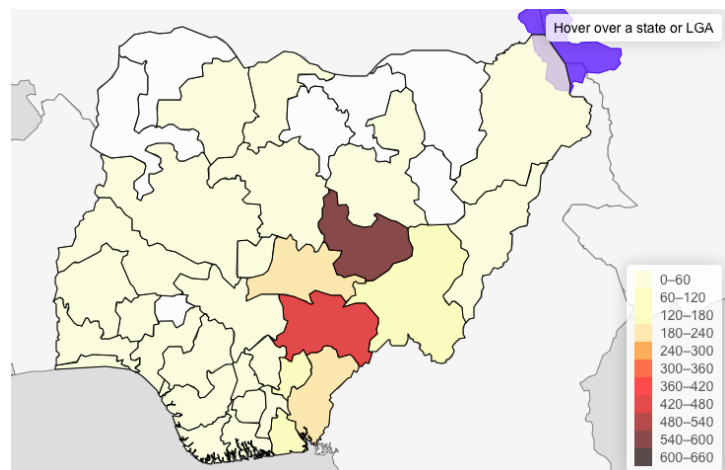
**Comparing Violent Deaths due to Ethnic Conflict and Land Issues:** According to the Nigeria Watch database, there were 2,846 violent deaths due to land issues and 7,444 violent deaths where ethnicity was the primary relation during the period of 2006-2014 (Graphs 3 and 4; Maps 3 and 4). Of all the ethnic related deaths, 30% (2,207) were related to land issues, the third leading cause behind political issues and crime. Deaths where ethnicity was the primary relation peaked in 2010, dropped off dramatically in 2011 and 2012, and then returned to previous highs in 2013. The trend for 2014 appears to be the same as the year before, with high numbers of violent deaths.



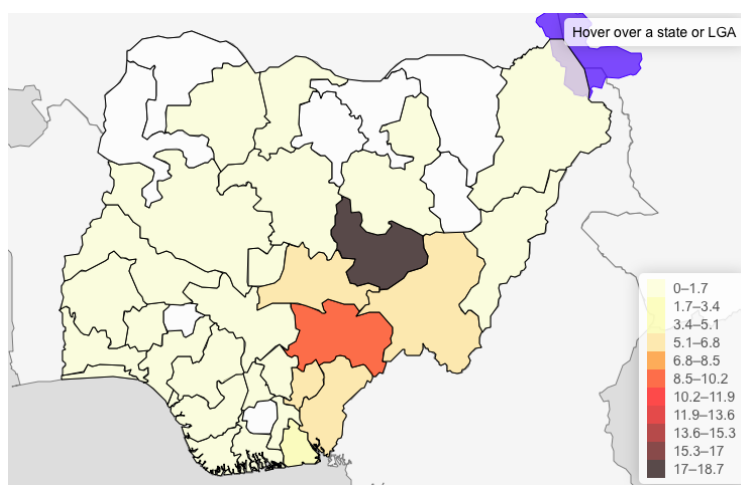
**Graph 3** - Number of Violent Deaths in Nigeria Caused by Land Conflicts between Communities, per Year, June 2006-May 2014



**Graph 4** - Number of Violent Deaths in Nigeria Caused by Land Conflicts between Communities, per State, Cumulated Figures, June 2006-May 2014



**Map 3** - Violent Deaths Caused by Conflicts between Communities in Nigeria, per State, June 2006-May 2014.



**Map 4** - Violent Deaths Caused by Conflicts between Communities in Nigeria, per State and per 100,000 inhabitants, June 2006-May 2014

## VIOLENT LAND CONFLICTS, CLIMATE CHANGE AND POLITICS

The connection between violent conflict and climate change is one that has been postulated by researchers for many years.<sup>51</sup> Scholars such as Vandana Shiva have long thought that significant ecological changes would lead to water wars over increasing scarcity<sup>52</sup>, land conflict over decreased arable and livable land<sup>53</sup>, and by constraining the state's ability to provide public services, which leads to destabilization.<sup>54</sup> The effects of climate change have thus far been far more concentrated in areas of the world already rife with conflict, insecurity, and underdevelopment, making conflict due to ecological and climatic changes more likely. "Demographic pressure and urbanization, inequitable access to and shortage of land, and resource depletion are widely predicted to worsen, with profound effects on the stability of both rural and urban settings."<sup>55</sup>

The early literature on environmental issues and climate was deterministic (initially in the sense that natural resource scarcity would lead to conflict,<sup>56 57</sup> and later that the empirical evidence actually points to more

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<sup>51</sup> Homer-Dixon, Thomas F. "On the threshold: environmental changes as causes of acute conflict." *International security* (1991): 76-116.

<sup>52</sup> Shiva, Vandana. "Water wars." *Privatization, Pollution and Profit* (2002).

