INTRODUCTION

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Overview

Food is essential for human life. Conflict is a persistent aspect of human life, as history shows us and the media remind us daily. This book is about food and conflict. Both are infinitely broad subjects in their own right, with perspectives discussed in many different academic disciplines. Use of the phrase 'food in zones of conflict' reflects a somewhat narrower focus. The contributions collected together in this volume are concerned with food or its scarcity in specific geographical areas in which conflict has taken place in the past or is occurring now.

Conflict here is defined in terms of a confrontation between usually armed combatants, as opposed to a more all-encompassing definition in which conflict is taken to mean almost any disagreement, from intrafamilial discord to broader social tensions which may or may not involve the use of violence or physical force. It was always intended that the scope of this volume should exclude these broader understandings of the term. Of course, armed conflict may frequently arise from such social tensions, but not all social tensions result in armed conflict.

Armed confrontation between groups of people often leads to significant upheavals in the prevailing social order and deleterious impacts on social and economic patterns of everyday life for those living within conflict zones or caught up in conflict in some other way. Despite technological advances in warfare, such as the development of precision munitions and more sophisticated intelligence capabilities, all too often the impact of warfare today is depressingly familiar in its effects on civilians (c.f. Slim 2007; Slim and Mancini-Griffoli 2008). The ability of people to grow or procure their own food is often one of the first activities to be undermined by warfare, because

of disruption to the daily lives of a community, because those involved in the fighting require food for themselves, or because the fields or factories that produce food are destroyed or rendered too dangerous to work in. The ability of humanitarian agencies to deliver food is also greatly constrained in conflict zones. To this list should be added the deliberate restriction of food by one side or the other as a weapon of war.

For these reasons, the topic of food in zones of conflict generally implies the existence of some food insecurity in such areas. Although this volume is not exclusively focused on food insecurity, the issue is discussed in a majority of the chapters. However, some chapters are concerned with different aspects of food and armed conflict, such as how the meaning of food can change in the circumstances of war, how this might relate to the psychological responses to war and how food can become a symbol for something beyond its intrinsic subsistence value. How armed conflict impacts upon, and is influenced by, the responses of individuals, communities, governments and armed forces in terms of the production, supply, access to and meaning of food, therefore represents the overarching theme of this book.

Food Security

Food security is determined by a combination of the availability of, access to and use of food. The relationship between food insecurity and conflict is, of course, one of mutual reinforcement. Conflict contributes greatly to food insecurity; food insecurity causes conflict (c.f. Cohen and Pinstrup-Anderson 1999; Messer and Cohen 2004, 2007; Messer, this volume). This serves to establish a vicious, self-reinforcing circle of conflict, food insecurity and underdevelopment, from which countries find it difficult to escape (Bora *et al*. 2010; Verwimp 2012).

Humanity has achieved some notable successes in improving food secu-rity since the 1960s. Food production worldwide has increased by one-third during this period (Nellemann *et al*. 2009: 21), a trend which has been accom-panied by a marked decline in the proportion of undernourished[1] people (O'Grada 2009: 2), from around 24 percent of the world's total population in 1975 to around 13 percent today (Food and Agriculture Organization 2011: 44). However, the decline has slowed in the last ten years as the *absolute* number of hungry people has risen, from 791.5 million in 1995–1997 to an estimated 925 million in 2012 (Nellemann *et al*. 2009: 7; Food and Agriculture Organization 2012: 90), which has offset the reductions achieved during the previous two decades. The global statistics also mask significant differences between regions. Two-thirds of the world's undernourished people reside in only eight countries: India, Pakistan, Bangladesh, China, the Democratic Republic of Congo (DRC), Ethiopia and Indonesia. Forty percent live in just China and India. In Sub-Saharan Africa, there has been little progress at all,

with the number of undernourished people increasing by 31 percent since the early 1990s and a drop of only four percentage points in the proportion of undernourished people as a percentage of the total population. In several countries, Botswana, Burundi, Gambia, Liberia, Madagascar, Swaziland, Tanzania, Uganda and Zambia, this proportion has increased or, in the case of Kenya, remained the same (Food and Agricultural Organization 2006, 2008, 2010, 2011, 2012).

This volume comes at a period when the international community is facing some very significant challenges in terms of addressing inequalities in access to and sustainability of global food systems. Events which have reversed some of the gains made in previous decades include the rises in global food prices between 2006 and 2008, the worldwide economic downturn since 2009, various natural disasters (most notably the East African and Sahelian droughts) and continuing conflicts in several countries. Moreover, the challenges facing the world are likely to become more pronounced in the coming decades. According to Nellemann *et al.* (2009: 6–7), by 2050, the world's population will have swelled by another 2.7 billion people; in order to feed everyone on the planet, there will need to be a fifty percent increase in global food production. However, the effects of climate change, losses of cropland, increasing urbanisation, water scarcity and environmental degradation, among many other factors, mean that production may fall short by as much as a quarter of the additional demand for food (Nellemann *et al.* 2009). All of these factors, along with a deepening inequality in access to food, are likely to increase instability and make conflict within and between countries more prevalent (Beddington 2009; McDonald 2010).

