

East African Journal of Environment and Natural Resources

eajenr.eanso.org
Volume 7, Issue 1, 2024
Print ISSN: 2707-4234 | Online ISSN: 2707-4242
Title DOI: https://doi.org/10.37284/2707-4242



Original Article

Farmer-Agropastoralist Conflict Escalation in Morogoro Region, Tanzania: A Structural and Process Analysis

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Article DOI: https://doi.org/10.37284/eajenr.7.1.1940

Date Published: ABSTRACT

29 May 2024

Keywords:

Agropastoralist,
Farmers,
Conflict,
Land
Resources,
Climate Change.

In Africa, access to natural resources such as land, water, forest, and wildlife reserve areas is a key factor for socio-economic development. The scarcity and degradation of these resources in rural environments threaten human security, leading to conflicts. Conflicts between agropastoralists and farmers are increasing in Tanzania. This research deployed the Social Conflict Theory that embeds structural and process elements to address the question of why and how the conflict between farmers and agropastoralists has escalated into deadly violence in the Morogoro region, Tanzania. Qualitative and ethnographic research methods were used. Results demonstrate that the way farmers lose their land by illegal means (e.g., bribes, force and coercion, and deception and stealth) is a critical factor that contributes more to land resource conflicts. We argue that land resource-related conflicts in Tanzania cannot be explained solely by a single driver (e.g., limited land resources), but by a combination of drivers including the illegal mechanisms used to control access to land resources. Conflicts between farmers and agropastoralists in the Morogoro region escalated to violence following the general patterns and transformation dynamics (i.e., process variables) described in Social Conflict Theory. These process variables involve tactics shifting from light to heavy, goals shifting from specific to general, and involvement shifting from few to many. The analysis of conflicts by focusing on process variables (conflict dynamics) enabled the identification of new factors (culture and age of participant in the conflict) that helped explain why some conflicts between farmers and agropastoralists escalate to deadly violence. The study recommends the formation of a loose coalition (e.g., Elders' Tribunal) which includes equal representation of members from the farmer and agropastoralist communities which may help solve the current conundrum caused by top-down administrative procedures and practices, which often leads to outcomes that are ineffective and unsatisfactory to all parties.

APA CITATION

Rweyemamu, D. R., Hughey, K., Roberts, L. & Ezekiel, M. J. (2024). Farmer-Agropastoralist Conflict Escalation in Morogoro Region, Tanzania: A Structural and Process Analysis. *East African Journal of Environment and Natural Resources*, 7(1), 157-171. https://doi.org/10.37284/eajenr.7.1.1940.

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East African Journal of Environment and Natural Resources, Volume 7, Issue 1, 2024

Article DOI: https://doi.org/10.37284/eajenr.7.1.1940

CHICAGO CITATION

Rweyemamu, Dennis Rugeiyamu, Ken Hughey, Lin Roberts and Mangi Job Ezekiel. 2024. "Farmer-Agropastoralist Conflict Escalation in Morogoro Region, Tanzania: A Structural and Process Analysis". *East African Journal of Environment and Natural Resources* 7 (1), 157-171. https://doi.org/10.37284/eajenr.7.1.1940.

HARVARD CITATION

Rweyemamu, D. R., Hughey, K., Roberts, L. & Ezekiel, M. J. (2024) "Farmer-Agropastoralist Conflict Escalation in Morogoro Region, Tanzania: A Structural and Process Analysis", *East African Journal of Environment and Natural Resources*, 7 (1), pp. 157-171. doi: 10.37284/eajenr.7.1.1940.

IEEE CITATION

D. R., Rweyemamu, K., Hughey, L., Roberts & M. J., Ezekiel. "Farmer-Agropastoralist Conflict Escalation in Morogoro Region, Tanzania: A Structural and Process Analysis", *EAJENR*, vol. 7, no. 1, pp. 157-171, May. 2024. doi: 10.37284/eajenr.7.1.1940

MLA CITATION

Rweyemamu, Dennis Rugeiyamu, Ken Hughey, Lin Roberts & Mangi Job Ezekiel. "Farmer-Agropastoralist Conflict Escalation in Morogoro Region, Tanzania: A Structural and Process Analysis". *East African Journal of Environment and Natural Resources*, Vol. 7, no. 1, May 2024, pp. 157-171, doi:10.37284/eajenr.7.1.1940.