<sup>53</sup> Homer-Dixon, Thomas F. "Environmental scarcities and violent conflict: evidence from cases." *International security* (1994): 5-40.

<sup>54</sup> Barnett, Jon, and W. Neil Adger. "Climate change, human security and violent conflict." *Political geography* 26, no. 6 (2007): 639-655. At 639

<sup>55</sup> UNEP: From Conflict to Peacebuilding The Role of Natural Resources and the Environment. P.8

<sup>56</sup> Ward, Diane. "Water Wars: Drought." *Flood, Folly and the Politics of Thirst* (Riverhead, New York, 2002) (2002).

<sup>57</sup> Theisen, Ole Magnus, Helge Holtermann, and Halvard Buhaug. "Climate wars? Assessing the claim that drought breeds conflict." (2011).



cooperation over environmental issues than conflict).<sup>58 59</sup> Recent academic focus has been more constructivist and post-structuralist in nature, arguing that environmental factors play a role in conflicts that are also affected by social, political, or cultural factors.<sup>60 61</sup>

Homer-Dixon sees conflict deriving from environmental changes as belonging to three categories; Simple-Scarcity conflicts, Group-Identity related conflicts, and Relative Deprivation conflicts.<sup>62</sup> He was also the first scholar to put forth the idea of “eco-violence,” which has continued to gain traction.<sup>63</sup> Eco-violence is the idea that “environmental transformation alters the sociopolitical fabric of society, disrupting productive relationships, which ultimately affects established constraints on social conflict.”<sup>64</sup> Homer-Dixon provides several useful graphics to show how climate and conflict are connected:

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<sup>58</sup> Wolf, Aaron T. "Conflict and cooperation along international waterways." *water policy* 1, no. 2 (1998): 251-265.

<sup>59</sup> Salehyan, Idean. "From climate change to conflict? No consensus yet." *Journal of Peace Research* 45, no. 3 (2008): 315-326.

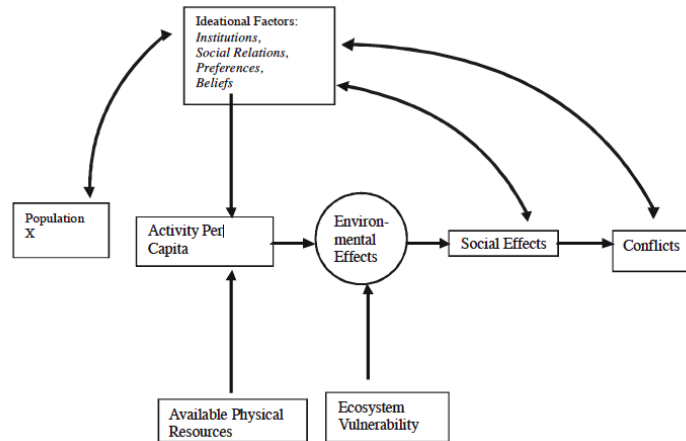
<sup>60</sup> de Châtel, Francesca. "The Role of Drought and Climate Change in the Syrian Uprising: Untangling the Triggers of the Revolution." *Middle Eastern Studies* ahead-of-print (2014): 1-15.

<sup>61</sup> Selby, Jan, and Clemens Hoffmann. "Beyond scarcity: Rethinking water, climate change and conflict in the Sudans." *Global Environmental Change* (2014).

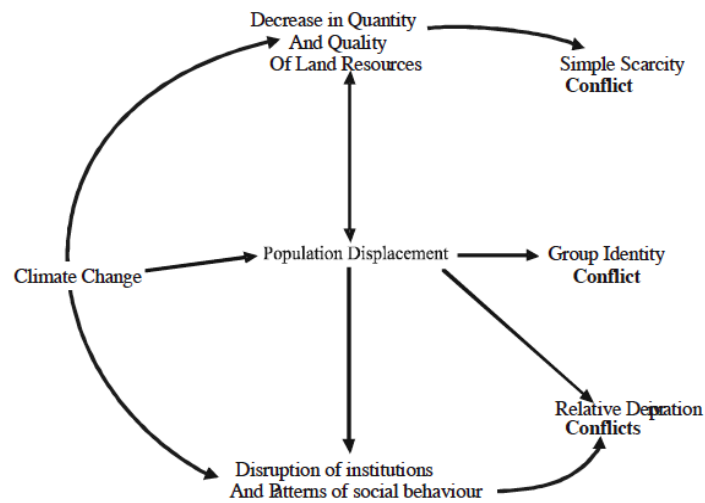
<sup>62</sup> Homer-Dixon, Thomas F. "On the threshold: environmental changes as causes of acute conflict." *International security* (1991): 76-116.

