# The logics of war and food (in)security

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## ABSTRACT

Many of today's food crises are linked to war and violent conflicts. This paper elaborates four logics of war that have an impact on food insecurity: a) destruction; b) conflict-induced displacement; c) food control; d) hunger as a "weapon of war". These logics explain why governments or belligerents are often unable or unwilling to respond to food crises, and why humanitarian assistance faces challenges in reaching people in need, while simultaneously avoiding exacerbating conflict. To mitigate future food crises, this article suggests a) to respect food as a human right, b) to overcome the silo-thinking between aid organizations, c) to integrate local capacities, and d) to enhance early action.

## 1. Introduction

The world is witnessing an increasing number of people living in food insecurity. Many of the current food crises are affected by or have an impact on violent conflicts. The most visible impact of violent conflicts on food security is the destruction of agricultural land, irrigation schemes, and infrastructure. In addition, displacement and mass starvation due to violent conflict have adverse and often long-term effects on the food security of affected populations. Chronic food insecurity, in turn, can become a decisive factor in prolonging or intensifying violent conflicts, instigating a vicious circle of violence and hunger (Martin-Shields and Stojetz, 2019).

Several food crises over the past decades have revealed the weaknesses of the international community in governing food (in)security in conflict settings. While national governments or belligerents are often unable or unwilling to respond adequately to food crises, humanitarian relief operations face the challenges of reaching those people in need of a food supply, while simultaneously avoiding exacerbating the conflict. This has left many affected communities having to find their own responses to food insecurity.

Most recently, the United Nations Food Systems Summit in 2021 has been declared as a "people's"- and "solutions"- centered summit, which brought together a wide range of experts and institutions to provide solutions for advancing the transformation of food systems (United Nations, 2021a). While the summit acknowledged that transformation in the global food system will directly lead to progress on the 17 Sustainable Development Goals (SDG), the links between food crises and violent conflict, unfortunately, played only a minor role. However, achieving food security, ending hunger and malnutrition, and enabling sustainable agricultural production, as addressed by SDG 2, "Zero Hunger", largely depends on the progress made on SDG 16, "Peace, Justice and Strong Institutions", in promoting peaceful and inclusive societies. (Civil) wars and violent conflicts are a drastic setback for every type of sustainable development. Conflict-affected countries are far from reaching the milestones of all SDG targets such as food security. Preventing and overcoming (civil) wars is, therefore, the necessary framework condition for being able to achieve SDG 2 and related SDGs, such as SDG 1, "No poverty", or SDG 10, "Reduced inequalities", in the first place. Food security, in turn, is necessary to achieve progress on SDG 16.
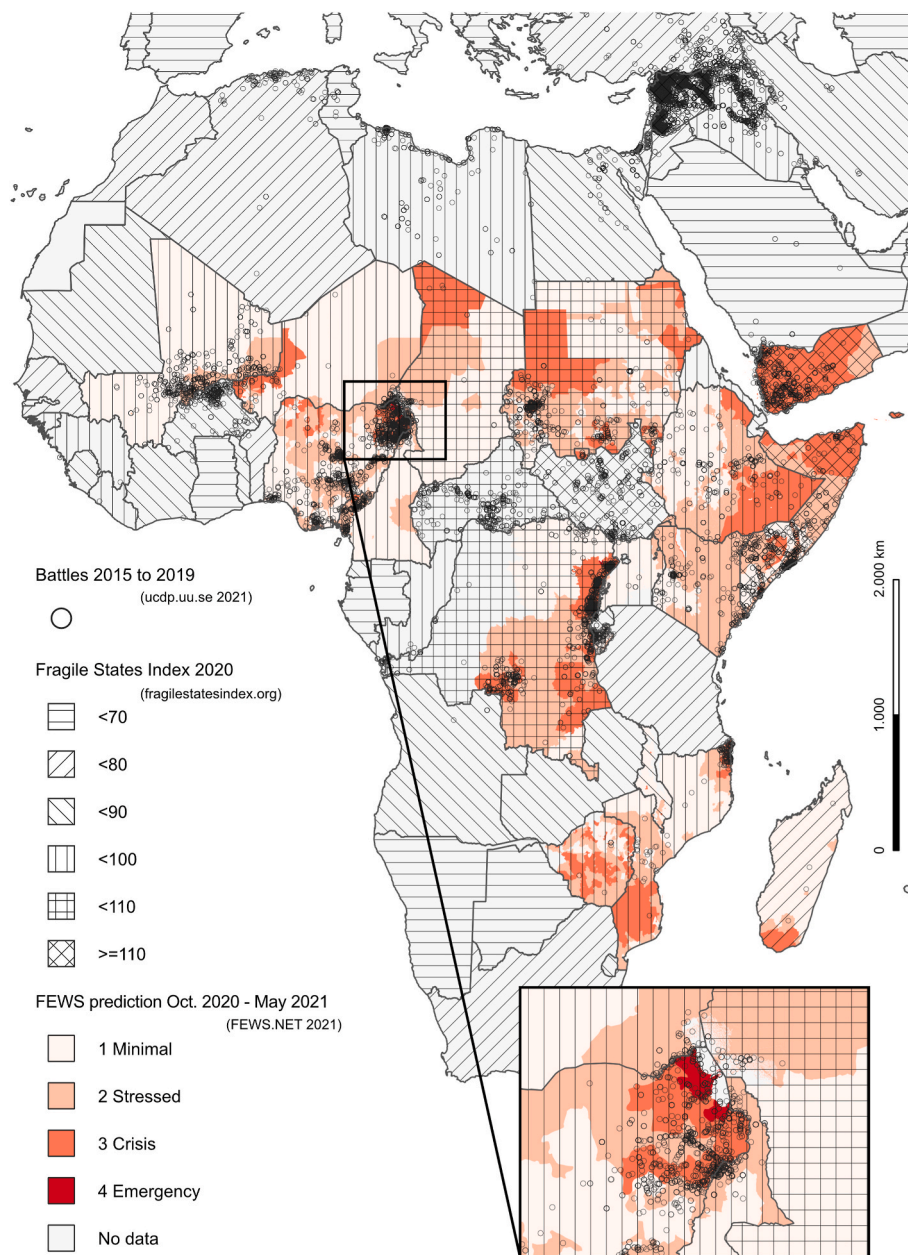
Against this background, the aim of this review article is to shed light on the manifold interlinkages between food insecurity and violent conflicts and to discuss how policy action can face the challenge to improve conditions of food security in violent settings, especially in civil wars. The paper is organized in the following way: first, we provide an overview of recent global trends and regional correlations of food insecurity and violent conflicts. Second, we conduct a comprehensive literature review on the correlations between food insecurity and violent conflicts. We identified four logics of how violent conflicts and war have an impact on food (in)security: a) destruction, b) conflict-induced displacement, c) control, and d) hunger as a "weapon of war". In the third part of the paper, we identify four key areas that policy actions and research should address for coping with food crises in violent conflicts, providing concrete examples to demonstrate how these actions can improve food security in protracted conflicts.

