

Explaining Participation in Violent Conflict over Land

Nina von Uexkull¹

Department of Peace and Conflict Research

Uppsala University

Nina.von_uexkull@pcr.uu.se

Early draft – prepared for the Meeting of the European Network for Conflict Research (ENCoRe), Geneva, 21-22 January 2016.

Do not cite or circulate

Abstract

With climate change and parallel increase in population pressure that diminish the availability of arable land it is of great importance to understand the determinants of land-related violence. However, little is known about why individuals participate in violent conflict over land. This study sets out to shed light on this question using novel data on around 70 individuals who fought in land-related conflict in the Mt. Elgon region of Kenya during the years 2006-2008. Survey data is combined with semi-structured interviews. The case of Mt. Elgon shares characteristics with many other regions in Africa that experience land-related conflict, such as scarcity of land resources, location in the periphery of the country and the importance of ethnic entrepreneurs for instigating violence. Findings can thus contribute to our understanding of the determinants of land-related violence in Kenya and elsewhere and inform conflict prevention and resolution efforts.

¹ This research is financed by the Swedish International Development Cooperation Agency, Sida. I thank Erik Melander as well as John Korir and Dickson Swegenyi for invaluable help in conducting the survey and interviews.

Introduction

The concern about the security implications of climate change has led to an increased interest in the origins of violent land conflicts in agrarian societies. Climate change is projected to have negative impacts on agricultural outputs and the availability of freshwater. Africa is pointed out to be particularly vulnerable (Niang et al., 2014). There is a concern that these negative impacts on resource availability will also have implications for the occurrence of violent conflict and in particular conflict over arable land and water resources (CNA, 2014).

In spite of the increasing importance of land-related conflict, there is a lack in micro-level research on why individuals engage in land-related violence. While there is a body of research on determinants of participation in violence against the state, incentive structures and dynamics at work in civil and interstate conflicts are quite different from those we observe in shorter, more localized but often no less deadly episodes of communal violence fought between non-state groups. Thus, different explanations are needed that help us understanding the motivations of individuals in these specific contexts. Aiming to contribute to filling this research gap this study focuses on the research question: Why do individuals participate in violent conflicts over land?

For understanding the determinants of participation in land-related violence I use novel individual level data on land-related violence in the Mt Elgon region of Kenya. In Mt. Elgon, 600 people reportedly died as a result of the land-related conflict, many more were injured and about 66 000-200 000 were internally displaced during the years 2006-2008 (HRW 2008). Data on 70 ex-combatants of the Sabaot Land Defence Force (SLDF) was collected in semi-structured interviews combined with a survey in January 2016. This draft presents the theoretical framework and research design. In future versions of the paper, the responses of the ex-combatants will be matched with responses of non-combatants from nationwide representative surveys from Kenya in order to identify what makes these combatants different from comparable Kenyans.

Understanding the motivations of combatants can inform approaches for conflict prevention as it can shed light on the origins and evolution of these land conflicts. In addition, it can also help in the evaluation of strategies for conflict resolution. If fighters have been recruited by mobilizing

grievances over lack of access to a particular piece of contested land, post-conflict arrangements may need to focus more on the establishment of institutional arrangements that regulate access for the contesting parties. If instead groups have dominantly been mobilised by prospects for gaining a livelihood, peace making may rather depend on creating alternative livelihood and job opportunities.

The paper is structured as follows. First, theoretical arguments for participation in land-related violence are presented. Then, I describe the research design.

Theoretical framework

The paper focuses on communal conflicts fought over land (Boone, 2013). Communal conflict is defined as fighting between non-state groups identified along religious, ethnic or linguistic identity lines (Sundberg, Eck, & Kreutz, 2012). I concentrate on the subset of cases where land access and ownership is a stated aim of the involved parties.

Previous research has often employed a top-down approach of strategic elites exploiting non-strategic and easily manipulated aggrieved masses. For example, Kahl suggests that state elites may exploit existing environmental pressures and incite intergroup violence as a way of crushing opponents (Kahl, 1998, 2006). On the basis of their ethnicity elites manipulate fighters to take part in fighting, for example by using the other side as scapegoat and creating in and out-group cleavages.

However, why would ordinary people not learn over time and ignore top-down ethnic entrepreneurship as empty noise especially where promises are not kept (cf. Scacco, 2012)? Focusing on strategic interactions of ethnic entrepreneurs leaves little agency to the actual participants. Individuals do make an active choice to partake in land-related violence, considering other alternatives such as leaving the area or seeking out non-violent means to address land disputes. Communal conflicts are usually localised and do not engulf the whole country. Therefore, moving to other areas that are not affected by conflict is usually possible. Thus, even when ethnic entrepreneurs add further fuel to flames, this is not a sufficient

explanation for a violent outcome. And in any case, it does not explain variation in participation across individuals belonging to the same communal group involved in a dispute over land.

