Election Violence in Zambia

Election violence plagues many democratizing polities, undermining democracy, terrorizing the population, and creating grievances between ethnic and social cleavages.

Understanding why election violence occurs, specifically in inchoate democracies, where election violence primarily occurs, can potentially lead to the mitigation of said violence and further, unimpeded democratization. Scholarly work on election violence suggests a myriad of potential factors that contribute to election violence, yet there is a general consensus that elites primarily instigate election violence and mobilize the social cleavages which engage in it. Understanding why and when elites engage in election violence is integral to understanding why some democratizing polities are plagued by election violence, whereas others are not. Many analyses of election violence use countries as the unit of analysis. Since election violence is rarely ever country wide, this approach is problematic. Instead, a constituency level approach would better allow one to analyze the causal mechanisms of violence. Using the case of Zambia, I plan on finding to what extent interparty competition incentivizes elites to instigate violence preceding, during and after elections.

Literature Review and Theory

Significant scholarly work has been devoted to violence after and during the transition to democracy. The role of institutions, ethnic and social cleavages, and state capacity are common topics in literature regarding this relationship between transition and violence. The case of Zambia is somewhat different as the 2016 election was the most violent election since the return to pluralism in 1991. Consequently, I found less scholarly work about violence occurring after a peaceful transition. Specifically, there has been little scholarly work about violence in Zambian elections. Golding and Wahman (2016) and (2018), who wrote a

qualitative paper about the violence in the 2016 election and conducted a constituency level analysis about the nomination violence prior to the 2016 elections argue that the 2016 election violence was largely a result of institutional failures, namely the electoral commissions failure to provide timely results and the PF's (Patriotic Front) heavy-handed response to unrest¹. In their 2016 analysis of nomination violence in Zambia Golding and Wahman argue intraparty competition plays a factor in election violence especially during the nomination period.² Fraser (2017) in an article discussing the characterization of the PF as populist, suggests violence in the 2015 and 2016 elections is related to uninstitutionalized parties built around the personality of a candidate, especially in the case of the PF³. Fraser also suggests increased polarization in Zambian politics and the development of militant party cultures also play a role.

Theoretical literature generally argues election violence is perpetrated by elites, but there is debate about when elites are willing to engage in election violence. Hafner-Burton, Hyde, and Jablonski argue that uncertainty about the election result and the absence of significant electoral constraints leads to election violence⁴. Uncertainty is particularly prevalent democracies in the developing world as there is a lack of information regarding public opinion and likely no or only rudimentary poling. This is especially so in the case of a democratic transition, as simply seeing opposition parties organize and operate may create a sense of uncertainty regardless of the electoral result. The other factor of Hafner-Burton, Hyde, and Jablonski's argument is the institutionalized restraints for incumbents to engage in

¹ Goldring, E. and Wahman, M. "Democracy in Reverse: The 2016 General Election in Zambia", *Africa Spectrum*, 51:3, (2016), pp. 107–121.

² Goldring, E. and Wahman, M. "Fighting for a name on the ballot: constituency-level analysis of nomination violence in Zambia", *Democratization*, 25:6, (2018), pp. 996-1015.

³ Fraser, A. "Post-populism in Zambia: Michael Sata's rise, demise and legacy". *International Political Science Review*, *38*(4), (2017). pp. 456-472.

⁴ Hafner-Burton, E., Hyde, S. and Jablonski, R. "When do Governments Resort to Election Violence?" *British Journal of Political Science*, 44:1:01, (2014), pp. 149-179.

election violence. A government in an institutionalized democracy will find it difficult to engage in violence because of the legal and institutional framework preventing this. In inchoate democracies these institutions are nascent or non-existent. The executive is often very powerful, preventing other institutions from checking them. Consequently, election violence tends to occur in consolidating and illiberal democracies. In the case of a semiconsolidated democracy, such as Zambia, one might say that an incumbent is certainly capable of engaging in violence, but there may be some framework that makes it difficult, or at the least symbolically shows the incumbent is violating the rule of law. That implies a, albeit small, risk on the incumbent's part to engage in violence. Taylor, Pevehouse, and Straus empirically support that elections with incumbents are more prone to election violence because of elite competition over clientelism but expands on the costs of engaging in violence. They argue that election violence alienates victims and their supporters, leads to international condemnation, and puts legitimacy of election as a whole into question⁵. Collier and Hoffman argue that elites have a repertoire of illicit strategies, and that choosing vote buying, fraud, and other non-violent illicit strategies is preferred to violence in some cases because violence can alienate potential "soft base" voters⁶. Other literature seems to view violence as an effective mobilization tool, but certain electorates may reject a candidate that uses violence. This is something I will address in the policy section of the paper. However, Collier and Hoffman seem to argue there is a hierarchy of illicit strategies, and incumbents would prefer to simply engage in fraud and or vote buying before resorting to violence. Roessler argues that regimes privatize violence to distance themselves from repression against domestic opposition for the purpose of maintaining income streams from foreign

⁵ Taylor, C. F., Pevehouse, J. and Straus, S., "Perils of Pluralism: Electoral Violence and Incumbency in Sub-Saharan Africa." *Journal of Peace Research*, 54:3, (2017), pp. 397–411.

⁶Collier, P., and Vicente, P., "Violence, Bribery, and Fraud: The Political Economy of Elections in Sub-Saharan Africa". *Public Choice*, 153, (2012), pp. 117–47.

donors⁷. Privatization of violence in Zambia occurs through the politicization of youth gangs. What Roessler adds to the debate is that there is consideration by elites of how international donors view their actions. There is this constant cost-benefit analysis of consolidating rule through authoritarian and illicit tactics in the face of electoral competition. Too little illicit tactics and the regime loses the elections, too much and the regime risks losing its foreign income stream.

The other body of literature seems less focused or contrary to the idea that elites face serious consequences for engaging in violence in inchoate democracies. Bekoe and Burchard find that voter turnout does not aggregately change due to pre-election violence, but is likely because violence mobilizes supporters, increasing participation, while intimidating opposition members, reducing participation. Bekoe and Burchard argue that elites will engage in violence for many different means, such as, reducing participation, punishing opposition, mobilizing support bases, etc., but do not address when elites will not engage in violence.

This is problematic as they use Kenyan election violence as their case study, where violence was restricted to only a portion of the country. Why then would elites only engage in violence in these areas? Bekoe and Burchard seem to argue it is result of there being ethnic cleavages associated with the presidential candidates (Kalenjin and Kikuyu), but in a pluri-ethnic society like Kenya, the existence of ethnic cleavages alone leading to violence would lead to much wider spread violence. Fjelde and Höglund argue that electoral system design, can increase the likelihood of violence because of the exclusion of ethno-pol groups that results

⁷ Roessler, P., "Donor-Induced Democratization and the Privatization of State Violence in Kenya and Rwanda." *Comparative Politics* 37:2, (2005), pp. 207–227.

⁸ Bekoe, D. and Burchard, S., "The Contradictions of Pre-Election Violence: The Effects of Violence on Voter Turnout in Sub-Saharan Africa." *African Studies Review*, 60:2:09, (2017), pp.73-92.

from majoritarian, low district magnitude systems⁹. Fjelde and Höglund also neglect to consider the costs of the part of elites engaging in violence. They believe that the costs and or perception of losing political control are in such absolute terms and unacceptable from a resource standpoint that election violence is undertaken whenever possible. In these cases majoritarian systems give the winner all the spoils of victory when the margin of victory could be relatively small, leading to the exclusion of potentially sizeable social/ethnic cleavages. Low district magnitude limits the chance that minorities can contest seats and be included in politics. Zambia is a first past the post, single member district, electoral system, which would, according to Fjelde and Höglund, put the country at risk for conflict. However, Zambia has had several consecutive peaceful elections and peaceful transfers of power. Fjelde and Höglund's argument rests on politics being viewed as a zero-sum game in regard to access to state resources and patronage networks¹⁰. I believe this is a legitimate assessment of politics in sub-Saharan Africa. In the absence of ideology-based parties, control of resources is arguably the primary cause for contention in politics in Sub-Saharan Africa¹¹. However, the focus on factors other than elite manipulation resulting from electoral competition is a focus on simply a part of the issue, instead of the whole. I use Fjelde and Höglund as an example of a series of scholarly literature that focuses on factors which aid elites' mobilization of social and ethnic cleavages. While the majority of this literature acknowledges that elites perpetuate violence, it seems these arguments rest on the premise that elites' use of violence is dependent on the existence of these cleavages, when oftentimes the elites fabricate and politicize the cleavages in order to engage in violence.

⁹ Fjelde, H. and Höglund, K., "Electoral Institutions and Electoral Violence in SubSaharan Africa." *British Journal of Political Science*, 46:2, (2016), pp. 297-320.

¹⁰. Ibid.

¹¹ Ibid.

I view local and national elites as rational actors, and therefore, elites in democratic polities will only choose to cheat in elections when there is a significant enough fear from competition that they may lose them. Elites understand that there are consequences to using violence; therefore, elites will not use violence indiscriminately. Even in polities with weak institutions and that are permissive of violence, the use of violence negatively impacts legitimacy and long-term stability. The threat of condemnation by observers and the international community also plays a role in this. Constituencies, in which there is a dominant party or an entrenched incumbent, will be less likely to experience violence as elites understand that there is little chance constituency seat could be contested. Only when under the impression of high competitiveness will elites then use violence. In these cases, the short run benefits of engaging in violence to intimidate the opposition voters and mobilize support will outweigh the loss in legitimacy from engaging in illicit strategies.

H₁ Heavily contested constituencies will be more prone to election violence.

Ethnic cleavages, socio-economic status, population density, ethnic heterogeneity and history of grievances or violence are means through which elites mobilize social cleavages to engage in violence but are not causal mechanisms. The ease in which elites engage in violence is certainly determinant on characteristics of the populous within the constituency. There needs to be social or ethnic cleavages to mobilize, but these cleavages can be non-politicized and have no history of collective action beforehand. Consequently, the idea of there being primordial hatreds or animosities between social cleavages, simply accentuated and stressed by elections, is baseless. Elites can often fabricate political identity and grievances as needed. Fabrication is a strategy not a cause. Ethnicity, class, and identity in general are tools elites use to mobilize support to engage in violence. It is a means not the causal mechanism of election violence: interparty competition. I chose to control for these variables because they facilitate elites' use of violence.

