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Food Insecurity and Conflict Dynamics: Causal Linkages and Complex Feedbacks

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This paper addresses two related topics: 1) the circular link between food insecurity and conflict, with particular emphasis on the Sahel, and 2) the potential role of food security interventions in reducing the risk of violent conflicts. While we eschew mono-causal explanations of conflict, acute food insecurity can be a factor in popular mobilization and a risk multiplier. Moreover, violent conflict itself is a major driver of acute food insecurity. If food insecurity is a threat multiplier for conflict, improving food security can reduce tensions and contribute to more stable environments. If these interventions are done right, the vicious cycle of food insecurity and conflict can be transformed into a virtuous cycle of food security and stability that provides peace dividends, reduces conflict drivers, enhances social cohesion, rebuilds social trust, and builds the legitimacy and capacity of governments.

Introduction

The nature of violent conflict has changed dramatically in recent decades. The predominant form of violent conflict has evolved from national armies fighting each other (inter-state wars); to armies fighting for independence, separation or political control (intrastate or civil wars); to various forms of violence, involving non-state actors such as rebels, gangs, and organized crime, ranging from civil conflict to urban unrest. Unlike the Cold War, current forms of violence often have no clear military, political or ideological objective. As William Reno highlights, there are countless small wars with no front lines. no battlefields, no clear conflict zones, no distinctions between combatants and civilians, and no ideology (Reno 2011).

The Sahel, spanning across Africa from Mauritania and Senegal in the west to Eritrea, Ethiopia and the Sudan in the east, has figured prominently in these discussions. Sahelian countries are home to 125 mil-

These kinds of conflicts are not easily addressed with traditional instruments, such as diplomacy or military means. The drivers of violence often include a wide range of factors. such as political, economic, social and environmental issues. They can include socio-economic inequalities, perceived or real injustice, a lack of jobs, conflict over natural resources and the distribution of their benefits. human rights abuses, political exclusion, and grievances over corruption. In many cases, it is difficult to define clear causes, and the roles of different factors are interrelated, possibly morphing into each other and changing over time. However, the food price-related protests of 2007-2008 and the mass uprisings of the Arab Spring – in which food prices were implicated - have renewed interest in the role of food insecurity and food price-related grievances as catalysts for conflict.

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lion people and include some of the poorest countries in the world, with Chad, Mali, Niger, and Eritrea accounting for four places among the bottom seven in terms of human development in 2012, with undernourishment rates ranging up to 65 percent in Eritrea (SOFI 2012, HDRO 2013). Six of the nine Sahelian countries were involved in armed conflicts in 2012, and undernourishment has been implicated as either a cause or a consequence of several of them.

This paper addresses two related topics: 1) the circular link between food insecurity and conflict, with particular emphasis on the Sahel, and 2) the potential role of food security interventions in reducing the risk of violent conflicts. As the 2011 World Development Report notes, conflict comes in many forms. While the traditional security paradigm has focused attention on interstate and major civil wars, other forms of political violence – such as rioting, communal conflict, and violence linked to organized crime – can pose threats to human security and diminish government capacity to respond to protracted crises (World Bank 2011). While we eschew mono-causal explanations of conflict (because parsing drivers of conflict is difficult, as most conflicts have multiple causes), acute food insecurity can be a motivation for popular mobilization and a risk multiplier. Moreover, violent conflict itself is a major driver of acute food insecurity.

A nuanced relationship between food insecurity and violence emerges: while (increases in) food insecurity can be a source of grievances that motivate participation in rebellion, acute and severe food insecurity has a dampening effect on conflict behavior. Communal conflicts tend to occur against a backdrop of chronic food insecurity, though the effects of rapid changes in food access are less clear. Regarding urban unrest, the picture is somewhat more straightforward: higher consumer prices, particularly for food and fuel, are associated with increases in urban protest and rioting, which can have adverse effects for institutions and influence

policy decisions that affect the whole country. However, it is usually not the most foodinsecure that riot, but rather those with comparatively better access. This is partly because of interactions with other variables, such as political regime (which affects the likelihood that demonstrations or riots are repressed) and incentives for the government to shield consumers from higher international prices. Equally important is the role of weak institutions, whose presence implies that there are few mechanisms through which conflicts can be managed. Likewise, lower costs to collective action faced by urban populations can play a part in accelerating conflict. The resulting instability can itself cause further price increases, contributing to a vicious cycle and protracted crisis.

If food insecurity can be a threat multiplier for conflict, improving food security can reduce tensions and contribute to more stable environments. Yet, food security interventions – both in the form of national level programmes and international efforts to address acute insecurity via emergency assistance or chronic insecurity through support programmes - can also become a source of conflict and, if they are not designed and implemented correctly, further distort food markets and suppress local production. But if done right, the vicious cycle of food insecurity and conflict can be transformed into a virtuous cycle of food security and stability that provides peace dividends, reduces conflict drivers, such as horizontal inequalities², enhances social cohesion, rebuilds social trust, and builds the legitimacy and capacity of governments. In many cases, these results are generated through the process of interventions themselves, for example, through the inclusion of various groups in community-driven programmes.

The remainder of this paper proceeds as follows. The next section addresses the relationship between food insecurity and civil conflict, and explores the causal relationships discussed therein, paying particular attention to Mali, Somalia, the Sudan and other Sahelian

cases. The following section focuses on food insecurity as a precipitator of communal conflict. Next, the article discusses the relationship between food insecurity, food prices and urban unrest. The piece concludes with some preliminary policy recommendations for how food security interventions could reduce the risk of violent conflict.