Food and Conflict

The nature of conflict has also changed markedly in recent decades. The geopolitical certainties of the Cold War have been replaced by a plethora of localised conflicts, with civil war and internal insurgencies becoming far more important than state-on-state conflict. It is worth noting that at time of writing, with the possible exceptions of 'latent' wars such as that between North and South Korea (still in an official state of war) and the tensions between Russia and Ukraine, globally there are no direct conflicts between states. Instead, wars between countries are fought increasingly by proxy, often using insurgent or non-state actors with asymmetric rather than conventional military tactics. The diffused nature of conflict in this way has heightened the exposure of local populations to its effects, and thereby increased their vulnerability to food stress (Teodosijević 2003).

Armed conflicts, together with natural disasters, present the greatest threats to a population's food security (Sikod 2008; Food and Agriculture Organization 2012: 84). A recent study conducted by Gates *et al.* (2012),

examining the effect of armed conflict on progress towards the United Nation's Millennium Development Goals, measured the extent to which conflict hinders development. The research found that an event which causes around 2,500 battle deaths leads in affected populations to, on average, a ten percent increase in infant mortality, a 3.3 percent increase in undernourishment and a reduction in life expectancy of one year. Specific examples of this from around the world are legion. In the case of the civil war in Burundi, which lasted from 1993 to 2005, for example, D'Haese *et al*. (2010: 14) found that between 1996 and 2007 the agricultural productivity of households in two northern provinces fell from over 4,000 to around 1,500 calories per person per day. The authors concluded that the ability of farming families in this region to recover from conflict is very low. In the Central African Republic, the displacement of the population by rebel activities during 2012 meant that many people were unable to cultivate their crops; a study carried out by a non-governmental organisation (NGO) in the north east of the country found that 21 percent of local children were suffering from acute malnutrition after their families had returned home (reported in Green 2012). The civil war in Syria which began in 2010 has greatly affected access to food in many areas of the country, with disruption to supplies (both domestic and imported), endemic unemployment, large numbers of internally displaced people and significant price rises for staples, all contributing to the problem. By October 2013, 5.2 million Syrians – over twenty percent of the country's pre-war population – were receiving assistance from the World Food Programme (WFP) both in Syria itself and in neighbouring countries (World Food Programme 2014b).

In 2010, the Food and Agriculture Organization (FAO) identified twenty-two countries, seventeen of which are in Sub-Saharan Africa, as being in a state of 'protracted crisis', defined as those which had suffered from an extended period of political crisis or conflict, either internally or in confrontation with another country (or countries). These were: Afghanistan, Angola, Burundi, the Central African Republic, Chad, Congo-Brazzaville, Côte d'Ivoire, the DRC, Eritrea, Ethiopia, Guinea, Haiti, Iraq, Kenya, Liberia, North Korea, Sierra Leone, Somalia, Sudan, Tajikistan, Uganda and Zimbabwe (Food and Agriculture Organization 2012: 86). Forty percent of their combined populations were undernourished, and together they accounted for twenty percent of the world's global population of undernourished people (Food and Agriculture Organization 2012: 84). These countries roughly correspond with those classed by the Chronic Poverty Research Centre (CPRC), among others, as 'fragile states' (Chronic Poverty Research Centre 2008, 2010), being those in which there is a close correspondence between the state's inability or unwillingness to deliver basic services to the population, and the levels of poverty (and food insecurity). The CPRC notes that conflict is the principal reason why chronic poverty is so endemic in fragile states (CPRC 2010: 2–3; see also Collinson *et al*. 2008; Jaspars and Maxwell 2009).

The number of forcibly displaced persons in the world was 45.2 million at the end of 2012 (up from 37.5 million in 2005), of whom 15.4 million were refugees, 937,000 were asylum seekers, and 28.8 million were internally displaced persons (International Organisation for Migration 2012; United Nations High Commissioner for Refugees 2013a) – an eighteen-year high. Self-evidently, when people are unable to remain in their own homes, they are unable to grow their own food, whether to consume or to sell, to maintain agricultural self-sufficiency or to plan for the future. For example, the ongoing conflicts in the Central African Republic, Somalia, South Sudan and Sudan have in recent years had a devastating impact on the local populations, with millions of people forced to leave their home areas and go into displacement camps locally or refugee camps in neighbouring countries. There, they usually become entirely dependent on humanitarian aid. With food production in these countries severely curtailed, it will take many years for indigenous populations to re-establish a basis for sustainable livelihoods. Displacement can also cause conflict with the populations of the host area or country, as some recent examples have demonstrated (e.g., Ghimire *et al.* 2010, in the case of Nepal; Porter *et al.* 2008 and Codjoe *et al.* 2013, in the case of Liberian refugees in Ghana; Burns 2010, in the case of Somali refugees in Kenya; Chatty and Mansour 2011, in the case of Iraqi refugees in Syria; and Loveless 2013 in the case of Syrian refugees in Lebanon).

Thus, the reverse relationship, the role of food insecurity in causing conflict, is also a very strong one. One obvious manifestation of this is in the form of food riots, the most recent examples being those which occurred in a number of countries (notably Burkina Faso, Cameroon, Côte d'Ivoire, Egypt, Mauritania, Morocco and Senegal) following the 2007–2008 global food price rises (Brinkman and Hendrix 2011: 7; Lagi *et al.* 2011). In a globalised world, both consumers and producers in developing countries are increasingly vulnerable to shocks in global market prices, and it is likely that the relative significance of this as a trigger for conflict will continue to deepen as globalisation accelerates (Messer and Cohen 2007; Berazneva and Lee 2013). Economics can also play a major role in large-scale internal conflicts. A study of Besley and Persson (2008), for example, demonstrated how the risk of civil war increases as the prices of food imports rise. Similarly, the work of Miguel (Miguel *et al.* 2004; Miguel 2007) highlights the links between fluctuations in economic growth and conflict. The control placed by many governments on food prices, and therefore on availability, is also important; protests in Sudan in 2012 and 2013, for example, were prompted in part by the lifting of government subsidies on a number of key staples. The recent phenomenon of the long-term leasing of agricultural land in developing countries by external companies and countries has introduced another important dimension to the impact of the globalised economic system on food security (see Daniel 2011; Strauss, this volume).