INTRODUCTION

In Africa, access to natural resources such as land, water, forest, and wildlife reserve areas is a key factor for socio-economic development. Importantly, sustainable use of the said resources is critical for ensuring that the development that they contribute to shall benefit the current and future population (Malipula and Theodory, 2022). The scarcity and degradation of these resources in rural environments threaten human security, leading to conflicts. About 40% of the world's 200 million pastoralists and agropastoralists live in Africa (Leal Filho et al., 2020). In the African context, pastoralism is referred to as a form of livestock production in which livestock keepers move with their livestock from place to place to exploit pasture and water availability at different seasons during the year (Kileli, 2014; Reda, 2015). While pastoralists depend entirely on production for their livelihood, agropastoralists practice a production system in which they depend (>50% of income generation and sustenance) on livestock, with the remaining portion on crop farming for food. This system entails sustained roaming around in search of water and pasture for grazing. During the dry season, some members of pastoral families move long distances with their herds to search for graze land and waterholes, while others remain at home and practice crop farming and other activities. Livestock serves many roles in a pastoral society: as both the means and outcomes of production, as sources and objects of labour, as value, and as social pride, culture, and capital goods (Leal Filho et al., 2020). As such, livestock production is not only the economic mainstay and the chief source of livelihood for African countries with large pastoralist and agropastoralist communities but also their source of social pride and security (Worku et al., 2014).

Tanzania is a developing country in East Africa, where nearly 70% of its land falls under the village land category which supports farming as well as pastoral and agropastoral activities for 80% of its population. The 2019/2020 National Sample Census of Agriculture results show that farming and livestock keeping are the main economic activities for most Tanzanians (URT, 2019-2020). Tanzania has 33.9 million cattle, 24.5 million goats, 8.5 million sheep, and 87.7 million poultry. Pastoralists and agropastoralists own 98% of the 33.9 million cattle, with 80% of the cattle in the agropastoral system and 18% in the pastoral system (URT, 2019-2020). Despite the economic importance of pastoralism, most economic development policies in Tanzania are based on the implicit notion that pastoralism is not the most efficient use of land resources (Gonin & Gautier, 2015; Mwambene et al., 2014; Massoi, 2019). Pastoralists' village lands and rangelands are increasingly being converted to other land uses including extensive farming and wildlife conservation (Benjaminsen & Bryceson, 2012; Ibrahim, Abdurrahman, & Umar, 2015 Theodory and Malipula, 2017). Game reserve expansion and additions and appropriation of customary land by local and foreign investors facilitated by ongoing government economic policy reforms have further

contributed to the shortage of grazing land 2010). (Mwambene et al., Therefore, agropastoralists are persistently evicted and/or forced to move to marginal areas along the periphery where basic services such as cattle dips, water points, health centres, and schools are lacking (Kajembe et al., 2013; Mwambene et al., 2014). Climate change also threatens agropastoral production system in East Africa (Oluwole et al., 2017; Theodory and Malipula, 2017), and Tanzania in particular (Mwakaje, 2013; Massoi, 2015; Theodory and Malipula, 2017), and future predictions show that the agropastoral sector will be severely impacted.

The factors mentioned above, together with other factors such as the increase of livestock and human population, poor infrastructure (e.g., lack of cattle dips and/or water points), livestock diseases (tsetse flies), hostile market mechanisms, and inadequate and poor social services (schools, health centres) have contributed to increased movement of agropastoralists with their livestock into areas which traditionally had few livestock, such as Mbeya, Iringa, Rukwa, Coast regions, and Morogoro region of Tanzania (Martin, 2010). This movement is creating serious land use conflicts and violence between agropastoralists and farmers due to conflicting goals and interests over the same land resources (Mwamfupe, 2015; Massoi., 2015). For instance, in the Kilosa and Mvomero Districts in the Morogoro region, conflicts between farmers and agropastoralists have escalated into violence that claimed people's lives (Mwamfupe, 2015).

The dominant literature on farmers and agropastoralists conflicts contends that farmer—agropastoralist conflicts in Africa and Tanzania in particular have generally been structural in nature including factors such as limited resources, climate change, and corrupt practices (Kajembe et al., 2003; Kisoza, 2007; Mandara et al., 2012); biased economic policies, institutional failures to resolve conflicts, and political context (Mandara et al., 2012; Mwambene et al., 2014); and insecure land tenure, poor coordination in resettling the migrants, lack of village land use plans, and the

heavy-handed approaches used to resolve conflicts (Mwamfupe, 2015). However, while the aetiology (manner of causation) of farmeragropastoralists friction or conflict seems to be laid bare, little academic inquiry has been done on why and how some farmers' and agropastoralists' conflicts escalate to deadly violence. Moritz (2010) suggests that farmer-pastoralist conflicts are complex and are informed by a myriad of structural and process factors, therefore any meaningful farmer-pastoralist conflict inquiry needs to consider structural and process elements in tandem. Such a position is anchored on the fact that structural variables are imperative in explaining the causes of conflicts, while process variables are relevant in elucidating the outcomes of conflicts. In this regard, the structural descriptions can unveil the causes of conflicts between farmers and agropastoralists but not why such conflicts escalate into widespread violence. These arguments raise an important research gap that this study seeks to address by complementing the structural disposition with process elements that can unveil the outcomes of farmers' and agropastoralists' conflicts. The Social Conflict Theory which embeds structural and process elements as described by Kriesberg (2007) and Pruitt and Kim (2004), was chosen to address the question of why and how the conflict between farmers and agropastoralists has escalated into deadly violence in the Morogoro region in Tanzania.