<sup>63</sup> Gleditsch, N. P., and H. Urdal. "Ecoviolence? Links between Population Growth, Environmental Scarcity and Violent Conflict in Thomas Homer-Dixon's Work" *Journal of International affairs* 56, no. 1 (2002): 283-302.

<sup>64</sup> De Soysa, Indra. "Paradise is a bazaar? Greed, creed, and governance in civil war, 1989-99." *Journal of Peace Research* 39, no. 4 (2002): 395-416. At 397



**Figure 1** - Environmental Change and Conflict (adopted from Homer-Dixon, 1991)



**Figure 2** - Types of Conflicts Likely to Arise from Environmental Change (adopted from Homer-Dixon, 1991)

Proponents of this view argue that climatic shifts will lead to increased competition over resources:

*“Decreases in the quality and quantity of renewable resources, population growth, and unequal resource access act singly or in various combinations to*

*increase the scarcity, for certain population groups, of cropland, water, forests, and fish. This can reduce economic productivity, both for the local groups experiencing the scarcity and for the larger regional and national economies. The affected people may migrate or be expelled to new lands. Migrating groups often trigger ethnic conflicts when they move to new areas, while decreases in wealth can cause deprivation conflicts.*"<sup>65</sup>

The connection between climate change and conflict does not seem immediately evident, which is perhaps its most dangerous trait; climate change has a very real impact on livelihoods, social order, peace and stability, but only the first item in that list is readily witnessed.<sup>66</sup> Conflict is several steps removed from climatic changes, but is inextricably linked to them through causal chains. Climate change can result in reduced access to the natural capital that sustains livelihoods, which can lead to increased poverty and threatened livelihoods, and increased grievances, all of which increase the risk that people will join rebel movements.<sup>67 68</sup>

Several other scholars have proposed ways in which climate change can lead to conflict, and provided typologies of conflict related to the environmental in Nigeria:

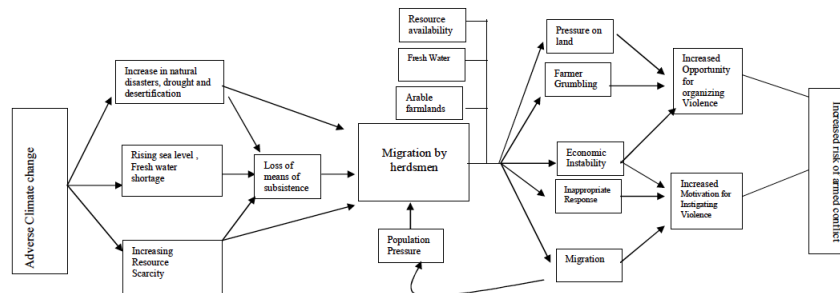
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<sup>65</sup> Homer-Dixon, T.F & Blitt, J. (1998) *Ecoviolence: Links among Environment, Population and Security*. Lanham: Rowman and Littlefield.

<sup>66</sup> Ezirim, G.E. and Onuoha, F.C. 2008 "Climate Change and National Security: Exploring the Theoretical and Empirical Connections in Nigeria", *Journal of International Politics and Development*, Vol.4. Nos. 1&2.

<sup>67</sup> Nordås, Ragnhild, and Nils Petter Gleditsch. "Climate change and conflict." *Political Geography* 26, no. 6 (2007): 627-638. At 631

<sup>68</sup> De Soysa, Indra, Nils Petter Gleditsch, Michael Gibson, and Margareta Sollenberg. *To cultivate peace: Agriculture in a world of conflict*. International Peace Research Institute, 1999.



**Figure 3** - Pathways to Climate Conflict (adopted from Odoh, 2012)

Factors affecting violent conflict	Processes which climate change could affect/exacerbate
Vulnerable livelihoods	Climate change is likely to cause widespread impacts on water availability, coastal regions, agriculture, extreme events and diseases. The impacts on livelihoods will be more significant in sectors of the population with high resource-dependency, and in more environmentally and socially marginalised areas. Some of these climate driven outcomes are long term and chronic (such as declining productivity of agricultural land), while others are episodic (such as floods). These impacts on livelihoods will be widespread both in developing and developed countries.
Poverty (relative/chronic/transitory)	Poverty (and particularly relative deprivation) is affected by the spatial differentiation of climate impacts and the sensitivity of places to them. Climate change may directly increase absolute, relative, and transient poverty by undermining access to natural capital. It may indirectly increase poverty through its effects on resource sectors and the ability of governments to provide social safety nets. Stresses from climate change will differentially affect those made vulnerable by political-economic processes such as liberalisation of markets for agricultural commodities.
Weak states	The impacts of climate change are likely to increase the costs of providing public infrastructure such as water resources, and services such as education, and may decrease government revenues. So climate change may decrease the ability of states to create opportunities and provide important freedoms for citizens as well as decrease the capacity of government agencies to adapt and respond to climate change itself.
Migration	Migration may be one response of people whose livelihoods are undermined by climate change. However, climate is unlikely to be the sole, or even the most important 'push' factor in migration decisions. Yet large-scale movements of people may increase the risk of conflict in host communities.

