

# Starvation, Conflict and Data: Considerations for Crimes against Humanity

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## Introduction

In 2020, there were 155 million acutely food-insecure people worldwide, with conflict and insecurity classified as the largest single driver for almost 100 million people.<sup>1</sup> While conflict can contribute to food crises in multiple ways, increasingly, the deliberate targeting of food is receiving greater attention. In 2018, the UN Security Council unanimously adopted Resolution 2417, recognizing the link between conflict and hunger, and condemning the use of starvation of civilians as a method of warfare.<sup>2</sup> Since then, the use of starvation tactics against civilians in armed conflicts has been reported in South Sudan, Syria and Yemen, among others.<sup>3</sup>

While the Statute of the International Criminal Court explicitly identifies starvation as a war crime under Article 8(2)(b)(xxv)<sup>4</sup> and also indirectly recognizes starvation as a form of genocide under Article 6(c)<sup>5</sup> there is no such recognition of starvation as a potential crime against humanity (CAH). Consequently, starvation as a CAH has received relatively less attention. In addition, despite the increasing availability of granular data on both food crises and violent conflict,<sup>6</sup> and the growing potential for analysis of quantitative data to contribute to understanding of atrocities,<sup>7</sup> limited research to date has brought together these fields of study.

In this chapter, we ask: what value can disaggregated conflict data bring in understanding and advancing accountability for starvation as a CAH? With respect to the particular case of starvation, we do this through analysis of disaggregated data from the Armed Conflict Location & Event Dataset (ACLED),<sup>8</sup> followed by a detailed case study of the violent Islamist group commonly known as 'Boko Haram' and its splinters. We also suggest the potential for disaggregated conflict data to be applied to other forms of conduct explored in the previous chapters.

We argue that statistical and geospatial analysis of conflict data can highlight patterns in large-scale, widespread and systematic attacks involving food, food systems and/or humanitarian assistance (hereafter, 'attacks involving food'). While the resulting analyses alone cannot provide sufficient evidence of starvation crimes, they can serve as a starting point for further investigation. In addition, they can contribute detail on the profile and dynamics of attacks involving food that can advance wider advocacy and policy initiatives for accountability. In doing so, we seek to contribute to a more comprehensive understanding of CAH in two ways: first, contributing to a growing literature seeking to situate starvation in international criminal law; and second, building on recent scholarship on the potential for statistical analysis to contribute to accountability for different manifestations of CAH.

In the section that follows, we briefly review available literature on starvation as a CAH, and the application of statistical analysis to the monitoring of human rights and conflict. Thereafter, we outline our methodology and sketch an empirical case study of attacks involving food by Boko Haram in West Africa, followed by a discussion of some implications of our analysis.

## **Literature review**

In this section, we briefly summarize existing research on starvation as a CAH, and the use of statistical data in international law.

### *Starvation as a Crime against Humanity*

Historically, extreme food insecurity was often framed as an unfortunate, but largely unavoidable, result of conflict, rooted in what de Waal calls the 'idea of famine as something simple, huge and apocalyptic'.<sup>9</sup> More recently, there has been increasing recognition of the strategic targeting of food and food systems to punish, coerce, and/or displace parties to a conflict and their (perceived) supporters.<sup>10</sup> Alongside this, have been calls for recognition of starvation as the result of deliberate acts, and for accountability in international law.<sup>11</sup> For example, Marcus specifically proposed varying degrees of culpability for what he terms 'faminogenic behaviour'.<sup>12</sup> Despite this attention, however, there has been limited prosecution for crimes involving starvation to date, in part because of complexities in defining and establishing starvation crimes.<sup>13</sup> Currently, the Rome Statute does not explicitly reference starvation as a CAH, although there have been calls for its inclusion.<sup>14</sup>

Kearney and others argue, however, that a prosecution based on violations of the right to food is conceivable within existing law and that such a prosecution, 'would be an evolutionary, not revolutionary, step.'<sup>15</sup> The Rome Statute presents at least two possibilities for starvation prosecution as a CAH: crimes of extermination and of other inhumane acts.<sup>16</sup> On the former, the Statute makes specific reference to access to food in Article 7 under which, CAH include 'inter alia the deprivation of access to food and medicine, calculated to bring about the destruction of part of a population.'<sup>17</sup> On the latter, even in the absence of an explicit reference to food or starvation, scholars have argued that the category of other inhumane acts constitutes 'the most appropriate existing crime by which to prosecute starvation,' as this represents a residual category under which comparably grave violations can be prosecuted.<sup>18</sup> As emphasised in the previous chapters, for conduct to meet the definition of a CAH, the acts concerned must target civilians, be widespread<sup>19</sup> or systematic in nature, and be executed in furtherance of a state or organisational policy while the acts must be carried out with intent, knowledge or reckless disregard of the consequences.<sup>20</sup>

In considering these criteria in turn, while there is no specific numerical threshold that establishes what entails large-scale or widespread violence, it is notable that it is not necessary for victims to be named, nor to share common characteristics (beyond being designated as civilians), and that deaths from geographically and/or temporally discrete sites may be aggregated as long as collectively they constitute part of a single, systematic campaign.<sup>21</sup> In considering intent, the criteria for CAH distinguish it from war crimes on several grounds, including that in the latter, prosecutors face the challenge of proving not only knowledge of an attack, but the specific intent to starve civilians.<sup>22</sup> Lastly, considering systematic violence, it has been argued that commonalities among perpetrator or victim profiles, specificities in the geographic and chronological signature of conduct, or a particular modality employed in violence can demonstrate methodical and systematic violence,<sup>23</sup> discussed further in the section below.