The question of why individuals turn to violent means in conflicts over land has not been systematically addressed by previous research to my knowledge. Building on previous research on participation in other forms of organised violence, I below present theoretical arguments for participation in land conflicts. My general proposition is that variation in the importance of land to an individual for livelihood, or alternatively variation in the importance of communal identity, should be crucial for explaining who engages in this form of violence and who does not.

Participation in conflicts over land and other forms of violence

In many respects, determinants of participation in communal conflicts over land should be similar to what we know about participation in other forms of organized violence. Similar to participation in civil war, organizing for communal land conflicts involves collective action problems (Olson, 1965). Participation in fighting is risky. Participants may die in battle with another group, or caught by government forces which are sometimes called to intervene especially when communal fighting regards land (Elfverson, 2015). In contrast to these great known risks, the benefit side of fighting is typically uncertain. While using violence may displace outsiders and vacate land, there are no guarantees that those participating in the conflict would benefit themselves. In addition, property rights of the original owners might also be revoked by the government following displacements (Kimenyi & Ndung'u, 2005). Thus, taking to arms in the context of land disputes is as puzzling as it is in the context of other forms of conflict.

A few common explanations may help explaining participation regardless of the form and dimension of conflict. Thus, they are likely also found in violent conflicts over land. These explanations are not necessarily rival, but can be present at the same time in the same conflict (Humphreys & Weinstein, 2008). In particular, there is a group of explanations that can be as much a cause of conflict participation, as they are a result of the conflict. These include neighbourhood effects. An individual linked to network endorsing the use of violence is more prone to participate than other individuals (McDoom, 2013; Scacco, 2012). A network that

endorses violence may also impose social sanctions on any member who refuses (Humphreys & Weinstein, 2008). Moreover, the direct or indirect experience of violence should make individuals more prone to use violence themselves. For example, experience of violence has been found to harden negative intergroup attitudes (Beber, Roessler, & Scacco, 2014) and increase support towards lawlessness (Dercon & Gutiérrez-Romero, 2012). These explanations likely also have explanatory power in land conflicts.

Another commonly accepted explanation is the provision of selective incentives to fighters, benefits that are contingent of participation, which makes groups overcome the collective action problem (Humphreys & Weinstein, 2008; Olson, 1965). These selective incentives include for example security provided to individuals that join the group they could not enjoy otherwise during wartimes (Kalyvas & Kocher, 2007). For example, in the Mt Elgon conflict in Kenya, several individuals reported they felt trapped between the SLDF land militia, who might kill them as suspected betrayers if not joining, and the government suspecting anyone of their ethnic community to be a member of SLDF. This made them join rather than stay out.²

Alongside these explanations, several explanations found in previous research can be refined to better fit the case of land-related violence fought between groups.

A resource worth dying for – land as essential for livelihood

Conflicts over land concern a tangible divisible issue that can directly benefit fighters in the war. In contrast to battles over government power or fighting a holy war, land is not essentially a public good. Thus, if the group can make credible to fighters that they can conquer a piece of land, and are able to keep it in control, an armed communal militia can use promises of future land gains as selective incentives for any active participant in violence. This may then make groups overcome the collective action problem.³

² Interviews Mt Elgon region, January 2016.

³ However, communal fighting happens within states, so the government is a third actor that is important for the prospects of groups to achieve their aims. Accordingly, upholding the promise credibly to distribute land to fighters does not only depend on the likelihood of winning over another communal group, but also the reaction of the government to intergroup fighting. Assuming communal violence is a strategy to gain land, a necessary condition for the conflict to become violent is that the government is either unwilling or unable to redress unlawful territorial gains made by groups. For example, this could be due to members of the government siding with a side in the conflict, or de facto anarchy where the dispute takes place.

However, even where credible promises of future land gains are made, participation in fighting involves great risk for the loss of life with future benefits being uncertain and contingent on the success of the group. Thus, that land itself is a resource worth dying for seems unlikely in most contexts. It should only be worth taking these great risks where land ownership is of major importance. On the structural level, it is no coincidence that land-related violence is concentrated in developing countries where agriculture is the backbone of the economy (Von Uexkull & Pettersson, 2013). The importance of land for the economy in these countries also means that how land is held or even accessed reflects how power is held because land ownership tends to depend on economic and political influence in these societies (Kanyinga, 2009a, p. 327).

Similarly, at the individual level, whoever takes part in the fight has likely a hunger for arable land. Most individuals have less costly outside options, such as migration from the area if it should be affected by conflict and finding jobs that are not dependent on the use of land. While a person with temporary labour in a factory may be poor, it is nevertheless unlikely to see this person risk life in fighting over land, as his livelihood does not depend on land. Thus, it seems likely that those participating are dependent on land for their livelihood and have little attractive and less risky outside options.

This argument refines the opportunity cost argument and makes it fit land conflicts specifically (Collier & Hoeffler, 2004). The higher economic gain from participation relative to alternatives, the higher the likelihood of participation in conflict (Collier & Hoeffler, 2004). As land is so tightly linked to economic wealth for certain population groups with livelihoods dependent on farming land, I thus expect that high dependence on land will be linked to participation in communal violence over land.