As mentioned above, natural disasters are also likely to lead to food insecurity, and they thereby increase the likelihood of conflict (e.g., Brancati 2007;

Nel and Righarts 2008; Hilhorst 2013). With its link to many individual natural disasters, climate change is surely the most significant environmental problem currently facing the world. The effects of climate change on food insecurity and conflict have been a major research theme over the past decade, and the association between climate change induced environmental stress and civil strife has been demonstrated empirically in numerous different studies (e.g., Homer-Dixon 1991; Nordås and Gleditsch 2007; Raleigh and Urdal 2007; Ingram *et al*. 2010; Akokpari 2012; Hendrix and Salehyan 2012; Scheffran *et al*. 2012). Localised competition over scarce resources – long recognised as an important trigger for warfare (e.g., Ember and Ember 1992) – has also become one of the major factors behind many current conflicts. This is particularly the case in Central and East Africa where violent conflict between tribal groups has been fuelled in part by territorial pressures over cattle grazing. The relationship has been attributed partly to a reduced ability of the population to adapt to environmental pressures, which have resulted in food shortages and rising mortality rates, particularly among women and young children (Gray *et al*. 2003; Jabs 2007; Meier *et al*. 2007, Rowhani *et al*. 2011; Cheserek *et al*. 2012; Njiru 2012; Terefe 2012). In the words of a Sudanese pastoralist, 'when there is food, there is no cattle-raiding' (quoted in Schomerus and Allen 2010: 55).

Another aspect of how conflict has a negative affect on food security is in relation to unexploded ordnance, which reduces the availability of agricultural land to grow crops and presents a risk to those who work in the fields, as discussed by one contribution in this volume. Furthermore, munitions, even from a past era, can also poison the soil, as is the case, for example, due to chemical leakages from disintegrating First World War bombs and mustard gas canisters in Belgium and northern France, or due to radioactivity following the dropping of atomic bombs in Japan and atomic bomb testing in the Pacific Islands.

However, shortage of food *per se* is only one part of the problem. Neo-Malthusian approaches which fail to take into account the importance of socio-political factors underlying food shortages are necessarily missing a critical explanatory element and can therefore be grossly misleading (c.f. Scanlan *et al*. 2010). As Amartya Sen (1981) emphasised over thirty years ago, the relationship between food insecurity and the environment is not a simple one, with the political mechanisms governing food 'entitlement' being more important than the amount of food produced in determining the human impact of shortage and famine. In this way, access to food – who gets what – is, for Sen, always the result of instrumentalist political decisions which prioritise the needs of some groups over others. In Sub-Saharan Africa, such access to food is usually a product of access to land, with land reform programmes instituted by governments often leading to conflict by redistributing land from weaker to more powerful groups, with bureaucratic inefficiency, corruption, human-wildlife conflicts and international political pressure also contributing to perceived injustices (e.g., Peters 2004; Bob 2010). Some commentators

argue that the International Criminal Court should recognise the denial of food or the deliberate manipulation of its access and distribution by governments and other organisations as crimes against humanity (e.g., Ratip 2011; see also de Waal 1997, in relation to a similar argument regarding the Geneva Convention).

The critical importance of the relationship between conflict and (under) development was recognised officially by the United Nations (UN) in May 2013, when the UN's High Level Panel on the Post-2015 Development Agenda published its findings (High Level Panel 2013). The panel's report sets forth an agenda for creating peaceful and stable societies as a key to resolving under-development and reducing poverty and food insecurity; it establishes goals for reducing violence, increasing the capacity of countries' security and justice sectors and preventing external shocks. It has been described as a 'milestone' in the creation of a new worldwide development framework (Denney 2013).

Humanitarian Intervention

It could reasonably be argued that a failure to appreciate fully the relationship between conflict and food insecurity has been a key impediment in the effectiveness of humanitarian and development interventions in the past. This point has been vociferously asserted by de Waal, who has demonstrated how the difficulty of indigenous populations to adapt to new conditions can often be precipitated by poorly thought-out external interventions from governments, international organisations and agencies. His seminal work on the famine in Darfur in 1984, published as *Famine That Kills* (1989) was at once a superbly detailed ethnographic treatment on the causes of famine, highlighting the importance of political factors in triggering it, and an indictment of methods used by external humanitarian actors, which, he contended, often ignore political realities. He took this latter point further in his subsequent work, *Famine Crimes* (1997), in which he argued that the humanitarian 'industry' has contributed to, not solved, the problem, by preventing local populations from developing their own responses to food crises. In his view:

> Humanitarian agencies can be a genuine instrument of change in the international system for responding to large-scale human tragedies. . .[yet] most current humanitarian activity in Africa is useless or damaging and should be abandoned. (de Waal 1997: xvi)