### *Statistics and International Law*

As Ball and Price outline, the use of statistics in assessing violations of human rights law has a history dating back to the Nuremberg Trials.<sup>24</sup> There followed specific instances in which violations were systematically quantified as well as an increased attention in the 1990s to the value of statistical data in human rights monitoring, often accompanied by purpose-built datasets. Examples of contemporary databases include those compiled and maintained by NGOs, truth commissions, criminal tribunals and human rights monitoring missions. The introduction of statistical data in international

criminal proceedings, however, has been relatively rare and received mixed reactions where it has been presented.<sup>25</sup> The paucity in the use of statistical data in international criminal proceedings is partially attributable to the substantial resources required for the collection and analysis of such data.<sup>26</sup>

Alongside dedicated efforts to monitor human rights violations, a sub-field of conflict scholarship has evolved with the purpose of quantifying and increasingly disaggregating conflict events. Datasets including ACLED and the UCDP Georeferenced Event Dataset provide temporally and geographically disaggregated records of political violence to facilitate analysis of the micro-dynamics of conflict across time and place.<sup>27</sup> The resulting datasets, alongside a growing number of thematic- and region-specific collections, have been used to analyse the drivers and effects of conflict, patterns in the use of (specific modalities of) violence, and differences in the violence profiles of conflict actors.

Statistical data offers potential value in addressing a number of challenges that are particularly acute in relation to atrocity crimes. First, by their very nature, CAH involve large-scale or widespread violence. The magnitude of these acts can present challenges in relation to the volume of testimonies, scale of resources, and individual burdens placed on victims and witnesses necessary to establish the large-scale or widespread nature of violence.<sup>28</sup>

Second, analysis of quantitative data can assist in the identification of patterns of violence that may be less recognisable in qualitative accounts.<sup>29</sup> As noted below, the identification of such patterns of violence may also be useful as circumstantial evidence in proving the required policy element in CAH, with patterns of violence being potentially indicative of a plan or policy to commit such attacks. Communications of parties to a conflict are often covert and acts of violence, even in large-scale conflicts, may be carried out in (semi-)secrecy, with the identities of perpetrators obscured. This can present challenges for establishing individual responsibility in complex and dynamic conflicts. Where evidence linking perpetrators to crimes (for example, of an order to carry out an act, or a communication informing of the commission of an act) is unavailable, 'patterns of violations can serve as important circumstantial linkage evidence indicating the potential existence of an order or knowledge of violations.'<sup>30</sup> Identifiable patterns in the use of specific tactics in different regions, for example,

[M]ay indicate the conduct was undertaken pursuant to an order or an organized plan because one would not expect that line-level soldiers, operating in different regions of a territory under different commanding officers, would independently engage in similar conduct at the same time of their own volition.<sup>31</sup>

In this way, even where definitive causal claims cannot be made based on statistical analysis alone, it can serve to challenge alternative narratives. For example, claims that acts were carried out in a random, non-coordinated way and that they were not connected to any state or organisational policy (as required by law) can be more robustly challenged with statistical evidence that suggests an identifiable pattern in the targeting, timing or spatiality of violence.

Third, quantitative data can assist in overcoming hurdles associated with systematic monitoring and reporting of violations, where to do so exposes reporting agencies to risk. For example, in humanitarian crises, operational agencies may be reluctant to systematically document and openly report human rights violations, when doing so may mean authorities withdraw or otherwise impede their access to populations in need.<sup>32</sup> This challenge of collecting and presenting systematic, actionable data on conflict-driven hunger for accountability purposes, while not compromising ground operations, has been specifically identified as a 'dilemma' by the Deputy Director of the World Food Programme.<sup>33</sup> One approach that can overcome this is for coordinating agencies to document violations, such as the World Health Organisation's surveillance system for monitoring attacks on healthcare.<sup>34</sup> In recent years, initiatives to build investigative and reporting capacity in relation to starvation violations have been spearheaded by Global Rights Compliance and the World Peace Foundation, which significantly contribute to the robustness, reliability and safety of documentation efforts.<sup>35</sup> Nevertheless, in the absence of a dedicated and large-scale database to document attacks specifically involving food, the quantitative analysis of available, open-source event data can help to fill this gap.

Taken together, although there are limitations to the use of statistical methods for monitoring and analysing human rights violations, a growing body of research contends that they can serve a useful function as part of multi-faceted efforts to strengthen accountability.

## **Methodology**

To analyse this category of violence, a measure of attacks involving food is created using ACLED data. The dataset is coded by violence type and other key details including location and date.<sup>36</sup> It also contains a short descriptive note on each event, providing a brief narrative of the incident, for example, 'On 28 November 2020, Boko Haram militants abducted and beheaded no fewer than 76 farmers at Garin Kwashebe in

the Zabarmari area of Borno, 10 kilometres (six miles) from the city of Maiduguri.<sup>37</sup> These narrative notes have a mean count of 31 words, typically containing sufficient detail to understand the basic elements of an event. As such, even though ACLED data is not designed to specifically capture starvation crimes, notes can be analysed to identify attacks involving food. ACLED is therefore better suited to this study than other datasets which do not capture as much narrative detail.