Hypothesis 1: An individual who is particularly dependent on land for his livelihood is more likely to participate in land-related violence than other individuals.

“Sons of the mountain” - Land as source of communal identity

Another perspective is that land conflicts occur largely because of a group’s strong sense of belonging and ownership to a particular land. They perceive themselves to be autochthonous to an area and to have an obvious (and even natural) association with a specific land that others do not enjoy (Lynch, 2011). From this perspective, land is not an economic resource per se, but a source of identity. In the most extreme case land could then be perceived as almost an indivisible issue at the group level (Fearon, 1995). While land in principle is perfectly divisible, historical narratives of belonging may lead communal groups to identify so much with particular pieces of land that this piece of land becomes indivisible in the sense that no other ethnic group may be tolerated there. Indivisible issues have been recognised as causes of conflict according to bargaining theory, as they eliminate a bargaining space between the actors involved (Fearon, 1995). Developing a strong senses of belonging may even happen for both sides in a conflict through population movements, for example through resettlement efforts by colonial powers (Kanyinga, 2009a; Lynch, 2011). Also fighting between groups over “holy sites” could be seen from this perspective.

At the individual level this may imply that the strength of identification with the own ethnic group could explain who participates. Only individuals that see themselves strongly and exclusively as part of a group, distinct from another group may develop a sense of being “sons of the soil” (Fearon & Laitin, 2011) – or in the case of the Mount Elgon conflict in Kenya “sons of the mountain” (Lynch, 2011) – that does not tolerate the presence and access of outsiders.

The importance of identity for the use of violence has been recognized in other contexts as well. In a study of Sub-Saharan Africa, Velitchkova finds that individuals who consider their “ethnic” affiliation more important than the nation are more likely to use violence in pursuit of political goals than persons who have not adopted such ethnic self-identifications (Velitchkova, 2015). An exclusive and strong ethnic identity below the level of the nation state seems particularly relevant for the explanation of non-state violence that per definition are fought between communally identified groups.

An additional empirical implication of this perspective is that participants will insist on access and ownership of land in the disputed area they feel righteously belongs to them. Thus, they would not agree to move to similar land resources or other forms of compensation elsewhere.

Hypothesis 2: An individual who is strongly identified with the own ethnic group and puts particular value to a particular land linked to his identity is more likely to participate in land-related violence than other individuals.

Research Design

This paper intends to contribute to explaining participation in land-related violence by sampling former participants in communal conflict over land and asking them to explain their situation, choices and behaviour prior to and during communal violence. Specifically, I focus on ex-combatants of the Sabaot Land Defence Forces (SLDF) that fought over land in the Mt. Elgon region of Kenya 2006-2008.

Background to the conflict

The Mt. Elgon district is located in Kenya at the border to Uganda in what is now Bungoma county. At the time of the conflict, it had a population of around 170 000, of which 56% fell below the poverty line (UNDP, 2010).

Mt. Elgon experienced several rounds of violence, first when Kenya gained independence in 1963, then at the return to multi-party politics in 1991, and, more recently, from 2006 to 2008 (Lynch, 2011, 392). In the first two episodes of violence, the Sabaot ethnic tribe, belonging to the larger Kalenjin tribe, fought the Luhya ethnic tribe (Lynch, 2011, p. 392). However, in the most recent episode of violence, Sabaot-speaker fought against Sabaot-speaker as the Soy sub-group of the Sabaot fought the Mosop sub-group (also called the Ndorobo) (Lynch, 2011, p. 392).

The roots of the 2006-2008 clashes lie in controversies around a government resettlement scheme, with the conflict arising about the question of how land would be distributed among the

people from the Mosop and people from the Soy. This process was started already 1970s when the government started to relocate the Mosop in order to protect the region they came from, the Moorland, which constitutes a precious water catchment area higher up on Mount Elgon. Until 2006, three big resettlement plans were initiated in three different areas (Chepyuk Phases I, II and III). Problems arose in all three resettlement phases that the government initiated.

Allegations of nepotism and corruption arose as for who would be the beneficiaries of land distributed by the government. The Mosop were the main target of the resettlement program. However, members of the Soy community claimed that they were from the same community, and even more numerous and therefore deserved more plots, especially given that many already had settled on the land in Chepyuk III that was to be redistributed anew. Many had been living in the area of Chepyuk III for decades as squatters or had been born there and had developed a sense of ownership to the area (Lynch, 2011, 404). A massive increase in population numbers made it even more difficult to resettle people as originally planned. Of 7500 applicants for phase III only 1753 were on the list of beneficiaries published in April 2006, half of them from the Soy and half from the Mosop (TJRC, 2013, p. 65; UNDP, 2010). The unsuccessful applicants that had been settling in the Chepyuk III area were evicted in 2006 (Simiyu, 2008).

Among the evicted from the land for resettlement in Chepyuk phase III the SLDF core formed. The SLDF's stated aim was to defend the interests of the lowland Sabaot against the Mosop and 'resist government attempts to evict squatters in the Chepyuk areas of Mt Elgon District' (KNCHR, 2008, p. 6; Human Rights Watch (HRW), 2008). It had transformed from a small militia calling themselves "Janjaweed" and grew quickly to a massive militia in possession of heavy arms (TJRC, 2013, p. 66). Violence started with the killing of the assistant chief in charge of the list of beneficiaries in mid-2006 (TJRC, 2013, p. 65).