However, the aid and development sectors have improved in the past two decades, and this type of criticism is almost certainly less valid in 2014. There is now a wealth of literature on the policies, doctrines, practices and practicalities of humanitarian intervention, which encompasses a vast range of disciplinary perspectives, not least from the social sciences. One of the reasons for the

improvement in the effectiveness of international development and aid strategies is that humanitarian actors are now far more willing to incorporate perspectives offered by social scientists, which prioritise the 'bottom-up' model of development and place a premium on the voices, opinions and needs of local populations (Pottier 1999). The importance of recognising the adaptability of local populations has been highlighted by the UK's Overseas Development Institute, which examined the response of communities to threats to livelihood in Chechnya, Darfur, the Occupied Palestinian Territories (OPT) and Sri Lanka. This research found that in the study locations, local populations had developed several strategies which reduced their exposure to risk and enabled them to remain in their home areas. In terms of food production, this included choosing different crops to cultivate, which required less maintenance and were less likely to be destroyed by armed actors; in the cases of Darfur and the OPT, this included forming self-defence groups and paying for 'protection' (Jaspars 2010; Jaspars and O'Callaghan 2010).

In addition, the vast majority of programmes and projects implemented by international donors, agencies and NGOs are subject to meticulous evaluation of their impact on local populations, with lessons learned fed back into the design of future schemes. Despite the significant advances made in the professionalisation of the aid and development sectors over the past two decades, however, there is still room for improvement in the way international intervention is carried out, as shown by Bell (2008), Messer (2009, this volume) and Anderson *et al.* (2012), among many others (see also, as examples, Anderson 1999; Clover 2003; Barrett and Maxwell 2005; Baro and Deubel 2006; Andrews and Flores 2008).

Part of the problem, of course, is the sheer logistical challenge of operating in conflict zones, with NGO and international agency staff increasingly subject to attack by armed protagonists. According to the Aid Worker Security Database (AWSD), the number of attacks on aid workers worldwide has almost trebled during the past decade, from 63 incidents (affecting 143 workers) in 2003 to 170 (affecting 331 workers) in 2013 (Aid Worker Security Database 2014). A recent case in point was the targeting of Médecins Sans Frontières staff in Somalia in 2013, which led to the charity closing its programmes and withdrawing all its staff from a country where it had been operating continuously since 1991. In Syria, 32 members of the Syrian Arab Red Crescent (SARC) were killed from the beginning of the conflict in 2011 to 2013 (International Committee of the Red Cross 2013). In some cases, humanitarian actors are unable to operate at all because of political constraints – for example, in rebel-controlled areas of southern Sudan and South Sudan.

Finally, a less obvious aspect of the links between food and conflict is in relation to the subsistence of armed protagonists. In the social sciences, this is an under-researched area, although some studies have focused on a historical perspective. This volume contains three contributions on this important topic (see below).

It will be clear from the above discussion that understanding the links between armed conflict, food insecurity, poverty, underdevelopment, humanitarian and developmental intervention, environmental change and political factors is crucial for fully appreciating the issues surrounding food in zones of conflict. This book pursues this objective.

The Approach of this Book

Social scientists have written extensively about food and conflict (e.g., de Waal 1989, 1997; Richards 1996; Pottier 1999; Alinovi *et al.* 2008; Geissler and Prince 2010; Magdoff and Tokar 2010), but the two subjects have never, as far as we are aware, been combined across so many disciplines in one volume. Yet, as the previous volumes in this series testify, the many perspectives on food, if one is to study the subject fully, make such a multidisciplinary approach essential. One might say the same about conflict.

Food is often studied in the context of development and humanitarian aid and the locations are also frequently zones of conflict; therefore, just as armed conflict creates food insecurity, it also disrupts the delivery of aid. From micro-scale research on local conflicts and their impact on production and consumption patterns to macro-scale treatments of the international politics of food aid (and food denial), scholarship on this covers a whole range of different disciplinary areas and practitioner methodologies. However, only rarely are these brought together in a multidisciplinary or interdisciplinary manner.

Related to all these aspects of food insecurity are the nutritional and medical effects of hunger and starvation due to conflict. There are articles concerning nutritional conditions and effects in specific historical and contemporary conflict situations, but they are scattered in disparate journals over separate topics, from micronutrient details of specific conditions to mortality, from the care of military personnel to the malnutrition of children. In contrast, some authors (e.g., Young *et al.* 2004; Egal 2006; Rossi *et al.* 2006; Young 2007; Pike *et al.* 2010) have incorporated cross-disciplinary perspectives. Egal (2006) writes of the need for nutritionists to collaborate more with government institutions and NGOs, to review and advise in conflict situations, 'promoting integrated interventions at community level' (2006: S18), while she recognises that this 'would call for a shift from a scientific/dietetic approach to nutrition' (2006: S18).

In the 'softer' social sciences, sociology and social anthropology, conflict is considered as a 'social fact', with civil wars and international armed conflict being viewed in similar terms and studied in similar ways to local conflicts taking place at a community or even family level. Furthermore, social anthropologists and sociologists try to understand the meaning of conflict from the point of view of those affected rather than only from that of the researchers; this provides an added dimension to the perspectives discussed above.

They also consider the symbolic and social roles of food, examining the way in which food can be used as a mechanism to bind communities together, to promote reconciliation, to formulate social identities and to distinguish different groups from one another.

In view of the above, probably the most potent analyses are those which combine perspectives from different theoretical and disciplinary viewpoints, demonstrating the role of environmental, social, political, economic, institutional and governmental factors in triggering food shortages in particular places at particular points in time (c.f. Devereux and Maxwell 2001; Oniang'o 2009; Ogola and Sawe 2013).