To produce a sub-set of events of interest, first, in line with the criteria outlined above, we restrict our analysis to attacks involving civilians. Then, the descriptive notes are analysed and coded for key terms associated with attacks involving food. These include terms associated with key food resources, features of the food system and attacks on humanitarian assistance. Table 1 gives examples of key terms and positively coded events under each category.<sup>38</sup>

<b>Example of key term</b>	<b>Example of event notes</b>	<b>ACLED Event ID</b>
Food	"Boko Haram militants killed at least 30 people during attacks on two villages in Damboa (Yakshari-12/02 and Kachifa-13/02) over two days in Borno State. The attackers looted food supplies, carting away herds, and kidnapping women and children."	NIG8740
livestock	"25 June. Boko Haram invaded Kaula village and killed nine residents. Food and livestock were stolen."	NIG14902
Farm	"20 October. Boko Haram attacked farmers tending to their fields in Kalle, 17 km from Maiduguri (approx coordinates used). The attackers killed 12 civilians."	NIG13242
market	"Suspected Boko Haram gunmen attack cattle trading market for the second time in a week. At least 50 reported dead, but the number was expected to climb."	NIG3588
humanitarian	"On 24 July 2020, Boko Haram mounted a roadblock at Aligambari in Nganzai LGA (Borno) on the Monguno-Maiduguri road and fired at the vehicle of a Humanitarian organization."	NIG17763

Table 1. Examples of key terms and notes of included events.

The result is a dataset of anti-civilian violence that specifically involves attacks on food. On average, these amount to 11% of all recorded anti-civilian events, and 12% of all related fatalities across Africa between 2001-2020.

Before proceeding to our empirical analysis, a number of limitations should be noted. First, ACLED data are not coded with the intention of specifically documenting attacks involving food, so notes may not have been recorded in such a way as to document these acts explicitly, even if they featured in an event. Moreover, the dataset does not extensively code acts of destruction (for example, targeting property or infrastructure) that do not also include acts of violence against people. As a result, the dataset likely excludes acts of this kind, contributing greater inclusion of attacks in which food, food systems and/or humanitarian assistance were particularly prominent in the violence, and/or direct and immediate physical harm came to human victims as part of the violence.

Lastly, in common with comparable datasets relying on open access sources, data may be affected by potential underlying biases in reporting sources.<sup>39</sup> However, in the absence of dedicated data-gathering efforts to capture attacks involving food, the dataset remains the best resource available for the intended analysis. Moreover, the analysis below relies exclusively on descriptive (rather than inferential) statistics, and therefore does not claim to assess the completeness of the data or capture the true universe of violence,<sup>40</sup> a discussion which is beyond the scope of this study. Therefore, we present our analysis with the caveat that owing to these limitations, the results are best interpreted as a preliminary test of the value of further, targeted investigation, rather than as robust evidence in themselves.

## **Empirical analysis**

As noted above, an act must meet several conditions to constitute a CAH. It must target civilians; be widespread (in terms of scale or geographically) or systematic in nature and be executed in furtherance of a state or organisational policy. Below, we present the results of an empirical analysis that tests the extent to which these characteristics are identifiable in data on attacks involving food attributed to Boko Haram.

### *Case selection*

We focus on the violent Islamist group commonly referred to as 'Boko Haram' and its splinter groups.<sup>41</sup> The group emerged in North-East Nigeria in 2009, which remains a

stronghold, but has since expanded activity throughout the Lake Chad region. The group is one of the most active on the continent, and estimates suggest that as many as 35,000 people have been killed in the conflict since the group emerged in 2009.<sup>42</sup> The situation in Nigeria has also been the subject of a decade-long preliminary examination by the Office of the Prosecutor of the ICC, which concluded with the finding of a reasonable basis that the group committed crimes against the humanity including enslavement; imprisonment; and other inhumane acts as part of an organisational policy, although specific reference to food rights and starvation was not made.<sup>43</sup>

North-East Nigeria has experienced cyclical food crises since the escalation of the conflict. Along with Somalia, South Sudan and Yemen, it was among four contexts deemed to be at risk of famine in February 2017.<sup>44</sup> By early 2018, an estimated 7.7 million people were in need of humanitarian assistance in the three most affected states of North-East Nigeria alone, and the majority of people in Borno State, the epicentre of the crisis, remained dependent on food assistance.<sup>45</sup> In late-2020, North-East Nigeria was yet again identified among four contexts at imminent risk of famine, with an estimated 13 million in food security phase 'crisis' or above.<sup>46</sup>

While these food security outcomes cannot be attributed to Boko Haram alone,<sup>47</sup> Boko Haram has been specifically implicated in violence driving food crisis. Alongside the actions of government forces, de Waal contends that Boko Haram has engaged in 'direct military acts of starvation,' including the destruction of food and livelihoods.<sup>48</sup> The group has also been accused of leveraging humanitarian aid as a weapon of war, with incidents including attacks on humanitarian organisations' facilities in North-East Nigeria affecting assistance for over 50,000 people.<sup>50</sup> Qualitative reporting on human rights violations also suggests that looting of civilian homes and businesses is widespread: in one investigation into an attack in north-east Cameroon, witnesses estimated that the group looted over half of the 142 homes in the village, taking food and other items.<sup>51</sup>

### *Large-scale violence*

Since their emergence in 2009, 336 attacks involving food, and 2,693 related fatalities, have been attributed to the group in the Lake Chad region. This amounts to 14.2% and 15.7% of Boko Haram anti-civilian violence respectively, higher than the continental average of 11%. As noted above, there is no established threshold for what constitutes 'large-scale' violence,<sup>52</sup> but that this is both a significant absolute number, and a relatively higher proportion of the group's violence than the continental average, is notable.