Background to Zambian Election Violence

Zambia transitioned to multiparty democracy in 1991 after 23 years of single party rule under Kenneth Kaunda and the UNIP (United National Independence Party). In the 1991 elections Kaunda was defeated by the Frederick Chiluba and the Movement for Multiparty Democracy (MMD). MMD dominance continued until 2011, when former MMD dissident Michael Sata and his new party, the PF (Patriotic Front), won the presidency and control of the National Assembly. Michael Sata died in office in 2014, leading to a succession crisis within the PF, from which Edgar Lungu emerged the nominee. The 2015 by-elections were extremely contentious, with Lungu beating the UPND (United Party for National Development) candidate Hakainde Hichilema, 48% to 46.6 %. The 2015 by-election was unprecedented because of outbreaks of violence during the elections, as violence during elections before then had been rare in Zambia¹².

The 2016 Zambian general election was a repeat of the 2015 presidential by-election, Lungu vs. Hichilema. The results were again marginal, with Lungu beating Hichilema 50.3% to 47.6%. The PF won the National Assembly with 80/156 seats, the UPND won 58. The MDD won 3. This reflects a condensation of political parties and the collapse of the MDD as a viable party as for the remaining 15 seats, 14 went to independents. Zambian politics also has a tradition of independents being integrated or bought in to existing parties, so many of these "independents are de facto PF or UNIP members¹³. In the aftermath of the 2016 election there was a widely held perception that the election result was fraudulent. The Zambian Electoral Commission (ZEC), ambitiously, declared they would be able to release

¹² Goldring, E. and Wahman, M. "Democracy in Reverse: The 2016 General Election in Zambia", *Africa Spectrum*, 51:3, (2016), pp. 107–121.

¹³ Fraser, A. "Post-populism in Zambia: Michael Sata's rise, demise and legacy". *International Political Science Review*, *38*(4), (2017). pp. 456-472.

results 48 hours after the last polling station closed¹⁴. They failed to do so, creating suspicion that was only reinforced when the incumbent, Lungu, winning .3% above the margin to avoid a runoff election, as per the 2015 reform¹⁵. Violence was exceptionally prevalent in with Lusaka, Southern, Western, and Copperbelt provinces all experiencing large demonstrations, riots, vandalism, and police repression¹⁶. International monitors reported little issue with the polling beyond delays but were concerned with state media bias towards the incumbent PF and Lungu¹⁷.

Application of Theory

Increased electoral competition resulting from the decline of MMD dominance and increasing polarization between the PF and UNPD, as well as the normalization of illicit electoral tactics has led to elites engaging in violence during elections in Zambia. Elites are rational actors, they weigh the costs of using violence rather than simply engaging in it because they can or that it would be beneficial to them. Even though there are some distinctions between election violence and civil war, understanding election violence as a tactic can be understood through Kaylvas' explanation of violence against civilians during the Algerian Civil War. To Kalyvas, use of violence against civilians by insurgents is selective and primarily engaged in contentious neighborhoods in which neither side has control in order to maximize support for the insurgents and prevent defections to the government 18.

There is an intentionality to violence because of the costs to engage in them. Election

¹⁴ Goldring, E. and Wahman, M. "Democracy in Reverse: The 2016 General Election in Zambia", *Africa Spectrum*, 51:3, (2016), pp. 107–121.

¹⁵ Fraser, A. "Post-populism in Zambia: Michael Sata's rise, demise and legacy". *International Political Science Review*, *38*(4), (2017). pp. 456-472.

¹⁶ Goldring, E. and Wahman, M. "Democracy in Reverse: The 2016 General Election in Zambia", *Africa Spectrum*, 51:3, (2016), pp. 107–121.

¹⁷ Mwakideu, C., "Election observers in Zambia report media 'biased' in vote" *Deutsche Welle*, 13.08.2016 https://www.dw.com/en/election-observers-in-zambia-report-media-biased-in-vote/a-19473207

¹⁸ Kalyvas, S. "Wanton and Senseless? The Logic of Massacres in Algeria," *Rationality and Society*, 11:3 (1999), pp. 243-285.

violence is rarely nationwide. It is limited to contentious districts with mobilizable cleavages. In the past two elections, the polarized nature of electoral politics in Zambia had created a geographical divide party identification. PF strongholds are in the Eastern half of the country, the UNPD in the Eastern. There is violence in the centrally located provinces of Lusaka, Central, Copperbelt, and Southern because these are continuous areas where both parties stand a chance to win. Fraser argues Zambian politics have become very polarized¹⁹, and as a result there is little competition in most of the country, which makes the few contested constituencies of the utmost importance to winning elections. Fraser further argues it was the UNPD's election to win, as PF support was fragmented, and the country was experiencing economic troubles²⁰. This likely lead to Lungu and PF associated elites feeling compelled to use illicit electoral strategies and violence to contest the election

Polarization of the Zambian political spectrum and PF weakness created a much more contentious electoral arena, making violence inevitable. Fraser argues the PF's success stems from Sata's populist program that intentionally chose policy contrary to the MMD's²¹. The MMD is often characterized as a technocratic, non-ideologically motivated party. Fraser argues the PF's success stems from Sata's populist program that intentionally chose policy contrary to the MMD's. This is in line with LeBas' argument that polarization is a short run elite strategy to prevent fragmentation and mobilize communities²². While carpet crossing is relatively commonplace in Zambian politics, intraparty competition is much rarer²³.

Consequently, electoral politics is viewed as an absolute PF or UNPD struggle, which only

¹⁹ Fraser, A. "Post-populism in Zambia: Michael Sata's rise, demise and legacy". *International Political Science Review*, *38*(4), (2017). pp. 456-472.

²⁰Ibid.

²¹ Ibid.

²² LeBas, A. "Polarization as Craft: Explaining Party Formation and State Violence in Zimbabwe." *Comparative Politics*, 38:4, (2006), pp. 419-38.

²³ Fraser, A. "Post-populism in Zambia: Michael Sata's rise, demise and legacy". *International Political Science Review*, *38*(4), (2017). pp. 456-472.

reinforces Fjelde and Höglund's argument that political elites view elections as a do-or-die struggle²⁴. LeBas' argument that polarization is not a reflection of competition, but a strategy to be competitive is an explanation of the PF's unexpected overthrow of MMD dominance. This challenges my argument that electoral competition leads to violence, as increased competition would not be the cause of the more polarized and contentious political arena in Zambia. But once the political arena has been polarized enough, competition becomes synonymous with violence, as in LeBas' case of Zimbabwe. Additionally, I question how much blame can be placed on the PF's party program for the 2016 election violence. Regardless, if the political gridlock and radicalization resulting from polarization eventually normalizes violence, Zambia's democratization is certainty under threat.

While violence prior to 2015 was rare in Zambia, it was not non-existent. Violence in Zambia has developed over the past several elections, contrary to the perception it began only during the 2015 by-elections. Literature points to parties use of militant youth wings, contentious and non-institutionalized nomination processes, and clashes between security forces and protesters prior to 2015 and 2016 elections. Fraser suggests it may be an escalation from parties integrating violent political entrepreneurs. Fraser uses the example of William Banda, a local elite associated with youth gangs, being integrated into the MMD²⁵. Banda's "Call Boys" then engaged in harassment, intimidation, and vandalism towards PF supporters. This soon escalated as the PF sought to militarize its own youth wings and mobilize the large social cleavage of unemployed, urban youths. Guy Scott, Sata's vice president, even reflected on this decision to engage in contentious, violent politics:

My other condition was 'get rid of violence' [...] I admit part of it is my fault because when I wanted William Banda out of Bauleni, I went and recruited

²⁴ Fjelde, H. and Höglund, K., "Electoral Institutions and Electoral Violence in SubSaharan Africa." *British Journal of Political Science*, 46:2, (2016), pp. 297-320.

²⁵ Fraser, A. "Post-populism in Zambia: Michael Sata's rise, demise and legacy". *International Political Science Review*, *38*(4), (2017). pp. 456-472.

people and say [sic] 'can you protect the people in Bauleni' but they themselves became thugs. I apologise, because they thought they were more powerful than police, so they started getting money from buses. (Mataka, 2016)²⁶

The issue of demobilizing these youth groups is problematic. Agbiboa in his article about Lagos youth gangs, Agberos, explains how once unemployed, urban youths are politicized and exposed to material benefits, demobilizing them is quite difficult²⁷. In the absence of political patronage these groups will seek out rents from society, leading to grievances and tensions, and the potential for further low intensity violence. I think it is also a question of if the political actors want to demobilize these groups. Particularly undisciplined call boys can be prosecuted by the law, with little damage to the party, due to their distance from the party. Elites' privatization of violence and militarization of groups will continue as it has become a norm of elective competition. This process is reinforcing over election cycle and it is evident that the state and electorate are permissive of this electoral strategy. The continued high competition between the PF and UNDP will warrant further use of militarized youths.

One of the reasons I control for unemployment in my model is the continuity of militarized youth wings in Sub-Saharan Africa Politics. Mehler argues that youth gangs, using the example of the voyous in Côte d'Ivoir, allow for parties to privatize violence, and mobilize political support²⁸. Bob-Milliar addresses more official youth wings in politics using "party foot soldiers" in Ghana in respect to the proliferation of "low intensity violence" 19.

The role of youth wings is complex as they are often integral in maintaining high amounts of participation. Bob-Milliar notes that foot soldiers spread information about candidates

²⁶Fraser, A. "Post-populism in Zambia: Michael Sata's rise, demise and legacy". *International Political Science Review*, *38*(4), (2017). pp. 456-472.

²⁷ Agbiboa, D. "Informal Urban Governance and Predatory Politics in Africa: The Role of Motor-Park Touts in Lagos." *African Affairs*, 117:466, (2018), pp. 62–82.

²⁸ Mehler, A. "Political Parties and Violence in Africa" in Basedau, M., Erdmann, G. & Mehler, A., eds., *Votes, Money and Violence: Political Parties and Elections in Sub-Saharan Africa* (2007), pp. 194-223.