MATERIALS AND METHODS

Study Design

This ethnographic-inspired research employed a qualitative research methodology as defined by Sarantakos (2005) with multiple data collection methods, i.e., interviews, focus group discussions, and review of relevant documents. Semistructured and open-ended questions were used to give participants the opportunity to freely express their perspectives, and share their thoughts on, for instance, the mechanisms used by agropastoralists to gain, maintain, and control access to and use of land resources, and the contribution of these

mechanisms to well-being and to conflicts with farmers.

Description and Selection of Study Areas

Morogoro region is the second largest (73,039 km²) of 31 regions in Tanzania. Administratively, Morogoro is divided into six districts, namely Morogoro municipality, Kilombero, Mvomero, Kilosa, Ulanga, and Gairo. This research was conducted in Kilosa and Mvomero Districts (Figure 1). One village from each of the three wards in Kilosa District and one village from each of the three wards in Mvomero District were examined. Each set of three villages consists of two farmers' villages and one registered agropastoralists' village. These villages are the farmers' villages of Tindiga (Tindiga ward) and Rudewa-mbuyuni (Rudewa agropastoralists' village of Twatwatwa (Parakuyo ward) in Kilosa District; and the farmers' villages of Dihinda (Kanga ward) and Dihombo (Hembeti ward) and the agropastoralists' village of Kambala (Mkindo ward) in Mvomero District. Similarities in rangeland vegetation types, farming, and livestock production systems, and availability of sufficient numbers of older farmers and agropastoralists (≥30 years old) interviewing were the main criteria used for selecting the villages. The >30 years age group was preferred to tap into participants' knowledge for then analysing and explaining the mechanisms by which gaining, maintaining, and controlling access to, and use of land resources leads to wellbeing as well as to conflicts between farmers and agropastoralists. The six villages involved in this research were purposely selected due to their peculiar situation of being prone to conflicts between farmers and agropastoralists that have escalated recently into deadly violence.

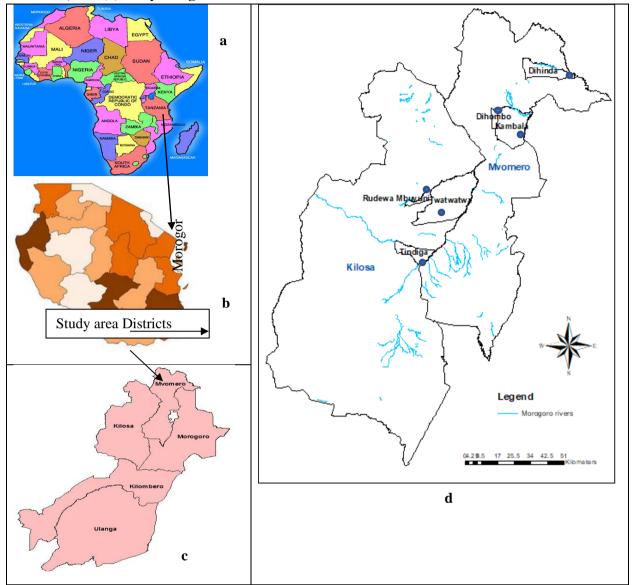
Data Collection Methods

Field data collection occurred from November 2017 to March 2018. This matched the period when most farmers prepare and sow their farm crops during the short rains (October – January), followed by the long rains (February – March). It

is during this crucial time that most conflicts between farmers and agropastoralists occur, because in most agropastoralists' villages, there are insufficient pastures during this time, so the agropastoralists wander around farmers' villages looking for pastures for their livestock. Data collection involved head-of-household interviews (HHIs), key informant interviews (KIIs), and focus group discussions (FGDs) for both males and females. Interviews and discussions were conducted in Swahili, Tanzania's national language, a language that all participants were competent with. Participants for household interviews and group discussions purposefully selected with the help of the local leaders, i.e., Village Executive Officers (VEOs). KIIs were conducted at the village and district levels to supplement the information that was obtained from FGDs and household interviews.

Thirty-six HHIs were conducted, i.e., six heads of households were interviewed in each of the six study villages. Six interviews were considered sufficient after discovering there were no new themes emerging, which suggested a saturation of data. Seventeen KIIs were conducted. Two KIIs were conducted in each of the six study villages: one with the Village Executive Officer (VEO), and another with the Village Agricultural and Livestock Officer (VALO), making a total of 12 KIIs. Two further KIIs were conducted at the District Council Offices with the District Agricultural and Livestock Officers (DALO) from both Kilosa and Mvomero Districts. The other three KIIs involved representatives from three non-governmental organizations (NGOs); two at the national level - one with the President of the Tanzania Pastoralists Association (CCWT), another with the secretary of the Tanzania Natural Resources Forum (TNRF), and one with the representative of a regional level NGO. Twelve FGDs were conducted: two FGDs in each of the six study villages, one for females and one for males. Female-only FGDs were carried out so that women could speak freely. Table 1 shows the composition of the survey sample.