The first recorded violence involving food carried out by the group took place in 2012, and continued to grow over time in both absolute terms, and as a percentage of the group’s anti-civilian violence (see Figure 1). This appears to support the argument that attacks on food formed part of a strategic tactical shift by the group, and not – for example – an incidental, random feature of the group’s violence which persisted at a relatively constant rate since its establishment.

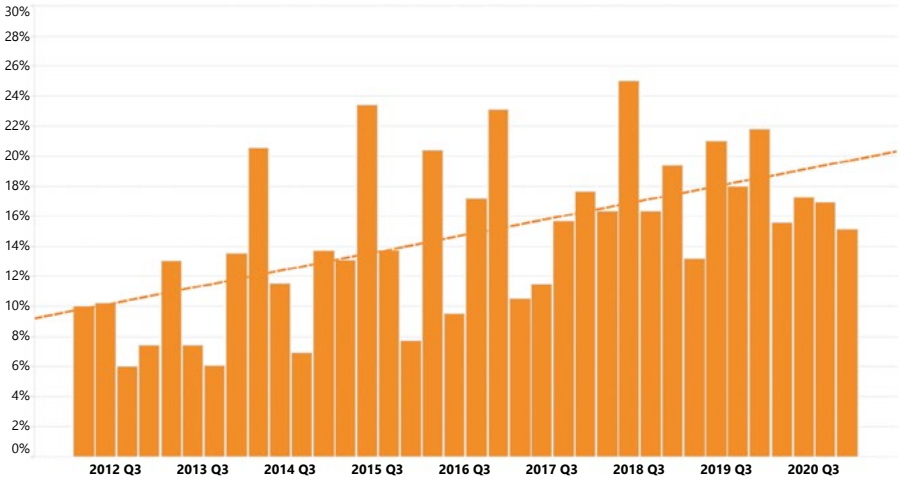


Figure 1. Percentage of all Anti-Civilian Violence by 'Boko Haram' that involves Food, with Trendline, per quarter, 2012-2020.

We can further identify a consistent pattern in the targeting of civilians through this type of violence. Over 80% of the violence involving food attributed to Boko Haram since 2009 has targeted civilians, along with over 85% of associated fatalities. The remaining 20% and 15% respectively, have been events involving food in which the group clashed with other armed groups (state forces and non-state militias). By contrast, the continental average for violence involving food that targets civilians is 38% with the majority (62%) involving clashes with other armed groups. This marks Boko Haram out as particularly prone to targeting civilians with this form of violence, at a rate over twice as high as the regional mean. Thus, the data indicates that the targeting of food resources by Boko Haram is likely to be a policy adopted by the group rather than being random or sporadic acts by individual members of the organisation.

### Geographically widespread violence

This violence is primarily concentrated in Nigeria (where over 83% of fatalities and 49% of events, are recorded), followed by Cameroon, Niger and Chad. Nonetheless, the geographic area covered by such attacks is considerable. All four of the countries in which Boko Haram has been recorded as active have witnessed anti-civilian attacks involving food and 11 of the 25 Admin Level 1 units (the State in Nigeria, or its equivalent) have witnessed attacks of this kind. Anti-civilian violence involving food has therefore taken place in just under half (44%) of the sub-national geographic units in which Boko Haram activity has been recorded.

Similarly, an analysis of geo-coded data shows a comparable geographic range of the group's activity across distinct types of anti-civilian violence. When the distance between attacks involving food is calculated and compared with other anti-civilian violence events, the average distance is 150km for anti-civilian attacks involving food, and 161km for other anti-civilian violence, a difference that is both small in absolute terms, and not statistically significant. Figure 2 presents this average distance across both types of violence by quarter, demonstrating that anti-civilian attacks involving food have a higher range than their counterparts, but follow a broadly comparable trend of geographic contraction over time.

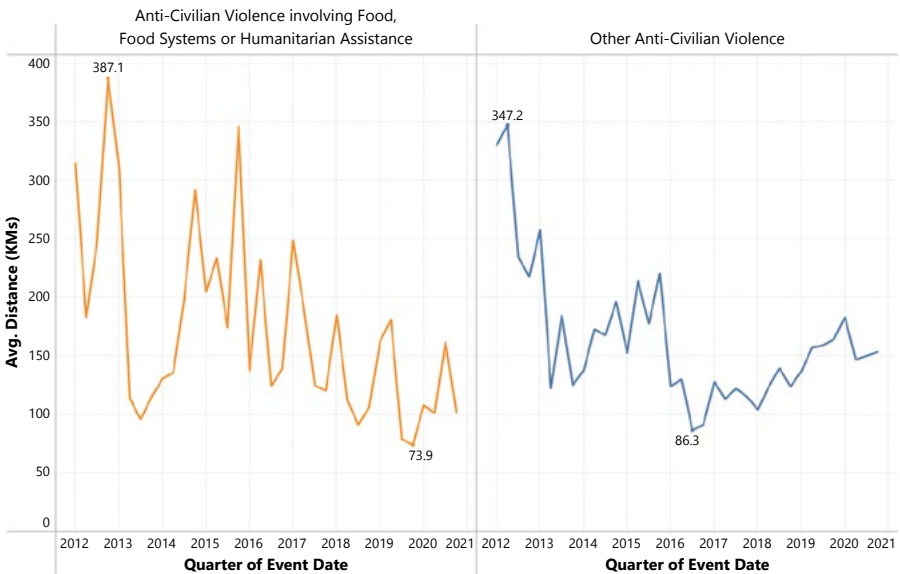


Figure 2. Average Distance between Sequential Anti-Civilian Violence by 'Boko Haram' by Type, per quarter, 2012-2020.

