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Food Security, Peacebuilding and Gender Equality: Conceptual Framework and Future Directions

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1

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Executive summary

The main objective of this study is to generate knowledge and evidence-based, meaningful, and actionable recommendations to governments and other stakeholders, particularly international organizations and FAO staff, on the nexus between support to nutrition and food security, building peace and stability, and striving towards gender equality. To this purpose, the study offers a framework to better understand how addressing the specific priorities of men and women in nutrition and food interventions in conflict-affected contexts may shape peacebuilding processes and improve gender equality in the aftermath of violent conflicts. In building this framework, the study explored the following questions:

- How can nutrition and food security interventions support and encourage the dual processes of peacebuilding and gender equality?
- What mechanisms shape the interaction between nutrition and food security, gender equality and peacebuilding?
- How do those mechanisms affect how nutrition and food security interventions may support pathways towards sustainable peace, and what are the gender dimensions of such pathways?

The study started by reviewing existing literature on three complementary processes that shape the answers to this question: (i) the relationship between armed conflict and nutrition and food security, (ii) the relationship between gender equality and nutrition and food security, and (iii) the relationship between gender roles, violent conflict and peacebuilding. This review uncovered the following patterns:

- 1. Conflict exposure has immediate effects on nutrition and food security, which result in adverse long-term, inter-generational legacies that are often irreversible. Nutrition and food security interventions may therefore have a considerable role to play in the economic and social recovery of populations affected by armed conflict.
- 2. Interventions that improve food security and provide for basic needs may go some way towards weakening some but not all welfare-related motives that may lead individuals becoming fighters or supporting armed groups. There is also a potentially important association between food price stability and peacebuilding outcomes, indicating that food stability and the recovery of local agricultural and food markets could help vulnerable individuals and households overcome the adverse legacies of armed conflict. These effects are largely mediated by how forms of local institutional formation during wartime affect (negative or positively) the lives and livelihoods of populations living in these areas.
- 3. Nutrition and food security outcomes are strengthened when gender equality improves.
- 4. There is very limited systematic evidence on the effects of nutrition and food security interventions on gender equality either in peaceful or conflict-affected contexts. Some findings suggest however that food and nutrition security interventions, with specific measures in place for gender equality programming, may have the potential to increase gender equality outcomes, while also being more effective in their food security and nutrition outcomes.

- 5. When appropriately supported, women's organizations and local forms of collective action can potentially play an important role in contributing towards gender equality and peace in post-conflict contexts.
- 6. While strong assumptions prevail in the literature about the role of women in peacebuilding, robust evidence on the potential effects of gender equality on peacebuilding outcomes is very scarce. Findings to date suggest a need to broaden concepts of formal peacebuilding, which may allow us to better identify what policy interventions including nutrition and food security interventions are more or less likely to sustainably contribute to gender equality and peace in the long term.

Taken together, these results form the basis for the study's conceptual framework grounded on five key pathways that shape how nutrition and food security may affect dual processes of peacebuilding and gender equality: (i) behavior, agency and aspirations; (ii) social norms about gender roles and equality; (iii) institutions and governance, including governance systems by different armed factions, informal networks and land tenure rights; (iv) agriculture and employment markets, in particular the role of exchange markets and prices, the role of employment markets and how market recovery could operate in tandem with safety net transfers and private remittances; and (v) local collective action and equal representation within. These lead to a number of recommendations for the design and implementation of nutrition and food security interventions that will contribute towards peace and gender equality:

- 1. Interventions should aim to support individual agency and foster aspirations: nutrition and food security interventions that aim at supporting processes of gender equality and peacebuilding as well as building the resilience of populations to further economic and political shocks could be strengthened by promoting women's agency and positive aspirations among populations affected by armed conflict. Gender-responsive and participatory community and group-based approaches FAO already employs, such as the Dimitra Clubs or the Farmer Field and Life Schools could provide avenues for fostering such behavioural changes.
- 2. Interventions must strive to transform gender roles and relations to address the causes of gender-based inequalities. Interventions that foster changes in gender relations improving women's position and their bargaining power within the household and the community may contribute positively to peacebuilding processes and reduce the likelihood of conflict reigniting. It is, however, important to note that effective social change requires long-term engagement of humanitarian, development and peacebuilding actors because social norms only change gradually over several years or (more typically) decades.
- 3. Interventions must acknowledge wartime institutions and work with informal structures of governance: nutrition and food security interventions cannot be de-coupled from institutional and political processes that emerge during violent conflict and continue to persist in the aftermath of the conflict. An effective intervention that contributes positively towards the dual goals of gender equality and peacebuilding requires systematic knowledge of and engagement with how state and non-state political actors act and compete throughout the conflict, and how they interact with local populations.
- 4. Interventions that aim to strengthen markets and provide equal market access for men and women will have long-term benefits: in particular, exchange, credit, insurance and

employment markets are central to the effectiveness of interventions in improving nutrition and food security and potentially support peacebuilding and gender equality objectives.