This volume includes perspectives from anthropology, sociology, international relations, political science, history, nutrition and religious and development studies. Most chapters are based on empirical research in conflict zones, with some of the authors recounting their own experiences of being caught up in a zone of conflict, either passively, or, in one case, as a member of the armed forces. Other contributions adopt a historical perspective, examining modes of subsistence in past conflicts among civilians and combatants, and the relationships between food, politics and conflict. Taken together, we hope that the sixteen essays collected here do justice to our original aspirations, to demonstrate the benefits of illuminating the topic of food in zones of conflict from several different disciplinary perspectives in order to promote fuller understanding.

Several themes weave through the diverse chapters in this volume. As we have emphasised, one of the most significant topics is food scarcity: this includes the ways in which conflict creates scarcity as well as how scarcity, or even the memory of scarcity, can promote conflict and political change. The relationship between conflict, (under)development and food stress is prominent in several contributions. The nature of food itself is the focus elsewhere, its intrinsic qualities and nutritional value and how it is enculturated from raw to cooked states are subjects examined by a number of the authors. From how to provide and prepare food in conflict situations when ingredients are limited to the role of war in altering subsistence patterns, several chapters highlight the adaptability of human beings in situations of hardship and scarcity. Another theme discussed is the intersection of food and politics and the instrumental use of food – or denial of food – by governments.

Finally, the cultural meaning of food is discussed in many of the essays. The importance of food's symbolic value and its social functions, and how they relate to everyday life is highlighted, which reminds us that the meaning of food often extends far beyond its role in providing subsistence. A theme that runs through several chapters is the way in which the symbolic characteristics of food might alter in conditions of conflict. From the collective remembrance of past famines to 'food wars', in which food is used as a weapon, the meaning of food in a particular context is formed from multiple layers of social and cultural associations which are constantly shifting. This also serves

as a reminder that the production and consumption of food are often highly politicised activities exploited by governments and other powerful groups.

Introducing the Chapters

The basic themes discussed above provide a framework for the contributions to this volume, demonstrating the need for and the benefits of a multidisciplinary approach. While the contributions represent a broad spectrum of perspectives, from the 'hard' to the 'soft' ends of the human sciences and the humanities, and from archival study to the experiences of those 'in the field', we have not attempted to separate the chapters by discipline. This is in order to emphasise how themes discussed above can be discerned from different theoretical angles and within different material, geographic and temporal contexts. We argue strongly that the collection of these diverse perspectives into one volume provides an important contribution to the subject, enabling those interested in any one aspect to gain insight into other dimensions for a more holistic understanding of the issues.

The contributions start with Shepler's 'discovery' of the importance of food in the narratives of her interviewees in Sierra Leone when asked about their experiences during their civil war of the 1990s and early 2000s. 'What emerges', she argues, 'is the centrality of hunger to their experience of the war', a point echoed throughout many of the chapters of this volume. Because Shepler found that food issues had been mentioned so often, her focus is on the meaning of food for local populations during conflict, both its material role as sustenance, and, more importantly, its symbolic meaning, with implications for networks of hierarchy, power and gender, as well as for wider social relations. Shepler demonstrates the way that the war prompted the introduction of innovations in food preparation and consumption, with displaced populations, for example, becoming agents of change when they returned to their home villages (a point also reflected in Beljak and Beljak's chapter in this volume). She concludes by emphasising that it is often the innovation and adaptability of local people which is the most important factor in how countries reconstruct themselves in the post-conflict period, and may assist them in future periods of subsistence stress. Echoing the approach of Alex de Waal (1989, 1997), human adaptability is a key theme that runs through many of the contributions to this volume.

The focus of the following chapter, by Oyeniyi and Akinyoade, is on the impact of unexploded ordnance and mines on food production in Africa, and the often harrowing effects of their accidental detonation. The authors note how many governments in Africa are failing to ratify or implement international treaties which they have signed, and instead continue to stockpile and deploy Anti-Personnel Ordnances (APOs). Drawing on the oral testimonies of civilian victims in Africa, the chapter demonstrates how devastating the impact of APOs can be at individual, family and community levels, and advo-

cates a more concerted international focus on the problem. The impact on food procurement due to danger in accessing fields for cultivation and harvest, identified in this chapter, is reflected elsewhere in this book, as is the international concern about such problems.

The office of the United Nations High Commissioner for Refugees (UNHCR) is one such vehicle of international concern for the victims of conflict. In Chapter 3, Henry and Macbeth show how the nutritional value of food aid for refugee camps has often been inadequate in the past, with some rations for refugees providing less micronutrient value than an average can of pet food in a developed nation. The chapter advocates that as local water sources may be contaminated, there are benefits in providing refugees in camps with ready to use therapeutic foods with well-balanced nutrients which do not require pre-preparation. If these can be produced locally there are not only micronutrient advantages, but also local socioeconomic benefits. Examples of such foods developed by Henry and colleagues are given. The authors conclude by noting the benefits of a holistic approach to interventions such as this, with researchers from different areas of applied human science working together to shape the most appropriate solutions, an argument which reflects a key aim of this volume.