## 2. Overview

Besides violent conflicts, climate change and extreme weather events, as well as the COVID-19 pandemic and its related economic shocks and slowdowns have accelerated world hunger. In 2020, an estimated 720 to 811 million people faced hunger, and the prevalence of undernourishment, having been stable for the past five years, increased by 1.5 percent to 9.9 percent (FAO et al., 2021). Violent conflicts remain an important driver of current food crises. In 2020, more than 99.1 million people in 23 countries were affected by conflict-driven food crises (FSIN and GNAFC, 2021). These crises are mostly found in countries or regions which already suffer from detrimental climatic changes, are highly dependent on agriculture for food generation, and where violent conflicts coincide with a high degree of state fragility and history of pre-existing tensions and conflicts (Fig. 1).

In Asia and the Middle East, more than 39 million people are affected by conflict-driven food crises, especially in Yemen, Afghanistan, and Syria, where political, social, and economic grievances or geopolitical tensions have sparked protracted violent and armed conflicts (FSIN and GNAFC, 2021). However, 63 percent of the global population facing food crises or worse (IPC/CH Phase 3 or higher) are located in Sub-Saharan Africa (Fig. 1)— an increase from 54 percent in 2019 (FSIN and GNAFC, 2021). In East Africa, 32 million people were in a state of crisis or worse (IPC/CH Phase 3 or above), above all in Darfur (Sudan), South Sudan, and Tigray (North Ethiopia), where armed conflicts, inter-communal violence, and localized tensions contributed to food crises and hunger. In addition, the situation in East Africa is particularly dramatic because of the combination with extreme weather events and – for Ethiopia and Somalia – the desert locust in 2020. In Central Africa, 40.2 million people were in a state of crisis. The continuous violent