There was an important political dimension in this dispute, as given the lack of land titles to those settling in the Chepyuk area, politicians exploited the situation. One candidate in the 2007 election to the parliament, Fred Kapondi, allegedly promised the SLDF support in the land question if he got elected. Many pointed Kapondi out to be crucial for inciting the group and for making the following conflict that violent (TJRC 2013, Theisen 2012). According to witnesses in

the Truth and Reconciliation commission, Fred Kapondi, reportedly said to the Soy in Chepyuk III: *“You must fight so that the Government can realize that your land should not be taken away from you. Then, finally you will be given your land”* (TJRC, 2013, p. 64).

The following violence can be described in three dimensions. First of all, the SLDF turned against the Mosop in the Chepyuk settlement areas, displaced most, and fought a low level communal conflict with those staying and defending their land. The Mosop side allegedly formed the Moorland Defence Force (MDF) in response.⁴ Fighting resulted in 20 killed in total on the Mosop side.⁵ The UCDP records 32 killed in non-state fighting (UCDP 2016).

The second type of violence occurred later and came to be the dominant form, when the SLDF had grown considerably and targeted civilians (mostly from the Soy) for supplying the group with food and money and assuring collaboration (Lynch 2011, 406). Over time the group built up a system of extortion, taxing people for supply of the own troops and enrichment of their leaders (Kanyinga, 2009a, p. 339). The UCDP database reports around 100 one-sided deaths, but the real figure is likely much higher (UCDP 2016).

The final dimension was fighting against government forces. In the beginning of the SLDF activity the police was totally overpowered. However, in March 2008, the army intervened and crushed the group. This led in turn to a number of deaths, not least inflicted by the government against civilians and alleged SLDF members. The army hunted alleged supporters and participants of the group including using torture and disappearances. The operation by the army resulted in the death of SLDF leader Matakwei in May 2008 and the execution or imprisonment of other high-ranking SLDF commanders (UCDP database 2016). The UN Human Rights Council reports that “the number of persons killed or disappeared by the security forces is conservatively estimated at over 200”. (Alston 2009, p.27) Both the SLDF and the army were accused of gross human rights violations, sexual violence and torture (HRW 2008, Kenyan National Human Rights Commission 2008).

⁴ Five respondents that had fought against the SLDF for the Mosop disputed that the MDF was actually strictly organised and had a leader (interviews 9 January 2016, Chepyuk) but MDF this is a common name reported.

⁵ Interviews Chepyuk, Mt Elgon, 9 January 2016.

After the end of the conflict the government started implementing the settlement of the 2006 list of beneficiaries to the Chepyuk III settlement area. Thus, the conflict did not achieve any change in the settlement policies and the conflict issue was not addressed following the conflict. Former SLDF fighters now rent land, or utilize farming land in the adjacent forest areas tolerated by the Kenyan Forest Department in the so-called Shamba system.⁶

Generalizability of results from the Mt Elgon context

Structurally the Mt. Elgon conflict shares common characteristics with many communal conflicts and thus results may be applicable to other contexts as well.

First, the conflict shares with other land-related conflicts the lack of clear legal land ownership that permitted different groups to claim that the land was theirs based on conflicting and unclear right of usage, legal rulings and directives of politicians in power (Simiyu, 2008). Kenya has a history of the coupling of land access and politics where with the introduction of multi-party politics, political campaigns have been building on questions of land access to ethnic groups (Boone, 2011; Kanyinga, 2009b). In these contexts, communal groups can make credible to their fighters that territorial gains can be made that will not be revised by the government.

Second, its geographic location in the periphery is similar to many other state-based and communal conflicts (Buhaug, 2006; Sundberg et al., 2012). It broke out in the periphery of the Kenya on the border to Uganda, in a marginalised region with little state presence and proximity to safe heavens and sources of weapons in neighbouring countries (Simiyu, 2008).

A third typical condition for communal land-related violence is resource scarcity, caused by ever increasing pressure on land resources, due to rapid population growth (Kahl, 2006). This was the case for Mt Elgon as well (Simiyu, 2008).

Moreover, similar to many other land-related conflicts in Kenya and elsewhere, its timing and extend is partly explained by powerful political supporters that both further incited violence and

⁶ Interviews Mt Elgon, January 2016.

allegedly even provided tangible support (Kanyinga, 2009a). In particular, the power struggle between two political rivals that struggled for political support, John Serut and Fred Kapondi, was crucial for the outbreak of violence (Simiyu, 2008).

It is a somewhat unusual case as during later stages of the conflict, other forms of violence including massive use of one-sided violence and fighting against the army became dominant (Simiyu, 2008). However, the conflict issue of land and fighting between the Soy (SLDF) and Mosop (Moorland Defence Force) was present throughout the conflict.⁷ It thus can nevertheless inform many other cases of land-related violence.