The relevance of international concern is also shown in Chapter 4. The work of a French NGO, Action Contre la Faim, stimulated the research that Kent reports on regarding certain villages of different ethnic composition in conflict-torn north-eastern Sri Lanka. The research includes a detailed analysis of the food available to different households, in order to assist the NGO identify the strategies for moving from aid delivery through rehabilitation to development. Using established evaluation methods she shows that answers could be provided to the basic question of who was hungry, how and why, all of which varied considerably between village communities of different ethnic composition in the study area. In concluding, Kent argues that the research demonstrates that in certain circumstances, interventions which improve the education about food and nutrition may be more effective than those which simply focus on improving health, sanitation and care.

The significance of international concern is again implied in the following chapter by Kimaro, who presents a passionate defence of the role of Christian NGOs in alleviating food insecurity in helping countless thousands of people over recent decades. She reminds us, first of all, how central conflict is in causing food insecurity and ill-health in Sub-Saharan Africa. The chapter uses interview data to examine the relationship between religious practices and food sustainability, and, by interweaving the testimonies of her informants with the main themes of her essay, she argues that a decline in traditional religious beliefs is reducing local mechanisms for conflict resolution and so contributes to subsistence stress in a number of ways.

As in Chapters 4 and 5, Chapters 6 and 7 are about the effects of internal conflict on food security in a specific geographic area. Deraga describes a situ-

ation in northern Mexico and along the border with the US where ongoing drug wars have had a seriously deleterious effect on livestock production and lifestyles in general. Acknowledging the difficulties of generating statistics concerning this problem, the author uses an ethnographic approach to describe how cattle ranchers and horse breeders have been finding increasing difficulties in transporting livestock to markets both within Mexico and across the border into or from the US. Thefts of livestock on ranches and during transport have become more common. Furthermore, the growing instability in the region in recent years has led to a rise in personal violence against local food producers and retailers.

The following chapter by two Croatian anthropologists, Beljak and Beljak, provides an interesting insiders' perspective on the effects of conflict on food consumption. The principal focus for their essay is on the impact of the war in the Balkans during the 1990s on the Croatian population, and the responses of the latter to increasing food stress and water shortages. This included relearning methods of food preparation used in earlier times, and adopting some new dietary regimes to cope with a shortage of staple foods. The authors pay particular attention to the importance of bread in the traditional Croatian diet, not only for its role in subsistence, but also for its symbolic relationship with 'home and hearth'. With a shortage of yeast, the population was forced to adopt new, alien methods of preparing bread or bread substitutes. This chapter again reminds us of the resilience and adaptability of human beings in conditions of drastic change, such as occur during wars and other conflicts.

The effects of war on food consumption and life patterns are also exemplified in Lightowler and Macbeth's chapter on feeding the British population during the Second World War, and the often-reported beneficial nutritional consequences of government intervention at all levels, including the rationing introduced in 1940. The authors begin by detailing the measures introduced by the Ministries of Food and of Agriculture, planned before the food shortages became significant. Encouraged by the government's 'Dig for Victory' campaign, abandoned farmland, public and private gardens, railway land and embankments, verges, etc., as well as pre-existing allotments, were cultivated for food. A complete governmental reorganisation of the provision and distribution of food had been planned, with the then recent scientific understanding of nutrition firmly included in the holistic overview. Lightowler and Macbeth explore how successful this policy was as regards the general nutrition and health of the whole British population during the war years and consider if there have been subsequent health effects.

Governmental provisioning is also fundamental to the next three chapters, which consider the provision of food to military personnel deployed in foreign locations during the twentieth century. In Chapter 9, basing her research on data such as letters home from the front, Duffett focuses on soldiers' rations during the First World War. Although she compares these favourably with

those of the French or German soldiers, she comments on the difficulties in some situations and the limited understanding at the time of micronutrients and not just calories. Her essay represents an important contribution to the understanding of how the British infantry fighting on the Western Front supplemented their rations by sourcing other means of subsistence. One of the most common ways they achieved this was through 'scrounging' from the local environment and the local population. Soldiers also received parcels from their families in Britain, which represented both an important source of additional food and an emotional reminder of home. Furthermore, Duffett notes the significance of the rituals surrounding the procurement, sharing and consumption of food in helping to forge strong bonds between the soldiers themselves.

In Chapter 10, Cwiertka draws on her archival research on the experiences of US and Japanese troops fighting in the Pacific during the Second World War. She compares the official subsistence regimes of each country's armed forces, whereby the distribution to US forces was centred in the US, whereas the Japanese army relied far more on locally sourced food, wherever their forces were based, supplementing rations erratically from Japan. The latter became very unreliable, particularly towards the end of the war, leading to food shortages among the Japanese army to the point of starvation; it is estimated that more than half of the Japanese soldiers who died between 1937 and 1945 died from malnutrition or starvation. Cwiertka cites a diary entry from a Japanese soldier revealing that starving Japanese troops resorted to cannibalism of the bodies of dead US soldiers. The role of the 'PX' system in providing US troops with a comforting 'taste of home', even at the Front Line, is compared with the Japanese *Shuho* facilities with a similar objective. Since both armies supplemented their rations with 'enemy food', this chapter, as with earlier chapters, draws attention to cultural changes in food habits engendered by war.