Food Insecurity and Civil Conflict

Civil conflict - defined as an armed conflict between the state and an opposition group that aims to take power over the central government or in a region, or to change government policies (Fearon 2007) - is the most common form of armed conflict in the world today, with civil conflict accounting for well over 90 percent of the active conflicts at the end of 2011 (Center for Systemic Peace 2012). In the 21st century, civil conflict is almost exclusively a phenomenon affecting food-insecure and less-developed countries. Two-thirds of the world's food-insecure people live in seven countries: India, China, the Democratic Republic of Congo (DRC), Bangladesh, Indonesia, Pakistan and Ethiopia, of which all but China have experienced civil conflict in the past decade, with the DRC, Ethiopia, India and Pakistan currently embroiled in civil conflicts. This correlation is largely due to the fact that both civil conflict and chronic food insecurity are associated with poverty (Collier et al. 2003), and because conflict itself is a cause of food insecurity. Nevertheless, a growing body of research makes both direct links and indirect links – as proxied by environmental scarcity or access to water resources - between food insecurity and civil conflict³.

Chronic food insecurity is a persistent lack of "sufficient, safe, nutritious food to maintain a healthy and active life," and is generally caused by extreme poverty (FAO 1996). Acute food insecurity refers to temporary gaps in access to food, and can result from a variety of factors ranging from high prices to disruptions in delivery systems, recessions, natural disasters and extreme weather events, politi-

cal turmoil, and violent conflict. It is also important to distinguish between food availability and access. The first refers simply to the amount of food available in a local market or in the country. Obviously, aggregate production shortfalls, perhaps caused by drought or flooding and crop failure, make food scarcer, and can thus increase acute food insecurity. Access at the individual our household level, however, is a function of the family's ability to pay for or produce food, and the presence or absence of social safety nets that can provide access for those who cannot pay. Markets play a critical role in ensuring local food availability. They also set prices and provide the incomes so that households have access to food (WFP 2009d). Thus, chronic food insecurity can coexist with high levels of aggregate food availability and production. Prior to the 2007-2008 food price crisis, which saw global food prices reach their highest point since the mid-1970s, India was home to roughly 25 percent of the world's undernourished while simultaneously being a net food exporter.

Acute food insecurity, such as that resulting from the interaction of drought and crop failure with political and economic marginalization, has countervailing effects on conflict: it can be a source of motivation for rebellion, but it can also significantly diminish an aggrieved population's ability to prosecute their war aims. Acute food insecurity can increase social grievances, providing a motive for engaging in rebellion. Rebellion is generally more likely in societies characterized by large horizontal inequalities across regions and ethnic groups (Østby 2008, Østby, Nordås and Rød 2009, Cederman, Weidmann and Gleditsch 2011, Stewart 2010). These grievances may become particularly serious when government responses to food insecurity are politicized and relief funds are diverted to other uses. While commonly cited as an example of resource drought-induced rebellion in the Sahel, the Berber-minority Tuareg uprising in Mali in the early 1990s was fueled also by grievances over embezzlement of international relief funds by ethnically Bambara government officials and military officers (Benjaminsen 2008).

Food insecurity may motivate participation in armed civil conflict at the individual level. Military organizations, both rebel and sovereign, recruit fighters via ideological/political appeals, material incentives, and coercion. The lure of food and shelter (and protection from both rebel and state violence) is often perceived as a cause for joining violent groups (Berman 2009). Empirical evidence, however, is mixed. In a survey covering seven countries in Latin America, Africa, and the Middle East, unemployment and idleness sustained lack of livelihood or income-generating opportunities - were the most common motivations for participating in rebel movements and joining street gangs (World Bank 2011, p. 80). While ex-combatants in Sierra Leone were more likely to participate if offered money and food (Humphreys and Weinstein 2008), ex-combatant surveys in Burundi (Taylor 2010) and Colombia (Arjona and Kalyvas 2012) did not indicate that participation was motivated by promises of food, shelter, or economic benefit. In these studies, revenge and political factors were the primary motivators of participation, and partisans tended to have higher socioeconomic status.

Moreover, there may be a potential countervailing effect of acute food insecurity on rebellion – such as in cases where the effects of drought interplay with those of political and economic marginalization. While food insecurity may be a source of grievances and motivate individual participation in rebellion in some instances, it may suppress conflict via its effect on the resource base necessary to sustain rebellion. Food insecurity may produce grievances, but grievances are neither a necessary nor sufficient condition for armed conflict. Aggrieved actors must be able to mobilize partisans, which require resources (Tilly 1978, Collier and Hoeffler 2004). Thus, while rising food insecurity as a result of higher food prices or curtailed access can be a source of grievances, acute food insecurity may diminish conflict for three basic reasons.

First, acute insecurity, such as that caused by drought and crop failure, diminishes the resources available to militants. Military thinkers ranging from Sun Tzu⁴ to Napoleon⁵ have recognized that the ability to forage is a binding constraint on militaries – especially those, such as rebel organizations, that lack sophisticated logistics and support networks. Rebel movements typically do not grow their own food and depend on voluntary or coerced contributions from the population. Drought depresses rural incomes via reduced agricultural production making it more difficult to find willing donors and making civilians more likely to resist coercion.