**Figure 4** - Factors and Processes that Connection Climate Change and Conflict (adopted from Barnett, 2007)

<i>Types</i>	<i>Level</i>	<i>Actors</i>	<i>Occupation</i>	<i>Stake</i>	<i>Dimension</i>	<i>Objective sort</i>
TP1	Inter Ethnic	Indigene/ settler	Cultivators/ herdsman	Vegetation and land	Domestic/ international	Relief from scarcity/ reinforcement of group identity
TP2	Inter Ethnic	Indigene/ settler	Cultivator/ cultivators	Arable land	Domestic	Relief from scarcity/ reinforcement of group identity
TP3	Inter Ethnic	Indigene/ settler	Herdsman/ herdsman	Grazing land	Domestic/ international	Relief from scarcity/ reinforcement of group identity
TP4	Inter Ethnic	Settler/ settler	Cultivator/ cultivators	Arable land	Domestic	Relief from scarcity/ reinforcement of group identity
TP5	Intra Ethnic	indigene/ indigene	Cultivator/ cultivators	Arable land	Domestic	Distributive Justice
TP6	Intra Ethnic	Indigene/ indigene	Herdsman/ herdsman	Grazing land	Domestic	Relief from scarcity
TP7	Intra Ethnic	Settler/ settler	Herdsman/ herdsman	Grazing land	Domestic	Relief from scarcity
TP8	Intra Ethnic	Settler/ settler	Cultivator/ cultivators	Arable land	Domestic	Distributive Justice
TP9	Inter Personal	Settler/ settler	Cultivator/ cultivators	Arable land	Domestic	Distributive Justice
TP10	Inter Personal	Settler/ indigene	Cultivator/ cultivators	Arable land	Domestic	Distributive Justice
TP11	Inter Personal	Indigene/ indigene	Cultivator/ cultivators	Arable land	Domestic	Distributive Justice

**Figure 5** - Typologies of Climatically Induced Violent Conflict over Land Resources in North East Nigeria (adopted from Obioha, 2008)

<i>1</i>	<i>Crisis / Location</i>	<i>Year</i>	<i>Level</i>	<i>Actors</i>	<i>Occupation</i>	<i>Objective sort</i>
2	Billiri Uprising	2000	Inter ethnic	Indigene/ settler	-	Reinforcement of group identity
3	Song Crisis	2002	Inter ethnic	Indigene/ settler	Herdsman/ Cultivators	Relief from scarcity/ reinforcement of group Identity
4	Dumen Village	2002	Inter ethnic	Indigene/ settler	Herdsman/ Cultivators	Relief from scarcity
5	Yelwa/ Shendam /Wase	2003	Inter ethnic	Indigene/ settler	Cultivators/ Cultivators	Relief from scarcity and reinforcement of group identity
6	Numan	2004	Inter ethnic	Indigene/ indigene	-	Reinforcement of group identity
7	Demsa	2005	Inter ethnic	Indigene/ settler	Herdsman/ Cultivators	Relief from scarcity and reinforcement of group identity
8	Lamurde	2005	Intra ethnic	Indigene/ indigene	Cultivators/ Cultivators	Reinforcement of group identity
9	Madagali	2005	Inter ethnic	Indigene/ indigene	-	Reinforcement of group identity
10	Bali Village reprisals	2005	Inter ethnic	Indigene/ settler	Herdsman/ Cultivators	Relief from scarcity and reinforcement of group identity
11	Numan reprisals	2005	Inter ethnic	Indigene/ indigene	-	Reinforcement of group identity

**Figure 6** - Application of Typologies to Specific Conflict Cases and Scenarios (adopted from Obioha, 2008)

The major conflicts in Nigeria are perhaps being affected by climatic changes, but in different ways depending on the conflict divisions and to varying degrees depending on location. The most compelling case to be made for the connection between climate change and land conflict can be found in the north, where

“conflicts between farmers and herdsmen in the use of agricultural land are becoming fiercer and increasingly widespread in Nigeria.”<sup>69</sup> Struggles for land—and the resources needed by both farmers and pastoralists—contain a scarcity factor, but in the sense that there are “limits set by livelihoods which are cannot be adapted to satisfy new needs.”<sup>70</sup> Farmers and pastoralists have livelihoods that both depend on access to land, and in a way that conflicts with each other. These conflicts have knock-on effects around the country, as they have “demonstrated high potential to exacerbate the food crisis in Nigeria and other affected countries due to loss of farmer lives, animals, crops and valuable properties.”<sup>71</sup>