Sampling participants in conflicts over land

For understanding why people participated in land-related violence, we collected data from 70 ex-combatants in SLDF in a survey and semi-structured interviews.

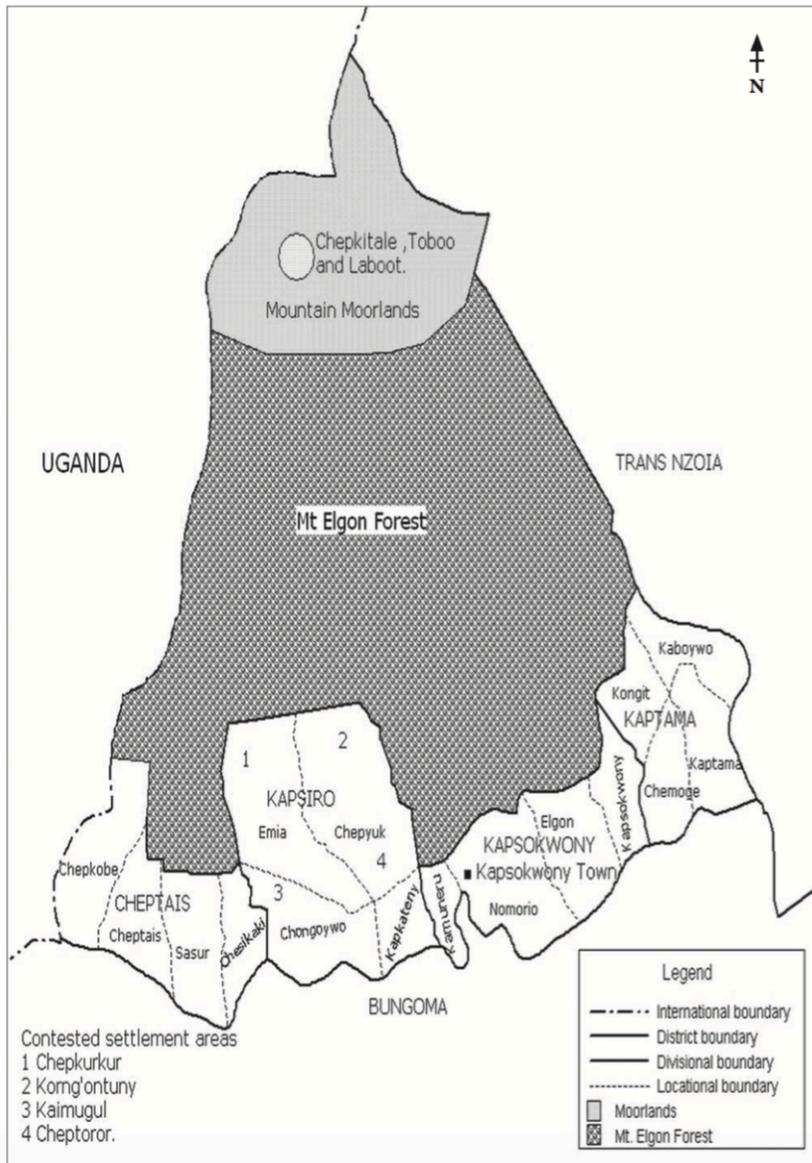
For the systematic test of explanations ex-combatants and non-combatants in the conflict need to be compared to see whether these systematically differ. Ideally a probability sample would be desirable for getting unbiased estimates. However, this would come with a number of problems. In reality, the number of sampled participants in violence in area-wide samples is typically extremely small. This results in low statistical power, a problematically high likelihood of type II error and difficulties in detecting effects. Thus, in order to have a high number of ex-combatants in the sample, we instead rely on a convenience sample of ex-combatants that will in later versions of the paper be compared to a sample of non-combatants using matching techniques and/or a case-control design.

We specifically focus on the SLDF as the dominant party in the conflict. The group was clearly responsible for starting the conflict and being the aggressive part throughout (UNDP, 2010). The other ethnic militia, the Moorland Defence Force, was nearly overwhelmed and mostly defending a small place where the remaining members sought refuge.⁸ This pattern makes

⁷ Interviews Mt. Elgon, January 2016.

⁸ Interviews Chepyuk, Mt Elgon January 2016.

participation somewhat less puzzling, as it turned out to be mostly defending the lives of those remaining.



Map of Mt Elgon (adapted from Simiyu (2008)).

For the identification of the ex-combatants we went to different locations. First, we went to the area where many participants originated from and returned after conflict in the lower parts of Mt Elgon. These are Chepkube, Cheptais, Sasur and Chesikaki closest to the Uganda border. We also went to the contested areas in the locations of Chongoywo, Emia, Kapkateny and Chepyuk (see map). In all of these locations we used the local administration, the area chiefs, together with traditional authorities, the villages elders, to present a list of known participants in the area

with the help of a Kenyan NGO, the Community Solutions Research Project. The individuals on the list were then contacted and asked whether they would be willing to participate in the study. This way we had several entry points to get a sample that is as representative as possible for the profile of members of the SLDF group. Altogether, around 70 ex-combatants filled in the survey and were interviewed for additional 30-60 minutes in semi-structured interviews.