**Fig. 1.** Food insecurity, violent conflicts, and fragility in Africa 2015–2021.

conflict in the DRC and the Central African Republic disrupted food production as well as food trade. In West Africa and the Central Sahel, ongoing violent conflicts left 24.8 million people in food crises. Hot spots are the Lake Chad Basin—comprised of the borderlands of Cameroon, Chad, Niger, and northern Nigeria—and the Central Sahel, affecting Burkina Faso, Mali, and Niger. In both regions, the combination of jihadist expansion, state failure, and criminality have led to a massive increase in violent incidents and displacement of populations, along with the destruction or closure of basic social services, disruption or permanent breakdown of productive activities, markets and trade flows, exacerbated by the negative economic impacts of COVID-19 (FSIN and GNAFC, 2021).

## 3. Multiple dimensions of food crises and violent conflicts

The correlations of food insecurity and violent conflict are characterized by a high degree of complexity and contextualization often coinciding with multi-layered crises which include, for example, the proliferation of terrorist groups and small arms, criminal networks, and state fragility. Besides food shortages and starvation, violent conflicts also entail severe short- and long-term impacts on the nutrition status. For example, studies in different regional contexts find evidence that conflict-affected children are shorter than children born in regions not affected by conflict (Akresh et al., 2011). Moreover, negative effects on child weight at birth were observed if the mother was exposed to conflict during pregnancy (Camacho, 2008). Physical and cognitive impacts have also been found in adults who were exposed to conflict in their early years (Akresh et al., 2012).

While a high number of single-case studies exist about the reciprocal relationship between certain aspects of food insecurity and certain contexts of violent conflicts (for an overview, see Brück et al., 2016), it is surprising that, conceptually, both thematic fields are hardly brought together. From the perspective of Food and Nutrition Research, criteria for determining the state of food insecurity are based on the four dimensions of availability, access, stability, and safety, and encompass a range of variables covering different sectors such as health, food prices, and agricultural production. Analyses of food security range from the individual to the global level, and are classified by severity. Annual publications monitor global, regional, and national food security to raise awareness and identify needs, and include general analyses of conflicts as one of the drivers of food insecurity. Such publications include "The

state of food security and nutrition in the world", by FAO, IFAD, UNICEF, WFP and WHO; the "Global report on food crises"; and the "Global Hunger Index" by Concern Worldwide and Welthungerhilfe.

From the perspective of Conflict Studies, research particularly differentiates between the duration and intensity of violent conflicts, root causes, key drivers, or ways of mobilization, as well as between domestic, regional, and inter-state constellations. Each of these typologies entails a certain interpretation of violent conflicts. While a number of conflict monitors exist (such as Uppsala Conflict Data Program; Armed Conflict Location & Event Data Project; Fragile State Index), a categorization of violent conflicts which includes food (in)security as an indicator is missing so far.

To overcome this gap, in the following, we aim to link the logic of war to food (in)security (Fig. 2). Hereby, we will concentrate on civil wars and interstate conflicts, and exclude other forms of political and social violence. We identify four dimensions of how these conflicts have an impact on food (in)security: destruction, conflict-induced displacement, food control, and hunger as a weapon of war. These dimensions are key amplifiers of the vicious circle between food (in)security and violent conflict. The deliberate deployment of the four logics of war leads to an increase in food insecurity and contributes to an increase of structural vulnerability within affected societies. Rising food prices, increasing social inequalities, exclusion from political decision-making processes, and (increasing) state fragility are, in turn, potential drivers of violent conflicts. This vicious circle is either directly or indirectly impacted by external influencing factors such as pandemics, economic shocks, natural hazards, or climate change. In the following subchapters, this paper further details the vicious circle between food insecurity and violent conflict, departing from the four logics of war.

### 3.1. Destruction and food insecurity

In violent conflicts, belligerent parties aim to harm, defeat, or even eliminate their "enemies". Consequently, the emergence of frontlines, battlefields, and war zones is an inevitable effect of violent conflicts, even if the current technological upgrading of modern armies and warfare (e.g., drones) aims to increase the accuracy of military attacks. This is why, by and large, violent interactions go hand-in-hand with physical destruction (Fig. 2), which affects people's vulnerabilities in various ways, and lead to vicious circles of violence and hunger.