- **5. Interventions must support positive collective action**: it is likely that nutrition and food security interventions may be able to better influence gender equality and peace outcomes when combined with measures that strengthen collective action among women, men and excluded population groups for instance, agricultural cooperatives, producer or community organizations that provide local public goods and engage both men and women on an equal basis.
- 6. In order to generate the positive pathways above, it is important to think and act over the long term: the pathways above involve the interaction of nutrition and food interventions with complex processes of social change that shape and are shaped by individual and household behavior, social norms, institutions, the operation of markets and collective action. These involve processes of change that operate over the long-term, requiring serious time and commitment.
- **7.** Above all, it is fundamental that existing evidence basis is strengthened considerably: the key lesson from this review is the serious lack of evidence about the role of nutrition and food security on peace and gender equality outcomes. This lack of evidence is in part a reflection of lack of action with regards to the design of nutrition and food security interventions that are sensitive to the different social dynamics that characterize conflict-affected contexts and the measurement, rigorous assessment and evaluation of what actions work or not in such contexts. The studies and policies reviewed in this paper suggest that there is large scope and potential for considerable positive effects of nutrition and food interventions on gender equality and peace outcomes in post-conflict contexts through the five pathways outlined above. This requires improving substantially the evidence base that may support the design, targeting and implementation of such interventions.

Acknowledgements

FAO has long acknowledged the importance of better conceptualizing the linkages between food security, peacebuilding and gender equality. To this end, a centre of excellence – the Institute of Development Studies (IDS) at the University of Sussex was selected and commissioned to develop a framework to better understand how addressing the specific priorities of men and women in nutrition and food interventions in conflict-affected contexts may shape peacebuilding processes and improve gender equality in the aftermath of violent conflicts. This study is therefore the result of a collaborative effort between the two entities. At FAO, the study benefited from the excellent input, discussions and unfaltering support from Julius Jackson, Unna Mustalampi, Ilaria Sisto, Indira Joshi and Liselot Morreels.

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1. Introduction

Over one and a half billion people live in countries affected by conflict and violence (World Bank 2011). At the end of 2014, there were 38 million internally displaced people in the world – over twice as many as in 1997. To better assist women, men and children affected by wars and violence, FAO has identified the need for a more holistic and people-centered approach to supporting countries in transition towards peace and preventing conflict. At the global policy level, FAO has been instrumental in the finalization of the Committee on World Food Security's (CFS) Framework for Action for Food Security and Nutrition in Protracted Crises (FFA), a global policy guidance instrument, formally endorsed by CFS in October 2015. The CFS-FFA has a specific principle on the links between interventions supporting nutrition and food security and peacebuilding and conflict mitigation, and another principle on gender equality and the empowerment of women and girls (FAO 2015a). To further mainstream gender equality into FAO's Strategic Objective 5 on "Increasing the resilience of livelihoods to threats and crises", and contribute to the implementation of the FAO Gender Equality Policy (FAO 2013a), there is a need to address the gender dimension of building resilience in conflict-affected situations, and better understand how this may contribute to conflict mitigation, prevention and peacebuilding processes with the ultimate goal of achieving food security for all.

Nutrition and food security interventions may in principle build resilience to conflict by assisting countries and people to cope with and recover from conflict, by being implemented in ways that reduce social inequalities, and by contributing to conflict prevention through supporting economic development broadly. There is also a widespread recognition that violent conflicts affect men and women differently and that both have important roles to play in the economic recovery and transitions to peace of countries affected by conflict. This recognition has led to significant policy efforts to further involve women in peace and economic processes in post-conflict contexts through, for instance, Security Council Resolution 1325 issued in 2000. Two global events during 2016 are also relevant to the focus of this paper acknowledged the rapidly rising numbers of vulnerable, at-risk people, due to a variety of causes.

The first-ever World Humanitarian Summit (WHS) was called by the United Nations Secretary-General in May 2016 in Istanbul, Turkey. The WHS convened 9,000 participants from around the world to support a new shared Agenda for Humanity and take action to prevent and reduce human suffering. Working around five core responsibilities, the Summit marked a shift towards more decisive and deliberate efforts to reduce needs, anchored in political will and leadership to prevent and end conflict and to bridge the divide between efforts across humanitarian, development, human rights, peace and security interventions. The WHS confirmed that gender equality, fulfillment of women's and girls' human rights and their empowerment in political, humanitarian and development spheres is a universal responsibility. It also emphasized that the skills and experience of women of all ages and their role as leaders and agents of change are pivotal to sustaining conflict prevention and resolution, to peacebuilding and to building resilient communities. FAO made commitments at the WHS², many of which are already reflected in FAO's Programme of Work and Budget. Amongst others, these include commitments to strengthen conflict-sensitive programming and interventions,

¹ http://www.unhcr.org/pages/49c3646c23.html.

² http://www.fao.org/emergencies/resources/documents/resources-detail/en/c/414467/.

to develop a corporate policy of FAO's contribution to sustainable peace in the context of Agenda 2030, and in support of catalyzing action to achieve gender equality.