Together, these patterns suggest that anti-civilian violence involving food attributed to Boko Haram is geographically widespread. When considered alongside the analysis on the scale of violence (above), they point to the magnitude of this violence and the widespread nature of its use by the group.

### *Methodical and systematic violence*

Having outlined observable patterns in the scale and geographic profile of violence above, we now turn to consider the evidence of its systematic nature. To do this, we analyse particular modalities of violence concentrated in time and deployed across wide geographic areas.

Specifically, we focus on attacks attributed to Boko Haram that take place in marketplaces. These attacks are significant for a number of reasons: first, markets are predominantly civilian centres of trading that are central to the smooth functioning of food systems, facilitating and regulating access to food for producers, traders and customers. Second, these attacks are numerous: 89 discrete market-related attacks on civilians have been attributed to the group, resulting in a reported 1,778 fatalities. These attacks are also more likely to be high-casualty than other forms of violence against civilians carried out by the group: on average, attacks in markets result in 20 reported fatalities, compared to 7 for non-market-based attacks on civilians, a difference that is statistically significant per the results of an independent t-test. Third, they are geographically widespread: attacks on markets take place in all four countries, and in 11 of the 25 Admin Level 1 units, in which the group is active. In this way, these constitute direct attacks on civilians, that are on average relatively high-intensity and geographically widespread.

This modality of violence also displays a specific temporal pattern. On average, 10 market attacks per year have been attributed to Boko Haram since 2012, but these vary significantly over time. In 2014, 21 attacks were attributed, resulting in 821 reported fatalities; while in 2015, 30 attacks were recorded, resulting in 533 reported fatalities. These years represent two- and three-fold higher levels than the average. While the absolute number of attacks on markets is relatively low compared to overall anti-civilian violence attributed to the group, that the pattern of these events diverges significantly with the frequency of other anti-civilian violence is notable (see Figure 3). Together, this temporal clustering in a way that diverges from wider patterns of anti-civilian violence, coupled with its large-scale and high-intensity nature, and widespread geographic use, suggests a methodical deployment of this tactic that could be reasonably attributed to an organisational policy.

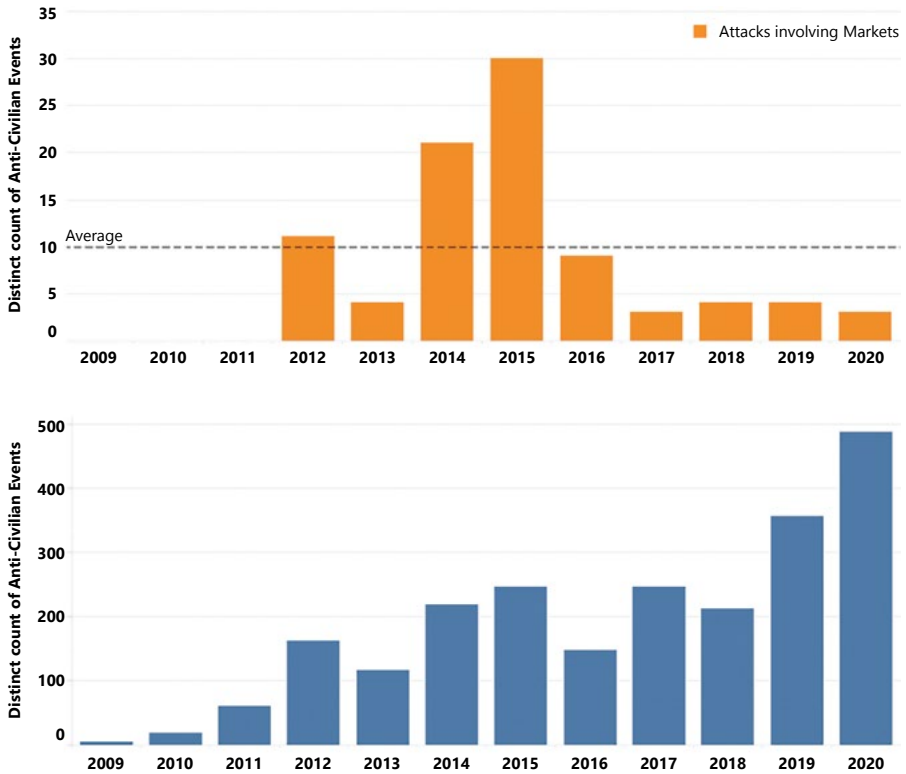


Figure 3. Number of Anti-Civilian Attacks involving Markets and those not involving Markets attributed to 'Boko Haram' by Type, per year, 2009-2020.

## Conclusion

Historically, food crises have often been framed as a largely inevitable by-product of conflict. Recently, there has been increasing recognition of its strategic dimensions – including in mobilization around calls for international accountability – which serve as an important corrective to this framing. However, efforts to pursue legal accountability have been complicated by the challenges of classifying starvation crimes. In this study, we have presented a case study of violence involving food by Boko Haram and argued that statistical and geospatial analysis of conflict data can serve to highlight patterns

of large-scale, widespread, systematic violence that suggest starvation is neither an inevitable – nor incidental – feature of contemporary conflict, but a function of specific policies by the group.

