

Breaking the Links Between Conflict and Hunger Redux

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This article revisits the authors' 1998 study on this topic (Messer, Cohen, & D'Costa, 1998). It employs a "food wars" framing to understand nutritional and political-conflict status in countries experiencing protracted conflict-related food crises and recent civil-war situations that involve food insecurity. This framing includes typologies of conflict (pre-conflict, active-conflict, and post-conflict) and food insecurity (food shortage, food poverty, food deprivation). It also incorporates related water-sanitation-and-health and land-grab issues that have multiplied since the early 2000s. Despite growing evidence of two-way causal links between food insecurity and conflict, policy attention to these connections remains surprisingly modest. The article considers the implementation of recent major initiatives and programs aimed at addressing food insecurity–conflict links. It concludes by: (i) examining the implications for understanding and responding appropriately to recent Middle Eastern and North African conflict and hunger situations and (ii) offering recommendations for promoting sustainable food security and building peace in conflict countries.

KEY WORDS: conflict, hunger, food insecurity

Introduction

The year 2015 marks 7 years since the 2007–2008 crisis of global spikes in food prices caused widespread deterioration in the food-security conditions in low-income countries, and provoked public demonstrations, some of which turned violent, in dozens of places (Messer, 2009). These threats to local, national, and global political stability elicited high-level policy responses from United Nations (U.N.) leaders (HLTF, 2008), U.N. food agencies (FAO, 2010), international financial institutions (IFIs) (World Bank, 2011), and international nongovernmental organizations (INGOs) (ActionAid/Environmental Working Group, 2011; Von Grebmer et al., 2011). Beyond the immediate humanitarian crisis, such responses showed increasing concern with food security as a security issue, the longer term causal connections linking conflict and food insecurity in both directions, and urgent inquiries on how to break cycles of food insecurity and political instability. The idea that food security should and could be mainstreamed into the world's peace-building agenda, although by no means new (see, e.g., FAO, 2005), received fresh funding and support, as did the idea that

peace-building and conflict prevention must be integral to pursuit and meeting of the Millennium Development Goals (MDGs) (FAO, 2005). Bold statements by U.N. Secretary General Ban Ki Moon (HLTF, 2008), and World Bank President Robert Zoellick (World Bank, 2011) intimated that high-level policymakers were poised to make economic and political agendas more conflict-sensitive, which included closer analysis of context-specific conflict histories and dynamics in relationship to hunger in situations that were carefully classified as fragile or conflict-affected (e.g., Bell, 2008).

Political and food agencies and think tanks additionally probed ways to break the links between food insecurity and conflict by considering, in the aftermath of the food-price crisis, politically destabilizing surges in agricultural direct foreign investments through which food-importing countries or commercial agents sought to control or stabilize food supplies, prices, or profits, sometimes by dispossessing small farmers in developing countries (e.g., Kugelman & Levenstein, 2012). Leading food economists analyzed these “land grabs,” along with other factors, as threats to food security and political stability in selected countries, as political stability became a dominant term of food-security policy analysis (Barrett, 2013). Such land-acquisition and food-price volatilities also energized well-organized political interests to assert these were violations of their human right to food, a right explored and advanced in a series of legal notes and discussion papers on land grabs, international trade, and high food prices issued by the U.N. Human Rights Council’s Special Rapporteur on the Right to Food (DeSchutter 2009, 2010a, 2010b). Reports in all these cases remarked or warned that synergistic conflict and food insecurity reduced life expectancies and quality of life for survivors, especially the youngest, whose long-term human development was especially threatened by malnutrition, illness, and psychosocial trauma during the first thousand days of life, when exceptional care to protect their special vulnerabilities would likely be needed but unavailable under hostile and devastating circumstances. Again, these were not new, but renewed interests (e.g., Hussain & Herens, 1997).

Below, we provide an overview of these conflict and food-insecurity literatures, as part of a consideration of where political-conflict concepts and contexts enter into agricultural and nutrition planning, where food-security concerns enter into peace-building planning, and where there are gaps in these assessments, who might fill them. We take as our reference point the working idea that conflict and the legacy of conflict, which we term “food wars,” are a continuing source of food insecurity in the world today, but there are ways to address these concerns, especially by putting food-security programming on a human-rights basis. The opening section offers a brief critical review of the food-wars, conflict/peace-building, and food-security literatures, which defines the various terms used to analyze causation and consequences and indicates certain gaps in theoretical, policy, and operational analysis. The second section considers current situations of food insecurity, where conflict enters into causation, and how international agencies that report on situations of food insecurity or conflict might better account for the linkages. The third section reflects on why conflict

and food-security analysis and policy are not more integrated, and what might be done to remedy unhelpful divisions. The conclusion emphasizes which existing institutions and agendas for action need strengthening.

Background

Food Wars

The concept of food wars as a cause of hunger originated with a long-view analysis of the history of hunger (Newman, 1991) that utilized a tripartite hunger typology, distinguishing food shortage, or availability, at the aggregate national or regional level; food access, or food security, at the household level; and food deprivation, or malnutrition, at the individual level. Food-wars analysis thereafter considered the multiple ways conflict causes hunger; how hunger contributes as a cause of conflict; and possible prospects for breaking the vicious cycles, including by constructing food security from peace (Messer et al., 1998). Food wars were conceptualized and defined to include situations where hostile parties use food (or hunger) as a weapon of war, where food insecurity follows as a consequence of conflict, and where food insecurity consequently contributes to continuing cycles of underproduction and political violence. Both historic and more recent (1980s through 1990s) conflicts demonstrated how causalities worked in both directions.