These dynamics have been evident in Somalia. As drought gripped that country in 2010–2012, the resulting humanitarian emergency debilitated Harakat al-Shabaab al-Mujahideen, the main armed opposition to Somalia's Transitional Federal Government. While al-Shabaab has been accused of food aid theft and using food denial as a weapon, environmental stress may have undermined its military capacity. Drought forced farmers and herders to flee regions considered al-Shabaab strongholds, undercutting the movement's economic base (Roble 2011). As resources became scarcer - the UN declared famine conditions in July 2011 - al-Shabaab resorted to levying higher taxes and confiscating livestock, creating tension between the movement and communities under its control. The blockage and diversion of food aid angered tribal groups and sparked violent clashes with local militias.⁶ In November 2011, al-Shabaab raided the Somali offices of UNICEF, the World Food Programme, and 14 other organizations, forcing them to suspend relief work (Chonghaile 2011). Organizations that continued to provide aid were met with new, higher "taxes" - forced levies of goods - on aid shipments the following month (UN Monitoring Group 2012). Though motivated by a desire to avoid dependency on Western organizations, the gambit backfired. The increasing strain on affected populations caused al-Shabaab to lose support both at home and abroad, contributing to al-Shabaab's military decline and a wave of defections in 2012.

Second, food insecurity can hinder active political participation – including participation in civil conflict – at the individual level. People experiencing acute food insecurity invest virtually all their effort in the pursuit of food, leaving little time and energy for the pursuit of higher-order needs like political goals, community needs, and ideological ends (Maslow 1984, Inglehart 1981). For this reason, it is usually not the most poor or food-insecure who participate in rebellion, and civil conflict is relatively more prevalent under conditions of relative food abundance and better agro-climatic conditions (Thiesen 2012, Hendrix and Salehyan 2012, Salehyan and Hendrix 2012).

Finally, the fact that food denial is often incorporated into counterinsurgency operations suggests that acute and severe food insecurity should suppress insurgent violence (Macrae and Zwi 1992). In conflicts ranging from the Second Boer War (1899-1902)7 and the Ethiopian-Eritrean civil war (1964-1991) to the ongoing conflict between the Government of the Sudan and rebel movements in South Kordofan and Blue Nile states, denial of food and food aid has been a central part of counterinsurgency strategies (Valentino, Huth and Balch-Lindsay 2004, Downes 2007). Because insurgents seek to avoid direct confrontation with state forces, governments often resort to targeting the guerrilla's base of support, i.e., the local population (Mason and Krane 1989). This is more likely when governments have less professionalized militaries and capable bureaucracies, and thus resort to draining-the-sea tactics as a secondbest option (Arreguin-Toft 2001). This tactic can backfire, leading to increased support for rebels if they are able to effectively shield local populations from harm.

While the causal link between food insecurity and civil conflict is complex, the reciprocal relationship (where civil conflict causes food insecurity) is well established and rela-

tively straightforward. Violent conflict is an important factor behind high food prices and severe food insecurity. Conflict often affects the ability to produce, trade and access food (United Nations 1993). Conflict typically brings increased military spending - especially on arms imports - which crowds out other social expenditures, contributing to food security and child hunger (Scanlan and Jenkins 2001). As of December 2012, prices in war-torn Syria had in some cases sextupled relative to prewar prices. The price rise has been attributed both to decreased production as a result of bombed factories and dramatic increases in transshipment costs (Morello 2012). In Mali, where conflict has disrupted market access, coarse grain prices increased sharply by 80-100 percent above average from late 2011 onwards in many markets during the lean season (June-September 2012), with the highest increases recorded in northern Mali. In late 2012 and early 2013 cereal prices had returned to historic levels in most markets due to good harvest following the good seasonal rains in 2012. In early 2013, however, localized cereal price increases were noted as the military intervention began in the north (WFP 2013).

As the following vignette on the Sudan makes clear, internally displaced persons and refugees often face the most extreme insecurity. These negative effects can persist over the longer term. Children in Burundi and Zimbabwe who experienced violent conflict were significantly shorter (stunted) than others, affecting their health, education and economic opportunities later in life (Alderman, Hoddinott and Kinsey 2006, Blattman and Miguel 2010).

In Focus: Strategic Food Denial in South Kordofan/Blue Nile States, the Sudan

The 2005 Comprehensive Peace Agreement (CPA) between the Government of the Sudan and the Sudan People's Liberation Movement (SPLM) ended nearly five decades of intense fighting between the Arabdominated Khartoum government and the Dinka- and Nuer-dominated South. While

this agreement paved the way for South Sudanese independence, the line of demarcation left the states of South Kordofan and Blue Nile – which had supported the SPLM during the conflict and are still home to former SPLM partisans – in a tenuous position. Popular consultations were held in 2011 to determine whether these states would remain part of the Sudan or join the newly independent South Sudan, but negotiations broke down due to the exclusion of SPLM-N (N standing for Northern Sector) from the process. Fighting erupted in South Kordofan in June 2011, following a contentious election for state governor when the Sudanese army attempted to disarm SPLM-N fighters, and spread to Blue Nile in September 2011.