Figure 1: (a and b) - Africa and Tanzania (URT, 2002), (c) location of study districts - Kilosa and Mvomero, and (d) study villages in Kilosa and Mvomero Districts



The HHIs were conducted at the participant's home, and on several occasions, farmers and agropastoralists were followed to their farms and grazing areas respectively. In that scenario, both interviews and FGDs were conducted at a secure and conducive place such as under the shade of a tree at a distance from fellow farmers or agropastoralists, to maintain privacy and enable free conversation. Interviews (HHIs and KIIs) lasted for around half an hour and FGDs lasted for

two hours. The interviews (HHI and KII) and FGDs focused on finding information on socio-economic and demographic characteristics, livelihood activities, impacts of climate change on production systems, land ownership and mechanisms to gain and control access to and use of land resources, perception of rangeland degradation and its impacts on the production systems, and causes of conflicts over land resources.

Table 1:. Respondent breakdown

Data collection	Number of respondents (Kilosa District-Villages)			Number of respondents (Mvomero District-Villages)			Total number of
method	Tindiga	Rudewa	Twatwatwa	Dihinda	Dihombo	Kambala	respondents
HHIs	6	6	6	6	6	6	36
KIIs	9 (3 VEOs, 3 VALOs, 1 DALO, 2			8 (3 VEOs, 3 VALOs, 1 DALO, 1			17
	representa	atives from	Associations:	representative from NGO:			
	CCWT & TNRF)			HAKIARDHI)			
* FGDs	2	2	2	2	2	2	96
Total numb	149						

^{*}FGDs: each had eight participants

(VEO = Village Executive Officer; VALO = Village Agricultural and Livestock Officer; DALO = District Agricultural and Livestock Officers; CCWT = Tanzania Pastoralists Association, TNRF = Tanzania Natural Resources Forum; HHI = Head of Household Interview; KII = Key Informant Interview; FGD = Focus Group Discussion)

Data Analysis

Audios from interviews and discussions were transcribed and translated from Swahili to English. Content analysis was carried out following the Graneheim and Lundman (2004) guidelines. Data were sorted and analysed manually by initiating coding and assigning categories. These modes of data organization enabled the identification, sorting, and arranging of the data and the examination of the connections and relations between the key elements identified. Coding helped in summarizing information, without losing the importance, meaning, and credibility of the information, as well as capturing key concepts. The codes and categories that emerged from the data were later sorted to form the main themes reported. Qualitative descriptors are applied quantitatively in some circumstances: i.e., "a few" is 10% or less, "a small minority" is up to 25%, "a large minority" is between 25% and 40%, "about half" is between 40% and 60%, "a majority" is between 60% and 75%, and "a large majority" is more than 75%. Respondents were coded (e.g., F3, DHB = farmer interviewee 3 in Dihombo Village; AgrP4, TWT = agropastoralist interviewee 4 in Twatwatwa Village).

Ethical Issues

Prior to the commencement of data collection in Tanzania, the required research permit and approvals from the Tanzania Commission for Science and Technology (COSTECH) and the Lincoln University Human Ethics Committee were sought and obtained. The researcher also

obtained permission to conduct the study from the regional, district, wards, and village authorities. Individual verbal consent was sought and obtained from study participants prior to their participation in the FGDs and interviews. The following steps were taken to ensure participants' rights and confidentiality were observed and respected: (1) voluntary participation, (2) names excluded from the recorded materials (anonymity), (3) ability to withdraw from participation and information provided at any stage, and (4) ability to contact the research team for any queries. The information acquired from participants was kept confidential and treated with privacy and was only accessed by the research team.

FINDINGS

Causes of Land Resource Use Conflict between Farmers and Agropastoralists

Farmers and agropastoralists hold contrasting views and opinions on the causes of conflict. On many occasions, each side blames the behaviour and the conduct of the other as being the cause of conflict, and the reason for conflict escalation between them. Despite their differences, both farmer and agropastoralist interviewees reported crop damage by livestock, violation of village boundaries, lack of village land use plans, excessive number of livestock, climate change impacts on land resources, corrupt practices by officials, incompetent conflict management institutions, and biased economic policies, as the

main contributing factors for land resource use conflicts.

Table 2: Interviewees' responses to the question "What are the possible causes for resource use-related conflicts in your community?"