²⁹ Bob-Milliar, G., "Party Youth Activists and Low-Intensity Electoral Violence in Ghana: A Qualitative Study of Party Foot Soldiers' Activism" *African Studies Quarterly*, 15:1, (2014), pp. 125-152.

through door-to-door canvassing. They also repress participation, through intimidation, harassment, and ballot box stealing³⁰. These groups are easily mobilized because they are ironically apolitical, as politics to them is an opportunity for material benefits and social advancement. In fact, their exclusion from party functions and decisions are what makes politicized youths so useful to elites. Normally mobilization of social cleavages means elites will have to tailor their campaign and platform. For youth groups this is not the case beyond basic clientelist relationships³¹. Scholars have noted that there is a relationship between youth bulges and conflict. Zambia has a youth unemployment rate (20-24) of 23.5 % ³². Continued economic stagnation and or the "growth without jobs phenomenon" that often results from neoliberal macroeconomic policy will let this material motivated, easily mobilized, social cleavage remain central in interparty competition and conflict. However, while the trend of militarized youth wings is important to understanding the escalation of conflict, their existence is not determinant of it. Rather, political elites recognize the political utility and relative ease of mobilization of unemployed youth social cleavages. Banda and other political elites introduced politized, violent youth wings to electoral competition. This then started an arms race between parties, which led to the proliferation of predatory groups. The trend of escalating violence is a product of elite manipulation and short-term electoral strategy which resulted from increased competition. Violence and the grievances resulting from illicit electoral tactics, such as militarized youth wing, s has a relationship with future proliferation of violence as I show through my statistical analysis.

The perception that the PF engaged in election fraud and appropriated state resources instigated the 2016 election violence. Whether the PF engaged in fraud debatable, but their

³⁰ Bob-Milliar, G., "Party Youth Activists and Low-Intensity Electoral Violence in Ghana: A Qualitative Study of Party Foot Soldiers' Activism" *African Studies Quarterly*, 15:1, (2014), pp. 125-152.

³² 2010 Census of Population and Housing

conduct reflects a reaction that would only occur when potentially losing the election. L. Laasko argues that election fraud is a causal mechanism to violence, because the opposition challenging the results can lead to riots and state repression³³. Opposition parties and supporters feel that the state has undermined the democratic process. This creates grievances because groups are excluded from power and feel a sense of injustice, which can be an effective cause for elites to mobilize around. The conduct of state institutions was dubious. The ZEC failed to provide results in a timely manner, regardless of their self-imposed deadline³⁴. UNIP riots were met with heavy handed responses by state authorities³⁵. Independent media coverage was heavily restricted during the election³⁶. The UNIP candidate, Hakainde Hichilima, was imprisoned for treason during the election under what would normally constitute a traffic violation³⁷. He was not released until 100 days after the election. The UNIP challenged the results in the Supreme Court but lost their appeal 3-2. The UNIP's failed attempt to use formal channels to challenge the election added to the perception that the PF was maintaining power through illicit means. This perception of an unlevel playing field is cause for grievance because the absence of winnable elections is effectively electoral exclusion.

The violence resulting from the 2016 and 2015 elections was not related to ethnicity. Fraser argues that tribalism is taboo in Zambian politics, citing the outrage and defections that resulted from a UNDP succession from a member of the Tonga ethnic group, Mazoka, to

³³ Laakso, L. "Insights into electoral violence in Africa" in Basedau, M., Erdmann, G. & Mehler, A., eds., *Votes, Money and Violence: Political Parties and Elections in Sub-Saharan Africa* (2007), pp. 224-252.

³⁴ Goldring, E. and Wahman, M. "Democracy in Reverse: The 2016 General Election in Zambia", *Africa Spectrum*, 51:3, (2016), pp. 107–121.

³⁵ In Fraser, A. "Post-populism in Zambia: Michael Sata's rise, demise and legacy". *International Political Science Review*, *38*(4), (2017). pp. 456-472.

³⁶ Goldring, E. and Wahman, M. "Democracy in Reverse: The 2016 General Election in Zambia", *Africa Spectrum*, 51:3, (2016), pp. 107–121.

³⁷ Mwakideu, C., "Election observers in Zambia report media 'biased' in vote" *Deutsche Welle*, 13.08.2016 https://www.dw.com/en/election-observers-in-zambia-report-media-biased-in-vote/a-19473207

Hichilema, also a Tonga³⁸. The PF has used these accusations of tribalism to delegitimize the UNDP. While diverse national tickets seem to be the norm, ethnicity plays a role on the constituency level. However, there are Bemba, Lozi, etc. candidates in both parties.

Consequently, while politics certainly have an ethnic aspect to them in Zambia, I found Western and Southern Provinces have some of the lowest ethnic heterogeneity scores in the country³⁹. Instances of violence recorded in the ACLED as well as Golding and Wahman's and Fraser's accounts of the election violence referred to the parties exclusively in partisan terms. In this way Zambia is an interesting case study. Zambia is a counterexample to the idea that ethnic heterogeneity is the sources of conflict in democratization. In fact, because of the high ethnic fragmentation, no ethnic group is significantly large enough to warrant ethnic parties and exclusion on the national level. Rather, ethnic diversity in the case of Zambia may potentially work against ethnic violence.

Model:

I used constituency level results from the Constituency Level Election Archive (CLEA)⁴⁰. The CLEA has constituency level vote shares and other electoral data for 168 countries. I calculate effective number of parties (ENoP) using Laakso and Taagepera's model⁴¹. ENoP is the measurement of the hypothetical number of parties a political system, or in this case a constituency, can maintain. I use ENoP to measure how competitive a field would look to a candidate. In a constituency with a relatively high ENoP a candidate may feel uncertain about his or her ability to win the seat, therefore, he would be willing to take the risk of engaging in violence.

³⁸ Goldring, E. and Wahman, M. "Democracy in Reverse: The 2016 General Election in Zambia", *Africa Spectrum*, 51:3, (2016), pp. 107–121.

³⁹ See index on pg. 26

⁴⁰ http://www.electiondataarchive.org/

⁴¹ Laakso, M., & Taagepera, R. "The "Effective" Number of Parties: A Measure with Application to West Europe". *Comparative Political Studies*, 12(1), 3. (1979).

I then took political violence data from the Armed Conflict Location & Event Data Project (ACLED)⁴², a cross national violence and conflict dataset. I made the assumption that all political violence on an election year was in some way related to the election itself. This is certainly a flaw in the model but picking and choosing from a secondary source is very subjective. I selected violence from 2016 and 2011 as they are both election years with histories of violence, especially in the case of 2016. The 2015 and 2008 presidential elections were not used as units of analysis despite instances of violence and high levels of competition because no constituency seats were contested. ACLED reports the location of violence based on administrative location. I made an addition to the ACLED data by finding the constituency that applied to the location of violence. This was largely unproblematic, except in the case of large urban centers, namely Lusaka and Kitwe, as they constituted multiple constituencies. My attempt to account for this was to average the ENoP of the constituencies which made up these urban centers and sum all violence that occurred there.

Controls for my model were ethnic heterogeneity, unemployment, population density, and previous incidents of electoral violence. Taylor, Pevehouse, and Straus did not find a significant relationship between previous violence and election violence⁴³, but other literature suggests a link between past and current violence. Wahman found that violence is common in rural settings in Zambia by controlling for population density; however, he discussed problems with finding said relationship when using ACLED data⁴⁴. The mobilizational capacity for ethnic cleavages is a common topic in conflict research. So, I control for ethnic diversity. As discussed in my analysis of Zambia, youth cleavages play an instrumental role

⁴² https://www.acleddata.com/

⁴³ Taylor, C. F., Pevehouse, J. and Straus, S., "Perils of Pluralism: Electoral Violence and Incumbency in Sub-Saharan Africa." *Journal of Peace Research*, 54:3, (2017), pp. 397–411.

⁴⁴ Goldring, E. and Wahman, M. "Fighting for a name on the ballot: constituency-level analysis of nomination violence in Zambia", *Democratization*, 25:6, (2018), pp. 996-1015.

in violence. Unfortunately, census data provides youth unemployment only at the national level. However, poverty is a useful analysis as per scholarly literature. Strauss and Wahman both controlled for poverty in their analysis and did not find a relationship. However, L. Laakso argues that it is not necessarily how poor a community is that determines violence, but that relative deprivation does play a role⁴⁵. Granted, unemployment does not model relative deprivation perfectly, but the assumption that not having employment, when the Zambian government promises job growth, is a grievance associated with relative deprivation is reasonable. The data for these demographic factors was found in the 2010 Zambian Census, which is the most recent census conducted to these elections. The Zambian Census does not record constituency level demographic data, consequently, I apply the census data to a constituency based on its provincial location. For example, Chifubu constituency in Copperbelt province has an unemployment rate of 22.1% because that is the unemployment rate in all of Copperbelt. Ethnic heterogeneity was calculated using ENoP model but with ethnic groups instead of political parties as per Lublin's approach⁴⁶, and is denoted EREG, (effective regional ethnic groups).

I then ran a multivariate regression analysis of the relationship ENoP has on the occurrence of violence for the 2011 and 2016 elections respectively. As stated before, controls were ethnic heterogeneity, unemployment, and population density. But for the 2016 regression I included the previous occurrence of election violence in 2011 as a dichotomous variable (viol_2011).

H_{0a} There is no statistical relationship between ENoP and violence for the 2011 and 2016 Zambian Elections

⁴⁵ Laakso, L. "Insights into electoral violence in Africa" in Basedau, M., Erdmann, G. & Mehler, A., eds., *Votes, Money and Violence: Political Parties and Elections in Sub-Saharan Africa* (2007), pp. 224-252.

⁴⁶ Lublin, D. "Electoral Systems, Ethnic Heterogeneity and Party System Fragmentation". *British Journal of Political Science*, 47:2, (2017)., pp. 373-389.