Violent conflict that deliberately destroys physical (land and water), biological (trees and seeds), and social resources for food production causes food shortage. Military investments for arms and armies divert resources from health, education, and social protection, and may plant explosives that destroy farmers, farming, and market livelihoods and household food security for decades to come. Deliberate siege warfare, asset stripping, scorched earth tactics, and hostile interference with markets and transport reduce nonviolent livelihoods and raise the costs of household food access. Deliberate or incidental destruction of water and sanitation, public health, and curative services elevate morbidity and mortality rates, and increase destructive synergisms among disease, household food insecurity, and individual malnutrition, especially of children. All were characteristic of the 1980s through 1990s food wars, famines, and protracted crises, especially in the greater Horn of Africa (e.g., DeWaal, 1997), where such destructive behaviors have persisted into the 2010s (Maxwell and Santschi, 2014), thereby calling into question optimistic investments in recovery processes, which focus on infrastructure construction and livelihoods, but ignore political–geographic–ethnic–religious (PGER) fault lines at their peril.

Food insecurity also becomes a cause of conflict when destitute, disempowered, and disenfranchised individuals are recruited to violence, and where well-organized political opposition interests, especially in urban areas, recruit disgruntled and underemployed youth to political demonstrations and violence. Food insecurity may not be the only cause or may be a trigger cause of conflict.

To emphasize food wars as a cause of low agricultural performance, our 1998 report (Messer et al., 1998) quantified the hypothetical impact of food wars on reductions in agricultural production and the rate of increase in production in sub-Saharan Africa (in the 1980s). It also considered elements of food wars in the case studies of Ethiopia-Eritrea, where food insecurity could be construed as a cause in multiple cycles of civil-war struggles, and Rwanda, where combined PGER and food insecurity factors, including reduced incomes related to plummeting coffee prices, arguably contributed to genocidal civil war in 1994. The policy and practice implications, in summary, showed that conflict and PGER matters are implicated in food-security matters, and that there are conflict-sensitive approaches to food and agriculture that can improve food, nutritional, and health outcomes. In particular, the documentation argued for closer monitoring of export commodity cash crops and basic food prices, wiser bridging of humanitarian emergency assistance and livelihood reconstruction for food security, and what would come to be labeled “resilience” (Ager, Annan, & Panter-Brick, 2013; Frankenberger, Spangler, Nelson, & Langworthy, 2012).

Food Security, Conflict, and Globalization

In view of this global political economy, conflict analysts (Homer-Dixon, 1999, vs. DeSoysa, 2002) argued over whether the true underlying causes of conflict were need (resource scarcities, livelihood- and food-insecurity), creed (hostile identity politics linked to a sense of unfair political-economic inequalities), or greed (competition for control over strategic resources, including high-value agricultural commodities), whereas food-wars analysis showed all three were implicated in most cases (Messer, Cohen, & Marchione, 2001). Using international legal and political-advocacy terminology, food-wars analysts also showed that severe economic inequalities and human-rights violations underlie both hunger and conflict as root causes and argued that food-security and conflict policy must pay greater attention to PGER factors that crosscut vertical (economic strata) and horizontal (sociocultural group) inequalities (Marchione & Messer, 2010; Messer, 2009; Stewart, 2008). They also considered food wars as related to conflicts and food insecurity associated with spiking food prices (Messer, 2009), and environmental or global climate change (Messer, 2010), with implications for humanitarian assistance and economic development (Messer & Cohen, 2011). Such studies also contributed to the growing political interest during the 2000s in “food security” as a “new” or “unconventional” security threat, an area developed by U.S. strategic contractors that encouraged priority attention to countries that were or might be terrorist threats to global or U.S. society (Piombo, 2012). All provided a lead-in to studies of causal linkages and consequences connecting food insecurity and violence, following the 2007–2008 world food price crisis (HLTF, 2008), which addressed food security and violence connections directly, and also in the context of anticipated global environmental and climate change, “Climate Change Causes Conflict” issues (Messer, 2010).

Food Insecurity in Zones of Protracted Crisis, Land Grabs, Agricultural Development, and Conflict

Such developments occurred against a background where lead food policy-makers framed “hunger” problems as “food (in)security” issues, with priority attention to food access as the main category of food-security concern and measurement, as it relates to nutritional requirements, household livelihoods, and food prices over delimited periods in time (FAO, 2012). Since the 1996 World Food Summit, the FAO has recognized the role of conflict as a principal cause of child malnutrition (Hussain & Herens, 1997) and food insecurity (FAO, 2000), and the corresponding significance and challenges of peace-building, which require actions at multiple social levels, bottom-up households and communities through top-down state and international programs (summarized in FAO, 2005). This work provides a good summary of the multiple ways conflict reduces food security and makes the task of increasing reliable food supply and access, nutrition, and health so much more difficult. The U.N. interagency Committee on World Food Security (CFS) continues to develop principles and procedures to address these concerns. FAO personnel have taken the lead in U.N. interagency efforts to address food insecurity in protracted crisis countries (CFS, 2014; FAO, 2010) and hosted a supporting on-line forum by the Community of Practice on Food Insecurity in Protracted Crises (2013). These exchanges include references to previous summary papers connecting food insecurity and malnutrition to crisis, and illuminate the wide and deep concern food agencies have demonstrated on issues of mainstreaming, as well as the difficulties of delivering effective responses. Respondents were asked to address three questions: (i) what programs or processes were most likely to mainstream food security into peace-building efforts, (ii) especially in fragile and conflict-affected situations (FCS), and (iii) who are or should be the accountable parties? The 25 responses were thoughtful, and referred to the increasing numbers of meetings and literature that address these connections, including the International Fund For Agriculture and Development’s (IFAD) cooperation with the International Food Policy Research Institute (IFPRI) and other U.N. agencies to address agricultural challenges in conflict situations.