In September 2016, the UN General Assembly convened a high-level plenary meeting on addressing large movements of refugees and migrants. This Global Migration Summit culminated in the New York Declaration for Refugees and Migrants, expressing the political will of world leaders to protect the rights of refugees and migrants, to save lives and share responsibilities. Once again, gender equality was central to the discussion and the New York Declaration states that Member States will ensure that responses to large movements of refugees and migrants mainstream a gender perspective, promote gender equality and the empowerment of all women and girls, and fully respect and protect the human rights of women and girls. In addition, it recognizes the significant contribution and leadership of women in refugee and migrant communities, and commits to ensure their full, equal and meaningful participation in the development of local solutions and opportunities.

Finally, there has been a shared understanding across the UN system that peacebuilding, conflict prevention and equality for all are complementary goals to be addressed across all agencies and requiring integrated approaches – a notion that has been enshrined within the UN Global Goals for Sustainable Development. This integrated approach includes the role of nutrition and food security interventions and programming (UN 2015, UN Women 2015, FAO 2013a).

However, to date, we have very limited knowledge or evidence about the links between nutrition and food security, gender equality, the onset, duration, mitigation and prevention of armed conflict, and peacebuilding processes in post-conflict societies.

The main objective of this study is to provide a framework to better understand how addressing the specific priorities of men and women in nutrition and food interventions in conflict-affected contexts may shape peacebuilding processes and improve gender equality in the aftermath of violent conflicts. The study will explore the following questions:

- How can nutrition and food security interventions support and encourage the dual processes of peacebuilding and gender equality?
- What mechanisms shape the interaction between nutrition and food security, gender equality and peacebuilding?
- How do those mechanisms affect how nutrition and food security interventions may support pathways towards sustainable peace, and what are the gender dimensions of such pathways?

In order to address these questions, the study will bring together different strands of literature and evidence to develop a conceptual framework that will, (i) allow us to think more systematically about potential interactions between nutrition and food security, peacebuilding and gender equality, and (ii) identify concrete entry points for policy interventions that support nutrition and food resilience among men and women in conflict-affected contexts in ways that promote sustainable peace and gender equality.

The paper is organized as follows. Section 2 outlines briefly the methodology and key concepts used in the study. Section 3 provides a detailed review of the existing literature on the relationship between, (i) armed conflict and nutrition and food security, (ii) gender equality and nutrition and food security, and (iii) gender roles, violent conflict and peacebuilding. These bodies of literature are critically reviewed in order to allow the systematic identification and mapping of a set of pathways

that shape the relationship between nutrition and food security, peacebuilding processes and gender equality. These pathways form the backbone of the conceptual framework developed in section 4, which is used to derive hypothesis about the relationship between nutrition and food security, gender equality and peacebuilding processes to be tested in future empirical work, and suggest entry points for practical recommendations for food and nutrition policy action in conflict-affected contexts. Section 5 summarizes the main conclusions and suggests how the findings of this study can support the design and evaluation of interventions that may support positive dynamics between food security, peacebuilding processes and gender equality. Particular attention is paid to the need for in-depth data collection and compilation, and the rigorous design and evaluation of policy interventions.

2. Methodology, focus and key definitions

The study was based on an extensive literature review using the wealth of research produced in www.hicn.org, in-depth literature searches in sources such as IBSS, Scopus, the Social Science Citation Index, Ingenta Connect and Google Scholar, and pertinent grey literature produced by relevant international organizations, donor agencies and INGOs. In addition, we conducted an online consultation at the start of the project, whereby we gathered relevant information. This consultation was followed by interviews with key individuals over phone and skype.

The study focuses on the relationship between nutrition and food security, armed conflict, peacebuilding and gender equality at the individual-, household- and community-levels, but recognizes that national, regional and international frameworks affect these micro-level processes. The overall micro-level perspective of the study is particularly useful for policy purposes, as understanding how processes of conflict and peace, nutrition and food security and gender equality develop at these levels of analysis will pinpoint how policy incentives to prevent conflict, maintain peace, promote gender equality and ensure nutrition and food security may be designed, implemented and fine-tuned to the needs of specific individuals, groups and communities.

Nonetheless, the study includes also a discussion of how the capacity of states to govern and ensure the rule of law and security may play an important role in how women, men, households and communities build food and nutrition resilience in post-conflict societies. The study takes a predominantly rural and country-centric focus, largely due to the fact that most violent conflicts are currently largely internal and take place in rural areas, and data collection usually takes place within country boundaries. Issues around urban violence, cross-border conflicts, cross-border informal and formal trading, refugee, displacement and other migratory movements and the role of nutrition and food security in these contexts are extremely important to gender equality and peace outcomes in conflict-affected countries, but outside the scope of this paper.

For the purpose of this study, we define peacebuilding as "action[s] to identify and support structures which tend to strengthen and solidify peace to avoid a relapse into conflict" (UN 1994). These actions can be at local, regional, national and international levels. The concept does not only apply to post-conflict situations but may also be extended to encompass measures and actions that can prevent conflicts from taking place, as well as to supporting measures during the conflict that could facilitate peace processes. Peacebuilding includes, therefore, a range of formal and informal

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³ See http://www.fao.org/fsnforum/forum/discussions/gender-and-peacebuilding.

actions – including nutrition and food security interventions – that may prevent and mitigate conflict, promoting social cohesion and stability, and contribute to peacebuilding processes in post-conflict settings. The usefulness of this broader concept of peacebuilding beyond the end of fighting is discussed in more detail in later sections.