 $\mathbf{H_{1a}}$ There is a statistical relationship between ENoP and violence for the 2011 and 2016 Zambian Elections

$$ENoP = \frac{1}{\sum pi^2}$$

$$ENEG = \frac{1}{\sum pi^2}$$

$$\textbf{Lusaka AVG} = \frac{(\textit{Chawama} + \textit{Lusaka Central} + \textit{Mandevu} + \textit{Matero} + \textit{Munali})}{5}$$

$$\textbf{Kitwe AVG} = \frac{(\textit{Kamfinsa} + \textit{Kwacha} + \textit{Wusakile} + \textit{Nkana})}{4}$$

Results

2016 Election Regression

| Indep var. | Estimate | Std. Error | t-Value | P-Value |
|---------------------|------------|------------|------------|-----------|
| : | : | : | : | : |
| (Intercept) | -0.0986952 | 0.7456385 | -0.1323634 | 0.8948804 |
| ENoP_2016 | -0.1059497 | 0.1463831 | -0.7237836 | 0.4703647 |
| viol_2011 | 3.6299561 | 0.7620627 | 4.7633296 | 0.0000046 |
| ethnic_heterogenity | 0.0118387 | 0.1023925 | 0.1156212 | 0.9081127 |
| popdensity | 0.0080921 | 0.0146244 | 0.5533311 | 0.5808889 |
| unemployed | 0.0543685 | 0.0703417 | 0.7729206 | 0.4408275 |

I fail to reject the null hypothesis. The relationship between ENoP and occurrence of violence was not statistically significant for either election, and, interestingly, negative. There was no statistically significant relationship for any of my controls with the exception of previous violence in 2011.

Interpretation:

While I found no relationship between election violence and effective number of parties, that does not necessarily mean that increased electoral competition is not the cause of the 2016 election violence in Zambia. I will discuss flaws with my model, and avenues for a more meaningful way to measure this relationship. However, I think it is also important to consider my application of the 2016 Zambian election to my theory.

Was the relationship between past violence and 2016 election violence the result of past grievances or is there another characteristic or a characteristic, poorly accounted for in my model, of these constituencies that make them especially prone to violence? If more work can be done to determine that previous instances of violence caused election violence in 2016, this has implications for the quality of Zambian democracy in the near future. 2011 had a relatively small number of instances violence - 33. In 2016 violence was limited to a few provinces, but the frequency was much higher – 126. This could mean that more violence will occur in 2021.

Further research:

Is ENoP a meaningful measure of competition for effectively a two-party race? ENoP measures do not reflect the electoral reality, just the number of hypothetically effective parties. Even if there is a high ENoP, a district may be won relatively easily. Potentially finding the difference between the two most competitive candidates would have been more effective. Although, at the constituency level it was often more than a two-candidate race for the seat. Additionally, setting categories for competition, margin of victory >5%, is subjective. From my understanding, there are some models that weigh towards the winning party more, which may be more effective in this case.

Demographic data was especially problematic as I lacked constituency level demographic data. For effective number of ethnic groups, the generalization of provincial

level data is especially problematic as ethnic cleavages are often geographically continuous. For example, if people identifying as the Lenje ethno-linguistic group only constitute 9.5 % of Central Provence, they would likely not make up 9.5% in every district, rather one or two constituencies may by >50 % Lenje, and the rest may be < 1%. This naturally has implications for ENEG because it means constituency level ENEG is likely much lower than provincial. ACLED data also was problematic. The majority of violence recorded was urban, which made my averaged ENoP measures for Lusaka and Kitwe very important, despite their ENoP measurements being less meaningful than non-averaged constituencies. I think Wahman's approach of surveying election monitors about violence at a constituency level would be more effective, as Wahman found more instances of rural violence than ACLED⁴⁷ and he was able to place violence accurately in constituencies.

While this model is certainly flawed, I do question if there may be a statistical relationship between election violence and ENoP in cases where the instances of violence are much more prolific and dispersed. Election violence in Zambia was almost entirely in four provinces, and effectively absent in the other six. A case such as Kenya may prove more applicable. Additionally, Zambia may be an exception, and the data sets do allow for a greater cross-national comparison, which is warranted, as the sample size of two elections and 159 instances of violence is not large enough. The 2015 Zambian by-elections may be of interest too, due to its proximity to the 2016 election and the very close result.

Policy

While Taylor, Pevehouse and Straus found no relationship between the presence of observers and election violence, there has been a strong argument for the use of election monitors in conflict situations. Election monitors can increase public trust in the results and

⁴⁷ Goldring, E. and Wahman, M. "Fighting for a name on the ballot: constituency-level analysis of nomination violence in Zambia", *Democratization*, 25:6, (2018), pp. 996-1015.

electoral process. von Borzyskowski found that violence is more likely when monitors expose election fraud, because the oppositions challenge of the result is perceived as more legitimate⁴⁸. Technical assistance can implead manipulation and strengthen institutional capacity for elections⁴⁹. This would have certainly been helpful in reducing the ZEC's delays in polling and providing results. However, election advisors found the actual voting process legitimate, yet the UNPD still challenged results. The flaws mainly rested in the incumbent party abusing state resources for campaigning, which is more of a reflection of the PF's disregard for democratic norms than actual election fraud. Despite the theoretical utility of election advisors, their presence proved ineffective in preventing violence.

Civic education is another potential policy solution to election violence. Finkel argues that civic education efforts can have positive long-term effects on perceptions of political agency, democracy, and responses to violence⁵⁰. I also question if civic education in this respect would impact the likelihood of further violence in Zambia. The issue is not lack of civic engagement or anti-democratic sentiments, political participation is declining but still high in Zambia⁵¹. However, elites do not engage in violence when there are electoral consequences. If civic education programs can lead the Zambian electorate to reject candidates and parties that utilize violence, there may be a return to peaceful elections in Zambia.

Conclusion

⁴⁸ von Borzyskowski, I. "A Double-Edged Sword: International Influences on Election Violence." Order No. 10128845, The University of Wisconsin - Madison. (2014.)

⁴⁹ Daxecker, U. "The cost of exposing cheating: International election monitoring, fraud, and post-election violence in Africa". *Journal of Peace Research*, 49:4, (2012), pp. 503–516.

⁵⁰ Finkel, S., Horowitz J., and Rojo-Mendoza, R., "Civic Education and Democratic Backsliding in the Wake of Kenya's Post-2007 Election Violence." *The Journal of Politics*, 74:01, (2012), pp. 52-65.

⁵¹ Goldring, E. and Wahman, M. "Democracy in Reverse: The 2016 General Election in Zambia", *Africa Spectrum*, 51:3, (2016), pp. 107–121.

While there was no relationship between violence and ENoP in the Zambian 2016 election, elite manipulation has normalized the use of violence in political competition. The emergence of violence as an electoral tactic by political elites is a reaction to the highly polarized, and highly competitive political arena in Zambia. This is certainly disconcerting as Zambia had until recently experience a very successful and peaceful transition to multiparty democracy. Regarding the 2021 election, there are several questions. Will it be a repeat of 2016; a contentious PF vs. UNDP election with the same candidates? Hichilima has unsuccessfully contested the presidency time now, and the UNPD might seek to run a different ticket in 2021. Will Lungu and the governing PF continue to express authoritarian tendencies in response to electoral threats? Given my findings, the damage may already be done. The 2015 and 2016 elections created grievance which will entrench violence in areas where there is a history of it. The case of Zambia may be a warning and unpleasant realization in regard to peaceful, democratizing polities. Democratization is not a process that simply progresses over time. There can be reverses, regressions, and even degenerations into instability and or authoritarianism. Additionally, election violence could be a reflection of democratic institution and norms in Zambia being more of a façade than a reality. When a ruling party and incumbent elites think they do not face a significant electoral threat, there is no reason they should not abide by democratic norms, as democratic norms bring legitimacy. However, in the case of extremely contentious electoral competition, like in Zambia, these illicit electoral strategies may prove irresistible in certain cases.