Although IFIs, such as the World Bank, have special classifications and financial programs for FCS, food-security and nutritional standards are supposed to be applied equally to conflict and nonconflict situations (Webb, 2009), based on humanitarian principles and authoritative nutritional knowledge (Sphere Project, 2000). The specter of drought combined with political instability and violence, which included the use of food as a weapon, became famine in Somalia in 2011–2012, despite the urgent actions of humanitarians to intervene and prevent it (Maxwell, Gelsdorf, Haan, and Dawe, 2012). Subsequent fact finding and action planning have taken pains to construct a principled humanitarian architecture that will hold governments and INGO directors at all levels accountable, and lead to better coordination of international, national, and local-level efforts (CFS, 2014; FAO, 2010). These action plans conceptually span the humanitarian versus development divide through the design of new livelihood approaches, cash

transfers, land-based livelihoods assistance, and a superior humanitarian architecture that can protect food security and save lives while such transitions are in process.

Official agencies, with INGO partners, are particularly concerned to find new ways to rebuild economies in war-torn regions, based on land-based livelihoods. Often-cited places for “success stories” are post-conflict Rwanda and Ethiopia; farmers in both countries remain predominantly small-scale, impoverished, and almost half still food-insecure, but are scaling up production of high-quality grains for market, through government partnerships with the World Food Programme’s Purchase for Progress (P4P; see <http://documents.wfp.org/stellent/groups/public/documents/communications/wfp217487.pdf>; <http://documents.wfp.org/stellent/groups/public/documents/communications/wfp217476.pdf>), agricultural and market assistance, and the U.S. Agency for International Development’s “Feed the Future” initiative (see <http://www.feedthefuture.gov/country/rwanda>; <http://www.feedthefuture.gov/country/ethiopia>).

Since 2008, official intergovernmental organizations (IGOs), including the U.N. Secretary General, food agencies, the CFS, and IFIs, along with INGOs, have organized numerous activities that seek to understand the underlying, contributing, facilitating, and trigger causes of food-(in)security related conflicts, and ways to break the links in their vicious cycles (FAO, 2010). Multiple research reviews (Brinkman & Hendrix, 2010, 2011; Hendrix & Brinkman, 2013; Simmons, 2013) and policy studies call for better food-security and nutritional targeting in conflict and protracted crisis situations (CFS, 2014; FAO, 2012; Maxwell, Russo, & Alinovi, 2012; Young & Maxwell, 2009). All pointedly raise international concern about the significance of household-level food security for peace-building, state-building, and conflict avoidance, and on the bases of these findings, issue recommendations for donors, policymakers, governments, and practitioners, including calls for better coordination with grassroots local interests, who are closest to the immediate suffering and responsive actions. The causal connections of food insecurity to Arab uprisings across the Middle East and North Africa (MENA) region, approached from various points across a political and interdisciplinary spectrum (e.g., Breisinger, Ecker, Al-Riffai, & Yu, 2012; Harrigan, 2014; Maurer, 2014; Maystadt, Tran, & Breisinger, 2014; Null & Prebble, 2013; Rosenberg, 2011; Zurayk, 2011), with destructive conflicts in Syria and streams of displaced persons, have fanned additional concerns about the connections of food insecurity and conflict in both directions.

Conflict-Sensitive Response

Most or all official institutions and INGOs by now have established special peace, state-building, and conflict or “fragility” units to explore implications of political volatility and violence for their policies, programs, and projects. As a result, program architectures are supposed to be more sensitive to conflict dynamics and to PGER factors, which influence the inclusion or exclusion from benefits that are supposed to advantage everyone. These official statements also

express alignment with human-rights principles. U.N. statements routinely acknowledge that access to adequate food is not only an economic good and necessary input to nutrition, health, and sustainable development, as articulated in MDG 1, which makes halving hunger a world, regional, and national target for achievement. Adequate food is also a human right, which incurs obligations for governments and the international community. The FAO's right-to-food initiatives, in particular, look forward to an era in which economic and political integration around right-to-food norms will produce monitorable and measurable progress that demonstrates how governments respect, protect, and fulfill the human right to food, through legislative actions and financial and logistical investments that produce nutritional advancement (DeSchutter, 2014; FAO, 2014b).

Below we consider the extent to which such special policies produce intended outcomes in selected countries, or simply reinforce programming and policy divides separating conflict and development, and humanitarian and development assistance.

Follow-up actions have included cautionary statements about the potential of food insecurity to provoke political violence, along with new tools to map, monitor, and assess the causes of rising food prices as related to political violence (FAO's Global Food Price Monitor; the World Bank Group's Food Price Watch). They have also included World Bank efforts to index, then direct special programs to address food insecurity and other crises in FCS and WFP's P4P initiative. Such efforts propose, construct, or strengthen corrective actions to improve food security and nutrition in the immediate term, and also contribute to intermediate and longer term actions to mitigate and prevent further political, economic, and human damages (see HLTF, 2008; Simmons, 2013). They also try to set conflict-prevention actions on a human-rights basis (DeSchutter, 2010a).

Supporting research and policy over this period has considered new approaches to food security for countries in protracted political and food crisis (CFS, 2014; FAO, 2010), the significance of conflict and security scenarios for economic development (World Bank, 2011), and the various ways violent conflict and donor government security concerns threaten principled humanitarian aid (impartiality, neutrality, independence) and Sphere standards for humanitarian action (Egeland, Harmon, & Stoddard, 2011; Sphere Project, 2000; WFP, 2012).