The most widely used definition of armed conflict is that proposed by Uppsala University/PRIO (and subsequently adopted by the World Bank) as "contested incompatibility, which concerns government and/or territory, where the use of armed force between two parties, of which at least one is the government of a state, results in at least 25 battle-related deaths". Events resulting in more than 1,000 battle-deaths are defined as major conflicts (Wallensteen and Sollenberg 2001). The analysis in this paper refers mostly to one form of major conflict - civil wars - defined as "armed combat within the boundaries of a recognized sovereign entity between parties subject to a common authority at the outset of the hostilities" (Kalyvas 2006: 17). Although other types of violent conflict will also affect the roles, actions and behavior of individuals, households and communities, albeit through different mechanisms, the study concentrates on civil wars given the scarcity of evidence on other forms of armed conflict. Following Justino et al. (2013), we conceptualize armed conflict as "occurring in non-linear cycles, where conflict and peace do not represent opposite ends of a continuum, but rather coexist in different degrees of intensity in different time periods". We also distinguish between the definitions of conflict and violence (Kalyvas 2006). While armed conflict represents a political process of negotiation or contestation of sovereignty, it is the process of generation of violence by different factions (against each other and as a form of control of territory, resources and populations) that shape individual and household behavior and changes in that behavior during and after the conflict (Justino 2011).

Post-conflict is the period directly after conflict. The start of the post-conflict period can be marked by the signing of an official peace-agreement, or by the end of fighting and violence for other reasons. Defining when this period starts and ends is heavily dependent on each individual context. This is a controversial issue as a 'post-conflict' country will be entitled to receive different aid and financial interventions than one still considered to be experiencing conflict. In addition, it is important to note some parts of a country may embark on a post-conflict period before others, whilst other parts can remain unaffected by direct violent conflict throughout a conflict period. The post-conflict period in many cases can also be characterized by high levels of violence and instability. All these situations are addressed in the study.

A large component of gender equality processes involves the support of women's empowerment. Empowerment is defined in the study as the expansion of freedom of choice and action: the process through which women or men improve their capacity to make life choices, and to transform these choices into actions and outcomes (see discussion in Justino et al. 2012a). This study attempts to address issues of women's empowerment as a route to gender equality, but considers also gender issues more broadly, including also the agency of men and how gender equality is defined by relationships between men and women, and by social and cultural norms in specific contexts.

Finally, nutrition and food security is understood broadly as encompassing the availability of adequate calories, protein and other nutrients, the ability of individuals and households to access nutrients and the markets and networks that shape their supply, and the capacity of individuals and

⁴ http://www.pcr.uu.se/research/ucdp/definitions/definition_of_armed_conflict/.

households to utilize food and its nutrients to maintain or improve wellbeing (Sen 1982). In other words, "food security exists when all people, at all times, have physical and economic access to sufficient safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life" (FAO 1996). This study extends this definition to also encompass the capability to use nutrients and food in ways that make vulnerable and at risk individuals, households and communities resilient to shocks and volatility in political and market forces. This concept of resilience is defined in FAO, IFAD and WFP (2015) as "the inherent capacities (abilities) of individuals, groups, communities and institutions to withstand, cope, recover, adapt and transform in the face of shocks". This definition is in turn related to the notion of human resilience proposed in Almedom (2007) as "the capacity of individuals, families, communities, systems and institutions to anticipate, withstand and/or judiciously engage with catastrophic events and/or experiences, actively making meaning out of adversity, with the goal of maintaining "normal" function without fundamentally losing identity" (see also Parker et al. 2013).

3. Literature review: what do we know and what we need to know

Large bodies of literature have provided evidence for the importance of gender equality, nutrition and food security and peace for development processes. However, very few studies have examined the interactions and synergies between these three important pillars of development. How can we better understand how nutrition and food security interventions may be able to support and encourage the dual processes of peacebuilding and gender equality?

Three complementary processes shape the answers to this question: (i) the relationship between armed conflict and nutrition and food security, (ii) the relationship between gender equality and nutrition and food security, and (iii) the relationship between gender roles, violent conflict and peacebuilding. These processes are typically analyzed separately in the literature. This section discusses this literature, while section 4 will attempt to bring them together as depicted below.

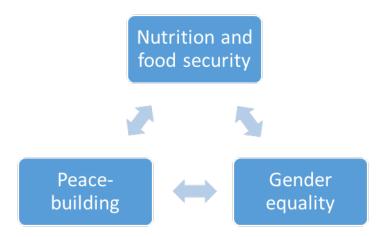


Figure 1: Links between nutrition and food security, gender equality and peace

3.1. The relationship between armed conflict and nutrition and food security

3.1.1. From conflict to nutrition and food security

A growing number of studies have documented in detail the causal effects of violent conflict along several dimensions using state-of-the-art econometric methods (see review in Justino 2012a). One of the most important findings in this literature concerns the impact of violent conflict on nutrition and food security outcomes, particularly during childhood. Overall the evidence shows that exposure to armed violence results in substantially adverse effects on food security and nutrition, with lasting legacies throughout the lives of those affected.