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Data Index

https://github.com/dmecklin/Election-Violence

| cst_n | cst | ENoP_2016 | ENoP_2011 | viol 2016 | n 2016 | viol 2011 | n 2011 | ethnic_heterogenity | popdensity | unemployed |
|--------------------|-----|------------------|------------------|-----------|--------|-----------|--------|--------------------------------------|------------|------------|
| BAHATI | 1 | 1.49639988727879 | 1.79354891142602 | 0 | 0 | 0 | 0 | 4.21645598441598 | 19.6 | 7.7 |
| BANGWEULU | 2 | 2.46931467160722 | 1.70922135907207 | 0 | 0 | 0 | 0 | 4.21645598441598 | 19.6 | 7.7 |
| BWACHA | 3 | 2.66808271405373 | 4.32301140334941 | 0 | 0 | 0 | 0 | 9.087026452334 | 13.8 | 12.7 |
| BWANA MKUBWA | 4 | 2.1024851114341 | 2.08170749131846 | 0 | 0 | 0 | 0 | 6.5705612573426 | 63 | 22.1 |
| BWEENGWA | 5 | 1.09053439552258 | 1.68577247887523 | 0 | 0 | 0 | 0 | 1.78619592068576 | 18.6 | 12.1 |
| CHADIZA | 6 | 4.23703395463371 | 2.63108073140041 | 1 | 3 | 0 | 0 | 4.03160780519271 | 30.9 | 8.8 |
| CHAMA NORTH | 7 | 1.6127061126974 | 6.08760724852071 | 0 | 0 | 0 | 0 | 5.9984763869977 | 8.1 | 6.4 |
| CHAMA SOUTH | 8 | 2.5390774078478 | 4.65756985563977 | 0 | 0 | 0 | 0 | 5.9984763869977 | 8.1 | 6.4 |
| CHASEFU | 9 | 2.21155340032778 | 2.27804203426893 | 0 | 0 | 0 | 0 | 4.03160780519271 | 30.9 | 8.8 |
| CHAVUMA | 10 | 5.58310564917085 | 2.59259146324012 | 0 | 0 | 0 | 0 | 4.51072198616111 | 5.8 | 10.3 |
| CHAWAMA | 11 | 2.25647625038771 | 3.38533134893371 | 1 | 2 | 0 | 0 | 11.258725512272 | 100.1 | 20 |
| CHAWAMA | 12 | 3.905684649328 | 3.20797251832878 | 0 | 0 | 0 | 0 | 4.21645598441598 | 19.6 | 7.7 |
| CHIENGE | 13 | 5.56004948778759 | 2.71993074844995 | 0 | 0 | 0 | 0 | 4.21645598441598 | 19.6 | 7.7 |
| CHIFUBU | 14 | 2.80028221414172 | 3.04186026429096 | 0 | 0 | 0 | 0 | 6.5705612573426 | 63 | 22.1 |
| CHIFUNABULI | 15 | 3.5257443680614 | 2.2181982797646 | 0 | 0 | 0 | 0 | 4.21645598441598 | 19.6 | 7.7 |
| CHIKANKATA | 16 | 1.47164180671206 | 2.50818153506725 | 0 | 0 | 0 | 0 | 1.78619592068576 | 18.6 | 12.1 |
| CHILANGA | 17 | 3.24919862990797 | 5.67886224864853 | 0 | 0 | 0 | 0 | 11.258725512272 | 100.1 | 20 |
| CHILILABOMBWE | 18 | 2.82264721571363 | 2.8598037931418 | 1 | 2 | 0 | 0 | 6.5705612573426 | 63 | 22.1 |
| CHILLIABOMISWE | 19 | | | 0 | 0 | 0 | 0 | | 14.2 | 6.3 |
| CHILUBI | _ | 3.34536427999052 | 2.08140838313512 | 0 | 0 | 0 | 0 | 3.10264158904892 3.10264158904892 | 14.2 | 6.3 |
| | 20 | 2.55610989902102 | 3.31056272577875 | - | | 0 | | | 63 | |
| CHIMWEMWE | 21 | 4.57165217538284 | 2.05901056697201 | 0 | 0 | 0 | 0 | 6.5705612573426 | 63 | 22.1 |
| CHINGOLA | 22 | 4.34553241157929 | 3.45296085563422 | 1 | 1 | | | 6.5705612573426 | | 22.1 |
| CHINSALI | 23 | 1.43469446741497 | 2.09996736130403 | 0 | 0 | 0 | 0 | 5.9984763869977 | 8.1 | 6.4 |
| CHIPATTA | 24 | 2.48441485093826 | 2.88362471337597 | 0 | 0 | 0 | 0 | 4.03160780519271 | 30.9 | 8.8 |
| CHIPATA CENTRAL | 25 | 3.24244890486636 | 3.41805219802122 | 0 | 0 | 0 | 0 | 4.03160780519271 | 30.9 | 8.8 |
| CHIPILI | 26 | 3.56312857002105 | 1.92456446587598 | 0 | 0 | 0 | 0 | 4.21645598441598 | 19.6 | 7.7 |
| CHIRUNDU | 27 | 1.87304745334997 | 4.92674627055607 | 0 | 0 | 0 | 0 | 11.258725512272 | 100.1 | 20 |
| CHISAMBA | 28 | 2.71501074211224 | 4.71215396714247 | 0 | 0 | 0 | 0 | 9.087026452334 | 13.8 | 12.7 |
| CHITAMBO | 29 | 1.46217329896164 | 2.98875896240463 | 0 | 0 | 0 | 0 | 9.087026452334 | 13.8 | 12.7 |
| CHOMA CENTRAL | 30 | 1.356673998617 | 3.1128302434976 | 1 | 7 | 0 | 0 | 1.78619592068576 | 18.6 | 12.1 |
| CHONGWE | 31 | 3.64154549811835 | 1.23691271197346 | 1 | 3 | 0 | 0 | 11.258725512272 | 100.1 | 20 |
| DUNDUMWEZI | 32 | 1.73945812919531 | 4.16089859689165 | 0 | 0 | 0 | 0 | 1.78619592068576 | 18.6 | 12.1 |
| FEIRA | 33 | 5.56181492516543 | 2.79096913795819 | 0 | 0 | 0 | 0 | 11.258725512272 | 100.1 | 20 |
| GWEMBE | 34 | 1.17131435479383 | 2.68410972899666 | 0 | 0 | 0 | 0 | 1.78619592068576 | 18.6 | 12.1 |
| IKELENG'I | 35 | 1.63579055402047 | 3.81223306119916 | 0 | 0 | 0 | 0 | 4.51072198616111 | 5.8 | 10.3 |
| ISOKA | 36 | 1.95434420611137 | 3.30786947771338 | 0 | 0 | 0 | 0 | 5.9984763869977 | 8.1 | 6.4 |
| ITEZHITEZHI | 37 | 1.49293564159593 | 5.19380420581433 | 0 | 0 | 0 | 0 | 9.087026452334 | 13.8 | 12.7 |
| KABOMPO | 38 | 1.81280704002734 | 4.71580815664636 | 0 | 0 | 0 | 0 | 4.51072198616111 | 5.8 | 10.3 |
| KABUSHI | 39 | 1.7111616738757 | 2.46184666248211 | 0 | 0 | 0 | 0 | 6.5705612573426 | 63 | 22.1 |
| KABWATA | 40 | 3.10225610800435 | 1.79880380297878 | 1 | 1 | 0 | 0 | 11.258725512272 | 100.1 | 20 |
| KABWE CENTRAL | 41 | 2.39374224921322 | 3.26734042374168 | 1 | 7 | 0 | 0 | 9.087026452334 | 13.8 | 12.7 |
| KAFUE | 42 | 3.76789513046093 | 8.43373931339379 | 1 | 2 | 1 | 1 | 11.258725512272 | 100.1 | 20 |
| KAFULAFUTA | 43 | 6.7326098637058 | 2.86677972213694 | 0 | 0 | 0 | 0 | 6.5705612573426 | 63 | 22.1 |
| KALABO CENTRAL | 44 | 2.05270039283345 | 5.31984392031002 | 0 | 0 | 0 | 0 | 3.55515105836847 | 7.1 | 7.7 |
| KALABO CENTRAL | 45 | 3.29957381298805 | 4.62533390066309 | 1 | 3 | 0 | 0 | 1.78619592068576 | 18.6 | 12.1 |
| CENTRAL | 43 | 3.27731301270003 | 7.0233330000309 | 1 | , | | " | 1.70017372000370 | 10.0 | 12.1 |
| KALULUSHI | 46 | 5.48529277969354 | 2.38803460478463 | 0 | 0 | 1 | 3 | 6.5705612573426 | 63 | 22.1 |
| KAMFINSA | 47 | 2.9816673050674 | 2.07614318161351 | 0 | 0 | 0 | 0 | 6.5705612573426 | 63 | 22.1 |
| KANCHIBIYA | 48 | 1.49235131111476 | 4.3343252614681 | 0 | 0 | 0 | 0 | 5.9984763869977 | 8.1 | 6.4 |
| KANKOYO | 49 | 2.80009507503137 | 2.29742834752441 | 0 | 0 | 0 | 0 | 6.5705612573426 | 63 | 22.1 |
| KANTANSHI | 50 | 2.3492875220659 | 2.05248436108642 | 0 | 0 | 0 | 0 | 6.5705612573426 | 63 | 22.1 |
| KANYAMA | 51 | 3.70484294768505 | 3.43336970886789 | 1 | 1 | 1 | 3 | 11.258725512272 | 100.1 | 20 |
| KAOMA CENTRAL | 52 | 2.74658808089821 | 4.74291001954923 | 1 | 2 | 0 | 0 | 3.55515105836847 | 7.1 | 7.7 |
| KAPIRI MPOSHI | 53 | 4.1454837055374 | 4.1171654015638 | 1 | 2 | 0 | 0 | 9.087026452334 | 13.8 | 12.7 |
| KAPOCHE | 54 | 2.38389164832119 | 1.96487959310469 | 0 | 0 | 0 | 0 | 4.03160780519271 | 30.9 | 8.8 |
| KAPUTA | 55 | 3.21544239428602 | 2.80863839863361 | 0 | 0 | 0 | 0 | 3.10264158904892 | 14.2 | 6.3 |
| KASAMA | 56 | 1.93237006095638 | 1.43666991637559 | 1 | 3 | 0 | 0 | 3.10264158904892 | 14.2 | 6.3 |
| CENTRAL | | 1.75257000075050 | 1.15000771057557 | 1 | | | | 5.10201130704072 | 12 | 5.5 |
| KASEMPA | 57 | 1.9092709975886 | 2.2665635796091 | 0 | 0 | 0 | 0 | 4.51072198616111 | 5.8 | 10.3 |
| KASENENGWA | 58 | 3.64457253552459 | 1.35257523593212 | 0 | 0 | 0 | 0 | 4.03160780519271 | 30.9 | 8.8 |
| KATOMBOLA | 59 | 1.27387955267707 | 3.85154379795307 | 0 | 0 | 0 | 0 | 1.78619592068576 | 18.6 | 12.1 |
| | | | | | | | | | | |