Conflict dynamics there show how fighting can exacerbate food insecurity in contexts of protracted crises. Prior to the resumption of hostilities in June, the World Food Programme was already providing for 400,000 people in South Kordofan, through a mixture of school feeding, food-for-work and foodfor-training programmes. After the signing of the CPA large numbers of internally displaced persons and refugee returnees placed strains on local markets and infrastructure, and a 2010 survey indicated that 38 percent of South Kordofan's population was at least moderately food-insecure (WFP 2010). The immediate effect of fighting was to disrupt WFP's distribution of aid by closing off access to its warehouse in Kadugli, which was stocked with over 620 tons of food (WFP 2011). Thirty-four of the 39 WFP staffers working in South Kordofan were transferred to other locations. As fighting escalated through the end of 2011, the Sudanese government began blocking international aid and UN workers from accessing conflict zones. The resulting insecurity placed many close to famine and sent 100,000 to 200,000 refugees into neighboring Ethiopia and South Sudan (UNHCR 2012). In July 2012, the Sudanese government agreed to a tripartite initiative of the UN, African Union and Arab League to resume humanitarian assistance. The WFP resumed emergency aid in August of that year.

Food Insecurity and Communal Conflict

Communal conflict is conflict between two or more distinct communities that neither targets nor directly involves the state. These conflicts tend to be episodic, rather than sustained campaigns like armed conflicts. Sometimes involving an ethnic aspect, examples of communal conflict include: recurrent clashes between Fulani Muslims and Tarok Christians in the city of Jos, Nigeria, which killed at least 2,350 people between 2001 and 2011; violence between herders in the Karamoja cluster, East Africa (see USAID 2011); and, rioting between Kyrgyz and Uzbeks in southern Kyrgyzstan. These conflicts have received less attention historically because they do not fit neatly into the state-centric security paradigm. However, they pose significant threats to human security and often occur in countries experiencing protracted crises, adding the need for interventions by the international community in complex contexts. For instance, the Ituri conflict between the Hema and Lendu communities in the DRC may have claimed over 11,000 lives between 1999 and 2003 and internally displaced several hundred thousand more, eventually becoming one of the primary foci of the United Nations Organization Stabilization Mission in the Democratic Republic of the Congo (MONUSCO) (Salehyan et al. 2012). Communal conflicts can escalate to civil conflict, as in Darfur, when the government is perceived to be supporting, tacitly or otherwise, one communal group at the expense of the other (Kahl 2006).

Communal conflicts tend to cluster in areas where land and water are scarce, such as the arid and semi-arid regions of the Sahel, as well as Kenya, Nigeria, and Uganda. Recurrent droughts in the Sahel, a persistent feature of the region that have become more intense and frequent since the 1960s (Zang 2003), have undermined cooperative rela-

tionships between pastoralists – who migrate with their herds in search of water and forage - and sedentary farmers, as pastoralist encroachments on farmlands have increased. Because herding activities occur in marginal lands, these conflicts often take place against a backdrop of chronic food insecurity and are exacerbated by poverty and political exclusion (Raleigh 2010). Communal conflicts are also prevalent in areas where high population densities create strain even on productive, fertile lands, such as in the cases of Burundi, the DRC, and Rwanda. However, evidence for the effects of transient climatic shocks is mixed. While some studies find that conflict is more prevalent in times of relative food insecurity ("When there is food, there is no cattle raiding", quoted in Schomerus and Allen 2010), others find that communal conflict is more prevalent during times of relative abundance (Witsenburg and Adano 2009, Theisen 2012), or that the relationship is curvilinear, with conflict more prevalent during periods of both relative insecurity and abundance (Hendrix and Salehyan 2012, Raleigh and Kniveton 2012). These findings are mixed, but suggest that inter-temporal changes in access to food exert some effect on the outbreak of these conflicts, and periods of very abundant rainfall and periods of drought are marked by increases in episodic communal conflict. More research on the specific impacts of food insecurity on communal conflict is needed.

Food Insecurity, Food Prices and Urban Unrest

While generally not as violent or deadly as either armed conflict or communal conflict, urban protests and riots related to food insecurity and grievances over food prices still deserve attention. Urban food protests and riots can occur in the context of protracted crises, complicating the provision of services to affected communities. In the midst of the conflict between the Transitional Federal Government and the Islamic Courts Union, Somali rioters looted WFP trucks in Moga-

dishu in April 2008, and market riots killed five a month later. Moreover, urban unrest can lead to more widespread violence, as in Libya and Syria. Once begun, conflict dynamics can be self-perpetuating, resulting in protracted crisis.

Urban bias - the tendency for governments in developing countries to be more responsive to the policy concerns and preferences of urbanites at the expense of rural dwellers – is well documented (Lipton 1977, Bezemer and Headey 2008). In all political systems, rulers risk removal from office by force or massive popular upheaval if serious urban grievances are not addressed. However, the risks of urban unrest as a result of higher food prices are perhaps greatest in democracies, followed by hybrid systems and then autocracies. Regardless of regime type, rulers face general incentives to invest in policies that disproportionately favor those segments of society that pose the most threat and whose support is most necessary for regime survival: urban dwellers, the military and the upper and middle classes (Bates 1981a, 1981b; Stasavage 2005). Urban dwellers are more geographically concentrated, are closer to the seat of government power, and face lower costs to acting collectively to protest against the ruler. The military, by virtue of their organization and armament, is well positioned to sabre rattle. The wealthy and middle classes have relatively more resources, time and energy to invest in popular expressions of discontent - and more to lose.