A couple of limitations for this strategy of identifying participants should be mentioned. These limitations are due to ethical and practical concerns inherent to the study of participants in violence. First, we only relied on individuals that were known by authorities to be participants in order not to risk that individuals would be disclosed, and thus endangered, by participating in the study. Second, we naturally could not interview people that for example fled to Uganda or Sudan after the conflict, or were killed in battle. Very few members of the group also still remain in prison. However, in depth interviews of individuals assured us that this sampling procedure still captured a great variety of members of the group in terms of responsibility within the group and even atrocities committed. Respondent ranged from individuals with rather simpler tasks of guarding to a number of senior ranking individuals of SLDF. Several of them had been in prison but were released afterwards.

It is unclear how many members the SLDF had in total. Therefore it is unclear what share of the group could be interviewed. Estimates about troop size vary a lot. Some more senior members involved in training said it could be around 3800 at maximum.⁹ Given the population size of only 170 000 in the whole Mt Elgon district this might still be exaggerated. As of June 2008, about 758 SLDF suspects had been arraigned in court on charges, although many of these were bailed afterwards (HRW, 2008).

Sampling non-participants in conflicts over land

Without a baseline of nonparticipants, it is impossible to reliably assess the characteristics that differentiate participants in land-related violence from the population. Therefore, we will compare characteristics of these individuals based on the survey responses to a set of individuals

⁹ Interviews MT Elgon region Emia Location January 2016.

that have not taken part in violence, but that are similar in relevant respects that we need to control for in order to be able to isolate a causal effect.

In future versions of the paper, we will employ a case-control design, which is common in medicine for example. This involves sampling observations (randomly or collecting all those available) for which the choice/behaviour is observed, as well as a random sample of the population for which the choice/behaviour is not observed. Under this basic design, the outcome is measured for all observations and selection depends on Y. The probability of the outcome can then be estimated easily as a function of covariates (King & Zeng, 2001).¹⁰

The sampling of non-combatants is done using the nationwide Afrobarometer survey round 4 (2008), which contained an explicit question on use of violence that allows us to identify respondents that did not engage in violence (<http://www.afrobarometer.org>). This dataset has the additional advantage that the survey was administered the same year as the conflict in Mt Elgon was violent.

Operationalizations

The data on ex-combatants was collected using both a survey and semi-structured interviews. The questionnaire consists of questions that are selected from the nationally representative survey Afrobarometer round 4 (2008) and additional questions. Questions were posed in exactly the same way as in Afrobarometer so that our sample of ex-combatants can be pooled for the analysis with a sample of non-participants. The survey was translated and administered by local interpreters from the Sabaot community in an environment that assured that no other people were present to hear the questions and answers and neither any foreigners were present in the same room. Thereafter semi-structured interviews were conducted in another room with help of another Sabaot interpreter.

The dependent variable: participation in violence

We focus on SLDF ex-combatants that is individuals that carried weapons for use in conflict as members of the SLDF group. All ex-combatants as identified as such by chiefs and elders are in

¹⁰ An alternative method to be considered is matching techniques (Diamond & Sekhon, 2012).

the dataset. Several respondents reported they were only “cooks” or tax collectors in the group. These are nevertheless coded as participants if they had stayed for longer time in the group and it is thus likely they got involved or would be prepared to take part in combat activities. During the interviews we got reports that being a cook was a common excuse used by former SLDF members. Many of the participants in the interviews have not served any terms in prison despite admitting to gross human rights abuses to us. In this context of impunity there could be clear incentives to report the role in the organisation as less violent.

For the non-combatants, all individuals were selected from the Afrobarometer round 4 that did answer the respective question, and did NOT report “yes, [I have used force or violence for a political cause],” and also not “no, but would do [it] if I had the chance”.

Independent variables

I first suggested that individuals who are particularly reliant on land should be more likely to take part in land-related violence. This is operationalized as a lack in cash income, which is a question that is also in the Afrobarometer 4 survey. This should in rural areas in Kenya proxy that adult individuals relied on subsistence farming or livestock keeping and therefore were reliant on access to land for their income. In addition to this, respondents were asked additional questions aiming at further investigating agricultural dependence. First, we asked what their livelihood depended primarily on before joining group and the number of children and wives. Presumably, the larger the household, the less easy it is to move from the area and the more important land ownership. Second, we asked whether they had considered alternatives like moving from the area and if yes, why they still came to join the group. These latter questions are not found in any other survey, but can be used to get an idea about the plausibility of the explanation that agricultural dependence is crucial for participation in land-related violence.