| | | | | - | | T - | T - | T | | |
|------------------------|-----|--------------------------------------|--------------------------------------|---|-----|-----|-----|--------------------------------------|-------|------|
| KATUBA | 60 | 3.49057609508045 | 4.9286918809845 | 0 | 0 | 0 | 0 | 9.087026452334 | 13.8 | 12.7 |
| KAUMBWE | 61 | 1.92155439743265 | 2.47394552466297 | 0 | 0 | 0 | 0 | 4.03160780519271 | 30.9 | 8.8 |
| KAWAMBWA | 62 | 4.16067931749957 | 2.97118539800151 | 0 | 0 | 0 | 0 | 4.21645598441598 | 19.6 | 7.7 |
| KEEMBE | 63 | 2.35037704143419 | 2.22131311170083 | 0 | 0 | 0 | 0 | 9.087026452334 | 13.8 | 12.7 |
| KWACHA | 64 | 2.11224120796848 | 4.25141534744569 | 0 | 0 | 0 | 0 | 6.5705612573426 | 63 | 22.1 |
| LIUWA LIVINGSTONE | 65 | 1.70048196975086 3.07984340949782 | 14.1708917033741 | 1 | 3 | 0 | 0 | 3.55515105836847 | 7.1 | 7.7 |
| LUAMPA | 66 | 1.7978068095085 | 13.2364081278496 3.93391097624586 | 0 | 0 | 0 | 0 | 1.78619592068576 3.55515105836847 | 7.1 | 7.7 |
| LUANGENI | 68 | 2.39873566027276 | | 0 | 0 | 0 | 0 | 4.03160780519271 | 30.9 | 8.8 |
| LUANSHYA | 69 | 2.28021356809043 | 2.77696193500546 5.17024795693387 | 1 | 2 | 0 | 0 | 6.5705612573426 | 63 | 22.1 |
| LUAPULA | 70 | 6.35849146471573 | 5.0684586358289 | 0 | 0 | 0 | 0 | 4.21645598441598 | 19.6 | 7.7 |
| LUBANSENSHI | 71 | 2.45513261132834 | 7.30612101834805 | 1 | 1 | 0 | 0 | 3.10264158904892 | 14.2 | 6.3 |
| LUENA | 72 | 3.68243368329847 | 5.29499067966804 | 0 | 0 | 0 | 0 | 3.55515105836847 | 7.1 | 7.7 |
| LUFUBU | 73 | 3.28605895144521 | 4.32623041026013 | 0 | 0 | 0 | 0 | 9.087026452334 | 13.8 | 12.7 |
| LUFWANYAMA | 74 | 3.12397171230849 | 4.03545939061323 | 0 | 0 | 0 | 0 | 6.5705612573426 | 63 | 22.1 |
| LUKASHYA | 75 | 4.7985726016683 | 2.48343008326492 | 0 | 0 | 0 | 0 | 3.10264158904892 | 14.2 | 6.3 |
| LUKULU EAST | 76 | 2.23528385166843 | 4.08305179991904 | 1 | 2 | 0 | 0 | 3.55515105836847 | 7.1 | 7.7 |
| LUMEZI | 77 | 5.56878398954994 | 4.32063163531863 | 0 | 0 | 1 | 1 | 4.03160780519271 | 30.9 | 8.8 |
| LUNDAZI | 78 | 4.89857464291904 | 3.28007649439861 | 0 | 0 | 0 | 0 | 4.03160780519271 | 30.9 | 8.8 |
| LUNTE | 79 | 1.60741998629056 | 5.71131473603361 | 0 | 0 | 0 | 0 | 3.10264158904892 | 14.2 | 6.3 |
| LUPOSOSHI | 80 | 1.79399191340931 | 2.57132319727672 | 0 | 0 | 0 | 0 | 3.10264158904892 | 14.2 | 6.3 |
| LUSAKA CENTRAL | 81 | 2.7031332463998 | 1.60547925381192 | 0 | 0 | 0 | 0 | 11.258725512272 | 100.1 | 20 |
| MAFINGA | 82 | 2.08989266556986 | 2.15224272887828 | 0 | 0 | 0 | 0 | 5.9984763869977 | 8.1 | 6.4 |
| MAGOYE | 83 | 1.16694291622515 | 3.59739110306232 | 0 | 0 | 0 | 0 | 1.78619592068576 | 18.6 | 12.1 |
| MALAMBO | 84 | 4.17398526333232 | 2.06040171702986 | 0 | 0 | 0 | 0 | 4.03160780519271 | 30.9 | 8.8 |
| MALOLE | 85 | 2.01124588795372 | 2.7651944291616 | 0 | 0 | 0 | 0 | 3.10264158904892 | 14.2 | 6.3 |
| MAMBILIMA | 86 | 7.32370119750381 | 2.5602036017113 | 0 | 0 | 0 | 0 | 4.21645598441598 | 19.6 | 7.7 |
| MANDEVU | 87 | 2.65110134051209 | 5.84850062473969 | 0 | 0 | 0 | 0 | 11.258725512272 | 100.1 | 20 |
| MANGANGO | 88 | 2.49091430197264 | 2.69676658525144 | 0 | 0 | 0 | 0 | 3.55515105836847 | 7.1 | 7.7 |
| MANSA CENTRAL | 89 | 1.32423792459387 | 2.24786332045286 | 1 | 2 | 1 | 1 | 4.21645598441598 | 19.6 | 7.7 |
| MANYINGA | 90 | 1.59361746269452 | 3.2915898011191 | 0 | 0 | 0 | 0 | 4.51072198616111 | 5.8 | 10.3 |
| MAPATIZYA | 91 | 1.09170187112856 | 2.25690706982953 | 0 | 0 | 0 | 0 | 1.78619592068576 | 18.6 | 12.1 |
| MASAITI | 92 | 3.52924304342075 | 2.38182206983381 | 1 | 1 | 0 | 0 | 6.5705612573426 | 63 | 22.1 |
| MATERO | 93 | 1.9122390229236 | 4.26127962257377 | 1 | 2 | 1 | 1 | 11.258725512272 | 100.1 | 20 |
| MAZABUKA | 94 | 1.60806123151741 | 2.30179273359028 | 1 | 1 | 0 | 0 | 1.78619592068576 | 18.6 | 12.1 |
| CENTRAL | | | | | | | | | | |
| MBABALA | 95 | 1.07849775005569 | 1.89623312421819 | 0 | 0 | 0 | 0 | 1.78619592068576 | 18.6 | 12.1 |
| MBALA | 96 | 2.74992935048483 | 2.65805393450404 | 0 | 0 | 0 | 0 | 3.10264158904892 | 14.2 | 6.3 |
| MFUWE | 97 | 1.2309163103537 | 5.81423539309514 | 0 | 0 | 0 | 0 | 5.9984763869977 | 8.1 | 6.4 |
| MILANZI | 98 | 2.46190438825854 | 6.58823523011085 | 0 | 0 | 0 | 0 | 4.03160780519271 | 30.9 | 8.8 |
| MILENGE | 99 | 2.04521233641858 | 2.71580540260428 | 0 | 0 | 0 | 0 | 4.21645598441598 | 19.6 | 7.7 |
| MITETE | 100 | 1.92544429458143 | 5.17245899609792 | 0 | 0 | 0 | 0 | 3.55515105836847 | 7.1 | 7.7 |
| MKAIKA | 101 | 3.46160625166874 | 3.15204506289074 | 0 | 0 | 0 | 0 | 4.03160780519271 | 30.9 | 8.8 |
| MKUSHI NORTH | 102 | 5.02069702178325 | 3.04062332081405 | 1 | 1 | 0 | 0 | 9.087026452334 | 13.8 | 12.7 |
| MKUSHI SOUTH | 103 | 3.93225492432422 | 3.86056854711979 | 0 | 0 | 0 | 0 | 9.087026452334 | 13.8 | 12.7 |
| MONGU CENTRAL | 104 | 1.46728307228067 | 3.36680153377885 | 1 | 1 | 1 | 4 | 3.55515105836847 | 7.1 | 7.7 |
| MONZE CENTRAL | 105 | 1.20876718152171 | 5.94242486118306 | 1 | 4 | 0 | 0 | 1.78619592068576 | 18.6 | 12.1 |
| MOOMBA | 106 | 1.34391585526346 | 3.52079096624117 | 0 | 0 | 0 | 0 | 1.78619592068576 | 18.6 | 12.1 |
| MPIKA | 107 | 1.76625860269287 | 3.58156437830256 | 0 | 0 | 0 | 0 | 5.9984763869977 | 8.1 | 6.4 |
| MPONGWE | 108 | 3.465963131543 | 1.49685035821833 | 0 | 0 | 0 | 0 | 6.5705612573426 | 63 | 22.1 |
| MPOROKOSO | 109 | 1.38921765558584 | 2.58056501861641 | 0 | 0 | 0 | 0 | 3.10264158904892 | 14.2 | 6.3 |
| MPULUNGU | 110 | 4.67708470258905 | 4.39328451099233 | 0 | 0 | 0 | 0 | 3.10264158904892 | 14.2 | 6.3 |
| MSANZALA | 111 | 3.46279844664657 | 5.09846791534631 | 0 | 0 | 0 | 0 | 4.03160780519271 | 30.9 | 8.8 |
| MUCHINGA | 112 | 1.79672277627396 | 4.13459154890599 | 0 | 0 | 0 | 0 | 9.087026452334 | 13.8 | 12.7 |
| MUFULIRA | 113 | 2.11308954812906 | 2.77318870727293 | 1 | 1 | 0 | 0 | 6.5705612573426 | 63 | 22.1 |
| MUFUMBWE | 114 | 5.87330264276576 | 3.28940305245261 | 0 | 0 | 0 | 0 | 4.51072198616111 | 5.8 | 10.3 |
| MULOBEZI | 115 | 3.87906012992062 | 1.85953519009431 | 0 | 0 | 0 | 0 | 3.55515105836847 | 7.1 | 7.7 |
| MUMBWA | 116 | 2.11400013375473 | 4.23659447085995 | 1 | 3 | 0 | 0 | 9.087026452334 | 13.8 | 12.7 |
| MUNALI | 117 | 4.5285320945283 | 3.94748857744395 | 0 | 0 | 0 | 0 | 11.258725512272 | 100.1 | 20 |
| MWANGAROMDWE | 118 | 1.89722893115357 | 3.40033303437711 | 0 | 0 | 0 | 0 | 3.55515105836847 | 7.1 | 7.7 |
| MWANSABOMBWE | 119 | 2.68358107605483 | 1.66997371822199 | 0 | 0 | 0 | 0 | 4.21645598441598 | 19.6 | 7.7 |
| MWEMBEZHI | 120 | 4.35604704468094 | 3.28562689938586 | 0 | 0 | 0 | 0 | 11.258725512272 | 100.1 | 7.7 |
| MWENSE MWINII LINGA | | 1.80553452594154 | 6.7317445207292 | | | | | 4.21645598441598 | | |
| MWINILUNGA | 122 | 1.18556041813143 | 2.27393985155009 | 0 | 0 | 0 | 0 | 4.51072198616111 | 5.8 | 10.3 |
| NAKONDE | 123 | 2.0404079341128 | 3.83437593942216 | 0 | 0 | 0 | | 5.9984763869977 | 8.1 | 6.4 |
| NALIKWANDA NALOLO | 124 | 1.35762626258641 | 2.07283147836695 3.38989231567656 | 0 | 0 | 0 | 0 | 3.55515105836847 | 7.1 | 7.7 |
| NAMWALA | 125 | 8.90302941773812 1.29270931923095 | 2.81120846046488 | _ | 0 4 | 0 | 0 | 3.55515105836847 | 7.1 | 12.1 |
| INAIVI W ALA | 126 | 1.292/0931923095 | 2.01120840046488 | 1 | 4 | Į U | Į U | 1.78619592068576 | 10.0 | 12.1 |

