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POLICY BRIEF

Applying Analytics to Prevent, Monitor and
Accept 2022 Elections in Kenya

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Background:

The Horn of Africa has experienced a challenging time due to the continuous election process moving from one country to the other. Elections are the most common means by which citizens select and provide legitimacy to their political leaders. Unfortunately, electoral politics has become intertwined with violence (Dunning, 2011). Research into the causes of electoral violence has recently become more systematic, examining the conditions under which incumbents are likely to use violence to influence the electoral process (Hafner-Burton et al., 2014), the effects of electoral institutions on electoral violence (Fjelde and Höglund, 2016), and the conditions under which ethnic diversity contributes to such conflict (Butcher and Goldsmith, 2017).

Despite the increased interest in electoral violence, the concept remains theoretically underdeveloped and conceptually vague (Staniland, 2014). Inherent in most definitions of electoral violence is the temporal link between violence and elections and the causal link between the two. Electoral violence is conventionally understood as violence that takes place with the electoral cycle. The causal link, which is often more implicit, limits electoral violence to that which is in some way connected to the electoral process, as opposed to violence that takes place during the elections, but has no direct bearing on the election.

In essence, electoral violence is often conceptualized at high levels of aggregation utilizing blunt categories including post-election protests, significant numbers of civilian killed and whether government forces harassed opposition candidates (Hyde and Marinov, 2012).

Context of early warning and response:

Outbreaks of election-related violence can be devastating, but experience has shown that they can be prevented. An improved efficiency of electoral violence early warning and prevention is increasingly argued. Although diverse and contingent on mandates and contexts in which organizations operate, early warning and prevention methodologies have common denominators that can be comparatively analysed (Sead Alihodžić, 2012).

While the government organs that include the National Police service (NPS), National Commission on Integration and Cohesion (NCIC), Independent Electoral and Boundaries Commission (IEBC), and the Office of the Registrar of Political Parties (ORPP), have done their part to prepare for elections, Kenya, may still face electoral challenges if these stakeholders continue with the same process of planning and application during the election process. While this article does not push for electoral reforms, it acknowledges its importance but puts more weight on the use of data to provide information that will prevent, monitor, and guide an acceptance to credible election results. It argues for the need for improved electoral violence early warning, prevention, and mitigation.

Data Gap:

Previous regional and national practices have resulted in an early warning system designed to operate within the conflict regions. These enable them to intervene rapidly and accurately, and to get information and ‘warning’ more directly to those who can act upon it (Rupesinghe 2009, xiv–xvi). These systems collect micro-level data through national civil society networks and ensure that the data is transmitted fast enough to allow a ‘close to real time’ analysis. While the potential for such a system is still being discussed and realised, newer systems that are designed to facilitate information ‘crowdsourcing’ by enabling a broader citizenry to disseminate information about relevant incidents and outbreaks of violence, through SMS, providing better opportunities for action and response (Meier, 2009).

The growth of social media and the expansion of the internet, provides an opportunity to respond to electoral challenges as they contribute to an alternative source of data to develop conceptually clear measurements of electoral violence. Social media platforms such as Twitter catalogue reports on political violence, and these data has previously been used to predict political instability (Ramakrishnan et al., 2014). Compared to traditional news reports, Twitter – for example, reports on major news events equally well, but contains a longer tail of minor events often not covered by traditional electronic and print media sources (Jackoway et al., 2011; Petrovic et al., 2013).

While research shows that the bulk of the data online was developed in the last ten years (on average), it has not been well utilized to discover trends, patterns and provide monitoring outcomes. Such online information can be used to provide insights into hotspot areas, election malpractice and advice the electorate through civic education. Most research using social media to estimate political violence has focused on large-scale, high-intensity violence like civil unrest and violent protest, but no attempt has been made to estimate occurrences of electoral violence using social media. This article also borrows from an op ed covering the development partners work, using big data analytics to advice policy, international support, and donor funding in Kenya in 2013 (Hushek, T., & Keane, B., 2017 - 2021).

Opportunities from Big Data:

The op ed shows that though applied minimally in the 2013 elections in Kenya, combining big data analytics and proven methods rooted in social sciences can complement the extensive political and economic reporting. The process would be done through comparing what, who, when where and how; with other data on public perception, income, and local demographics – to get a correlation. Such correlations can provide a prediction on the possibility of violence or the need for support in the form of civic education.

With the elections coming up in 2022, such application requires time to collect data; preferably six months before and three months after the election process. Application of big data would be an opportunity for development partners to contribute to the spirit of sharing and offer development support that remains somewhat non-

involved. Such support through investment in a locally led data analytics election program can therefore offer the following:

1. Map networks to identify the degrees of separation: Violent extremist organizations and gang groups remain a threat during the election period in Kenya. With limited mapping of their activities, the resulting outcome usually is a blanket response to the community from either law enforcement or different election parties. A mapping process would assist in the identification of the degrees of connectivity and the level of influence that various political outfits have at the local level (Robertson & Olson, 2013). The same can also be used to determine those who would wish to take advantage of the election period to push for violence and extremism (Carlsen, 2010).
2. Computer modelling tests and assists in predicting outcomes of formal and informal negotiations and interactions that may result in hate speech or fake news. The recent elections in Kenya were marred with fake news and hate speech online. Such interactions also pushed for an increase in the pockets of violence within the different regions in Kenya. Predictive analytics would advise the response of the finite resources available to the government stakeholders on where and when to respond (Busolo & Ngigi, 2018).
3. Data analytics can assist to systematically compensate for cognitive biases by individuals when weighing information. While the National Commission on Integration and Cohesion (NCIC) has tried to respond by prosecuting certain cases, the information remains limited when it only depends on a singular incident (Menya, 2020; Kaberia, 2013).

Conclusions:

While the recommendations below can be applied in the Horn of Africa countries during the election season, it has expanded on the opportunities available to all the stakeholders and development partner support in Kenya. The use of technology is an opportunity not to be assumed and a quick win to prevent, monitor and guide the acceptance the 2022 elections in Kenya.

In conclusion, election related violence impedes the peaceful transition of power and can prevent citizens from exercising their constitutionally protected rights to choose their elected leaders. It can take a variety of forms, perpetrated by many different actors, and often falls short of erupting into full-fledged civil conflict. Thus, it can be difficult to correlate the presence of any violent event that occurs to the election itself.

The use of new technology including social media can provide data to be coded and validated to estimate the trends in electoral violence during elections in different counties in Kenya. Additionally, the use of machine learning can accurately measure electoral violence compared to existing datasets. Based on research, a more direct type of reporting, often from observers of the event itself, social media may offer a more straight forward way to discover violent events. The use of technology through

word embedding, further, provide greater accuracy in identifying instances of violence in the text resulting in timely action and response (Beieler, 2016).

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