Yet to a large degree this conflict-sensitive agenda remains separate from food and nutrition planning and programming conceptualized by economists (bankers) and technical experts (Bell, 2008). Technical experts have scrutinized the causes and mechanics of food-price volatility (CFS-HLPE, 2011; FAO, 2011) and the possible multiplier threats of climate change (Hajkowicz et al., 2012; Messer, 2010). The multiple food and agriculture outlooks produced during these intervening years (Foresight, 2011; IAASTD, 2009) did not carefully integrate conflict factors into their assessments and planning. Although in each case conflict and political volatility were acknowledged to be drivers of food insecurity, agricultural underproduction, and malnutrition, serious discussions of the implications of these factors for food and nutrition policy were secondary to

setting priorities for research leading to action on technical issues, or relegated to a later stage of activities (see Albrecht, Braun, Heuschkel, Mari, & Pippig, 2013). The Foresight (2011) report mentions conflict in its section on “volatility in the future” under “non-economic factors.” But the authors accept and are guided by professional war counters’ reports that wars and civil strife have declined in recent years, even as they heed geographers’ and demographers’ warnings that competition for water and other essential resources by increasing numbers of people experiencing climate change might raise conflict potential (p. 107).

Analogously, the MDGs, despite FAO’s (2005) efforts to mainstream peace-building, did not make conflict prevention or recovery an integral part of their holistic approach to achievable goals, targets, and indicators, even though some countries added priority national goals as targets such as de-mining and removal of unexploded ordnance (Afghanistan, Angola, Cambodia, Laos, Mozambique, Burma) to the conventional standard list. Additionally, the addendum to country guidelines for MDG progress reports acknowledges for the next stage, post-2015, under a final, residual category of “other” priority themes, issues of overcoming inequalities and exclusions, and possible forthcoming priorities on “security ... and social protection schemes; conflict and fragility; violence, etc.” (UNDG, 2013). But the challenge remains, to integrate conflict prevention and recovery into agriculture, food security, and nutrition planning.

In practice, FAO’s food outlook report (FAO, 2014a) shows that conflict and postconflict countries still dominate the lists of countries requiring emergency humanitarian food assistance; very few have emerged from their postconflict status. These findings (which we explore in more detail below) suggest that the growing conflict sensitivity of aid agencies still has far to go to move postconflict countries into food security, sustainability, and prosperity.

Materials and Methods

Situating Food Insecurity and Conflict: 2007–2014 Data

In order to examine the relationships among conflict, PGER factors, food insecurity, and globalization, we drew on existing academic and international organization databases. For conflict data, we used the Uppsala Conflict Data Program (UCDP) database at Uppsala University. This provides information on all armed conflicts that have resulted in 25 or more deaths since 1946. It categorizes conflicts according to duration, intensity (with low-intensity conflicts resulting in fewer than 1,000 deaths in any given year), and the type of conflict. The latter categorization focuses primarily on whether the conflict is internal to a place or interstate, but the database also provides adequate narrative information to judge which PGER factors come into play in internal conflicts, as well as the extent of foreign-government support for nonstate opponents of the government in internal conflicts. According to Eck (2012), the quality of this dataset is quite high in comparison to some alternative conflict databases, although its reliance on media accounts may create some biases in terms of its comprehensiveness.

We confined our data collection to the years 2007–2014, in order to focus on the effects of the greater food-price volatility that emerged in that period. As the UCDP database did not have 2014 data available, we supplemented it with information on specific conflicts (Mexico, Ukraine) from GlobalSecurity.org, a widely cited website on military topics. We also examined the World Bank's most recent FCS list. Places on this list either receive a low rating from the Bank on its Country Policy and Institutional Assessment, or have a U.N. and/or regional peace-keeping or peace-building mission present. The places on the list have poor governance and weak institutions, and include those currently experiencing conflict, those affected by past conflicts, and those with a high potential for conflict.

We focus on two additional sets of countries: those where conflict concluded relatively recently, but where the legacy of conflict impinges on food security through high numbers of displaced people, weak economies, and governance issues; and countries that border on conflict countries and have accepted large numbers of refugees from the conflicts. Particularly in low-income countries, refugee populations create additional food insecurity problems. We identified these two sets of countries using FAO's Global Information and Early Warning System.

For food insecurity data, we employed the Global Hunger Index (GHI), developed by IFPRI. To reflect the multidimensional nature of hunger, the GHI uses U.N. data to combine three equally weighted indicators into one index: the share of the population with insufficient caloric intake, the proportion of children under the age of five suffering malnutrition, and the under-five mortality rate. Whereas the first element has a bias toward measuring calorie availability, the second two capture a greater degree of inequality in access to food (inasmuch as child malnutrition and deaths are highly correlated with poverty). Child malnutrition also reflects micronutrient deficiencies, as well as caloric inadequacy. Child mortality data partially reflect "the fatal synergy of inadequate food intake and unhealthy environments" (von Grebmer et al., 2013, p. 7). GHI scores between 0 and 5 indicate the absence of hunger; between 5 and 9.9, "moderate hunger"; 10–19.9, "serious"; 20–29.9, "alarming"; and 30 or higher, "extremely alarming." The GHI only focuses on aggregate national data, so it often does not capture important pockets of hunger in otherwise food-secure places. Nor does it expose significant differences in levels of food security within countries that might be related to conflict, for example, Northern Uganda's lagging behind the rest of the country on most human development indicators due to the long legacy of conflict.

We examined the influence of globalization in conflict zones using World Bank data on the share of merchandise trade in the national economy. Although globalization involves more than "openness to trade," that is a key and readily measurable aspect, with data available for many countries.

We supplemented the above data with information on food insecurity, malnutrition, and illness among refugees and internally displaced persons (IDPs). These uprooted people most often have fled their homes because of conflict, and frequently rely on external food assistance. Both their flight and their dependency

on food aid that may not always arrive on a timely basis or provide an adequate diet mean that such populations are at high risk of human insecurity (on which see UNDP, 1994).