In Nigeria, current research points to climate change playing a role in farmer-pastoralist conflict in the northern and central areas of the country as it exacerbates resource scarcity for both groups, chief among them the availability of suitable land for growing crops and grazing cattle. A recent study conducted by two Nigerian scholars viewed the issue through an eco-violence theoretical lens; the authors concluded that although the immediate cause of violence between the Fulani pastoralists and farmers is resource scarcity, the proximate cause is the drought and desertification due to climate change that leads to depletion of resources.<sup>72</sup> “In Nigeria, many communal

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<sup>69</sup> Adisa, R. Solagberu, and Oluwasegun A. Adekunle. "Farmer-herdsmen conflicts: A factor analysis of socio-economic conflict variables among arable crop farmers in North Central Nigeria." *Journal of Human Ecology* 30, no. 1 (2010): 1-9, at 1

<sup>70</sup> Gausset, Quentin, Michael Anthony Whyte, and Torben Birch-Thomsen, eds. *Beyond territory and scarcity: Exploring conflicts over natural resource management*. Nordic Africa Institute, 2005. p.17

<sup>71</sup> Adisa, R. Solagberu, and Oluwasegun A. Adekunle. "Farmer-herdsmen conflicts: A factor analysis of socio-economic conflict variables among arable crop farmers in North Central Nigeria." *Journal of Human Ecology* 30, no. 1 (2010): 1-9, at 4

<sup>72</sup> Odoh, S. I., and Chilaka Francis Chigozie. "Climate change and conflict in Nigeria: a theoretical and empirical examination of the worsening incidence of conflict between Fulani Herdsmen and farmers in northern Nigeria." *Arabian Journal of Business and Management Review* (2012): 110.

clashes (often mis-interpreted or mis-represented as ethnic and religious clashes) are actually struggle over either the control of land or mineral resources or both.”<sup>73</sup>

The Ministry of Environment is acutely aware of the challenges climate change will bring to Nigeria in the near future. In addition to tackling the decades-old problem of oil spills in the Niger Delta, the aftermath of major flooding in 2012 that destroyed croplands and displaced over 2 million people,<sup>74</sup> the Ministry is increasingly turning its attention to the north and the growing threat of desertification, which is exacerbated by changing climatic conditions. The Great Green Wall project is one of the largest initiatives being explored to prevent the Sahara’s slow movement southward through the planting of 1,500 kilometers of vegetation along the border of the desert.<sup>75</sup> Nigeria is working with the UN to create a Climate Change Data Management System through the African Adaptation Project (AAP), which will hopefully aid in the fight against climate change. A recent AAP report states that Nigeria is one of the most threatened regions of the continent in terms of decreased Cereal Productivity in Sub-Saharan Africa under a scenario of CO<sub>2</sub> atmospheric concentrations a level at 520-640 ppm by 2050. From 2000 to 2005, Nigeria also had some of the highest levels of net forest loss per year due to climate change in the world.<sup>76</sup>

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<sup>73</sup> Odoh, S. I., and Chilaka Francis Chigozie. "Climate change and conflict in Nigeria: a theoretical and empirical examination of the worsening incidence of conflict between Fulani Herdsmen and farmers in northern Nigeria." *Arabian Journal of Business and Management Review* (2012): at 118

<sup>74</sup> Nigeria floods kill 363 people, displace 2.1 mln –agency. Reuters, available at <http://in.reuters.com/article/2012/11/05/nigeria-floods-idINDEE8A40EH20121105>

<sup>75</sup> Nigeria: Oil Spills, Gas Flaring, Desertification Top Nigeria's Environmental Challenges. AllAfrica, available at <http://allafrica.com/stories/201407150572.html>

<sup>76</sup> UNEP (2014). Keeping Track of Adaptation Actions in Africa. Targeted Fiscal Stimulus Actions Making a Difference. United Nations Environment Programme (UNEP), Nairobi

The Sahara desert already occupies 35% of land mass in Nigeria, and is creeping southward in Nigeria at a rate of 0.6 kilometers a year at the same time that deforestation is taking place at 3.5% per year.<sup>77</sup> In addition, the Sudano-Sahelian region of Nigeria has experienced a 3-4% decrease of rainfall per decade since the beginning of the nineteenth century; the number of rainy season days in the north has decreased from 150 to 120 in the last thirty years, destroying 20% of crop yield. “The strong and worrisome increase of 425% in the extent of sand dunes/Aeolian deposits between 1976 and 1995 is a strong pointer to land resource loss due to climate change and possibilities of desert encroachment around the northern axis of Nigeria.”<sup>78</sup>