| RUFUNSA 138 3.4233749902317 1.66314592939046 0 0 0 0 11.258725512272 100.1 20 | ROAN | 137 | 2.9596557619053 | 4.20937794369296 | 0 | 0 | 0 | 0 | 6.5705612573426 | 63 | 22.1 |
|---|--------------|-----|------------------|------------------|---|---|---|-----|------------------|------|------|
| RUFUNSA 138 3.4233749902317 1.66314592939046 0 0 0 0 11.258725512272 100.1 20 SENANGA 139 1.87068878519911 2.33136115193812 0 0 1 1 1 3.55515105836847 7.1 7.7 SENGA HILL 140 5.23247393224699 4.83663752687736 0 0 0 0 3.10264158904892 14.2 6.3 SERENJE 141 4.94810390037406 1.63138311396552 0 0 0 0 0 9.087026452334 13.8 12.7 SESHEKE 142 1.50052658168873 1.36313732759452 1 2 0 0 0 3.55515105836847 7.1 7.7 SHANGOMBO 143 2.38526797747131 5.91335868419382 0 0 0 0 0 3.55515105836847 7.1 7.7 SHIWAN'GANDU 144 2.70056084500161 8.25078432187711 1 1 1 0 0 0 5.998476386997 8.1 6.4 SIAVONGA 145 1.37761220070183 3.43029667380328 0 0 0 0 0 1.78619592068576 18.6 12.1 SINDA 148 4.61058151423883 1.73298715462616 0 0 0 0 1.78619592068576 18.6 12.1 SINDA 148 4.61058151423883 1.73298715462616 0 0 0 0 0 3.55515105836847 7.1 7.7 SOLWEZI 150 1.71859029349491 3.29676988383265 1 4 1 1 4.51072198616111 5.8 10.3 SOLWEZI EAST 151 2.06938497031662 0 0 0 0 0 0 4.03160780519271 30.9 8.8 SOLWEZI EAST 151 2.06938497031662 0 0 0 0 0 0 4.03160780519271 30.9 8.8 SUMA 153 3.26772321074883 0 0 0 0 0 0 4.03160780519271 30.9 8.8 SOLWEZI EAST 151 2.06938497031662 0 0 0 0 0 0 0 4.03160780519271 30.9 8.8 SUMA 153 3.26772321074883 0 0 0 0 0 0 0 0 4.03160780519271 30.9 8.8 SUMSAKILE 154 3.50596463502824 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | PETAUKE | 136 | 2.29745427525259 | 3.41652242462332 | 1 | 1 | 0 | 0 | 4.03160780519271 | 30.9 | 8.8 |
| SENANGA 139 1.87068878519911 2.33136115193812 0 0 1 1 3.55515105836847 7.1 7.7 SENGA HILL 140 5.23247393224699 4.83663752687736 0 0 0 0 3.10264158904892 14.2 6.3 SERENIE 141 4.94810390037406 1.63138311396552 0 0 0 9.087026452334 13.8 12.7 SESHEKE 142 1.50052658168873 1.36313732759452 1 2 0 0 3.55515105836847 7.1 7.7 SHANGOMBO 143 2.38526797747131 5.91335868419382 0 0 0 3.55515105836847 7.1 7.7 SHANGOMBO 144 2.70056084500161 8.25078432187711 1 1 0 0 5.5984763869977 8.1 6.4 SIAVONGA 145 1.37761220070183 3.43029667380328 0 0 0 1.78619592068576 18.6 12.1 SINDA 146 2.82014308702068 < | | | | | | - | | - | | | |
| SENGA HILL 140 5.23247393224699 4.83663752687736 0 0 0 3.10264158904892 14.2 6.3 SERENJE 141 4.94810390037406 1.63138311396552 0 0 0 9.087026452334 13.8 12.7 SESHEKE 142 1.50052658168873 1.36313732759452 1 2 0 0 3.55515105836847 7.1 7.7 SHANGOMBO 143 2.38526797747131 5.91335868419382 0 0 0 0 3.55515105836847 7.1 7.7 SHWAN'GANDU 144 2.70056084500161 8.25078432187711 1 1 0 0 5.9984763869977 8.1 6.4 SIAVONGA 145 1.37761220070183 3.43029667380328 0 0 0 0 1.78619592068576 18.6 12.1 SIKONGO 146 2.82014308702068 15.4048653319459 0 0 0 0 3.55515105836847 7.1 7.7 SINAZONGWE 147 1.532 | | | | | | - | | - | | | |
| SERENJE 141 4.94810390037406 1.63138311396552 0 0 0 9.087026452334 13.8 12.7 SESHEKE 142 1.50052658168873 1.36313732759452 1 2 0 0 3.55515105836847 7.1 7.7 SHANGOMBO 143 2.38526797747131 5.91335868419382 0 0 0 3.55515105836847 7.1 7.7 SHIWAN'GANDU 144 2.70056084500161 8.25078432187711 1 1 0 0 5.9984763869977 8.1 6.4 SIAVONGA 145 1.37761220070183 3.43029667380328 0 0 0 1.78619592068576 18.6 12.1 SIKONGO 146 2.82014308702068 15.4048653319459 0 0 0 3.55515105836847 7.1 7.7 SINDA 148 4.61058151423883 1.73298715462616 0 0 0 1.78619592068576 18.6 12.1 SINDA 148 4.61058151423883 1.7329871546216 0 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td>-</td> <td></td> <td></td> <td></td> | | | | | | | - | - | | | |
| SESHEKE 142 1.50052658168873 1.36313732759452 1 2 0 0 3.55515105836847 7.1 7.7 SHANGOMBO 143 2.38526797747131 5.91335868419382 0 0 0 0 3.55515105836847 7.1 7.7 SHIWAN'GANDU 144 2.70056084500161 8.25078432187711 1 1 0 0 5.9984763869977 8.1 6.4 SIAVONGA 145 1.37761220070183 3.43029667380328 0 0 0 0 1.78619592068576 18.6 12.1 SIKONGO 146 2.82014308702068 15.4048653319459 0 0 0 3.55515105836847 7.1 7.7 SINAZONGWE 147 1.5328969587752 1.9002862260529 1 2 0 0 1.78619592068576 18.6 12.1 SINDA 148 4.61058151423883 1.73298715462616 0 0 0 1.78619592068576 18.6 12.1 SOLWEZI 150 1.718590 | | _ | | | | - | - | - | | | |
| SHANGOMBO 143 2.38526797747131 5.91335868419382 0 0 0 0 3.55515105836847 7.1 7.7 SHIWAN'GANDU 144 2.70056084500161 8.25078432187711 1 1 0 0 5.9984763869977 8.1 6.4 SIAVONGA 145 1.37761220070183 3.43029667380328 0 0 0 0 1.78619592068576 18.6 12.1 SIKONGO 146 2.82014308702068 15.4048653319459 0 0 0 0 1.78619592068576 18.6 12.1 SINAZONGWE 147 1.5328969587752 1.9002862260529 1 2 0 0 1.78619592068576 18.6 12.1 SINDA 148 4.61058151423883 1.73298715462616 0 0 0 0 4.03160780519271 30.9 8.8 SIOMA 149 7.62290465452007 11.2408696930298 0 0 0 0 3.55515105836847 7.1 7.7 SOLWEZI | | | | | 0 | - | | - | 7.000.0000 | | |
| SHIWAN'GANDU 144 2.70056084500161 8.25078432187711 1 1 0 0 5.9984763869977 8.1 6.4 SIAVONGA 145 1.37761220070183 3.43029667380328 0 0 0 0 1.78619592068576 18.6 12.1 SIKONGO 146 2.82014308702068 15.4048653319459 0 0 0 3.55515105836847 7.1 7.7 SINAZONGWE 147 1.5328969587752 1.9002862260529 1 2 0 0 1.78619592068576 18.6 12.1 SINDA 148 4.61058151423883 1.73298715462616 0 0 0 4.03160780519271 30.9 8.8 SIOMA 149 7.62290465452007 11.2408696930298 0 0 0 3.55515105836847 7.1 7.7 SOLWEZI 150 1.71859029349491 3.29676988383265 1 4 1 1 4.51072198616111 5.8 10.3 SOLWEZI EAST 151 2.06938497031662 | SESHEKE | | | | 1 | 2 | 0 | 0 | 3.55515105836847 | | |
| SIAVONGA 145 1.37761220070183 3.43029667380328 0 0 0 1.78619592068576 18.6 12.1 SIKONGO 146 2.82014308702068 15.4048653319459 0 0 0 3.55515105836847 7.1 7.7 SINAZONGWE 147 1.5328969587752 1.9002862260529 1 2 0 0 1.78619592068576 18.6 12.1 SINDA 148 4.61058151423883 1.73298715462616 0 0 0 4.03160780519271 30.9 8.8 SIOMA 149 7.62290465452007 11.2408696930298 0 0 0 3.55515105836847 7.1 7.7 SOLWEZI 150 1.71859029349491 3.29676988383265 1 4 1 1 4.51072198616111 5.8 10.3 CENTRAL 151 2.06938497031662 0 0 0 0 4.51072198616111 5.8 10.3 SOLWEZI WEST 152 1.57037634887661 0 0 0 | SHANGOMBO | 143 | 2.38526797747131 | 5.91335868419382 | 0 | 0 | 0 | 0 | 3.55515105836847 | 7.1 | 7.7 |