Methodology

In light of the small sample size (49) and the need to rely on our own interpretative judgments for some of the key variables (the type of conflict, but also whether to exclude certain situations as “conflicts”), we did not attempt to subject the data to statistical correlation analysis. Rather, we utilized a qualitative analysis of the relationships among the variables with an eye toward developing a model of causality, as in our previous studies on this topic (Messer et al., 1998; Messer & Cohen, 2007, 2008).

Results

It is important to note that the UCDP data only capture violence that involves contending national armed forces, national armed forces confronting organized rebel groups, and civilian deaths caused by these warring parties. It does not consider nonconflict armed violence, which includes homicides, suicides, extrajudicial killings, armed gender-based violence, and armed criminal activities such as kidnapping and robberies (Small Arms Survey, 2015). Often such activities are the work of organized criminal groups. Such violence can be particularly deadly: in 2013, Honduras, El Salvador, and Guatemala, all countries considered at peace, had the first, fourth, and fifth highest homicide rates in the world, due in large measure to the actions of criminal gangs (Restrepo & Garcia, 2014). The relationships between the gangs and past conflict in Central America is unclear.

We do consider Mexico’s “drug war” to rise to the level of the type of armed conflict that we are including in the data. We base this judgment on the scale of the violence, the level of organization of the drug cartels, their armed opposition to the Mexican government, and the engagement of the Mexican armed forces against the cartels.

Table 1 displays the data discussed in the preceding section. As noted previously, in addition to the data in the table, we considered conflict, displacement, and food insecurity in our analysis. According to the U.N. Refugee Agency (UNHCR), as of the end of 2013, violent conflict, political persecution, and human-rights violations had displaced 51.2 million people, the highest total ever recorded. One in five (10.7 million) were newly displaced in 2013, equivalent to more than 30,000 people uprooted each day. The vast majority (33.3 million, or 65 percent) were people displaced within their own countries. Over 8 million people joined the ranks of the world’s IDPs in 2013; this, too, is the highest figure ever recorded. Among the 11.7 million refugees who received protection and/or assistance from UNHCR during the year, a majority (53 percent) came from just three countries experiencing high-intensity conflict: Afghanistan, Somalia, and Syria (UNHCR, 2014a).

Table 1. Conflict, Hunger, and Globalization, 2007–2014

Conflict Venue	Conflict Intensity	Type of Conflict (With PGER Factors)	FCS List	2005 GHI	2013 GHI	Merchandise Trade/GDP (%)
<i>Sub-Saharan Africa</i>						
Angola	Low (2007, 2009)	Internal (G)		22.7	19.1	84.1
Burundi	Low (2008)	Internal (E)	Yes	39.5	38.8	36.8
Burkina Faso	Refugee Hosting Country	Refugees from Mali		26.6	22.2	51.3
Cameroon	Refugee Hosting Country	Refugees from CAR and other countries		16.3	14.5	43.8
CAR	Low (2011–2014)	Internal (E, R)	Yes	28.5	23.3	24.4
Chad	Low (2007–2010)	Internal (P) Refugees from CAR, Nigeria, and Sudan	Yes	29.7	26.9	50.4
Democratic Republic of Congo (DRC)	Low (2007, 2008, 2012)	Internal (P, G, E) Rwandan intervention	Yes	N/A	N/A	45.2
Congo Republic	High (2009, 2013)	Refugees from CAR		18.4	20.5	118.4
Ethiopia	Refugee Hosting Country	Internal (G, E)		31	25.7	35
Côte d'Ivoire	Low (2007–2013)	Internal (E, R)	Yes	16.5	16.1	89.7
Liberia	Postconflict	Postconflict, refugees from Côte d'Ivoire	Yes	20.6	17.9	88
Mali	Low (2007–2009, 2012–2013)	Internal (G, E)	Yes	20.7	14.8	49.3
Mozambique	Low (2013)	Internal (P)		25.1	21.5	75.8
Senegal	Low (2011)	Internal (G)		13.7	13.8	63.7
Sierra Leone	Postconflict	Post-conflict	Yes	28.4	22.8	63.4
Uganda	Low (2007–2011, 2013)	Ugandan government troops fighting Ugandan rebels (G, E) in neighboring countries		18.6	19.2	41.6
Somalia	High (2007–2012)	Internal (P, R)	Yes	N/A	N/A	N/A
Sudan	Low (2013)					
	Low (2007–2010, 2013)	Internal (P, G, E, R)	Yes	24.7	27	19.4
	High (2011–2012, 2014?)					
South Sudan	Low (2011–2012)	Border disputes with Sudan	Yes	N/A	N/A	N/A
	High (2013–2014)	Internal (R)				
Nigeria	Low (2009, 2011–2012)			16.3	15	35.9
	High (2013)					
Niger	Low (2007–2008)	Internal (E)		25.6	20.3	65
Mauritania	Low (2010–2011)	Incursions by religious militia; refugees from Mali		14.6	13.2	133.9
Djibouti	Low (2008)	Border dispute with Eritrea		24	19.5	49.9
<i>Asia</i>						
Philippines	Low (2007–2014)	Internal (P, G, R)		14	13.2	46.9
Bangladesh	Low (2012)	Internal (G)		20.2	19.4	51.1
Sri Lanka	High (2007–2009)	Internal (E)		16.9	15.6	48.1
India	Low (2007–2014)	Internal (G, E)		24	21.3	42.1