Legally, while the resulting analysis is not sufficient in itself to demonstrate that specific CAH have taken place, it can serve as a starting point for further investigation. Particularly in the context of further inquiry into abuses in Nigeria following the conclusion of the ICC prosecutor’s preliminary investigation, a consideration of the extent to which organisational policy deliberately sought to violate civilians’ food rights and leverage hunger as a weapon of war would be important.

Apart from the specific case study of starvation, the use of statistical and geospatial analysis of conflict data may also be equally useful with respect to other forms of CAH, including those examined in the previous chapters (including human trafficking and migratory policies). It is clear that proving the contextual elements of CAH, which featured extensively throughout the various chapters, is one of the key challenges for any prosecution based on Article 7 of the Rome Statute. However, in this context, it is worth reiterating that there are challenges in utilising such data as evidence in court settings, since the data would need to comply *inter alia* with the rules set out in the Rules of Evidence and Procedure of the International Criminal Court. Notwithstanding such challenges, the methodology explored in this chapter may, as a minimum, play a role in assisting the Office of the Prosecutor in their investigative phases in determining the *prima facie* existence of widespread or systematic attack in furtherance of a state or organisational policy.

In this context, it seems appropriate to suggest that lawyers working in the field of international criminal justice (prosecution, defense counsel and judiciary) should engage with political scientists working with statistical and geospatial data. An increased understanding of this methodology, by lawyers at the various levels of international criminal justice, may serve to overcome the reluctance towards the use of data in international criminal procedures.

Beyond the narrow question of international criminal prosecution, the analysis has implications for advocacy and accountability initiatives seeking to strengthen accountability for starvation more widely.<sup>53</sup> In particular, the inclusion of statistical and geospatial analysis could contribute to domestic accountability initiatives; transitional justice mechanisms; humanitarian responses seeking to identify and prioritise particular protection threats; and dominant narratives on norms, protection and adherence to the

rule of law internationally. Further research into the potential contribution of statistical analysis and its application to starvation in particular, would be valuable at this critical point in global food insecurity.

## Notes

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<sup>1</sup> Food Security Information Network, *The Global Report on Food Crises 2021*, 5 May, <https://www.wfp.org/publications/global-report-food-crises-2021>.

<sup>2</sup> United Nations, "Adopting Resolution 2417 (2018), Security Council Strongly Condemns Starving of Civilians, Unlawfully Denying Humanitarian Access as Warfare Tactics," 24 May, 2018, <https://www.un.org/press/en/2018/sc13354.doc.htm>.

<sup>3</sup> Global Rights Compliance (GRC) and World Peace Foundation (WPF), *Accountability for Starvation Crimes: South Sudan Policy Paper*, 15 November, 2019, <https://starvationaccountability.org/resources/publications/accountability-for-starvation-crimes-south-sudan-policy-paper-2>; Ibid, *Accountability for Starvation Crimes: Yemen Policy Paper*, 4 September, 2019 <https://starvationaccountability.org/resources/publications/accountability-for-starvation-yemen-policy-paper>; Ibid, *Accountability for Starvation Crimes: Syria Policy Paper*, 15 November, 2019, <https://starvationaccountability.org/resources/publications/accountability-for-starvation-crimes-syria-policy-paper>; Amnesty International, "Syria: 'Surrender or Starve' Strategy Displacing Thousands amounts to Crimes against Humanity," 13 November, 2017, <https://www.amnesty.org/en/latest/news/2017/11/syria-surrender-or-starve-strategy-displacing-thousands-amounts-to-crimes-against-humanity/>.

<sup>4</sup> In terms of this provision the following is a war crime: "Intentionally using starvation of civilians as a method of warfare by depriving them of objects indispensable to their survival, including wilfully impeding relief supplies as provided for under the Geneva Conventions".

<sup>5</sup> This refers to "Deliberately inflicting on the group conditions of life calculated to bring about its physical destruction in whole or in part". The Elements of Crimes adopted pursuant to the Statute then clarifies this further by stating that: "The term 'conditions of life' may include, but is not necessarily restricted to, deliberate deprivation of resources indispensable for survival, such as food or medical services, or systematic expulsion from homes."