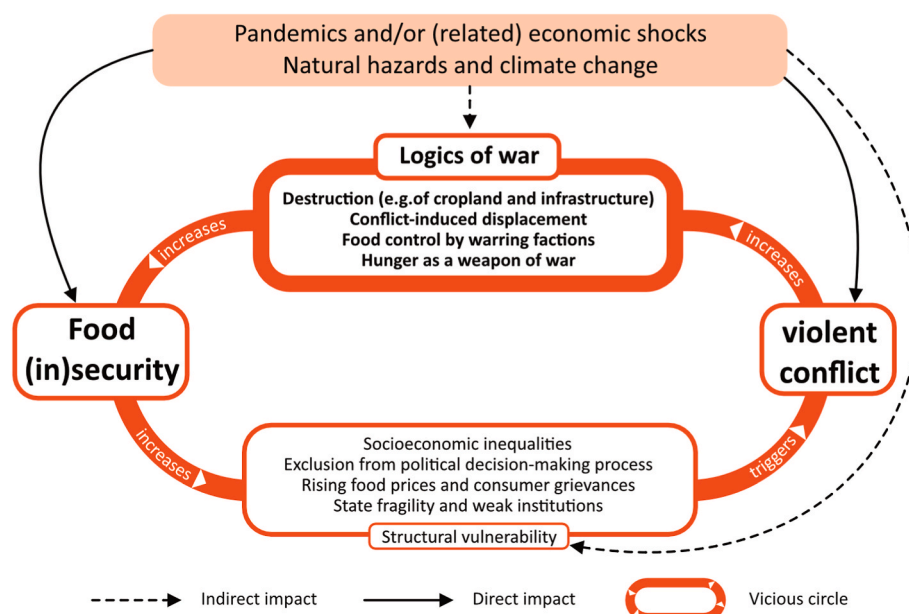In general, Collier (1999) finds that the gross domestic product



**Fig. 2.** The vicious circle of violent conflict and food insecurity.

(GDP) per capita declines at an annual rate of 2.2 percent during civil wars. However, the agrarian sector suffers proportionally more physical destruction than other economic sectors. The reason is that most battles and fighting take place in rural areas, where insurgents and rebel groups easily find sanctuaries and hide-outs (Fearon and Laitin, 2003). This is why small-scale farming and animal breeding, which play a key role for the production of subsistence economies, are particularly exposed to the destructive effects of wars. The destruction (e.g. bombing) or contamination (e.g. land mines, chemical weapons) of agricultural areas, as well as the demolition of infrastructure (irrigation schemes, roads, bridges, buildings, etc.), lead not only to heavy losses of agrarian production but might force farmers to abandon agriculture altogether. In addition, farmers may also no longer be able to cultivate their fields for lack of access to seeds, fertilizer, credits, and capital, due to the uncertainty of access to buyers and markets, and the displacement or killing of people (Baumann and Kuemmerle, 2016).

For the reconstruction of war-torn countries, it is also important to consider that the rehabilitation of war zones for food production and food supply takes decades. Clearing battlefields (de-mining), re-building physical infrastructure, and establishing operational governance structures are costly and take time. Moreover, such phases of post-war reconstruction are overshadowed by fierce disputes over access to and ownership of land and water, as property rights often change hands several times during war (Van Leeuwen and Van Der Haar, 2016). Thus, food insecurity, for poor populations in particular, often persists beyond the end of a violent conflict, as reconstruction takes place at a slow pace.

### 3.2. Conflict-induced displacement and food insecurity

War-related destruction and the degradation of agricultural land and related infrastructure, as well as the expansion of war zones, all provoke displacement on a large scale, as is currently the case in the DRC, Yemen, Afghanistan, Syria, Sudan, Nigeria, Ethiopia, and South Sudan. The impacts on food security are direct and severe—not only in the short-term but often also in the long term. Conflict-induced displacement not only leads to the collapse of agricultural production and to the decay of infrastructure at the place of origin, but also disrupts or interrupts local and regional supply chains, and increases food prices at local markets. At the same time, displaced people have to give up their livelihoods as producers of food (farmers, pastoralists, etc.), and are thus exposed to food insecurity themselves, especially if they cannot restart agricultural activities. These negative impacts have long-term implications, often for years after the return of displaced persons to their homes (Brück et al., 2016). Moreover, conflict-induced displacement can create further challenges, as it may negatively impact the environment and food security in receiving areas through deforestation, water shortages, abandonment of rural areas, and unsustainable agricultural and un-adapted production systems (George and Adelaja, 2021).