Table 1. Continued

Conflict Venue	Conflict Intensity	Type of Conflict (With PGER Factors)	FCS List	2005 GHI	2013 GHI	Merchandise Trade/GDP (%)
Afghanistan	High (2007–2013)	NATO intervention	Yes	N/A	N/A	31.9
Burma	Low (2007–2014)	Internal (G, E)	Yes	N/A	N/A	N/A
Pakistan	Low (2007)	Internal (R)		21.2	19.3	30.6
	High (2008–2013)					
Tajikistan	Low (2010)	Internal (R)		19	16.3	67.3
Thailand	Low (2007–2013)	Internal (G, E, R)		6.6	5.8	130.4
Malaysia	Low (2013)	Internal (G)		5.8	5.5	139
Cambodia	Low (2011)	Border dispute with Thailand		20.9	16.8	136.6
<i>Middle East/North Africa</i>						
Iran	Low (2007–2011)	Internal (P)		<5	<5	30.2
Iraq	High (2007–2010, 2013–2014)	Internal (P, R)	Yes	N/A	N/A	70.1
	Low (2011–2012)					
Syria	Low (2011)	Internal (P)	Yes	5.1	<5	N/A
	High (2012–2014)					
Algeria	Low (2007–2013)	Internal (R)		<5	<5	59.1
Occupied Palestinian Territory (OPT)	Low (2007–2012)	Armed opposition to Israeli occupation	Yes	N/A	N/A	94
	High (2014)					
Yemen	Low (2009–2010, 2013)	Internal (P, R)		27.9	26.5	64.1
	High (2011–2012)					
Libya	High (2011)	Internal (P)		<5	<5	100.2
Turkey	Low (2007–2012)	Internal (G, E)	Yes	<5	<5	49.3
<i>Americas</i>						
Peru	Low (2007–2010)	Internal (P)		9.9	5.5	45.8
Colombia	Low (2007–2014)	Internal (P)		6.9	5.9	32.2
Mexico	High (2006–2014)	Internal (P)		<5	<5	63.3
<i>Europe</i>						
Azerbaijan	Low (2012)	Territorial dispute with Armenia		5.4	<5	61.5
Georgia	Low (2008)	Russian invasion in support of separatists (G)		11.3	9.3	64.5
Russia	Low (2007–2013)	Internal (G, E, R)		<5	<5	42.9
Ukraine	High (2014)	Separatist rebellion (G), Russian intervention		<5	<5	86.7

Sources: Conflict, intensity, and type—UCDP (2014); for Mexico and Ukraine, GlobalSecurity.org (2014); for postconflict and refugee-hosting countries, FAO (2014a). GHI data for 2005 and 2013—Von Grebner et al. (2013). FCS status—World Bank (2014a). Merchandise trade and GDP data—World Bank (2014b); for OPT, calculated by authors from U.S. CIA (2014).²⁰¹³ GHA data for Sudan include South Sudan.^{2007–2014}, conflicts within India included fighting between government forces and the following groups: insurgents in ethnic minority areas of the northeastern part of the country, Maoist (Naxalite) rebels, and separatists in Kashmir.

In sub-Saharan Africa, 2.4 million refugees depended on regular provision of food aid in mid-2014. Surveys between 2011 and 2013 had found high rates of anemia and chronic malnutrition among refugee children under the age of five. Insufficient funding from donors meant that 800,000 of these nutritionally vulnerable people faced reductions in already minimal rations (UNHCR, 2014b).

Unlike refugees who have crossed international borders, IDPs are not entitled to protection and assistance from the international community as a matter of international law. Their well-being is, instead, the responsibility of their home state, which may be an armed party in the conflict that led to their displacement or the source of persecution and human-rights violations. IDPs often face disproportionate vulnerability to food insecurity and malnutrition, as in Afghanistan, where more than 600,000 people remain displaced within the country after nearly 35 years of warfare (IDMC, 2014; IRIN, 2014).

Some conflicts are confined to a particular region or set of regions of a country, as in India, where most of the internal fighting takes place either in the far eastern tribal states such as Assam, Nagaland, and Tripura, or in Kashmir (Falcao, 2012; UCDP, 2014). A study that constructed GHI indices for India's states found that Assam is in the serious category, or better-off than most of the 17 Indian states with data; the state has experienced improvements in food security and nutrition since the mid-1990s. The other conflict-affected states did not have data available. West Bengal, which has a legacy of past conflict, fell into the alarming category along with most of the other states, although with a hunger index score below India's national GHI score of 23.7 (Menon, Deolalikar, & Bhaskaret, 2009).

Similarly, much of the conflict-related displacement in Sudan stems from the ongoing fighting in the Darfur region. About 80 percent of the country's 2.4 million IDPs and virtually all of the more than 360,000 Sudanese refugees in Chad are Darfuris (IDMC, 2014; UNHCR, 2014d). Between February and May 2014, intensified fighting in the region newly displaced 177,000 people. A survey of the preschool children among these IDPs found a proxy Global Acute Malnutrition Rate of 29.9 percent, double the internationally recognized emergency threshold. These children are 10 times more likely to die before their fifth birthdays than well-nourished youngsters (Sudan Nutrition Cluster, 2014).