Conflict exposure has immediate effects on child nutrition and food security. Several studies have examined the impact of individual and household exposure to armed violence on nutrition and food security across a range of different conflict-affected countries. Despite wide differences in conflict duration, war strategies and other context-specific characteristics, the magnitude of the effects of exposure to armed violence on nutrition and food security are remarkably similar (and devastating) across the various case studies.

The strongest evidence comes from a series of studies by Richard Akresh, Philip Verwimp and Tom Bundervoet on Rwanda and Burundi. For instance, Akresh, Verwimp and Bundervoet (2007) found that boys and girls under the age of five born in regions in Rwanda affected by armed violence had height for age z-scores (HAZ) that were 0.30 and 0.72 standard deviations lower, respectively, than boys and girls that were not affected by violence. The study was able to trace these adverse effects largely to disruptions in agricultural production during the conflict. Bundervoet and Verwimp (2005) studied the impact of the civil war in Burundi, and subsequent economic embargo on the health status of children aged 0-5 years, showing a reduction of one standard deviation in height-for-age when compared to similar children who had not experienced these events. The authors advanced some potential explanations for these results, including the breakdown of the economy and health systems and consequent spreading of infectious diseases among displaced people, and increases in food prices during the economic embargo. In a follow-up paper, Bundervoet, Verwimp and Akresh (2009) showed that one additional month of war exposure in Burundi was associated with a reduction in children's height for age z-scores by 0.047 standard deviations. Similar effects have been found in other conflicts, including Colombia (Camacho 2008, Duque 2014), Cote d'Ivoire (Dabalen and Paul 2013, Minoiu and Shemyakina 2014), India (Tranchant, Justino and Muller 2014), Iraq (Aldoori, Armijo-Hussein, Fawzi and Herrera 1994, Guerrero-Serdan 2009), Mexico (Brown 2014, Nasir 2015) and Nepal (Nepal 2015).

Conflict exposure and associated nutritional shocks result in adverse long-term, inter-generational legacies. A related body of evidence has shown that many of the effects listed above may be irreversible throughout the lifetime of those affected, and may be transmitted across generations. Several studies have found that adults observed today that were affected by violence in their childhood are likely to be shorter, less educated and earn less than comparable individuals that did not experience violence in early ages. The main channel explaining these adverse long term effects is the persistence of malnutrition due to food shortages and changes in food composition. For instance, Akbulut-Yuksel (2009) shows that German children who were of school age and lived in areas bombed by Allied Forces during WWII are now about a half inch shorter, and 8 percent less likely to be satisfied with their current health than similar children not affected by violence. Similar results have been found for modern conflicts. Alderman, Hoddinott and Kinsey (2004) analyzed the long-term effects of the 1970s war in Zimbabwe showing that, in 2001, on average, children (under 5 years old) affected by the war and drought in Zimbabwe during the 1970s would have been 3.4 cm taller had the war and adverse

weather conditions not taken place. The loss in stature, in addition to school losses, resulted in reduced lifetime earnings of about 14 percent. Akresh, Bhalotra, Leone and Osili (2012) investigated the impact of the Nigerian civil war of 1967-70 and found that women exposed to the war between birth and adolescence, who are still alive today, have lower height than other comparable women not exposed to the war. Very similar results and causal transmission channels have also been reported by de Walque (2006) for the case of the Khmer Rouge (1975-79) regime in Cambodia, Domingues (2010) for the case of Mozambique, and Akresh, Lucchetti and Thirumurthy (2010) for the Eritrea-Ethiopia war.

A complementary emerging body of evidence has suggested that the effects of conflict on children through nutritional channels may take place even before the child is born, which points to important inter-generational effects of violent conflict. Several studies have shown that pregnant women who suffer from under-nutrition and stress related to violence exposure give birth to low-weight and low-height children – which, in turn will multiply the adverse effects of conflict across generations. In a pioneering study, Camacho (2008) showed that the exposure of women to violence across Colombia during the first three months of pregnancy resulted in lower birth weights and premature deliveries. Similarly, Valente (2011) found that maternal exposure to conflict before conception during the conflict in Nepal was negatively and significantly correlated with lower height-for-age of newborns and young babies. Similar evidence is reported in Parlow (2012) for the case of Kashmir.

Taken together, these results suggest that the adverse effects of armed violence exposure on nutrition and food security may be irreversible: adults that were affected by violence in their childhood (and are alive today) are likely to be shorter, less educated and earn less than comparable individuals that did not experience violent conflict in early ages. Furthermore, armed violence may affect nutrition and food security outcomes even before the child is born. The causal mechanisms explaining both immediate and long-term effects are remarkably similar across case studies and include (i) the direct destructive effects of fighting and violence, which result in the breakdown of the economy, agricultural markets, health systems and infrastructure, (ii) the consequent spreading of destitution and infectious diseases, particularly in displacement and refugee camps, and (iii) increases in food prices and shortages of basic foods during conflicts. These findings suggest that nutrition and food security interventions may have a considerable role to play in the economic and social recovery of populations affected by armed conflict. But can such interventions also support more sustainable peace and stability?