- <sup>6</sup> Tilman Brück, Tilman and Marco d'Errico, "Food Security and Violent Conflict: Introduction to the Special Issue," *World Development* 117 (2019): 145-149.
- <sup>7</sup> Wendy S. Betts, "Evidence by the Numbers: Using Statistical Analyses as Evidence of International Atrocity Crimes," *University of San Francisco Law Review* 50, no. 3 (2016): 357-400.
- <sup>8</sup> Clionadh Raleigh, Andrew Linke, Håvard Hegre, and Joakin Karlsen, "Introducing ACLED: An Armed Conflict Location and Event Dataset," *Journal of Peace Research* 47, no. 5 (2010): 651-660.
- <sup>9</sup> Alex de Waal, *Famine Crimes: Politics & the Disaster Relief Industry in Africa* (Oxford: James Currey, 1997), 122.
- <sup>10</sup> Joanna Macrae and Anthony B Zwi, "Food as an Instrument of War in Contemporary African Famines: A Review of the Evidence," *Disasters* 16, no. 4 (1992): 299-321; Alex de Waal, *Mass Starvation: The History and Future of Famine* (Cambridge: Polity, 2018); Bridget Conley and Alex de Waal, "The Purposes of Starvation: Historical and Contemporary Uses," *Journal of International Criminal Justice* 17, no. 4 (2019): 699-722.
- <sup>11</sup> See contributions in Antonio Coco, Jérôme de Hemptinne, Brian Lander, "Foreword: Special Issue on Starvation in International Law," *Journal of International Criminal Justice* 17, no. 4 (2019): 673-674.
- <sup>12</sup> David Marcus, "Famine Crimes in International Law," *The American Journal of International Law* 97, no. 2 (2003): 245-281; Charles Kenny, "Famine Is a Crime," *Foreign Policy*, 25 July, 2011, [http://www.foreignpolicy.com/articles/2011/07/25/famine\\_is\\_a\\_crime](http://www.foreignpolicy.com/articles/2011/07/25/famine_is_a_crime); see also, de Waal, *Mass Starvation*.
- <sup>13</sup> Manuel J. Ventura, "Prosecuting Starvation under International Criminal Law," *Journal of International Criminal Justice* 17, no. 4 (2019): 781-814; Antonio Coco, Jérôme de Hemptinne, Brian Lander, "International Law against Starvation in Armed Conflict: Epilogue to a Multi-Faceted Study," *Journal of International Criminal Justice* 17, no. 4 (2019): 913-923; de Waal, *Mass Starvation*.
- <sup>14</sup> See Armed Conflict Survey 'Humanitarian Aid as a Weapon of War,' *Armed Conflict Survey* 5, no. 1 (2019): 14-20; Alex de Waal, "The Nazis Used it, We Use it," *London Review of Books* 39, no. 12 (2017), <https://www.lrb.co.uk/the-paper/v39/n12/alex-de-waal/the-nazis-used-it-we-use-it>.
- <sup>15</sup> Diana Kearney, "Food Deprivations as Crimes against Humanity," *New York University Journal of International Law and Politics* 46 (2013): 253-289, 258.
- <sup>16</sup> See Kearney, "Food Deprivations,," Randle C. DeFalco, "Accounting for Famine at the Extraordinary Chambers in the Courts of Cambodia: The Crimes against Humanity of Extermination, Inhumane Acts and Persecution," *The International Journal of Transitional Justice* 5 (2011): 142-158; *Ibid.*, "Conceptualizing Famine as a Subject of International Criminal Justice: Towards a Modality-Based Approach," *University of Pennsylvania Journal of International Law* 38, no. 4 (2017): 1113-1187.
- <sup>17</sup> International Criminal Court (ICC), *Rome Statute of the International Criminal Court* (1998), <https://www.icc-cpi.int/resource-library/Documents/RS-Eng.pdf>, Article 7 (2) (b).
- <sup>18</sup> Ventura, "Prosecuting Starvation."

<sup>19</sup> Widespread refers to either the number of victims and/or taking place over a broad geographic area.

<sup>20</sup> UN Office on Genocide Prevention and R2P, "Crimes against Humanity," *not dated*, <https://www.un.org/en/genocideprevention/crimes-against-humanity.shtml>; Kearney, "Food Deprivations," 271;

<sup>21</sup> DeFalco, "Accounting for Famine," 149.

<sup>22</sup> See GRC and WPF, *The Crime of Starvation and Methods of Accountability and Prosecution*, 2019, <https://sites.tufts.edu/wpf/files/2019/06/The-Crimes-of-Starvation-and-Methods-of-Prosecution-and-Accountability.pdf>; Kearney, "Food Deprivations," 269-270.

<sup>23</sup> DeFalco, "Accounting for Famine," 149

<sup>24</sup> Patrick Ball and Megan Price, "Using Statistics to Assess Lethal Violence in Civil and Inter-State War," *Annual Review of Statistics and Its Application* 6 (2019): 63-84.

<sup>25</sup> Betts, "Evidence by the Numbers."

<sup>26</sup> *Ibid.*

<sup>27</sup> Raleigh et al., "Introducing ACLED"; Therese Pettersson and Magnus Öberg, "Organized Violence, 1989-2019," *Journal of Peace Research* 57, no. 4 (2020): 597-613; Ralph Sundberg and Erik Melander, "Introducing the UCDP Georeferenced Event Dataset," *Journal of Peace Research* 50, no. 4 (2013): 523-532.

<sup>28</sup> Betts, "Evidence by the Numbers," 365; Sascha Nanlohy, Charles Butcher, and Benjamin E. Goldsmith, "The Policy Value of Quantitative Atrocity Forecasting Models," *The RUSI Journal* 162, no. 2 (2017): 24-32; Keydar, Renana, "Mass Atrocity, Mass Testimony and the Quantitative Turn in International Law," *Law & Society Review* 53, no. 2 (2019): 554-587.

<sup>29</sup> Jennifer Leaning, "The Use of Patterns in Crisis Mapping to Combat Mass Atrocity Crimes," in Robert I. Rotberg (ed.), *Mass Atrocity Crimes: Preventing Future Outrages* (Cambridge, MA: World Peace Foundation, 2010), 192-219; Jay Jacobs and Bob Rudis, *Data-Driven Security: Analysis, Visualization and Dashboards* (Indianapolis, IN: John Wiley & Sons, 2014).

<sup>30</sup> Betts, "Evidence by the Numbers," 365.

<sup>31</sup> *Ibid.*

<sup>32</sup> See contributions in Jonathan Moore (ed.), *Hard Choices: Moral Dilemmas in Humanitarian Intervention* (London: Rowman & Littlefield, 1998); Jakob Kellenberger, "Speaking Our or Remaining Silent in Humanitarian Work," *International Review of the Red Cross* 86, no. 855 (2004): 593-609.