According to some estimates, two-thirds of 11 states (Bauchi, Borno, Gombe, Jigawa, Kano, Kaduna, Katsina, Kebbi, Sokoto, Yobe, and Zamfara) could turn into desert this century. The Sahara increases by 1,400 square miles a year in Nigeria, while geological data indicates a 400 percent increase in sand dunes over the last twenty years.<sup>79</sup> In 11 of Nigeria’s northernmost states (Borno, Bauchi, Gombe, Adamawa, Jigawa, Kano, Katsina, Yobe, Zamfara, Sokoto and Kebbi), around 35% of the land that was cultivatable fifty years ago is now no longer arable, threatening the livelihoods of 15 million pastoralists.<sup>80</sup>

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<sup>77</sup> African Technology Policy Studies Network, “Farmers’ Perceptions of Climate Change and Adaptation Strategies in Northern Nigeria: An Empirical Assessment.” RESEARCH PAPER | No. 15

<sup>78</sup> Roma, Lesotho. “Climate change, population drift and violent conflict over land resources in northeastern Nigeria.” *J. Hum. Ecol.* 23, no. 4 (2008): 311-324. At 312

<sup>79</sup> Odoh, S. I., and Chilaka Francis Chigozie. “Climate change and conflict in Nigeria: a theoretical and empirical examination of the worsening incidence of conflict between Fulani Herdsmen and farmers in northern Nigeria.” *Arabian Journal of Business and Management Review* (2012): at 117

<sup>80</sup> Odoh, S. I., and Chilaka Francis Chigozie. “Climate change and conflict in Nigeria: a theoretical and empirical examination of the worsening incidence of conflict between Fulani Herdsmen and farmers in northern Nigeria.” *Arabian Journal of Business and Management Review* (2012): at 119



One Nigerian scholar posits that “The conflict situation is likely to continue in a progressive manner due to the increasing down south march of the Sahara desert through the Sahelian zone of the northeast Nigeria is leading to opening up of more agrarian land to grazing, which usually marks the beginning of hostile contact between the arable agriculturists and the pastoralists.”<sup>81</sup> That being said, other studies looking at the connection between rainfall, drought, and conflict have shown that the links are exaggerated in the current literature.<sup>82</sup>

Most existing papers on climate change-induced conflict in Nigeria focus on the farmer and pastoralist conflict, but conflicts could arise from migration, rising sea levels, changing land uses in urban and peri-urban areas, and international issues surrounding Lake Chad and the Niger River Basin. Climate change’s affect on sea levels could bring about a “potentially massive environmental refugee migration occurring in Nigeria. For a one meter rise, more than 3 million people are at risk based on the population at the time. Estimates of the number of people to be displaced ranges from 740,000 for a 0.2 meter rise to 3.7 million for a 1 meter rise and 10 million for a 2 meter rise.”<sup>83</sup>

This change in sea level could potentially inundate “more than 70% of the Nigerian coastline, thus placing land at risk many kilometers inland. A one meter rise in sea level for example, could place up to 600km<sup>2</sup> of land at risk. They equally predicted that the rates of land loss through edge erosion alone could cause losses of as much as 250km<sup>2</sup> by

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<sup>81</sup> Roma, Lesotho. "Climate change, population drift and violent conflict over land resources in northeastern Nigeria." *J. Hum. Ecol* 23, no. 4 (2008): 311-324 at 317

<sup>82</sup> Selby, Jan, and Clemens Hoffmann. "Beyond scarcity: Rethinking water, climate change and conflict in the Sudans." *Global Environmental Change* (2014).

<sup>83</sup> Nigeria: Surviving the Tide. AllAfrica, available at <http://allafrica.com/stories/201407160234.html>

the year 2100.”<sup>84</sup> This is of particular concern because “much of Nigeria’s densely populated, increasingly urbanized 500-mile-long southern coast is less than twenty feet above sea level; the Delta region, with its easily flooded network of estuaries, rivers, creeks, and streams, sits especially low, as does Lagos.”<sup>85</sup>

Irrespective of the conflict connection, climate change will have a huge effect on Africa in general: it could reduce groundwater recharge by up to 70%, shrink the growing area for 81-97 percent of African plant species, and reduce crop yields by up to 17 percent for wheat, 5 percent for maize, 15 percent for sorghum, and 10 percent for millet.<sup>86</sup> One of the major factors that could lead to conflicts over land related to climate change is migration; when certain locations become inhospitable to people due to desertification, decreased food yields, etc., the resulting migration (both internal and trans-border) might lead to clashes between the existing population and the migrants.<sup>87</sup> Conflict arising from this environmental migration is likely to come in four different forms:

*“First, the arrival of migrants can burden the destination’s economy and natural resource base, promoting native-migrant competition for economic and natural resources... Second, when environmental migrants and residents belong to different ethnic groups, the arrival of many newcomers over a relatively short period of time may upset a precarious ethnic balance... Third, environmental migration provides opportunities to*