3.1.2. From nutrition and food security to conflict/peace

Even though there is now a wealth of evidence on the effects of violent conflicts on nutrition and food security, we have limited knowledge about the role of nutrition and food security in igniting, preventing or mitigating conflicts and, potentially, in supporting peacebuilding processes. The literature reviewed above showed that individuals, households and communities face serious constraints in coping with conflicts and maintaining adequate nutrition levels and food security. However, many people live in conflict areas in the midst of conflict and violence. Some do well, some live in fear of destitution and violence, and others get by (Justino 2013). Does nutrition and food security matter for their resilience? And if yes, do processes whereby people ensure access to food affect conflict and peace processes?

Evidence on these complex relationships is scarce. Based on a number of disperse findings in the literature, a series of potential mechanisms is discussed below, whereby nutrition and food security

may affect conflict (or peace) outcomes. At the individual- and household-levels, it is possible that nutrition and food security may affect participation in armed groups (or other forms of armed group support), which is used as a common coping strategy to address food insecurity and potential destitution in conflict areas (Justino 2009). A range of additional mechanisms may operate at the community level, including local food prices, the functioning of agricultural markets and asset recovery, and how local resources are controlled by different warring factions.

Individual and household survival in conflict areas may sometime involve the participation in or support for armed groups. People living in areas of violent conflict face enormous challenges, and often adopt a mix of legitimate and illegal, formal and informal activities in order to survive and protect their livelihoods. This may include the participation in and support for warring factions. Most of the available evidence on the relationship between civilians and armed groups has focused on recruitment (forced and voluntary). There are, however, several accounts of how civilians survive and protect their livelihoods – including ensuring food security – through forms of voluntary and involuntary support for armed groups beyond recruitment, including the provision of shelter, food and information (Nordstrom 1997, Kalyvas 2006, Wood 2003). Recent empirical evidence has suggested that ordinary individuals join armed groups in order to avoid destitution and hunger - as a livelihood coping strategy – and to secure protection from violence for themselves and their families. In one of the pioneering surveys of ex-combatants, Humphreys and Weinstein (2008) discussed how armed groups in Sierra Leone helped to meet the basic needs of their recruits, and provided food, shelter and physical security for their families. Ex-combatants reported improved prospects of getting a job, money and food and protection for their families as some of the most important motivations for having joined both armed groups. Walter (2004) discussed the importance of 'misery' and 'lack of voice' as incentives for the retention of fighters in armed groups, while Justino (2009) argued that the risk of destitution and poverty may be factors leading to the support and participation in armed groups.

This evidence suggests that interventions that improve food security and provide for basic needs may go some way towards weakening some - but not all - welfare-related motives that may lead individuals becoming fighters or supporting armed groups. This is because such motives are very complex. Some individuals choose to participate in and support armed groups because they may gain from the conflict in terms of improved opportunities, looting and the appropriation of assets (Grossman 2002, Hirshleifer 2001, Keen 1998). Others are forced into armed groups through coercion and abduction (Blattman and Annan 2009, Humphreys and Weinstein 2008), fear of violence (Kalyvas 2006, Kalyvas and Kocher 2007) and due to peerpressure and group norms (Petersen 2001, Verwimp 2005). Others still join and participate due to socio-emotional motivations such as the 'pleasure of agency' (Wood 2003), ideological and cultural identification, revenge, grief, anger and pride (Goodwin 2001, Wood 2003, Petersen 2001). Many participate to voice discontent and grievances (Gurr 1970). And, in many cases, people cannot afford to stay out because non-participation is very costly in terms of both physical and economic survival (Kalyvas and Kocher 2007, Justino 2009). Given these complex processes of recruitment, support and relations between armed groups and civilian populations, it is unlikely that food security interventions on their own may succeed. However, to date the long-term welfare and economic security impact of recruitment and civilian-armed group relationships remains under-researched.

Changes in food prices have been at times associated with the onset or re-ignition of violent conflict. An emerging body of literature has linked the rise of food prices and resulting levels of food and nutrition insecurity to the onset and duration of conflict (see, for instance, Brinkman and Hendrix 2011a,

2011b, D'Souza and Jolliffe 2012, Bohstedt 2014). This literature suggests two mechanisms whereby food security may shape violent conflict – one that operates at the group level and another at the individual level.

At the group level, increases in food prices and food insecurity may raise perceived forms of deprivation and exclusion that may aggravate existing grievances. When grievances are formed along ethnic, religious or other forms of social cleavages, the potential for civil unrest may increase to sufficient high levels as to cause violence (Brinkman and Hendrix 2011b, 2012, Hossain and Kalita 2014). At the individual level, food insecurity resulting from price rises may reduce the opportunity costs of individuals participating in, joining or supporting armed factions, thereby increasing the feasibility of armed conflict, as discussed above.