Violence can also affect an overwhelming share of the populace. For example, by the end of August 2014, the conflict in Syria had displaced 6.1 million people within the country, and had led an additional 3 million to flee to neighboring countries, thereby uprooting 44 percent of all Syrians, as well as a significant share of the Palestinian refugees living in Syria. Those crossing borders faced harsh health and food-security conditions, including inadequate shelter and medical care, few livelihood opportunities, and high food prices (UNHCR, 2014c; UN OCHA, 2014). For IDPs, the conditions are even worse; according to the U.N. Office for the Coordination of Humanitarian Affairs, as of the end of 2013:

The confluence of risk factors including worsening food security, a poor pre-crisis nutrition situation, poor/suboptimum infant and young child

feeding practices, poor hygiene practices, deteriorating access to water, sanitation and health services combined with inequalities between rural and urban populations all contribute to a heightened risk that the nutritional status of children under-5 and other vulnerable groups is deteriorating, and that community based nutrition interventions are urgently required. . . . [A]n estimated 300,000 children aged 0-5 years are suspected of being at risk of acute malnutrition across Syria and 1.7 million children under-5 and pregnant and lactating women are at risk of micronutrient deficiencies. (U.N. OCHA, 2013, p. 28)

Discussion

Examining the data presented in the previous section yields a number of observations:

1. GHI data are missing for 6 of the 13 places that experienced high-intensity conflict during at least one year over the period under study. However, 2012 under-five mortality rates are available for all six, and four of the six rank in the highest global decile: Afghanistan (18th highest of 194 countries), DRC (5th), Somalia (4th), and South Sudan (12th). Iraq and OPT have much lower child mortality rates, and rank 70th and 83rd globally, respectively. It is notable that the highest rank belongs to Sierra Leone, a country with a significant conflict legacy (UNICEF, 2013). This extremely limited sample suggests that the links between high-intensity, violent conflict on the one hand and hunger and ill health on the other are stronger in South Asia and Sub-Saharan African than in other regions. These two regions have higher GHI scores (20.7 and 19.2, respectively, in 2013) than other global regions and the overall world score (13.8), and are the only regions to have scores above the moderate level. This regional effect also holds in the data for low-intensity conflicts, although Yemen, which has GHI scores approaching extremely alarming, is an outlier.
2. Notwithstanding the preceding point, there is considerable evidence from the literature (summarized in Simmons, 2013) that higher food prices after 2007 contributed to unrest in more food-secure Middle Eastern and North African countries, although violence tended to occur in lower income countries rather than more affluent nations. But the causal pathways are complex, and there certainly is no evidence for a simple linear relationship between higher prices and violence.
3. In the small number of interstate conflicts in Sub-Saharan Africa, the country that is home to the bulk of the fighting appears to have a high GHI or under-five mortality rate. However, such a relationship between variables does not hold in other regions.
4. For the 12 high-intensity conflict zones with data on the ratio of trade to overall GDP, the mean share is a majority, 55 percent. However, this even smaller sample is skewed by the presence of several countries (Iraq, Libya, and Ukraine) that rely heavily on extractive industry exports. A number of studies

from the early 2000s argued that dependence on primary product exports, in conjunction with economic decline and high income inequality, can contribute to internal conflict, although there is also literature disputing this (see Messer & Cohen, 2007, 2008, for a literature review). As we have argued elsewhere, there is no clear pattern with respect to the question of whether trade openness favors or disfavors conflict, although in the high-intensity conflict zones, it is noteworthy that those countries with high GHI scores or under-five mortality rates also have trade shares of GDP that are below the mean for the group and less than 50 percent. No such set of relationships among the variables seems to hold in the low-intensity conflict zones, either in Sub-Saharan Africa or elsewhere, but again, countries with high dependence on extractive-industry exports may skew the data. We have also made the point that high reliance on agricultural exports as a source of foreign exchange may have deleterious effects on livelihoods in a country (with heightened conflict potential) if there is also an inequitable structure of production and trade that marginalizes significant population groups (Messer & Cohen, 2007, 2008).

5. The data on refugees and IDPs make it clear that conflict, food insecurity, malnutrition, and displacement all go hand-in-hand. Even for recognized refugees, who are entitled to assistance and protection under international law, food security remains fragile at best due to a lack of timely and adequate resource flows from humanitarian assistance donors.
6. Conflict and the food insecurity that stems from it do not respect internationally recognized boundaries. Too often, conflicts tend to spill across borders in the form of refugee flows and, often directly related to this, so do armed combatants. This is the case in Mauritania, where conflict is due to the activities of armed groups from Mali, and was a factor with regard to the now terminated conflict in Sierra Leone, which spilled over from nearby Liberia and for a considerable time had a very high level of intensity. Also, many of the “internal” conflicts listed in Table 1 involve substantial intervention from neighboring countries. For example, the conflict in DRC is known as Africa’s World War because of intervention from several nearby states. Also, various countries in the Horn of Africa have supported armed factions in neighboring countries at one time or another. In the case of Uganda, fighting between the government and the rebel Lord’s Resistance Army has, in recent years, occurred entirely outside of Uganda.

The Gap Between Conflict Analysis and Policy and Programs

Food has not been as cheap, and prices have been more volatile, since 2007. From the high-level attention paid to conflict, one would have expected more integrated food-security and peace-building approaches, with conflict prevention and food security high on agency agendas.

Without argument, since 2007–2008, IGOs, IFIs, and INGOs that address food security and nutrition problems have been attentive to political violence, and

added conflict sensitivity to their official planning (Jaspars & Maxwell, 2013; see also Jaspars, 2000). Field operations are well aware of PGER factors that influence population displacements, food insecurity, mortality, and violence, and routinely integrate conflict analysis and impact scenarios into their reports (Ratner et al., 2013). The FAO and CFS have advanced comprehensive projects on food security in zones of protracted crises.