I alternatively suggested that variation in participation could be explained by the strength of communal identity linked to a particular piece of land. This is tested using a question on identification with the own ethnic group:

Let us suppose that you had to choose between being a Kenyan and being a _____ <i>[Respondent's self-reported Ethnic Group]</i> Which of the following best expresses your feelings?	
I feel only _____ <i>(R's ethnic group)</i>	1
I feel more _____ <i>(R's ethnic group)</i> than Kenyan	2
I feel equally Kenyan and _____ <i>(R's ethnic group)</i>	3
I feel more Kenyan than _____ <i>(R's ethnic group)</i>	4
I feel only Kenyan	5
Not applicable <i>(respondent did not answer the ethnicity question above)</i>	97
Refused to answer <i>[DNR]</i>	98
Don't know or cannot say <i>[DNR]</i>	99

In addition the respondents were asked a couple of other questions that intend to identify whether the contested land was a source of identity. The respondents were asked 1) what they thought the conflict was about, 2) whether they themselves would have accepted if the government would have offered them land anywhere else instead of Chepyuk III and 3) whether they thought others in the group would have accepted this. The rationale is that if they would have accepted land anywhere else, this means that where the land is of less important to them. Accordingly, it is not a question about a particular piece of land being particularly important to their identity.

Controlling for alternative explanations

In the evaluation of the hypotheses on data with non-combatants and combatants, control variables will include sex, age and location (rural/urban) (see e.g. (Linke, O'Loughlin, McCabe, Tir, & Witmer, 2015; McDoom, 2013).

A number of respondents in nationally representative surveys are not even likely to participate in land-related violence, as there are no land disputes in their areas. Land disputes are common in most rural areas in Kenya, in particular in the most densely populated former White Highlands of the Rift Valley (Boone, 2012; Kanyinga, 2009b). This is also reflected in conflict event data with most parts of the country having seen some events of fighting involving communal militias (ACLED 2013). Thus, living in rural locations in Kenya can be assumed to capture a non-zero risk of land disputes and thereby a non-zero risk that respondents face the choice of using violence in these disputes.¹¹ The variable urban/rural in the Afrobarometer survey provides

¹¹ We could refine this further by controlling for land-related violence in the area of the respondents based on geo-referenced event data e.g. by the UCDP GED (Sundberg and Melander 2013) and other data on land-related violence

information on the location of the respondent. The sample of non-respondents will be limited to rural respondents (n=856).

The age of the respondent is an important control variable. All individuals in our data were around 16-40 at the time of the conflict. This fits with general patterns of violence in Kenya. In the electoral violence of 2007/2008 over 70% of the direct perpetrators of the violence were young people (EDC & USAID, 2009).

Another control variable is the sex of respondents. All combatants in our data are male, in line with common patterns in armed groups. A variable asking about the sex of the respondent will be used to control for this.

Results

TBA

in Kenya e.g. ACLED (Raleigh, Linke, Hegre, & Karlsen, 2010) and Catherine Boone's data (Boone, 2012). Thereby we can identify districts and regions that are at risk of seen land-related violence.

References

- Beber, B., Roessler, P., & Scacco, A. (2014). Intergroup Violence and Political Attitudes: Evidence from a Dividing Sudan. *The Journal of Politics*, 76(03), 649–665. <http://doi.org/10.1017/S0022381614000103>
- Boone, C. (2011). Politically Allocated Land Rights and the Geography of Electoral Violence: The Case of Kenya in the 1990s. *Comparative Political Studies*, 44(10), 1311–1342. <http://doi.org/10.1177/0010414011407465>
- Boone, C. (2012). Land Conflict and Distributive Politics in Kenya. *African Studies Review*, 55(01), 75–103. <http://doi.org/10.1353/arw.2012.0010>
- Boone, C. (2013). Land Regimes and the Structure of Politics: Patterns of Land-Related Conflict. *Africa*, (1), 188–203.
- Buhaug, H. (2006). Relative Capability and Rebel Objective in Civil War. *Journal of Peace Research*, 43(6), 691–708. <http://doi.org/10.1177/0022343306069255>
- CNA. (2014). National Security and the Accelerating Risks of Climate Change. Retrieved from http://www.cna.org/sites/default/files/MAB_2014.pdf
- Collier, P., & Hoeffler, A. (2004). Greed and grievance in civil war. *Oxford Economic Papers*, 56(4), 563–595. <http://doi.org/10.1093/oep/gpf064>
- Dercon, S., & Gutiérrez-Romero, R. (2012). Triggers and Characteristics of the 2007 Kenyan Electoral Violence. *World Development*, 40(4), 731–744. <http://doi.org/10.1016/j.worlddev.2011.09.015>
- Diamond, A., & Sekhon, J. S. (2012). Genetic Matching for Estimating Causal Effects: A General Multivariate Matching Method for Achieving Balance in Observational Studies. *Review of Economics and Statistics*, 95(3), 932–945. http://doi.org/10.1162/REST_a_00318
- EDC, & USAID. (2009). Cross Sectoral Assessment for At-Risk Youth in Kenya.
- Elfvérsson, E. (2015). Providing security or protecting interests? Government interventions in violent communal conflicts in Africa. *Journal of Peace Research*, 52(6).
- Fearon, J. D. (1995). Rationalist Explanations for War. *International Organization*, 49(3), 379–414. <http://doi.org/10.2307/2706903>
- Fearon, J. D., & Laitin, D. D. (2011). Sons of the Soil, Migrants, and Civil War. *Ethnicity and Ethnic Strife*, 39(2), 199–211. <http://doi.org/10.1016/j.worlddev.2009.11.031>
- HRW. (2008). *All the men have gone. War Crimes in Kenya's Mt. Elgon Conflict*. Human Rights Watch.
- Humphreys, M., & Weinstein, J. M. (2008). Who Fights? The Determinants of Participation in Civil War. *American Journal of Political Science*, 52(2), 436–455. <http://doi.org/10.1111/j.1540-5907.2008.00322.x>
- Kahl, C. H. (1998). Population Growth, Environmental Degradation, and State-Sponsored Violence: The Case of Kenya, 1991-93. *International Security*, 23(2), 80–119.