For these reasons, rulers have general incentives to subsidize urban food consumption at the expense of rural producers, and target interventions during food price spikes toward comparatively better-off segments of society. These interventions — such as general consumer subsidies, price controls, and export bans — harm rural incomes while doing little to target aid to those who are most food insecure. However, political institutions can amplify or mitigate this urban bias. Democracy reduces the degree

of urban bias in policy choices by endowing rural dwellers and the poor with more political influence - in developing countries, the median voter is likely to be both - than in autocratic systems (Bates 1981b, Stasavage 2005). This makes democracies more responsive to the concerns of rural food producers, who benefit from higher prices. The needs of poor households, who are particularly vulnerable to higher prices and who may have trouble meeting basic needs, are also protected. Since at least 70 percent of the world's poor are rural dwellers (IFAD 2011), the general tendency to promote rural, agricultural interests is a pro-poor policy in the developing world.

The differing incentive structures facing democracies and non-democracies help explain the divergent ways in which developing countries addressed the 2007-08 food price crisis. Democracies were more likely to respond to the crisis with interventions, such as food-for-work and food stamp/ration programmes, which directly targeted more insecure households and produce fewer market distortions. Autocracies were more likely to use export bans, price controls, and consumer subsidies - policies that shield urban consumers from higher international prices but impose significant losses on rural food producers (in the form of lower prices) and fail to target relief at cash-poor households (Hendrix 2011). Export bans, price controls and general consumer subsidies are less effective in addressing acute food insecurity, but their political logic is obvious: shielding comparatively better-off consumers is good politics. China, a one-party state, India, a consolidated democracy with a history of food riots, and Indonesia, a nascent democracy, did not follow conventional World Bank wisdom in 2007-2008 yet were largely able to insulate their societies from international price pressures. While each country followed a different set of policies, all three imposed export bans (going against World Bank best practices) and achieved stable food prices, with advantageous political results: the incumbents in India and Indonesia were both re-elected in 2009, partly because of their success in keeping food prices stable (FAO 2009, Timmer 2010) and China avoided urban unrest at a time of intense international scrutiny due to the Beijing Olympics.

Thus, political considerations cause different types of regimes to address food price crises - and food insecurity - in different ways, with effects for political stability. In African and Asian urban centers, democracies see more protest when world food prices are high than autocracies and hybrid, semiauthoritarian regimes (Hendrix and Haggard 2012). Democracies are more likely to follow World Bank-recommended best practices, but also see more popular unrest in times of higher food prices (Hendrix 2011, Hendrix and Haggard 2012). These findings are probabilistic in nature, and mean that individual countries - like India, in the case of export bans - may buck these trends. Because popular mobilization is a mainstream form of political activism in democracy, however, this popular mobilization does not necessarily lead to instability or crisis. Rather, protests and rioting tend to be more destabilizing in autocratic, one-party systems, where the government's legitimacy hinges in greater part on its ability to ensure domestic order and broad benefits to large segments of society. Hence, protracted crises and regime change should be more likely to follow urban unrest in more autocratic and hybrid political systems. Food price increases seem particularly likely to lead to large-scale unrest in oneparty regimes where the government has actively intervened in food prices in the past via price controls and consumer subsidies (as has been the case in Egypt and Tunisia, in particular, and across North Africa). These interventions create expectations that food price interventions will continue, and encourage consumers to evaluate the government explicitly in terms of their ability to stabilize consumer prices.

Resulting instability can exacerbate food insecurity by causing hoarding and panic

buying. In both 2007-08 and 2011, the demonstration effect of urban unrest on regime instability - made visible by the ouster of Haitain Prime Minister Jacques-Eduard Alexis in 2008, and the Arab Spring uprisings in Tunisia and Egypt in 2010-2011 caused many governments around the globe to respond with export bans and panic buying. Export bans may have pushed world rice and wheat prices up by 35 and 25 percent during the 2007-08 crisis, respectively (Timmer 2010, Martin and Anderson 2011). Commitments to broad consumer subsidies across the Middle East and North Africa discouraged the adjustment of consumption patterns of households, causing drawdowns on buffer stocks, which sent sovereign purchasers back into world markets at higher prices (Wodon and Zaman 2010, Albers and Peeters 2011). These higher prices eventually made North African states' commitments to consumer subsidies fiscally untenable. In 2002, Egyptian government food and fuel subsidies amounted to 1.4 percent of GDP. By 2011, they accounted for more than 8 percent of GDP (Author's calculations, IMF Survey 2012).

A Peacebuilding Approach to Food Security Interventions in Protracted Crises

Food security interventions can have negative effects on conflict dynamics, prolonging humanitarian crises. As in the Malian example, misappropriated food aid can be a source of political grievances, and violent actors can appropriate food aid in order to satisfy their basic resource requirements. Generally, in irregular conflicts, such as insurgent rebellions, it is often difficult to fully distinguish, much less separate, targeted populations from belligerents, who typically operate in small bands and do not wear conventional military uniforms (LeRiche 2004). Polman and Waters (2010) identified aid misappropriation as playing a role in conflicts ranging from protracted crisis situations like Afghanistan (2001-), Ethiopia (1974–1991), and Somalia (1991-) to the former Yugo-slavia (1992–1995). In a global study from 1972–2006, Nunn and Qian (2012) found that increases in US food aid were associated with increases in civil conflict onset and incidence, as well as conflict duration.