In addition to these factors, food insecurity in certain regions or countries that result from global uncertainties, such as climate change and price fluctuations of certain commodities, may also potentially affect conflicts across borders and between groups that depend on agriculture or trade in specific commodities for their survival. There seems to be a plausible association between the rise of food prices in 2007/8 and rise in civil unrest in many parts of the world (Brinkman and Hendrix 2011a, Simmons 2013). Both mechanisms discussed above also seem probable. **There is, therefore, a potentially important association between food price stability and peacebuilding outcomes.** However, evidence on how food prices and food markets change during armed conflict and affect local markets and socio-political relations is scarce.

The recovery of local agricultural markets and assets may support livelihoods in conflict-affected areas. One of the most devastating impacts of armed conflicts is the deliberate destruction and plundering of property, markets and assets (see review in Justino 2012a), which limits the ability of households to produce food for subsistence or for sale and to rely on selling assets as a coping strategy, affects their productive capacity and constrains their access to (formal or informal) markets.

The sale of livestock is a common form of coping strategy used by rural households in developing countries in times of crisis. However, during armed conflicts, livestock can become a risky form of savings since it can be easily stolen or killed (Bundervoet 2006, Verpoorten 2009) and, as a visible asset, may make households targets of violence. Therefore, many tend to minimize this risk either by moving somewhere safer, destroying or hiding their livestock (and other visible assets) and by resorting to activities that will not attract unduly attention from warring factions, such as subsistence crop farming (Brück 2004, Bundervoet 2006, Deininger 2003, McKay and Loveridge 2005).

Resorting to low-risk low-return coping strategies may have adverse long-term consequences, but may also provide immediate protection against uncertainty and fear. For instance, Brück (2004) shows that subsistence farming led to improvements in the economic security of households living in extreme poverty during the civil war in Mozambique because market and social exchange entailed limited welfare gains. McKay and Loveridge (2005) report how the adaptation of subsistence modes of agriculture production in Rwanda was associated with improved nutritional status of children in the post-conflict period. These effects of subsistence modes of production during conflict must, however, be balanced against the long-term effects of violence on household economic vulnerability. At the same time, many households affected by armed conflict depend on informal activities (mostly petty trading) and in some cases illegal activities (Jaspars, O'Callaghan and Stites 2007). This is particularly the case of internally displaced people and refugees that move from rural to urban areas (Engel and Ibáñez 2007, Ibáñez and Moya 2006, Kondylis 2005, 2007).

Taken together, these disperse findings suggest that the recovery of local agricultural and food markets could help vulnerable individuals and households overcome the adverse legacies of armed conflict by encouraging affected people to move beyond subsistence agriculture, re-join exchange markets and perhaps reduce the appeal of illegal activities. More work needs, however, to be done in order to better understand how the functioning of agriculture markets may shape household and individual livelihood choices in ways that will reduce the risk of conflict re-ignition.

Local political control critically shapes how food policies will succeed in supporting peace. The availability and effectiveness of coping strategies adopted by individuals and households in areas of armed violence are determined not only by their own choices, but also by the formal and informal institutions and organizations that emerge from the conflict, and how these shape the availability of and access of people to markets and social and political opportunities. Re-establishing food security and food markets in the aftermath of violent conflicts may also crucially depend on these institutions. By learning about them, it may be possible to devise food interventions that will support the resilience of households and avoid conflict re-ignition.⁵

One important aspect of institutional change in conflict-affected contexts is related to the emergence of governance and order in areas outside the control of the state (Gáfaro, Ibáñez and Justino 2014, Justino 2012b, 2013, Kalyvas 1999, Mampilly 2011). Although not all insurgent groups intend to take on state functions, many conflicts are characterized by the emergence of non-state actors that aim to replace weak, inexistent or inappropriate state institutions. Some examples include the FARC in Colombia, the Tamil Tigers in Sri Lanka, Hezbollah in Lebanon, the Taliban in Afghanistan, Al Shabaab in Somalia, amongst many others. Many of these groups provide security and justice, ensure that populations under their control access basic needs, build infrastructure and regulate local markets and social relations. Some groups exercise state functions in full as a way of demonstrating their capacity to rule (Mampilly 2011), others act in Mafia-like structures (Gambetta 1996) and others provide intermediary roles between local populations and state institutions (Mampilly 2011). These forms of local institutional formation during wartime are likely to have substantial effects – negative and positive – on the lives and livelihoods of populations living in these areas. They also determine and control to a very large degree how aid and development programs - including nutrition and food security interventions - may reach vulnerable populations. However, current understanding of these institutional changes is extremely limited, which has constrained political and development efforts at promoting positive change in conflict contexts.