Causes for land resource use-related conflicts										
Agropastoralists' village	Farmers' villages									
Twatwatwa Kam	bala	Rudewa- mbuyuni	Dihinda	Dihombo	Tindiga					
Crops damaged by livestock		Crops damaged by livestock								
Farmers violating village boundar	ies	Agropastoralists violating village boundaries								
Corrupt government officials an officers	Agropastoralists bribe corrupt government officials and police officers									
Government policies favour ag expansion and tourism, thus din grazing land	Agropastoralists increase livestock numbers, while the land size remains the same									
Heavy penalties by government and exaggerated compensation demanded by farmers for crop date	Agropastoralists refuse to pay compensation fees for crop damage									
Climate change impacts on t resources	Climate change impacts on the land resources									
Lack of sound, trustworthy, and fu conflict resolution machinery	Lack of village land use plans (which include customary tenure system i.e., land ownership without CCROs)									

The majority of agropastoralist interviewees reported that the persistence of conflicts between farmers and agropastoralists reflects the government's failure to strike a balance between the promotion of large-scale agriculture investments by foreign and local investors, and interests in grazing land access by the agropastoralists. The ongoing economic policy reforms favour the agriculture and tourism sectors, for which government policymakers may themselves have private interests. This has been reported to be the reason for the marginalization of the livestock sector. One key interviewee from the NGO echoed these comments by saying:

We have seen the influx of 'investors' who take large portions of land to start large and extensive commercial farming, ranching, and mining activities. In the process, agropastoralists are evicted from their land without any prior arrangements to resettle them somewhere else. The government is responsible for this because we are about to witness what could be the largest land grab in the history of the country due to the ongoing land policy reforms under the Southern Agricultural Growth Corridor of Tanzania (SAGCOT) program funded by the USAID involving several multi-national companies (NGO2, TZ).

The large majority of farmer and agropastoralist interviewees also reported that the climate has changed leading to prolonged droughts, unpredictable rains, floods, and increasing outbreaks of animal and crop diseases and pets. Forceful and/or voluntary drought-induced migration is linked to land resource use conflict between the two communities. The views of one agropastoralist well summarize this position:

Climate has changed a lot over the years. I remember in the 1990s when I was a young boy, we used to graze our cattle around our homestead because there were lots of quality pastures and water. But over the past decade conditions have become worse, the quality of pastures has deteriorated, and water sources have gone dry because there is no rainfall. Our animals have nothing to eat and drink in this village. To rescue our animals, some family members must move with animals to other villages to search for pastures and water. It is very unfortunate that this has led

to misunderstanding, and thus conflicts between us and farmers (AgrP2, TWT).

The farmers and agropastoralists had contrasting views and opinions regarding penalties and compensation for crop damage. Farmers reported that in recent times, agropastoralists have become more reluctant to negotiate and pay compensation fines at the village level, instead, they prefer to take the dispute matters to the District Courts because it is more likely for these cases to be settled in their favour by bribing officials in the authorities. The farmers' position is eloquently presented by a farmer who reported:

In December 2015, 180 cattle were caught on farms and a group of vigilant farmers detained the cattle at the village office. The intention was to wait for the cattle owner to come and negotiate with the farmers whose crops had been destroyed. To our surprise, it was the police officers who came first and took the cattle to the police station. The police requested the farmers to report to the district court the next day for the case hearing proceedings. The court officials kept postponing the hearings knowing that the farmers could not afford to attend in court every time they were called for due to costs associated with travelling and other expenses. This practice by police officers and court officials is highly linked to receiving bribes from agropastoralists, and I personally think this is among the reasons we (farmers) have decided to take matters into our own hands and strike back by whatever means necessary to hurt them (F3, DHD).

On the other hand, agropastoralists accused the government officials and farmers of imposing heavy penalties against them and sometimes exaggerating the compensation fines for crop damage. A few agropastoralists reported that farmers collude with their village officials to table 'false claims' and exaggerate the magnitude of the crop damaged by cattle in order to maximize penalties and fines. Such position is elucidated by an agropastoralist interviewee who revealed that:

Farmers and some district officials are taking advantage of us lacking formal education and knowledge on legal issues, to earn money from us. Once cattle are caught on farms, heavy fines and penalties are imposed against us even when the crop damage is very little. In some villages, they have village regulations that state that each head of animal found on the farm regardless of the extent of the damage caused, will be charged 25,000 Tshs. (US\$12). That is lots of money, and sometimes we need to find the best way to handle the situation, which often leads to more disputes (AgrP2, KBL).