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<sup>84</sup> Tologbonse, E. B., S. J. Auta, T. D. Bidoli, M. M. Jaliya, R. O. Onu, and F. O. Issa. “Farmers’ Perception of the Effects of Climate Change and Coping Strategies in Three Agro-Ecological Zones of Nigeria.” *Journal of Agricultural Extension* 14, no. 1 (2010) at 126

<sup>85</sup> Sayne, Aaron. *Climate change adaptation and conflict in Nigeria*. US Institute of Peace, 2011. At 4

<sup>86</sup> Is soil the new oil in Africa's quest for sustainable development? Thomson Reuters Foundation, Available at <http://www.trust.org/item/20140821153944-chxte/>

<sup>87</sup> The imperatives of national security in Nigeria. Business Day, available at [http://businessdayonline.com/2014/08/the-imperatives-of-national-security-in-nigeria-1/#.U\\_9WwktgxTF](http://businessdayonline.com/2014/08/the-imperatives-of-national-security-in-nigeria-1/#.U_9WwktgxTF)

*exploit the situation, which generates tension. For example, the migrants' origin country may suspect that the receiving country accepts migrants in order to upset the ethnic balance in the origin country... Fourth, the conflict could follow existing fault lines. For example, pastoralists and farmers may compete over land. Migrants and residents may compete over jobs. Environmental migration from rural to urban areas—another fault line—presents competing effects.”*<sup>88</sup>

The economic costs of climate change will also be enormous, and likely lead to further destabilization and act as a threat multiplier for future conflict. A DFID report estimated that climate change would cost the country between 6 percent and 30 percent of its GDP by 2050, worth between \$100 billion and \$460 billion. Decreased productivity and growth losses will occur in a dozen key sectors and agriculture's share of GDP could decline by nearly 40% by 2050 without significant efforts to combat climate change. Along the same lines, the Federal Ministry of Environment has estimated that 3 feet of sea level rise would cost Nigeria \$43 billion in GDP over thirty years.<sup>89</sup>

There are many environmental challenges facing Nigeria, including deforestation, reduced agricultural production, declining food security, increased incidence of both flooding and drought, and of spreading disease – all of which can lead to an increased risk of conflict over scarce land and water resources.<sup>90</sup> Although the jury is still out on whether climate change is—and will continue—to be a major factor in causing or aggravating

<sup>88</sup> Reuveny, Rafael. "Environmental change, migration and conflict: theoretical analysis and empirical explorations." In *International Workshop on Human Security and Climate Change, Oslo*. 2005. At 4-5

<sup>89</sup> Sayne, Aaron. *Climate change adaptation and conflict in Nigeria*. US Institute of Peace, 2011. At 4

<sup>90</sup> Tologbonse, E. B., S. J. Auta, T. D. Bidoli, M. M. Jaliya, R. O. Onu, and F. O. Issa. "Farmers' Perception of the Effects of Climate Change and Coping Strategies in Three Agro-Ecological Zones of Nigeria." *Journal of Agricultural Extension* 14, no. 1 (2010) at 127

conflicts in Nigeria, one scholar provides a potential causal chain that links the two: a lack of robust responses to climate issues leads to resource scarcity, which leads to issues such as sickness, hunger, and joblessness; a lack of response to these issues leads social unrest and then to manifest conflict.<sup>91</sup> The human security implications of climate change are quite significant, as these issues have the potential to “snowball into ethnic, religious and other types of conflicts in Nigeria.”<sup>92</sup>

## FINDINGS

**Is there any correlation between violent land conflicts and climate change in Nigeria?** Perhaps, but the data is inconclusive. The northern land conflicts between farmers and pastoralists (or between different farmer groups, or different pastoralist groups) may be affected by climate change in that the ecology of northern Nigeria is growing less hospitable to both farming and pastoralism, leading to growing competition over a smaller resource base. The conflict event data is difficult to connect to climate changes at the moment due to the way conflicts are coded; even though climate plays a role, most manifest conflict events are framed as purely ethnic or religious in nature. Despite this problem, there is a growing body of knowledge that points toward climate as a key factor in conflict, even though it may not be the main cause.<sup>93</sup> The research on climate change and conflict is ramping up, which means the linkages between the two will be better understood in the coming years.<sup>94</sup>