While food assistance programmes have not always had their intended consequences, food security policies, programmes and projects can nonetheless contribute to more peaceful societies through the integration of a peacebuilding approach. Peacebuilding is a multidimensional approach to building lasting peace in the post-conflict period. Peacebuilding aims at reducing the risk of relapse into violence by: addressing the root causes of conflicts; improving social cohesion and reconciliation among groups; and, creating capacities and institutions that can manage disputes, so that they do not evolve into war or violence. Peacebuilding is as much about an outcome as it is about a process. If, for example, various groups are involved in the design, implementation and evaluation of a food security programme, the interaction and dialogue among these groups can build social cohesion and reduce the risk of violence.

Yet, just because food assistance efforts take place in a protracted crisis or in a conflict-affected country, it does not mean that they necessarily contribute to peace. They can, for example, undermine investment in local food production and the development of local capacity. If done right, however, food assistance can help to transform the vicious cycle of food insecurity and conflict into a virtuous cycle of food security: the risk of violence can be reduced (Brinkman and Hendrix 2011, p. 15). To address root causes, peacebuilding needs to be based on conflict analysis. Deeper understandings of the drivers of conflict allow actors to work on conflict, rather than in conflict, and to reduce the risks behind violence (Woodrow and Chigas 2009). Peacebuilding actors have made significant progress in conflict analysis through the development of various tools and trainings. Yet, what remains difficult is

the translation of conflict analysis into good peacebuilding programming – both in post-conflict periods and during protracted crises. In protracted crisis, the need for the integration of peacebuilding into food security policies, programmes and projects is huge.

FAO-WFP (2010) identifies five characteristics of protracted crises: duration or longevity; conflict; weak governance or public administration; unsustainable livelihood systems and poor food security outcomes; and breakdown of local institutions. These characteristics are quite common in the Sahel. Food security interventions through the integration of a peacebuilding approach could address these symptoms of a protracted crisis through the generation of peace dividends, the reduction of conflict drivers, the enhancement of social cohesion, and the building of legitimacy and capacity of governments.

First, regarding duration, peacebuilding can be a long-term process, taking as long as a generation to implement (World Bank 2011). Yet, peacebuilding can also yield immediate results, which reduce the risk of violence and the duration of the violent conflict. Protracted crises are often the result of recurrent cycles of violence that persist despite immense costs to both sides and the possibility of negotiated settlement. Often, a key barrier to civil war settlement is the lack of a third party that can credibly enforce ceasefires in the short term. In contrast to interstate wars, where negotiated settlements leave both parties with standing militaries that can be called back into action in the case of reprisal attacks, civil war settlements often require that one party – usually the rebels – lay down their arms and reintegrate into society, as was, for example, the case in Mozambique and Sierra Leone.

Once rebel groups begin to reintegrate, however, they are susceptible to retribution at the hands of the state. Even if different sides can agree in principal to a settlement over the underlying issues, fear of disarmament and reprisal - in a context where the only guarantor of safety is one of the former partisans – prevents a negotiated deal (Walter 1997). Under these circumstances, rebels may believe that they are better off fighting it out, even if prospects for victory are slim. Civil wars are thus much more likely to grind on for years, causing incredible human suffering in the process. Thus, through United Nations peacekeeping operations, the international community can help bring protracted crises to their conclusion by acting as the third party to: negotiations; inclusive political processes; and, disarmament, demobilization, and reintegration processes. The UN has facilitated successful negotiations and DDR processes in dozens of countries.

Second, food security interventions can reduce the risk of, and address root causes of, violent conflict. After a violent conflict, central governments can lack legitimacy among some groups. This can be the result of a combination of factors. For example, it may be the case that the ruling regime has not (yet) had its authority confirmed through a fair and free electoral process; that some groups are excluded from politics; or, that the government was an active party to the violence. The active creation of peace dividends for all segments of the population can contribute to the trustworthiness and legitimacy of a government. This is particularly critical

Duration	Conflict	Governance	Sustainability	Local institutions
Reducing the risk of violence	Peace dividendsCash- or Food-for-WorkReducing horizontal inequalities	· Capacity development	 Shared natural resource management Safety nets 	· Social cohesion

Table 1: Outcomes of Key Food Security Interventions in Relation to Characteristics of Protracted Crises

in the immediate aftermath of a conflict, when dividends have the capacity to create and enhance local support in the peace process. There is a high mutual interdependency between political and security issues on the one side, and development and humanitarian issues on the other. In Mozambique, for example, the provision of assistance for the purpose of reintegrating both former combatants and internally displaced people (IDPs) eased the tension that population movements and a lack of livelihood opportunities otherwise might have caused (World Bank 2011, pp. 132, 182).