Perceived Reasons for Farmer– Agropastoralist Conflict Escalation

Farmers and agropastoralists hold contrasting views and opinions on the causes of conflict escalation. Either side blames the behaviour and ways of conduct of the other as the cause for conflict escalation. Farmers reported the following as the main causes for conflict escalation:

- livestock eating and destroying crops on farms
- Unresponsiveness and deliberate delays of the government officials and other state organs (e.g., police forces) to intervene in a timely way to diffuse tensions
- Arrogance and cruel behaviour of agropastoralist warriors (Morans), which is contributed to by their superiority in 'fighting skills' using all sorts of weapons
- Hatred between agro-pastoralists and farmers, i.e., farmers perceive they are being disrespected by their counterpart agropastoralists because agro-pastoralists are believed to be relatively affluent compared to farmers
- Divisive politics and discriminatory propaganda employed by politicians and government officials against agropastoralists, to gain political mileage, and

mistrust of the ability of local conflict resolution institutions to adjudicate fair and just decisions.

The majority of interviewees and discussants in both male and female FGDs in the farmers' villages reported that the reluctance and deliberate delays by the government officials and police forces to intervene in a timely manner to diffuse tensions was due to corrupt practices, i.e., waiting until the violence has escalated provides an opportunity for officials in the authorities and police officers to receive bribes from agropastoralists, in order to negotiate and/or manipulate the outcome of the criminal or civil offense. One interviewee retorted:

It is disappointing to see that when the agropastoralists' cattle have been caught on farms; it takes a few minutes for the police officers to arrive in the village. But it is absolutely the opposite when the crops are destroyed, and the farmer gets severely beaten or killed in the contest. When the farmer reports the incident to the police, the police officers always give many excuses like "We don't have gas (fuel) in our cars" or "We have a shortage of police officers at present." This always leaves me with one profound question. Where do they get money to fuel the cars and respond timely when it is the agropastoralists who have reported that the cattle have been caught on farms? There is nothing else one can think of, other than the truth that these police officers are corrupt (F3, DHB).

Like farmer interviewees and discussants, agropastoralists also mentioned divisive politics and discriminative propaganda, corrupt practices by officials, and mistrust of the local conflict resolution institutions as the causes for conflict escalation. Furthermore, the large majority of agropastoralist interviewees and discussants in the FGDs reported ethnic hatred, i.e., agropastoralists perceive being disrespected by their counterpart farmers "indigenous people", who call them names like; "immigrants from Kenya", "you look skinny like your animals", "uncivilized humans."

The local 'Swahili newspaper (The Jamhuri, 02 June 2015) reported that residents in Kilosa and Myomero districts mentioned names of the Members of Parliaments (MPs) representing Morogoro region as culprits involved in the contentious politics and involved in sponsoring the 'MWANO', which causes escalation of conflicts between farmers and agropastoralists in Twatwatwa and Rudewa-mbuyuni Villages in Kilosa District; and Kambala and Dihombo Villages in Mvomero District. Like what was in reported the local newspaper, agropastoralist interviewee contended:

The MWANO combatants are a large group of young men (18-30 years of age) holding arrows and machetes in their hands from farmers' villages, hired by the farmers with the support from the village leaders, government officials, and Members of Parliament representing various constituents in Morogoro region. When they find cattle wandering around, they start throwing arrows at our 'Morans' to scare them. If Morans run away and leave the cattle behind, the MWANO combatants use that opportunity to steal and sell some of the cattle to the prearranged potential buyers. They take the remaining animals to the village offices, waiting for the cattle owner to come and pay millions of Tanzania Shilling as a compensation fee for something that did not actually happen (false claims). Who on earth can endure such humiliation feelings? I will do everything possible to strike back so that I reclaim my dignity, and if need be, I will die for that (AgrP2, KBL).

DISCUSSIONS

Causes of Land Resource Use Conflict Between Farmers and Agropastoralists

These findings corroborate those of other studies across Africa, which emphasize that explanations for farmer – agropastoralist conflict escalation have generally been structural in nature, focusing on factors such as climate change (Mwakaje, 2013; Oluwole et al., 2017; Owuor et al., 2011),

biased economic policies (Benjaminsen & Bryceson, 2012; Ibrahim et al., 2015; Martin, 2010), and institutional failure to resolve conflicts, corrupt practices, and the larger political context (Bond, 2014; Dafinger & Pelican, 2006; Harshbarger, 1995; Mwamfupe, 2015). For example, Hagberg's (1998, 2005) study on conflict escalation between farmers and agropastoralists in Southwest Burkina Faso, argues that frustration with the authorities' corruption and consequent impunity of the agropastoralists was the ultimate reason for conflict and conflict escalation. Also, Dafinger and Pelican (2006) state that the Aghem women [farmers] in Northwest Cameroon accused traditional and state authorities of partiality and prioritizing their personal gain over the farmers' well-being.