As Chapter 11 starts 'I remember', we are immediately introduced to a forceful, personal account of the experience of military provisioning, the symbolic role of food and the acquisition of change. Campbell was deployed with the US Army's 101st Airborne Division in the early days of the Iraq War in 2003, and is now conducting research on Iraqi cuisine and national identity. She describes the dry ration packs provided to the US armed forces in Iraq and how, despite their balanced nutritional value, she and her fellow soldiers quickly became bored with the monotonous and processed nature of their contents. This led them to explore and develop a taste for the local cuisine, which Campbell describes as becoming a 'craving' for basic Iraqi foods, such as chicken and flatbread. In a highly thoughtful passage, Campbell describes how this established feelings of what might be described as 'cognitive dissonance' on the part of herself and her colleagues, as they consumed the cuisine of a conceptually dehumanised 'enemy'. Food became an agent of changed attitudes, as through food the humanity of the Iraqi people was revealed. Drawing on interview data, Campbell also details the way that this taste for

Iraqi food lingered among veterans after they had returned to the US, sometimes to civilian life. Her concluding comment that 'war is filled with many paradoxes' is one which is reflected in several chapters in this book.

The more deliberate use of food in attempts to influence attitudes is the theme of Chapter 12, as Rusca recounts how memories of famine were manipulated in political posters during the Weimar Republic in Germany (1919–1933). Rusca shows how the propaganda of different political factions used food extensively in their visual and textual imagery to support the objectives of their party, either by instilling fear with warnings of a return to starvation with the policies of their opponents, or by suggesting hope and food through the benefits of their own policies, as well as exhortations to work and not strike. Rusca uses detailed content analysis of the political posters at the time to demonstrate how this policy was put into practice, and how sophisticated some of these posters were in playing on the population's psychological vulnerabilities. Her chapter highlights how food can be of great political importance, especially when memories of famine and severe malnutrition are played upon. As other contributors to this volume have noted, she refers in her conclusion to the use of food and concepts about food as a weapon of war.

That past famine can be a powerful political symbol and a focus for galvanising political rhetoric is also demonstrated in Chapter 13 by Collinson. He examines the role of the Irish Famine of the 1840s in creating the social and political upheavals in Ireland during the nineteenth and early twentieth centuries, as well as its legacy today. Tracing the changes wrought in the Irish diet by the Famine, the author considers the important relationship between subsistence, land ownership and political change, which was brought together instrumentally by the Irish Land League in the latter half of the nineteenth century, leading to conflict with landlords and the British government. Drawing on his fieldwork in Ireland, Collinson goes on to discuss what this historic Famine means to the present-day population, noting the way in which recent memorial events have been used as a way of reconciling formerly divided communities. In the final section of the chapter, the use of partisan images from the Famine in Republican murals in Northern Ireland is contrasted with the current role of food used in promoting cross-border development on the isle of Ireland.

The political use of publicising famine and hunger is central to Chapter 14 by Talton, which highlights the important relationship between food stress and political change. His chapter focuses on Ethiopia during the early 1970s, and specifically the way in which the famine in 1972–1974, which killed an estimated 40,000 to 60,000 people, galvanised political protest within the student movement in Ethiopia and abroad against Emperor Haile Selassie's government. While the government prioritised the delivery of food to urban areas and even food exports, exacerbating the lack of access to food among rural communities, the Ethiopian students intervened directly to provide food aid to the starving. The student movement thereby created the political space

which was then usurped by the armed forces to manoeuvre against the government, leading to the coup of 1974 and then the overthrow of the monarchy. As Talton states, 'hunger . . . served as the cornerstone of Ethiopia's revolution', but he also shows how attitudes from outside Ethiopia played a significant role.

In the following chapter, Michael Strauss is also concerned with how external conditions can affect the potential for conflict in or between nations. He details a relatively recent macro-level response to potential food stress, which has significant implications for international relations, that of land leasing. This phenomenon involves multinational corporations or national governments taking over vast areas of agricultural land, largely in Africa, in order to protect the long-term food security of the lease-holding nation. In 2010, there were reportedly 177 such arrangements covering 27 African countries. Strauss convincingly emphasises the dangers of land leasing in this way, where there is no transfer of sovereignty, and yet the territories leased may come to be viewed as *de facto* territory of the lease-holding nation. In a conflict situation, this introduces the possibility of a third country being drawn into a conflict between two nation states in order to protect its own investments. Strauss provides an example of the way in which the South Korean corporation, Daewoo, was involved in an arrangement in 2008 which would have leased up to half of Madagascar's cultivable agricultural land for 99 years, in return for payments and investments of up to US$6 billion. A coup in Madagascar prevented the deal going ahead, in which Strauss speculates that North Korea may have had a role.

Because of its interdisciplinarity, we use as our concluding chapter of this volume the broad and detailed coverage of the topic by Messer, who emphasises the important role that anthropologists can play in understanding and promoting the complex ways in which food, agriculture and conflict are interconnected with social, geographic, political, economic, ethnic and religious factors and forces operating at regional and global levels. She draws on her extensive research on western development policies and responses to food insecurity to provide a critique of the approaches adopted by global institutions and aid agencies, focusing in particular on the concept of 'food wars'. These she defines as 'situations of organised armed political violence where combatants on one or both sides use hunger as a weapon, and where destruction of farming populations, infrastructure, waterworks and markets results in disruptions to agricultural production, food markets, health services and human nutrition long after formal fighting had ceased'. While this definition covers aspects in every one of the preceding chapters of this volume, her own chapter contains detailed information on the efforts to provide aid by different organisations, constantly reminding readers of the need for attention to the full context of each situation. She notes that the WFP and the FAO are moving towards a model that marries development and relief, emphasising the establishment of sustainable modes of livelihood as well as the delivery of aid.