A peace dividend should be timely and tangible. People should be able to see it, feel it, use it, or spend it (WFP, quoted in UN/ PBSO 2010). School feeding programmes are a good example of how peace dividends can be quickly delivered after a violent conflict to all segments of the population, especially if a school feeding programme existed before the initiation of hostilities. Some form of school feeding exists in 155 countries, including dozens of conflict-affected states, where it can play an essential role, often as one of the few safety nets in place. In the Sahel, countries such as Ethiopia, Mali, Mauritania, Niger, Senegal and the Sudan have school-feeding programmes. The school system can provide an effective way to scale up existing safety nets and prevent negative coping strategies (Bundy et al. 2009). Education during conflicts can provide a sense of structure and normalcy - along with protection from harm, abduction and recruitment into armed groups (Penson and Tomlinson 2009). School feeding and community involvement in school committees can play a key role in terms of peacebuilding, enhance equity, help reconciliation and rebuild social capital, cohesion and trust after a conflict (see WFP 2009b for the case of Liberia, Brinkman and Hendrix 2011). Other examples of peace dividends are the delivery of seeds and tools or programmes that increase agricultural productivity through extension services. An example is a project in Sierra Leone that

increased the quality of cocoa beans after the end the civil war, which allowed farmers to get higher prices for their crops.

In many countries, land has been a root cause of violence. FAO-WFP (2010) contains an example of how an inclusive consultative process to develop a new land law contributed to peace in Mozambique. These consultations included stakeholders with customary titles to land, along with new private investors. The new land law enacted in 1997 had great social legitimacy and ownership and was perceived as balanced, thereby decreasing grievances associated with unequal access and perceptions that the government was favoring one group over another. In post-conflict situations ranging from Nepal to Rwanda, land reform - specifically, expanding ownership opportunities for previously landless households - has become a national priority. Another cause of violent conflict in many countries is the presence of large horizontal socio-economic inequalities among groups, especially with regards to land. They played, for example, an important role in Liberia and Sierra Leone (see, e.g. UNICEF 2011). Ensuring that food security interventions address these inequalities on a more permanent basis could reduce the risk of violent conflict.

Third, food security interventions can support the development of capacities and public administration systems. In El Salvador, for example, a school-feeding programme was started during the civil war in 1984. WFP supported capacity development, from the institutional framework and oversight to logistics, procurement and the design of the food basket (Bundy et al. 2009). In Nepal, the establishment of a nation-wide food security monitoring system, supported by WFP, has helped the government respond to food insecurity and contributed to the legitimacy of the state and strengthened state-society relations (McCandless 2012). Because horizontal inequalities played a role in the Maoist rebellion in Nepal, an equitable response capacity of the government also addresses a root cause. Similar arguments are prompting the Government of South Sudan, with the support of WFP, to establish a strategic grain reserve system, which will develop government capacity to address food insecurity and contribute to state legitimacy (McCandless 2012).

These programmes have a proven track record of changing attitudes in the aftermath of conflict. A review of peacebuilding activities found that the impact of access to social services on communities was described as "stabilizing," "tension diffusing," and "calming aggressions and the belligerent mood" (Kyrgyzstan); as "confidence building," "fostering unity," and potentially strengthening the "spirit of collaboration and cooperation" (Uganda); and as a return to "normal life" (Central African Republic) (McCandless 2012).

Fourth, food security interventions can improve the sustainability of livelihood systems and food security outcomes. For example, the rehabilitation and management of water resources by different ethnic groups in Kyrgyzstan contributes to multi-ethnic reconciliation and addresses underlying drivers of conflict, including resource scarcity and ethnic tensions. Early outcomes of the programme, which is supported by FAO, WFP and others, include increased social cohesion across ethnic lines (McCandless 2012). A peacebuilding programme among pastoralists in Ethiopia focusing on conflict management capacity also unintentionally contributed to resilience because it improved social cohesion and relations among communities, which made them more resilient in the face of drought or other shocks, because of freedom of movement, access to water and land and more diverse livelihoods (MercyCorps 2012). In Somalia, a water and sanitation programme by UNICEF was radically adapted early on to incorporate a component for negotiations to resolve conflicts about water access, which led to an agreement among local leaders on the construction of water systems and monitoring mechanisms (McCandless 2012).

Safety net systems, such as school feeding, cash- and food-for-work programmes, and child nutrition support also contribute to sustainability and better food security outcomes. Cash- or food-for-work programmes focus on (re)building vital infrastructure, such as dams, roads, swamp reclamation structures, hillside terraces, water facilities and catchment areas. For example, WFP has conducted a large road rehabilitation project in South Sudan since 2006, which has improved links in South Sudan and with neighbouring countries and helped revitalized trade. The roads built so far have halved the average travel time to markets, schools and health centres and reduced cereal prices in locations with road access. Cash- or foodfor-work programmes can particularly be important in cases where youth are vulnerable to recruitment by rebels, gangs or organized criminal violence. Safety nets can also provide an important mechanism to prevent urban riots or other forms of violence in reaction to sudden changes in access to food, for example, as a result to increases in food prices.

Fifth, various food security interventions have contributed to social cohesion. This comes about partly as a result of working closely with communities. In Liberia, for example, the evaluation of a protracted relief and recovery operation found that 90 percent of the 1,200 participants interviewed believed that the short-term jobs, provided through the operation, had helped to promote peace and reconciliation (WFP 2009a). This percentage of positive replies was higher than for skills learned or improvements in living conditions. Greater social cohesion can result even from brief exposure to new community-based participatory institutions (Fearon et al. 2009). Focusing on youth is essential, particularly given the role that unemployed youth have played in fueling violence. Therefore, in Sierra Leone, a new programme targets youth by offering them cash- and food-for-work activities that rehabilitate roads, drainage systems, and other community assets.