Crop damage by grazing cattle, and the hurting or killing of humans or livestock pre-emptively or in retaliation, were reported as factors causing conflicts, and in one way or another were mentioned as the reasons for conflict escalation. More frequent crop damage on farms, caused by either farmers or agropastoralists violating their village boundaries, and consequent losses in crop yields or cattle being confiscated and/or killed, led to each side's response in terms of violence. The instigating factor for violence was mostly based on arguments and misunderstanding concerning actual damage, its degree and compensation costs, as well as the legitimacy of the respective claims. Deliberate delays by the local administration and state organs and their reluctance to resolve the conflict amicably were associated with corrupt practices, i.e., waiting until the violence has escalated, provides an opportunity for government officials and police officers to solicit bribes from agropastoralists, in order to negotiate and/or manipulate the outcome of the criminal offense. A similar finding is reported by Harshbarger (1995), who argues that herders, farmers, state officials, and local chiefs in Northwest Cameroon use the mediation of herder-farmer conflicts to compete for political power, social control, and natural resources in local villages. She describes how farmers suffering from cattle trespassing and crop damage are becoming impatient with the corruption of authorities, who collaborate with herders, and therefore, take the law into their own hands.

In their discussion of conflict escalation between Aghem farmers and Aku herders in northern Cameroon, Kum (1983) and Moritz (2010) claim that conflict between these two groups transformed from an economic into an ethnic conflict because of the continuous destruction of farms, delay in settlement of cases, and the fact that farmers generally lost cases against herders and were left uncompensated or not compensated enough. Ethnicity is an important variable in conflicts between farmers and agropastoralists in the Morogoro region because farmers are indigenous and/or native residents, whereas agropastoralists are immigrant Maasai [the large majority], Sukuma, and Mang'ati communities. With agropastoralists being non-native, they constantly get moved further away from essential social services and quality grazing areas. As a result, agropastoralists are continually and increasingly frustrated with local farmers, but also with government and local authorities whom they hold responsible for their suffering. Similar situations have been described in West African countries. For example, Dafinger and Pelican (2006, p. 133) argue that the farming communities in Northwest Cameroon claim the status of 'firstcomers' and see themselves as "owners" or "guardians" of the land. They consider the Fulbe agropastoralists their guests, or "strangers," and expect them to respect their political and territorial primacy. Also, Ibrahim et al. (2015) in Nigeria concludes that past farmer-herder conflicts were solely due to an overlap of farmlands with cattle routes, where farmers grow crops on the routes. But recently, these conflicts have escalated, taking another dimension of ethnic and religious differences with little effort from government or community leaders aimed at addressing them.

The discussion above has explained the escalation of conflicts between farmers and agropastoralists in terms of conflict as start-up or structural variables, in particular, institutional failures to

resolve conflicts and challenges emanating from land resources competition. The structural variables may be necessary conditions for the escalation of farmer-agropastoralist conflicts, but they cannot solely explain the escalation itself. In other words, this structural explanation does not explain why disputes between farmers and agropastoralists escalate into widespread violence. Thus, it is necessary to consider how variables dynamics process (i.e., and transformation patterns) identified by research have contributed to a better explanation of conflict escalation in the Morogoro region. The next sub-section discusses the dynamics and transformation patterns (process variables) of escalation conflict between farmers and agropastoralists.

The Dynamics and Transformation Patterns of Conflict Escalation

Social Conflict Theory is particularly useful for conceptualizing the problem of farmer and agropastoralist conflict escalation because it offers a well-articulated approach (i.e., process variables) to conflict escalation generally. Crucially, reasons for escalation can be identified by examining the sequence of interactions to explain why some conflicts escalate and others do not (Kriesberg, 2007). Conflict theorists argue that parties do not seek to escalate the conflicts they have engaged in. Escalation is instead usually an unintended consequence of conflict behaviour and may occur inadvertently, step by step, without the opponents having carefully considered the implications of their actions (Kriesberg, 2007, p. 157). It is, therefore, important to recognize that there are general patterns and processes in how conflicts metamorphose into widespread, violent engagements. These patterns of transformation can be found in who or what groups of people are involved, in the actions they take, and in the stakes they hold or the goals they pursue during the conflict (Moritz, 2010, p. 141).

Conflicts between farmers and agropastoralists in the Morogoro region escalate into violence following the general patterns and transformation dynamics 'process variables' described by Pruitt and Kim (2004) in Social Conflict Theory. The tactics shifted from light to heavy, i.e., from persuasion to violence. It was noted that farmers first pursued administrative and legal actions before they resorted to physical violence. When farmers realized that the administrative and legal procedures did not work in their favour, then they changed tactics from reconciliation to creating the MWANO group to fight agropastoralists. Further, the goal shifted from specific to general, i.e., from crop damage by cattle to inter-ethnic hatred and violence. It was reported that farmers first demanded compensation for crop damage caused by cattle caught eating and/or destroying crops on the farm. But when the agropastoralists became increasingly stubborn about compensating the farmers, and occasionally, used forceful means to rescue their cattle from being confiscated (to evade penalties), the farmers resorted to seeking the eviction of all agropastoralists in the Morogoro region.