Yet a focused assessment of post-2008 agricultural, food, and nutrition planning finds that in many U.N., IFI, and INGO cases conflict analysis and food security programming are still separate streams of activity, which means “conflict” still needs to be integrated into the mainstream of agriculture, food, and nutrition discussions. The relevant “road maps” for the post-2015 MDG agenda still implicitly rather than explicitly incorporate conflict concerns into forward thinking (e.g., Leone, 2014) and the 2014 two-decade follow-up to the International Conference on Nutrition (<http://www.fao.org/about/meetings/icn2/en/>) makes food security in zones of protracted crisis a side route rather than main track in its agenda. INGOs (e.g., CARE International UK and International Alert, 2012; CRS, 2013) maintain separate conflict and peace-building units. IFIs such as the World Bank, according to their own independent evaluations of lending practices in fragile and conflict-affected situations, largely ignore politics, and along with them, the special implications of their own research and guidelines for working in FCS (Alexandre, Willman, Aslam, & Rebosio, 2013; Hellman, 2013; World Bank Independent Evaluation Group, 2014). In sum, conflict or peace-building and food-security or development programs mostly remain siloed in practice, paralleling the persistent humanitarian and development divide separating donor policies and practitioner programs. The agenda for action on food security in countries in protracted crises is likewise persistent, but also still outside the mainstream. Until conflicts and food insecurity burst onto the political scene, as in MENA countries (e.g., Maystadt et al., 2014), they mask food-insecurity problems, associated with higher food prices and stagnant or declining agricultural production and livelihoods in already restive and food-insecure countries, such as Syria, where displacement of desperate rural folk to urban zones make them ripe for political recruitment and conflict.

Consensus is emerging around the importance of greater accountability to affected people in humanitarian programming (e.g., Cairns, 2008, 2012; Delaney & Ocharan, 2012; Walker, 2014). But communities, grassroots, and local governments or CSOs that are supposed to provide “bottom-up” programming eliciting and responding to local voices are too often hypothetical rather than grounded and real. “Civil society,” which is supposed to be “strengthened,” is still a black box, within which community values, norms, organizations, dynamics, and leadership are contained. Counting the numbers of citizen or group complaints to officials (e.g., about inadequate social services), or constructing performance indicators for CSOs do not get at these essential relationships between people. INGOs are struggling to learn how to work effectively with local partners in violent and newly settled situations. On-the-ground operations and their home

offices face a steep learning curve, where optimistic investments for peace-building and state-building in self-identified post-conflict states in the donor FCS processes such as the “New Deal” (Haspelagh, 2012) have turned violent, as in South Sudan, dashing hopes that investments in food security can easily prevent conflict in the absence of additional conflict-sensitive political analysis. Coordination of civilian and military operations adds to the challenge (Haysom, 2013).

For agricultural projects in post-conflict situations, significant questions are by what PGER criteria farmers are chosen or choose to participate, how their crop production relates to food production and consumption in their vicinities, and how such activities relate to landholding and government or foreign investments in land and agriculture. In view of food wars and globalization literature, a significant question is whether public and private investors can anticipate export-crop-led economic growth and land-based household livelihoods in such politically unstable, food-insecure, displaced-person situations, possibly also characterized by land grabs—without conflicts and displacements.

Additionally, Sphere Project (2000) humanitarian standards and food-aid nutritional quality literature (e.g., Webb, 2009) in some ways work against special emphasis on conflict factors, as they emphasize common nutritional needs no matter what the principal cause or source of disasters that frame nutritional deficiencies. More constructively, food security and nutritional specialists (e.g., Simmons, 2013; Webb, 2009) hope that nutrition and food security programs might be able to bridge the humanitarian-development divide. They hope case studies of on-the-ground agricultural and food-security programs, including productive safety net programs, as in Ethiopia, will not only build local capacities for nutrition and food security, but also build trust that can serve other peace-building operations.

War and peace professionals who count conflicts, and support methodologies, models, and metrics that assert numbers of conflicts are in decline, insist the world is becoming more peaceful. The authors of the *Human Security Reports* downplay their own evidence that the number of people affected by conflicts is increasing, and appear to have no interest in spotlighting the enormous, unaddressed legacy of conflict as a source of food insecurity or troublesome barrier to, or indicator of, human security (Human Security Report Project, 2014a, 2014b). Various sources attest that elevated mortality stemming from conflict is due more to population displacement, deficiencies of clean water and sanitation, exposure to disease, and public-health failures rather than to direct blows from violence. But conflict professionals have yet to integrate these short-, medium-, and long-term human welfare damages into their recent war and human security assessments.

Conclusions and Policy Implications

Conflict will continue to be a risk and risk multiplier in food-insecurity situations, while food insecurity, especially mediated by livelihood insecurity and high and volatile food prices, is a risk multiplier of conflict. Consequently,

food-security policymakers at multiple levels need to continually refresh conflict analysis in operational contexts. Conflict analysts and peace-building policymakers need to refresh their understandings of food insecurity as an underlying, contributing, or trigger cause of conflict, and take steps to mitigate these social-welfare deficits. Reviews (e.g., Simmons, 2013) generally favor two directions to meet such requirements: (i) the implementation of social safety nets that can prevent or mitigate food insecurity that might lead to conflict-potentiating livelihoods or migration in search of livelihoods and (ii) greater flexibility in funding that will allow on-the-ground operations to shift rapidly from direct relief to livelihood-based programs.

An additional livelihood concern should be access to land and resources to produce and access food in conflict-affected situations. In these places, humanitarians responding to emergency food crises expect to work with local governments and civil-society organizations, who will help them facilitate a transition toward agricultural growth that will favor “pro-poor,” “small farmer,” and cooperative approaches, approaches that in particular advantage women. All these local institutions remain “black boxes” for further analysis. The positive framework of “resilience,” if it is to be a superior alternative to “vulnerability” analysis, also demands more rigor, especially in moving among individual, household, community, and national levels of analysis.

Limitations and Bias

Further research is needed to fully track the pathways through which the relationship between food insecurity (as a triggering factor) and conflict operates. Likewise, the apparent regional differences in the relationships among variables, discussed above, merit further investigation.

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Notes

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