<sup>33</sup> Remarks by Brian Lander, Deputy Director, World Food Programme, 'A Pandemic of Hunger: Implementing UN Security Council Resolution 2417,' Global Rights Compliance webinar, 19 May 2021.

<sup>34</sup> See World Health Organization, "Surveillance System of Attacks on Healthcare (SSA)," *not dated*, <https://www.who.int/emergencies/attacks-on-health-care/surveillance-system/en/>.



<sup>35</sup> GRC and WPF, *The Starvation Training Manual*, 2020, <https://starvationaccountability.org/wp-content/uploads/2019/12/Manual-Primer-Jan-2020-.pdf>.

<sup>36</sup> ACLED, "Codebook," 2020, <https://acleddata.com/resources/general-guides/#1603120929112-8ecf0356-6cf0>.

<sup>37</sup> ACLED Event ID NIG19020.

<sup>38</sup> For a full list of key terms and detailed methodology, see Caitriona Dowd, "Food-Related Conflict and Hunger," (unpublished manuscript, April 2021), typescript.

<sup>39</sup> Ball and Price, "Using Statistics," Betts, "Evidence by the Numbers."

<sup>40</sup> For further discussion, see Ball and Price, "Using Statistics," Betts, "Evidence by the Numbers."

<sup>41</sup> Note that since its emergence, the group has undergone several periods of re-organisation, splintering and alliance formation, referred to only briefly in this study, see Jacob Zenn, "Leadership Analysis of Boko Haram and Ansaru in Nigeria," *CTC Sentinel* 7, no. 2 (2014): 23-29; and *Ibid.*, "The Islamic State's Provinces on the Peripheries: Juxtaposing the Pledges from Boko Haram in Nigeria and Abu Sayyaf' and Maute Group in the Philippines," *Perspectives on Terrorism* 13, no. 1 (2019): 87-104. However, owing to a high level of continuity in the group's activity and coordination over this time, these have been consolidated under a single heading for the purposes of this analysis. This practice is consistent with formal investigations and reports into the group's human rights abuses – see UNOHCHR, "End of Visit Statement of the Special Rapporteur on Extrajudicial, Summary or Arbitrary Executions on her Visit to Nigeria," 2 September, 2019, <https://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=24934&LangID=En>; Human Rights Council, "Report of the Human Rights Council on its Twenty-Third Special Session," 13 August, 2018, <https://digitallibrary.un.org/record/805737?ln=en>; Human Rights Council, "Report of the Special Rapporteur on the Human Rights of Internally Displaced Persons on his Mission to Nigeria," 12 April, 2017, <https://digitallibrary.un.org/record/1298870?ln=en>.

<sup>42</sup> Global Centre for the Responsibility to Protect "Nigeria," 15 March, 2021, <https://www.globalr2p.org/countries/nigeria/>.

<sup>43</sup> Office of the Prosecutor of the ICC, Report on Preliminary Examination Activities 2020, 2020, <https://www.icc-cpi.int/itemsDocuments/2020-PE/2020-pe-report-eng.pdf>, 64-65.

<sup>44</sup> United Nations Secretary-General, "Full Transcript of the Secretary-General's Joint Press Conference on Humanitarian Crises in Nigeria, Somalia, South Sudan and Yemen," 22 February, 2017, <https://www.un.org/sg/en/content/sg/press-encounter/2017-02-22/full-transcript-secretary-generals-joint-press-conference>.

<sup>45</sup> UNOCHA, *Global Humanitarian Overview* 2018, 2018, [https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/gho\\_2018-en.pdf](https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/gho_2018-en.pdf), 36.

<sup>46</sup> Food and Agriculture Organization and World Food Programme, *Hunger Hotspots: FAO-WFP Early Warnings on Acute Food Insecurity (March to July 2021 Outlook)*, 23 March, 2021, <https://www.wfp.org/publications/fao-wfp-early-warning-analysis-acute-food-insecurity-hotspots-november-2020>, 11.

<sup>47</sup> See discussion of wider abuses including by the Nigerian security forces by Amnesty International *Amnesty International Report 2020/2021: The State of the World's Human Rights* (London: Amnesty International, 2021).

<sup>48</sup> Alex de Waal, "Food as a Weapon of War and the Nobel Peace Prize for the World Food Programme: Calling out the Culprits," World Peace Foundation, 9 December, 2020, <https://sites.tufts.edu/reinventingpeace/2020/12/09/food-as-a-weapon-of-war-and-the-nobel-peace-prize-for-the-world-food-program-calling-out-the-culprits/>.

<sup>49</sup> Armed Conflict Survey 'Humanitarian Aid as a Weapon of War.'

<sup>50</sup> Jacob Kurtzer, *Out of Sight: Northeast Nigeria's Humanitarian Crisis*, 11 May, 2020, <https://www.csis.org/analysis/out-sight-northeast-nigerias-humanitarian-crisis>, 9.

<sup>51</sup> Human Rights Watch, "Cameroon: Boko Haram Attacks Escalate in Far North," 5 April, 2021, <https://www.hrw.org/news/2021/04/05/cameroon-boko-haram-attacks-escalate-far-north>.

<sup>52</sup> DeFalco, "Accounting for Famine."

<sup>53</sup> See GRC and WPF Starvation, *The Crime of Starvation*, 23-25.