As the conflict evolved, there was also greater investment in the conflict and an increase in participation, i.e., a shift from few to many. A good example is a tragic event that took place in Rudewa-mbuyuni Village on the eve of 8th December 2000, when a group of Maasai warriors attacked the village with firearms and other weapons, which left many fatalities and many severely injured. This tragic event resulted from a confrontation between a few Twatwatwa agropastoralists and a few Rudewa-mbuyuni farmers regarding the ownership of Rudewambuyuni sub-village (also known as 'Ngaiti'), a place which used to be part of the farmers' village of Rudewa-mbuyuni, but now was a place under the ownership of agropastoralists from Twatwatwa Village. The ownership disagreement annoyed the agropastoralists, and as they returned home, they mobilized more people from their villages. When the agropastoralists came together and decided to "take the law into their own hands", there was a greater likelihood that the conflict would escalate. Social psychologists and conflict theorists have long noted that group dynamics tend to escalate conflicts for a number of reasons, including the development of group

cohesiveness and militant leadership (Moritz, 2010; Pruitt & Kim, 2004). Similar group dynamics happened among FulBe agropastoralists and Karaboro farmers in Burkina Faso (Harshbarger, 1995).

The research findings also suggest that direct faceto-face contact between the two parties, particularly during the initial stages of the conflict when emotions run high, may contribute to conflict escalation. This makes the relatively immediate moments when crop damage is detected and/or cattle are caught on farms especially crucial. Delays and reluctance (for whatever reasons) of government officials and state organs to intervene in a timely manner to diffuse tensions between farmers agropastoralists at this critical time play a major role in creating an intense atmosphere and favourable environment for conflict escalation. For example, the two parties involved in this research shifted their goals from solving the problem to hurting the other party, i.e., farmers and MWANO vigilantes stole and killed cattle instead of detaining them while waiting for compensation; similarly, agropastoralists destroyed and burned to ashes farmers' houses and, injured and killed farmers instead of compensating for crop damage. Moritz (2010) argues that when direct interactions lead to injuries or fatalities, they increase the chance of conflict escalating into widespread violence between communities and can quickly lead to more violence between people who were not involved in the first place.

One other factor is central to the field of anthropology but is not covered well in Social Conflict Theory: culture. Agropastoralists and farmers in Tanzania, and across East Africa are generally members of different ethnic groups who may or may not share beliefs and practices relating to their way of life, and on how to manage conflicts. With this observation, there is no doubt the cultural repertoires of conflict management mechanisms of farmers agropastoralists are different and sometimes incompatible. Farmers, especially women, felt that they were being disrespected by the Maasai-Morans. For example, farmers reported that it is extremely difficult to argue and negotiate with agropastoralist Maasai warriors [Morans] because of their arrogance and cruel behaviour, which is contributed to by their superiority in 'fighting skills' using all sorts of weapons. It can also be argued that the contemptuous behaviour shown by the youth-Maasai [Morans] to women farmers is attributed to the fact that, in the Maasai tradition, women unless considered older (i.e., the Western equivalent of senior citizens), tend to have a lower social status in comparison to their male counterparts be they younger or older (Buzinde et al., 2014).

Moreover, Hedges, Borgerhoff, James, and Lawson (2016) argue that in the African context, pastoralism is labour-intensive, with pastoral communities traditionally recruiting youths. Hagberg (1998) and Tonah (2006) argue that participants' age in the farmer-herder conflicts are the immediate reason for conflict escalation. Hagberg (1998, p. 180) quoted one elder: "The way of children and the way of adults are not the same. So [the son of the farm owner] took the firearm and went to the field to fight the [son of the herder]." The finding affirms the argument of the two authors as it was reported by research participants that often the youth-Maasai (Morans), who are the ones entrusted by Maasai elders to take care and graze the cattle, have disappointed their elders due to their unlawful and shameful acts of using extreme force and weapons to force their way into farmers' villages.

CONCLUSION

From this discussion, it is evident that the farmer–agropastoralist conflicts in the Morogoro region follow the general patterns described in Social Conflict Theory. The process approach, focusing on conflict dynamics rather than structural context alone, leads to the identification of new variables that may explain why some conflicts between farmers and agropastoralists escalate and others do not. It is important, however, to keep in mind that farmer–agropastoralist conflicts are complex, and their escalation cannot be explained by one

single factor. Rather, different causal combinations of structural and process variables may lead to that particular outcome.

Regarding the role of intermediaries and third parties (i.e., authorities), there is much evidence of the institutional failure of traditional and governmental authorities in the Morogoro region that has contributed hugely to conflict escalation. The study recommends that the formation of a loose coalition (e.g., Elders' Tribunal) which includes equal representation of members from the farmer and agropastoralist communities may help solve the current conundrum caused by top-down administrative procedures and practices, which often leads to outcomes that are ineffective and unsatisfactory to all parties.

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