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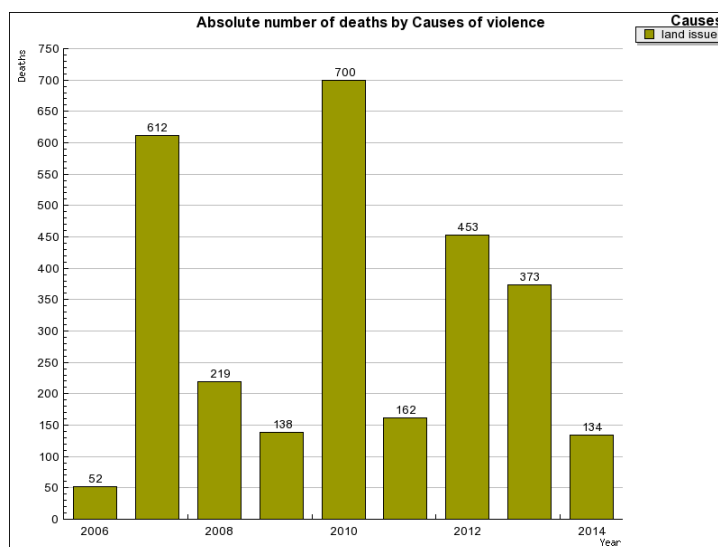
<sup>91</sup> Sayne, Aaron. *Climate change adaptation and conflict in Nigeria*. US Institute of Peace, 2011. At 4

<sup>92</sup> Roma, Lesotho. "Climate change, population drift and violent conflict over land resources in northeastern Nigeria." *J. Hum. Ecol* 23, no. 4 (2008): 311-324. At 323

<sup>93</sup> Benjaminsen, Tor A., Koffi Alinon, Halvard Buhaug, and Jill Tove Buseth. "Does climate change drive land-use conflicts in the Sahel?." *Journal of Peace Research* 49, no. 1 (2012): 97-111.

<sup>94</sup> Hendrix, Cullen S., and Sarah M. Glaser. "Trends and triggers: Climate, climate change and civil conflict in Sub-Saharan Africa." *Political geography* 26, no. 6 (2007): 695-715.

Nigeria is quickly becoming the most studied country with regard to climate and conflict, as some people posit that “the Sahel belt has already seen the first ‘climate wars’ referring, in particular, to clashes between herders and sedentary farmers.”<sup>95</sup> Indeed, “during the last few years, violent land-use conflict in the Sahel has become the most popular example of the alleged link between global climate change and conflict.” Whether or not the early fervor surrounding this research will die down and be replaced by more nuanced approaches to understanding climate and conflict remains to be seen. A search of the Nigeria Watch database for violent deaths related to “climate” or “environment” yields zero results, but “natural disaster” deaths number 1,759 from 2006-2014, and of those, 1,067 violent deaths (from 192 events) were caused by flooding. The Nigeria Watch database, however, does not indicate that violent deaths due to land conflicts or natural disasters are increasing over time (Graph 5).



**Graph 5** - Number of Violent Deaths in Nigeria Caused by Land Conflicts, per Year, June 2006-May 2014

<sup>95</sup> Benjaminsen, Tor A., Koffi Alinon, Halvard Buhaug, and Jill Tove Buseth. "Does climate change drive land-use conflicts in the Sahel?." *Journal of Peace Research* 49, no. 1 (2012): 97-111.

**Are violent land conflicts more prevalent in the South or the North, and why?** Violent conflicts are more prevalent in the north because of number of factors (population pressures, poor governance, lack of funding resources for social services, Boko Haram, etc.) and environmental issues are part of the mix (increasing desertification, grazing areas growing sparse in conjunction with population boom, decreased productivity of farmlands). Although land conflicts between communities and international oil companies and the government are prevalent in the south-south and south-east, and land rights and tenure concerns lead to disputes all over the country, the north has added socio-economic and political shortcomings that make land conflict more likely, especially where the livelihoods of most people in that area predominately fall into two categories (farmers and pastoralists) that compete over land and other resources.

**Are violent land conflicts related to politics and in what way?** The land rights and land tenure issue is germane to this conflict, as proper land rights are often denied to certain groups deemed to be “settlers.” Many observers point to the Land Use Act of 1978 as a great impediment to proper land tenure, as it gives the government control over land that should belong to the people of Nigeria, while still allowing customary land tenure to reign where the law is not enforced. Many of the major ethnic conflicts in the north are justified under the idea that some groups are “indigenes” and others are “settlers” to a particular area, which has some legal and political substance due to language in the 1999 Constitution.

With respect to the farmer-pastoralist conflict, politics plays a role in that local leaders will often foment conflict with other groups for political gain. Legal issues are also at play, since pastoralists operate with a different understanding of land tenure than farmers; pastoralists graze their cattle wherever they can find suitable land, which often means encroaching on farmer’s land. Lack of effective

political leadership to solve this fundamental disconnect on land use rights is a major cause of conflict in the north.

In the south-south and south-east, a political ineptitude and corruption with regard to the oil sector is the root cause of many conflicts in the Niger Delta, as local and regional leaders often serve the interests of international oil companies more than the interests of their constituents.