Conflicts Continue

Time has passed since we had the initial idea for this volume, and during that time several new conflicts have emerged around the world.

In Mali, a Tuareg rebellion in the north of the country and a coup among the country's armed forces was exploited by Islamists, who captured several towns during 2012. A further advance south towards the capital Bamako in early 2013 prompted a French military intervention, which succeeded in ousting the Islamists from their urban strongholds, and enabled the delivery of aid to the population, which had been internally displaced due to the instability. The WFP described the humanitarian situation in Mali as 'critical' in April 2013, with twenty percent of households in the northern areas of the country facing extreme food shortages (World Food Programme 2013).

In the Central African Republic, to the south east, a rebel coalition overthrew the government of François Bozizé in March 2013 after advancing from the north east of the country. The coalition was itself ousted from power when its leader, Michel Djotodia, was persuaded to step down by regional leaders in January 2014. The country experienced an almost complete breakdown in law and order during 2013. Over 465,000 internally displaced persons and refugees have been created as a consequence, with a concomitant rise in demand for food aid and pressures on surrounding countries; around half of the population are in need of humanitarian assistance. The targeting of Muslim populations by militia groups during 2014 has been described as 'ethnic cleansing' by Amnesty International (2014). A French and African force was deployed to the country in 2013 to help stabilise the security situation.

In Sudan, continuing violence in the border region with South Sudan, since the latter's secession in 2011, has created an estimated 300,000 refugees who are residing in camps in South Sudan, Kenya and Ethiopia, and has forced a further 250,000 to leave their homes. These problems are compounded by the limited humanitarian access in parts of southern Sudan. Meanwhile, the conflict in Sudan's Darfur region has intensified in 2013 and 2014, adding to the already substantial aid-dependent population, estimated to amount to around 1.5 million people (Department for International Development 2013).

In South Sudan, conflict between different sections of the armed forces erupted in December 2013 and led to a significant humanitarian crisis in the country. As of March 2014, 932,000 people had been forced from their homes and were internally displaced or residing as refugees in, primarily, Ethiopia, Kenya, Sudan or Uganda (UNICEF 2014). Three million people, almost a third of the population, were estimated to be food insecure (United Nations News Centre 2014), with the rainy season in 2014 predicted to add to this number

and complicate the delivery of aid. The speed at which the crisis emerged provides a stark illustration of the impact of armed conflict on already vulnerable populations.

In Syria, the most serious crisis over the past two years has once again focused the world's attention on the Middle East. The civil war in Syria has torn the country apart and had an enormous impact on the population. As of March 2014, 2.5 million people were living as refugees in surrounding countries, with around 4.3 million internally displaced, figures which together represent over one third of the country's pre-war population (United Nations High Commissioner for Refugees 2014); around 9 million people required humanitarian assistance (Guardian 2014). The situation has been described by the United Nations High Commissioner for Refugees, António Guterre, as 'a disgraceful humanitarian calamity with suffering and displacement unparalleled in recent history'. It is probably the most significant crisis international agencies and NGOs have faced since the end of the Cold War, the effects of which will be felt for several generations to come (United Nations High Commissioner for Refugees 2013b; Guardian 2013a; Guardian 2013b).

To these conflicts many others could be added, for example the serious riots in Venezuela in early 2014 over high inflation and shortage of staple foods, continuing violence and food deprivation in Iraq (United Nations Development Programme 2013), and the situation in Afghanistan, where over a quarter of the population faced crisis or emergency levels of food insecurity in November 2013 (World Food Programme 2014a).

Conclusion

Despite the huge challenges which the global community faces in alleviating the suffering of the populations affected by conflict, Shepler's chapter at the start of this volume, applied on a broader scale, may be viewed as something of a beacon of hope for humanity in coming years. Innovation – scientific, technical, agricultural, developmental, socioeconomic and, critically, political – will hopefully hold the key to overcoming many of the threats to human food security, as it has in previous decades. It is worth reminding ourselves of the tremendous progress which has been forged over the past thirty years or more in reducing poverty and hunger throughout the world; innovation has played a critical role in this. However, the international community must work as much as possible with local populations, recognising the latter's inherent adaptability and resourcefulness, rather than attempting to impose scientific and technical solutions from above, as has happened too often in the past.

Yet, there is also the argument that the growing environmental pressures caused by climate change are so great that they have the potential to undermine or even wipe out the gains of recent years – not least because they may

well significantly increase levels of conflict around the world (c.f. Burke *et al.* 2009). Nevertheless, of the different forms of innovation which are likely to be needed, political innovation, with sound leadership, could be the most pressing and the most important in terms of suppressing future levels of conflict.

Many of the contributions collected together in this volume emphasise the relationship between political contexts and actions and the food security of human populations. This relationship can be deleterious – as in Ethiopia in the 1970s, Bosnia in the 1990s or in parts of Sub-Saharan Africa today – or positive, as in the case of Britain's rationing programme during the Second World War. Political innovation and leadership will undoubtedly be required in the coming decades at a global level, so that a more concerted effort from governments and international organisations can be achieved to address inequalities in food access, which, as they deepen, have the potential to exacerbate existing conflicts, cause new ones to emerge, and, perhaps in time, threaten the future of us all.

Note

1   Undernourishment is defined in terms of a minimum calorific energy intake relative to size and body weight (Food and Agriculture Organization 2011: 51, no 2).

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