### 3.3. Food control by warring factions

In violent conflicts and wars, food supply is of strategic economic importance to any armed group—from vigilante gangs to large-scale armies. This is why armed groups' presence and rule directly impact local food security and the control of production areas. Historically, supplying large armies with food went hand-in-hand with the plundering of food storage and the looting of civilian households and markets. Although looting is still a common strategy of armed groups, the linkages between armed groups' presence and food security are not necessarily destructive; armed groups often show a strong interest in increasing local food production. Combatants can take direct control over agricultural resources and livestock for sustenance or levy taxes on these products. For example, the Taliban have taken *zakat* (Islamic tax) of 10 percent for any agrarian crop produced in the territory under their control in Afghanistan (Giustozzi, 2019). Also in Syria and Iraq, the agrarian zones seized by the Islamic State of Iraq and Syria (ISIS) were

maintained to a large extent, despite massive displacement (Eklund et al., 2017). In the Sahel, it has been reported that non-state armed groups control and invest in some pastoral activities in order to maintain economic activities and keep the region as a base (International Crisis Group, 2005).

Consequently, people in conflict-affected contexts also adjust their practices to changing politics and (local) political actors. To protect their livelihoods and food security, people might (voluntarily or coerced) cooperate with armed groups (Martin-Shields and Stojetz, 2019). Individuals might participate in and support armed groups because they benefit from the conflict through improved economic opportunities, such as access to food, agricultural land, or livestock. Pastoralists in eastern Niger, as well as in other parts of the Sahel, who are confronted with resource scarcity, state predators, and violence by various armed groups, accept agreements with armed groups to access pastures (Köhler, 2021). In Mali, pastoralists have joined jihadist groups because of decades of political marginalization, rather than because of ideology (Benjaminsen and Ba, 2018). Essentially, the way armed groups cope with food production is a significant indicator of their relationship with the local communities. Plundering reflects an ignorance of the livelihood security of the people while taxing of food production can be interpreted as an interest of the armed group in establishing a longstanding relationship with the communities (Oberschall and Seidman, 2005).

### 3.4. Hunger as a "weapon of war"

When violent conflicts are directed against certain social segments (ethnic, religious, or political groups), food insecurity can even become a "weapon of war" (Messer and Cohen, 2015)—either as an intended strategy or as a byproduct. The goal is either to deprive a particular warring party of the population's support or to eliminate entire population groups by starvation (e.g. ethnic cleansing, genocide). Direct strategies include cutting off food supplies to harm hostile armed groups and the population supporting them (De Waal, 2018). Similarly, blocking food access and destroying food infrastructure by filling in wells and canals with concrete, the destruction of arable land, etc. ("scorched earth"), are violent techniques calculated not only to ignite mass starvation, malnutrition, and hunger among the population but also to foster displacement and to erase the memory of those who once lived there (Wimmer and Schetter, 2003). Although the number of victims of mass starvation has declined in the past decades (De Waal, 2017), it is still a widely-used intentional military strategy in present conflict zones such as Tigray (North Ethiopia), Yemen, South Sudan, or the Central African Republic.

Strategies may also include preventing humanitarian access. In recent food crises, Al-Shabaab in Somalia, ISIS in Syria, and commanders in South Sudan refused to allow humanitarian agencies to distribute aid. Governments themselves also often violate humanitarian principles and reject international relief operations, especially if the government forms part of the conflict, as could be witnessed in Syria, Ethiopia, and Yemen in recent years. The bypassing of humanitarian principles can also extend to donor governments. One reason for the delayed response to the food crisis in Somalia in 2011 was the U.S. anti-terrorist legislation, which made it risky for humanitarian organizations to provide assistance to areas controlled by Al-Shabaab (De Waal, 2018). Another example is the recent return of the Taliban to power in August 2021. The denial of international recognition of the Taliban as the new government of Afghanistan and the promulgation of sanctions by the United Nations went hand-in-hand with the freezing of international bank accounts held by the Afghan government, and the cessation of development aid. Afghanistan immediately slipped into a humanitarian crisis of hunger, which has been amplified by droughts and crop failures; the United Nations has prognosed acute food insecurity for 11 million people in Winter 2021/22 (United Nations, 2021b).