- Kahl, C. H. (2006). *States, Scarcity, and Civil Strife in the Developing World*. Princeton and Oxford: Princeton University Press.
- Kalyvas, S. N., & Kocher, M. A. (2007). How “Free” is Free Riding in Civil Wars?: Violence, Insurgency, and the Collective Action Problem. *World Politics*, 59(02), 177–216. <http://doi.org/10.1353/wp.2007.0023>
- Kanyinga, K. (2009a). The legacy of the white highlands: Land rights, ethnicity and the post-2007 election violence in Kenya. *Journal of Contemporary African Studies*, 27(3), 325–344. <http://doi.org/10.1080/02589000903154834>
- Kanyinga, K. (2009b). The legacy of the white highlands: Land rights, ethnicity and the post-2007 election violence in Kenya. *Journal of Contemporary African Studies*, 27(3), 325–344. <http://doi.org/10.1080/02589000903154834>
- Kimenyi, M., & Ndung’u, N. (2005). Sporadic Ethnic Violence. Why has Kenya not experienced a full-blown civil war? In P. Collier & N. Sambanis (Eds.), *Understanding Civil War* (pp. 123–156). Washington, DC: World Bank.
- King, G., & Zeng, L. (2001). Logistic Regression in Rare Events Data. *Political Analysis*, 9(2), 137 –163.
- Linke, A. M., O’Loughlin, J., McCabe, J. T., Tir, J., & Witmer, F. D. W. (2015). Rainfall variability and violence in rural Kenya: Investigating the effects of drought and the role of local institutions with survey data. *Global Environmental Change*, 34, 35–47. <http://doi.org/10.1016/j.gloenvcha.2015.04.007>
- Lynch, G. (2011). The Wars of Who Belongs Where: The Unstable Politics of Autochthony on Kenya’s Mt Elgon. *Ethnopolitics*, 10(3-4), 391–410. <http://doi.org/10.1080/17449057.2011.596671>
- McDoom, O. S. (2013). Who killed in Rwanda’s genocide? Micro-space, social influence and individual participation in intergroup violence. *Journal of Peace Research*, 50(4), 453–467. <http://doi.org/10.1177/0022343313478958>
- Niang, I., Ruppel, O. C., Abdrabo, M., Essel, A., Lennard, C., Padgham, J., & Urquhart, P. (2014). Africa. In International Panel on Climate Change, *Climate Change 2014: Impacts, Adaptation, and Vulnerability Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*.
- Olson, M. (1965). *The Logic of Collective Action. Public Goods and the Theory of Groups*. Cambridge, MA & London: Cambridge University Press.
- Raleigh, C., Linke, A., Hegre, H., & Karlsen, J. (2010). Introducing ACLED: An Armed Conflict Location and Event Dataset. *Journal of Peace Research*, 47(5), 651 –660. <http://doi.org/10.1177/0022343310378914>
- Scacco, A. (2012). *Who Riots? Explaining Individual Participation in Ethnic Violence*. Unpublished manuscript.
- Simiyu, R. (2008). *Militianisation of resource conflicts The case of land-based conflict in the Mount*

Elgon region of Western Kenya. Institute of Security Studies.

Sundberg, R., Eck, K., & Kreutz, J. (2012). Introducing the UCDP Non-State Conflict Dataset. *Journal of Peace Research*, 49(2), 351–362. <http://doi.org/10.1177/0022343311431598>

TJRC. (2013). *Report of the Truth, Justice and Reconciliation Commission* (Vol. 3). Nairobi, Kenya.

UNDP. (2010). *The Mt. Elgon Conflict: A Rapid Assessment of the underpinning socio-economic governance and security factors*. Nairobi, Kenya.

Velitchkova, A. (2015). World Culture, Uncoupling, Institutional Logics, and Recoupling: Practices and Self-Identification as Institutional Microfoundations of Political Violence. *Sociological Forum*, 30(3), 698–720. <http://doi.org/10.1111/socf.12188>

Von Uexkull, N., & Pettersson, T. (2013). What they are fighting for: Conflict Issues in African Non-state Armed Conflicts 1989-2011. In *Paper presented at the Meeting of the European Network of Conflict Research (EnCoRe), 24-26 April*. Amsterdam.