| SIKONGO 146 2.82014308702068 15.4048653319459 0 0 0 0 3.55515105836847 7.1 7.7 SINAZONGWE 147 1.5328969587752 1.9002862260529 1 2 0 0 1.78619592068576 18.6 12.1 SINDA 148 4.61058151423883 1.73298715462616 0 0 0 0 4.03160780519271 30.9 8.8 SIOMA 149 7.62290465452007 11.2408696930298 0 0 0 0 3.55515105836847 7.1 7.7 SOLWEZI 150 1.71859029349491 3.29676988383265 1 4 1 1 4.51072198616111 5.8 10.3 CENTRAL SOLWEZI EAST 151 2.06938497031662 0 0 0 0 0 0 4.51072198616111 5.8 10.3 SOLWEZI WEST 152 1.57037634887661 0 0 0 0 0 4.51072198616111 5.8 10.3 VUBWI 153 3.26772321074883 0 0 0 0 0 4.03160780519271 30.9 8.8 WUSAKILE 154 3.50596463502824 0 0 0 0 0 0 4.51072198616111 5.8 10.3 ZAMBEZI EAST 156 3.85057430619495 0 0 0 0 0 4.51072198616111 5.8 10.3 | SHIWAN'GANDU | 144 | 2.70056084500161 | 8.25078432187711 | 1 | 1 | 0 | 0 | 5.9984763869977 | 8.1 | 6.4 |
| SINAZONGWE 147 1.5328969587752 1.9002862260529 1 2 0 0 1.78619592068576 18.6 12.1 SINDA 148 4.61058151423883 1.73298715462616 0 0 0 4.03160780519271 30.9 8.8 SINDA 149 7.62290465452007 11.2408696930298 0 0 0 3.55515105836847 7.1 7.7 SOLWEZI 150 1.71859029349491 3.29676988383265 1 4 1 1 4.51072198616111 5.8 10.3 CENTRAL 50LWEZI EAST 151 2.06938497031662 0 0 0 0 4.51072198616111 5.8 10.3 SOLWEZI WEST 152 1.57037634887661 0 0 0 0 4.51072198616111 5.8 10.3 VUBWI 153 3.26772321074883 0 0 0 0 4.03160780519271 30.9 8.8 WUSAKILE 154 3.50596463502824 0 0 0 | SIAVONGA | 145 | 1.37761220070183 | 3.43029667380328 | 0 | 0 | 0 | 0 | 1.78619592068576 | 18.6 | 12.1 |
| SINDA 148 4.61058151423883 1.73298715462616 0 0 0 4.03160780519271 30.9 8.8 SIOMA 149 7.62290465452007 11.2408696930298 0 0 0 3.55515105836847 7.1 7.7 SOLWEZI 150 1.71859029349491 3.29676988383265 1 4 1 1 4.51072198616111 5.8 10.3 CENTRAL SOLWEZI EAST 151 2.06938497031662 0 0 0 0 4.51072198616111 5.8 10.3 SOLWEZI WEST 152 1.57037634887661 0 0 0 0 4.51072198616111 5.8 10.3 VUBWI 153 3.26772321074883 0 0 0 0 4.03160780519271 30.9 8.8 WUSAKILE 154 3.50596463502824 0 0 0 0 6.5705612573426 63 22.1 ZAMBEZI EAST 155 2.07080311766194 0 1 1 0 0 | SIKONGO | 146 | 2.82014308702068 | 15.4048653319459 | 0 | 0 | 0 | 0 | 3.55515105836847 | 7.1 | 7.7 |
| SIOMA 149 7.62290465452007 11.2408696930298 0 0 0 3.55515105836847 7.1 7.7 SOLWEZI 150 1.71859029349491 3.29676988383265 1 4 1 1 4.51072198616111 5.8 10.3 CENTRAL SOLWEZI EAST 151 2.06938497031662 0 0 0 0 4.51072198616111 5.8 10.3 SOLWEZI WEST 152 1.57037634887661 0 0 0 0 4.51072198616111 5.8 10.3 VUBWI 153 3.26772321074883 0 0 0 0 4.03160780519271 30.9 8.8 WUSAKILE 154 3.50596463502824 0 0 0 0 6.5705612573426 63 22.1 ZAMBEZI EAST 155 2.07080311766194 0 1 1 0 0 4.51072198616111 5.8 10.3 ZAMBEZI WEST 156 3.85057430619495 0 0 0 0 | SINAZONGWE | 147 | 1.5328969587752 | 1.9002862260529 | 1 | 2 | 0 | 0 | 1.78619592068576 | 18.6 | 12.1 |
| SOLWEZI 150 1.71859029349491 3.29676988383265 1 4 1 1 4.51072198616111 5.8 10.3 SOLWEZI EAST 151 2.06938497031662 0 0 0 0 4.51072198616111 5.8 10.3 SOLWEZI WEST 152 1.57037634887661 0 0 0 0 4.51072198616111 5.8 10.3 VUBWI 153 3.26772321074883 0 0 0 0 4.03160780519271 30.9 8.8 WUSAKILE 154 3.50596463502824 0 0 0 0 6.5705612573426 63 22.1 ZAMBEZI EAST 155 2.07080311766194 0 1 1 0 0 4.51072198616111 5.8 10.3 ZAMBEZI WEST 156 3.85057430619495 0 0 0 0 4.51072198616111 5.8 10.3 | SINDA | 148 | 4.61058151423883 | 1.73298715462616 | 0 | 0 | 0 | 0 | 4.03160780519271 | 30.9 | 8.8 |
| CENTRAL SOLWEZI EAST 151 2.06938497031662 0 0 0 0 4.51072198616111 5.8 10.3 SOLWEZI WEST 152 1.57037634887661 0 0 0 0 4.51072198616111 5.8 10.3 VUBWI 153 3.26772321074883 0 0 0 0 4.03160780519271 30.9 8.8 WUSAKILE 154 3.50596463502824 0 0 0 0 6.5705612573426 63 22.1 ZAMBEZI EAST 155 2.07080311766194 0 1 1 0 0 4.51072198616111 5.8 10.3 ZAMBEZI WEST 156 3.85057430619495 0 0 0 0 4.51072198616111 5.8 10.3 | SIOMA | 149 | 7.62290465452007 | 11.2408696930298 | 0 | 0 | 0 | 0 | 3.55515105836847 | 7.1 | 7.7 |
| CENTRAL SOLWEZI EAST 151 2.06938497031662 0 0 0 0 0 4.51072198616111 5.8 10.3 SOLWEZI WEST 152 1.57037634887661 0 0 0 0 4.51072198616111 5.8 10.3 VUBWI 153 3.26772321074883 0 0 0 0 4.03160780519271 30.9 8.8 WUSAKILE 154 3.50596463502824 0 0 0 0 6.5705612573426 63 22.1 ZAMBEZI EAST 155 2.07080311766194 0 1 1 0 0 4.51072198616111 5.8 10.3 ZAMBEZI WEST 156 3.85057430619495 0 0 0 0 4.51072198616111 5.8 10.3 | SOLWEZI | 150 | 1.71859029349491 | 3.29676988383265 | 1 | 4 | 1 | 1 | 4.51072198616111 | 5.8 | 10.3 |
| SOLWEZI WEST 152 1.57037634887661 0 0 0 0 4.51072198616111 5.8 10.3 VUBWI 153 3.26772321074883 0 0 0 0 0 4.03160780519271 30.9 8.8 WUSAKILE 154 3.50596463502824 0 0 0 0 0 6.5705612573426 63 22.1 ZAMBEZI EAST 155 2.07080311766194 0 1 1 0 0 4.51072198616111 5.8 10.3 ZAMBEZI WEST 156 3.85057430619495 0 0 0 0 4.51072198616111 5.8 10.3 | CENTRAL | | | | | | | | | | |
| VUBWI 153 3.26772321074883 0 0 0 0 4.03160780519271 30.9 8.8 WUSAKILE 154 3.50596463502824 0 0 0 0 0 6.5705612573426 63 22.1 ZAMBEZI EAST 155 2.07080311766194 0 1 1 0 0 4.51072198616111 5.8 10.3 ZAMBEZI WEST 156 3.85057430619495 0 0 0 0 4.51072198616111 5.8 10.3 | SOLWEZI EAST | 151 | 2.06938497031662 | 0 | 0 | 0 | 0 | 0 | 4.51072198616111 | 5.8 | 10.3 |
| WUSAKILE 154 3.50596463502824 0 0 0 0 0 6.5705612573426 63 22.1 ZAMBEZI EAST 155 2.07080311766194 0 1 1 0 0 4.51072198616111 5.8 10.3 ZAMBEZI WEST 156 3.85057430619495 0 0 0 0 4.51072198616111 5.8 10.3 | SOLWEZI WEST | 152 | 1.57037634887661 | 0 | 0 | 0 | 0 | 0 | 4.51072198616111 | 5.8 | 10.3 |
| WUSAKILE 154 3.50596463502824 0 0 0 0 0 6.5705612573426 63 22.1 ZAMBEZI EAST 155 2.07080311766194 0 1 1 0 0 4.51072198616111 5.8 10.3 ZAMBEZI WEST 156 3.85057430619495 0 0 0 0 4.51072198616111 5.8 10.3 | VUBWI | 153 | 3.26772321074883 | 0 | 0 | 0 | 0 | 0 | 4.03160780519271 | 30.9 | 8.8 |
| ZAMBEZI EAST 155 2.07080311766194 0 1 1 0 0 4.51072198616111 5.8 10.3 ZAMBEZI WEST 156 3.85057430619495 0 0 0 0 4.51072198616111 5.8 10.3 | | | 0.000 | | | - | - | 0 | | | |
| ZAMBEZI WEST 156 3.85057430619495 0 0 0 0 4.51072198616111 5.8 10.3 | | | | | | | | ļ · | | | |
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| KITWE AVG 158 2.65 2.86 1 14 1 1 6.5705612573426 63 22.1 | | | | | 1 | _ | - | _ | | | |

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| 12.101556 | Zambia |
| 9.087026 | Central |
| 6.570561 | Copperbelt |
| 4.031608 | Eastern |
| 4.216456 | Luapula |
| 11.258726 | Lusaka |
| 5.998476 | Muchinga |
| 3.102642 | North |
| 4.510722 | Northwestern |
| 1.786196 | Southern |
| 3.555151 | Western |

| Incidents of Violence (2016) | Region |
|------------------------------|----------------|
| 126 | Zambia (total) |
| 13 | Central |
| 26 | Copperbelt |
| 5 | Eastern |
| 2 | Luapula |
| 39 | Lusaka |
| 1 | Muchinga |
| 5 | North |

| 4 | Northwestern |
|----|--------------|
| 24 | Southern |
| 7 | Western |