We have shown how the four interrelated logics of war—destruction, conflict-induced displacement, food control, and "hunger as a

weapon"—affect people's food (in)security. However, other factors, such as (conflict-related) increases in food and seed prices, hazards, and (changing) climatic conditions, intensify the exposure to conflict and food insecurity (Martin-Shields and Stojetz, 2019). The COVID-19 pandemic and the disruptions it has caused in the global food system especially affect the food security of millions of vulnerable people (FSIN and GNAFC, 2021). In many of today's conflict-affected countries, smallholder farmers, agro-pastoralists, and pastoralists, who are already highly vulnerable and exposed to risks in the absence of conflicts, suffer most (Touré et al., 2017). Violent conflicts constitute additional "shocks" that affect not only these populations' livelihoods and well-being but the overall food system. In addition, in times of war and violent conflict, natural hazards affect the population much harder and increase the difficulty of access to food dramatically. Droughts, in particular, exacerbate the effect of food (in)security. As slow-onset disasters, they usually affect larger land areas than other types of disasters and make mitigation and adaptation strategies difficult to implement. Many of the adverse effects of drought often accumulate slowly and may persist for years after the event has ended (Wirkus and Piereder, 2019).

Food insecurity in turn can spark, intensify, or perpetuate violent conflicts. While food insecurity alone is not likely to cause violent conflicts, it can become a decisive factor in increasing social grievances, in combination with socio-economic and political inequalities. In consequence, certain social segments of the population (particularly youth) become excluded from economic activities and participation in political decision-making processes, which can ultimately fuel civil unrest or conflicts (Hendrix and Brinkman, 2013). Thus, in post-war reconstruction situations, the rapid achievement of food security for large parts of the population is essential to lay the basis for establishing sustainable peace and to prevent relapse into violence. Besides these structural conditions, rising food prices have been found to decisively exacerbate the risk of political unrest and conflicts, particularly in urban settings. Across Africa, there is a strong correlation between rising food prices, increasing unrest, and increasing political repression (Berazneva and Lee, 2013). For example, wheat price fluctuation became a root cause of conflict events in Sudan in 2011 (Chen et al., 2018). The dominant explanation for the vicious circle of food prices and violent conflict is consumer grievances. Higher food prices create or increase economic constraints and/or sentiments of (perceived) relative deprivation, which activate grievances that, in turn, can lead to riots and unrests, whereas—vice versa—the outbreak of violence entails the likelihood of increasing food prices again (Raleigh et al., 2015). These grievances can be directed against the government if it fails to secure food for the population in the face of rising global food prices.

## 4. Addressing food crises and violent conflict

The complex relationships between food crises and peace or war that we have discussed require comprehensive and adapted policy actions. These actions must refer to the reduction of food insecurity as an effect of the four logics of war identified above. To tackle these logics of war themselves, we have identified four key areas that a multi-faceted policy response should consider when addressing the interface of food insecurity and violent conflict.

### 4.1. Compliance of all parties to food as a human right

First, international human rights law defines food as a human right. This means that states and non-state actors such as international organizations have to respect, protect, and fulfill people's right to access adequate food. When people are not able to access adequate food, the state is responsible for taking emergency measures to secure food equally for all parts of its population (OHCHR and FAO, 2010). International humanitarian law more specifically protects access to food during armed conflict. It addresses, on the one hand, the devastating effects of the logic of war mentioned above and, on the other, regulates

humanitarian relief operations in conflict settings. Most importantly, international humanitarian law prohibits the starvation of civilians as a method of warfare, as well as attacking, destroying, removing, or rendering useless objects indispensable for the survival of the civilian population. Moreover, if civilian populations are starving, meaning facing a high degree of deprivation or where their survival is threatened, belligerent parties should allow and facilitate relief operations (Akande and Gillard, 2019).

The problem remains how to achieve the compliance of all conflict parties to these rules. This means, above all, that international accounting mechanisms need to be improved. The UN Security Council Resolution 2417 of 2018 is a major step in this direction. The resolution stresses the importance of compliance by belligerents with international law and condemns the denial of humanitarian access to affected civilians (UNSC, 2018). Most importantly, the resolution stipulates that the obstruction of humanitarian access in conflict settings can result in targeted sanctions as already imposed in the past on Al Shabaab in Somalia, on the anti-Balaka commander in the Central African Republic, and on the President of the Humanitarian Commission of the regional administration and management office in Kidal, Mali (Akande and Gillard, 2019). Thus, the resolution should be used by UN agencies to monitor and report on human-induced food crises in conflicts, calling on the Security Council and the international community to act (Zappalà, 2019). However, as mentioned above, targeted financial sanctions and counter-terrorism legislation have also led to restrictions in humanitarian relief operations. Solutions provided by the Security Council, such as exemptions for humanitarian assistance, need to be more systematically integrated (Akande and Gillard, 2019).