WFP worked alongside other humanitarian agencies to facilitate the return of IDPs in the Blolequin area of Côte d'Ivoire. Bitter land disputes erupted as IDPs returned to resettle. IDP camps surrounded the village of Gohogbehi. For some time, mutual fear between the IDPs and Gohogbehi residents had brought work on the plantations to a standstill, and the bridges joining the village and the camps were destroyed. Talks between WFP and the two communities led to an agreement whereby the parties would receive a onemonth general food distribution followed by three months of food for work in exchange for rehabilitating the bridges. Both communities received their general food distribution at the same location; and constructing the bridges together gave them an opportunity to live and work together. Today, the two communities co-exist peacefully, goods and people circulate freely and access to the town is ensured. Food assistance has helped these communities to develop social cohesion (WFP 2009b).

In Mindanao (the Philippines), a school meals programme increased community participation. In an evaluation, parents claimed to have grown closer as a community, and become better able to trust members and be more sensitive to others' needs. School meals also strengthened the opportunities for dialogue between the government and targeted communities. Through food-forwork or training people became more cooperative and took on new projects together (WFP 2009c).

These examples show that peacebuilding outcomes can be achieved through the process of providing food security assistance. Peacebuilding outcomes were achieved without adding to – let alone replacing – food security objectives. Yet, the impact on peace can be greater if conflict dynamics are take into account in programme design. In fact, involving communities in the design and implementation of programmes and having an inclusive approach to programmes will contribute to peacebuilding outcomes. The social interaction and joint analysis builds

social cohesion. At a minimum, no groups should feel excluded or unfairly treated. Doing so can undermine a fragile, nascent peace.

Conclusion

Since the end of the Cold War, the world has seen a steady decline in the number of active armed conflicts. However, 2011 deviated significantly from that trend, seeing the largest year-to-year increase in the both the number of active conflicts and conflict severity. That this increase has closely followed spikes in international food prices – in late 2010 and early 2011 – has once again raised the question of whether food insecurity is a cause of violent conflict. In this paper, we surveyed the extant literature to develop a nuanced picture of the role of food insecurity in conflict.

This paper addresses the feedbacks between food insecurity and conflict. While food insecurity can be a source of grievances that motivate rebellion, severe food insecurity has a dampening effect on conflict behavior. Communal conflicts tend to occur in chronically food-insecure environments, though the effects of rapid, intertemporal changes in food access are less clear. Regarding urban unrest, the picture is somewhat more straightforward: higher consumer prices, particularly for food and fuel, are associated with increases in urban protest and rioting, which can have adverse effects for institutions and influence policy decisions that affect the whole country. However, these relationships must be understood in proper context, as collective action paradigms, political institutions, and market structures can either mitigate or amplify the effects of food insecurity on conflict. Moreover, conflict itself is a significant source of food insecurity, as it disrupts production and distribution networks. Strategic food withholding can also be used as a tool used in counterinsurgency.

What is clear is that there is a significant role for the international community to play in encouraging peacebuilding and the reso-

lution of protracted crises, and that many of these interventions address conflict-related food insecurity. Food insecurity is a threat multiplier, but improving food insecurity can help to reduce tensions and address some of the fundamental grievances that motivate conflict in the first place. After decades of progress in eradicating hunger, food insecurity is once again a front-page issue. While the challenges are no doubt great, there is a role for the integration of a peacebuilding approach into food-related interventions in responding to protracted crises. This role goes well beyond emergency relief and can contribute to rebuilding healthy, vibrant, and peaceful societies.

Notes

- An earlier version of this paper was prepared for the High Level Expert Forum (HLEF) on Food Insecurity in Protracted Crises, 13–14 September 2012, FAO, Rome (see http://www.fao.org/cfs/cfs-home/cfs-fipc/hlef-home/en/) and draws on analysis in our Occasional Paper for the World Food Programme (see references). The authors wish to thank Colleen Devlin and Catherine Mahoney for research assistance. The views and interpretations in this paper do not necessarily represent the views of the United Nations.
- ² Horizontal inequality is inequality in access to resources, public employment and services, denial of cultural recognition, and political discrimination between defined groups based on culture, language, ethnicity, or religion within a society. For instance, the United States is characterized by horizontal inequality between racial groups: White Americans and Black or African Americans. In Africa, the relevant cleavages are often ethnic, such as between the dominant Shaigiya, Ja'Alin and Danagla and the marginalized Fur and Nuba peoples in Sudan.
- ³ See Brinkman and Hendrix (2011) for a comprehensive review of these issues.

- 4 "Make forays in fertile territory in order to supply your army with food." Art of War. Ch.6.
- ⁵ "An army marches on its stomach."
- ⁶ "Militants have imposed fines on clans and local residents ranging between \$6,000 and \$9,000, according to the size of the clan, in the eastern part of the Galgadud region, with the goal of financing their terrorist activities." Hussein Mohamud Osoble, a commander in the progovernment AhluSunnawalJamaa militia, as quoted in Mohamed (2012).
- ⁷ A particularly telling (and astonishingly direct) quote from then Great Britain Prime Minister Lord Salisbury, discussing counterinsurgency strategy with his Minister of War: "I do not like this protection of isolated hills. I should prefer to see a complete protection of lines and bridges; and then you ought to be able to destroy food with flying columns of considerable strength. You will not conquer these people (the Boers) until you have starved them out." (Quoted in Spies 1977).

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