### 4.2. Build bridges between humanitarian action, development, and peacebuilding

Second, food assistance needs to bridge humanitarian action, development intervention, and peacebuilding. Short-term food assistance during food crises and violent conflicts focuses on improving the food consumption of affected people and communities. However, relief operations in civil war contexts often face challenges in reaching those people most in need in a timely and appropriate manner, in guaranteeing aid workers' safety and security, and in gaining necessary data of affected populations (Tranchant et al., 2019). At the same time, food interventions risk becoming a source of conflict themselves, primarily because of an inadequate understanding of the conflict context (Devereux, 2000). The misappropriation of food aid, in particular, such as the usurpation of food by violent actors, can fuel political grievances and perpetuate conflict. Moreover, food aid can undermine local food production and markets and can affect smallholders' livelihoods and the development of local capacities (Hendrix and Brinkman, 2013). A clear and locally informed analysis of the conflict and its context is needed to prevent the negative impacts of food aid in conflict environments.

Food assistance, especially when provided in the long-term, such as in protracted crises or post-war situations, can identify potential conflicts and address them, reducing the risk of conflict flare-ups. Usually, these interventions have a longer-lasting impact than the immediate supply of food (or cash/vouchers), and already include transitional or development assistance measures, such as rehabilitating destroyed infrastructure, support of sustainable livelihood strategies, and the creation of safety nets especially for displaced persons, host communities and returnees, and social cohesion (Delgado et al., 2019). Long-term food assistance can, therefore, play a crucial role in building local capacity, restoring agricultural production, and ultimately, consolidating peace. For example, in north-eastern Nigeria, the support of internally displaced households in growing their own food has decreased dependency on food aid and helped to build up a sense of belonging to the community (Delgado et al., 2021).

However, while the inclusion of peace into humanitarian assistance and development has gained much momentum since the World

Humanitarian Summit in 2016, it also raises concerns, particularly because of the different mandates of humanitarian assistance, development, and peacebuilding. This is the case, for example, in Mali, where the humanitarian, development, and peace nexus (HDP-nexus) debate has been mainly driven by various UN agencies, but was highly politicized due to the controversial role of actors and contested funding, which fostered the disintegration of the three sectors instead of increasing the cooperation between them (Steinke, 2021).

Moreover, the meaning of peace within the HDP-nexus and its practical operationalization remains unclear to most actors involved. Peace can have diverse meanings from one place to another and across scales, and most importantly, from common academic concepts (for a review on the local turn in peacebuilding, see Ejdus, 2021). From a practitioner point of view, it is important to understand these local perspectives and practices, and the underlying normative conceptions that might be attached to them, because transferring concepts of peace (or of conflict and conflict resolution) from one place to another where different concepts are used can reinforce conflict (Delgado and Smith, 2021).

Considering food assistance along with the HDP-nexus thus requires a comprehensive understanding of the given specific context and strengthening the role of local partners in the planning, implementation, and monitoring of projects.

### 4.3. Integrate local capacities into food assistance

Third, there is a need to better understand the specific vulnerabilities and diverse coping strategies of conflict-affected populations in securing food in specific local contexts. These strategies depend on multiple factors such as the conflict context, intensity and duration, the individual situation, access to resources and support, and governance. For example, farmers affected by conflict in Colombia changed their crop production to a low-risk, low-return strategy by switching their production from activities with higher investments to less profitable crops with short-term yields, and crops that provided food for subsistence (Arias et al., 2017). Also, Brück et al. (2019) show that households during the Gaza conflict in 2014 increased their use of safety nets to minimize uncertainty, with support ranging from cash transfers to in-kind assistance received by the household. As Haan et al. (2012) note on the food crisis in Somalia in 2011, remittances are also an important safety net in responding to food crises and conflict, but still much needs to be learned about their role for affected people.

Therefore, the context-specific response mechanisms of local individuals, communities, and institutions to conflict-induced food crises need to be better understood, and lessons learned need to be incorporated into relief efforts, rehabilitation, and development efforts, while striving to avoid potential harm. This also means that international organizations, as well as national governments and civil society organizations, must tackle the structural inequalities of a (globalized) agri-food system, building sustainable local agricultural production systems, which focus on vulnerable people, especially small-holders and their access to natural resources and markets.

### 4.4. Better link between early warning and early action for food crises and conflict

Finally, food assistance amid conflict needs to be faster. Early warning mechanisms for famine, such as FEWS NET, have advanced progressively towards better predicting and managing food crises. They provide decision-makers and relief organizations with a rigorous, evidence-based analysis of food insecurity and acute malnutrition situations. Over the past decade, and especially in the aftermath of the well-predicted food crisis in Somalia 2011, when the emergency response was slow, humanitarian organizations have developed new tools to close the gap between early warning and early—or anticipatory—action, in which weather forecasts and other early warnings trigger predetermined actions before an event turns into a disaster or the peak of a disaster is reached (Weingaertner and Wilkinson, 2019). While most of the early action focuses on natural hazards, some anticipatory action takes already place in contexts of violent conflict, e.g. FAO's drought early warning early action in Mindanao, Philippines, a region frequently prone to climate-induced hazards and regular clashes between the government and non-state armed groups (FAO, 2020), or the UN Central Emergency Response Fund (CERF), which has also introduced an anticipation window in its financing structure, and used it in Ethiopia and Somalia when forecasts predicted unusually dry conditions in spring 2021 (UNCERF, 2021).

However, little is known about their effectiveness, and despite the technical progress, challenges continue to exist with data availability, especially in contexts of violent conflicts. Data needed for comprehensive analysis and a timely warning might not be available, up-to-date, or accessible for the area needed, particularly about the conflict-affected populations (Wagner and Jamie, 2020). Moreover, a knowledge gap still exists between data that is available to assess the food security situation and data on conflict or conflict early warning. Accurate conflict early warning seems to be more challenging, especially when it comes to predicting the impact of conflicts (Maxwell and Hailey, 2020). New developments in conflict early warning and forecasting systems such as UCDP ViEWS or ACLED Pulse might have the potential to close the "conflict assessment gap" of current food crisis warning systems (Wirkus and Piereder, 2019), although this is politically sensitive and needs to be considered carefully (Maxwell and Hailey, 2020). Even if warnings are timely and allow careful planning, adequate finance mechanisms need to be in place, capacities of organizations built, and access to conflict-affected regions guaranteed. Initiatives such as the Anticipation Hub provide a useful platform for exchange, lessons learned and increased cooperation between different humanitarian actors, donors, and researchers.

## 5. Conclusion

The causal relationship between civil wars and violent conflicts, on the one hand, and food insecurity and famine, on the other, are complex and context-driven. In this contribution, our aim was to show that food insecurity is not only a byproduct of war, but that it stands in the center of the logic of violent conflicts – e.g. to feed the self-armed groups, to seek rents for the military organization, or to harm the enemy. The international community still faces challenges breaking the vicious circle of violence and hunger; this becomes even more an urgent field of action since we have witnessed a dramatic increase in food insecurity and famines in conflict settings during the last several years.

Against this background, we make clear recommendations. First, on the legal and political level, compliance of all conflict parties to guarantee access to food as a human right has to be strengthened. The UN Security Council Resolution 2417 gives new impetus in pursuing policy actions and should be used by UN agencies and the international community to closely monitor and report if national governments secure food for its entire population, and if they or conflict parties facilitate humanitarian access in case they lack the capacity to prevent or mitigate a food crisis. Second, we address the cooperation between humanitarian agencies, development organizations, and peacebuilding actors. Food assistance, if implemented well, is decisive in mitigating the devastating effects of conflicts in the short term and in contributing to peace in the long term. Food (in)security should thus be a key issue in the HDP-nexus. Third, improving the cooperation and coordination between these actors also requires a much better understanding of local response mechanisms to food crises and conflict, as well as local perspectives towards peace, and should be considered for the planning and implementation of relief operations and national response strategies. Finally, the improved linking between early warning and early action over the past decade needs to be more systematically applied to conflict contexts to protect lives and livelihoods before crises materialize.

Taking into account these four key areas could help local communities, national governments, international humanitarian and development organizations, and UN agencies to take effective preventive, anticipatory, and emergency action against food crises amidst violent conflict, while at the same time integrating peacebuilding approaches into (long-term) food interventions to address hunger and conflict.

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