3.2. The relationship between gender equality and nutrition and food security

3.2.1 From gender equality to nutrition and food security

A large body of literature spanning the last three decades has shown that improving gender equality has positive effects on nutrition and food security, particularly for children. Evidence has shown that changes in intra-household distribution of resources, assets or power that favor women are

⁵ See also Principle 11 of the Framework for Action for Food Security and Nutrition in Protracted Crises (CFS-FFA) (FAO 2015a).

associated with positive welfare effects. One of the strongest case study examples is that of Brazil. For instance, Thomas (1990) shows that child survival rates increased 20-fold following small rises in female (but not male) earned income. In a later study, Thomas (1997) reports that, when the individual incomes of women rise, spending on education and health increases six-fold, children weight-for-height scores rise eight-fold, and height-for-age scores are four times higher. Rangel (2006) has further found that increases in female decision-making power within the household results in increased investments in the education of children, particularly girls. Similar results have been reported for Cote d'Ivoire (Hoddinott and Haddad 1991, Duflo and Udry 2004), Mexico (Attanasio and Lechene 2010) and China (Qian 2008). In a ground-breaking study, Duflo (2003) showed further that pensions received by women (grandmothers) in South Africa resulted in significant improvements in the height-for-age and weight-for-height scores of girls. Another related study conducted in Nicaragua found that conditional cash transfers paid to women resulted in more than doubling household expenditure on milk, and in 15% increase in food expenditures (Gitter and Barham 2008). FAO (2011) estimates that agricultural outputs in developing countries could be increased by between 2.5 to 4% by granting male and female farmers equal access to productive resources. Other sectors and occupations could benefit from similar positive impacts by facilitating the entry of women (World Bank 2012).

One of the key channels through which female empowerment gains results in household nutrition and food security and other welfare benefits is through education. For instance, Fafchamps and Shilpi (2011) have found that improvements in women's primary education in Nepal are associated with higher survival rates of children and better schooling outcomes for both boys and girls. von Grebmer et al. (2009) show that higher levels of hunger are associated with lower literacy rates and lower access to education among women, and with higher health and survival inequalities between men and women.

Another channel is through the increased involvement of women in local decision-making processes and politics at the community level. Recent empirical micro-level evidence has shown a positive impact of women's social and political participation and empowerment not only on intra-household welfare distributions but also on community welfare and institutions in India (Bhalotra and Clots-Figueras 2011, Beaman et al. 2006, 2011, Chattopadhyay and Duflo 2004). Beaman et al. (2006) show that children in villages in India headed by female leaders benefit from higher immunization rates and improved school attendance rates (particularly, girls). Other research in India has shown that women in positions of power within their communities invest more in drinking water (in West Bengal and Rajasthan), and in roads (Chattopadhyay and Duflo 2004). A recent study found that increases in women's political representation in India have resulted in significant reductions in neonatal mortality (Bhalotra and Clots-Figueras 2011). A new study (Justino et al. 2015) has shown, in addition, that improvements in gender awareness and specific gender-equality programming within humanitarian interventions may result in considerable improvements in the access to and the use of services in humanitarian settings, and increases the effectiveness of humanitarian outcomes. Taken together, these studies provide a strong body of evidence showing that nutrition and food security outcomes are strengthened when gender equality improves.

3.2.2. From nutrition and food security to gender equality

The links from nutrition and food security to gender equality are less clear. Women and girls are disproportionately affected by food insecurity. According to FAO (2014) and WFP (2009), between 2012 and 2014 over 60 percent of individuals affected by chronic and severe malnourishment were

women and girls. The nutritional needs of pregnant and lactating women and of small children are particularly significant as malnourishment in the womb and in the first few years of life can lead to decreased life chances for affected children, further exacerbating cycles of poverty and gender inequalities (Guerrero-Serdan 2009). The disproportionate number of women and girls affected by food insecurity is largely due to entrenched gender inequalities that limit women and girls' access to income, agricultural technology, education, credit, inputs and land. In addition, family and cultural practices often favor men and boys' direct access to food within the household and limit women's decision-making powers about family spending and food distribution (Brody 2015, FAO 2015b). Gender inequalities in nutrition and food security also tend to persist despite the dependence of female workers on agriculture – in Africa, 63 percent of working women are dependent on agriculture (48 percent of male workers) and, in Asia, 57 percent of female workers are dependent on agriculture (48 percent of male workers) – and increases in women working in the agriculture sector to fill the void left as men shift employment away from agricultural jobs (Agarwal 2013; see also Fukuda-Parr 2016).

Given these facts, a question still remains as to whether and how nutrition and food security may affect gender equality. Justino et al. (2015) has made some – albeit limited – progress in this area by examining the effect of gender equality programming on humanitarian outcomes. One of the findings of this study was that food programs that exhibit a high level of gender equality programming have positive effects on a variety of humanitarian outcomes, including on norms and behaviors that shape gender equality. The study had three key findings pertinent to this question.

First, greater gender equality programming was shown to be strongly associated with improvements in access to education and with education outcomes among boys and girls. The most relevant interventions were the provision of in-kind incentives to households (such as sugar) if girls attend school, the distribution of free school uniforms, the supply of scholarships for girls, the provision of school meals, the implementation of awareness campaigns about the value of girls' education, the supply of sanitation facilities in schools, the provision of school buildings, and the implementation of income earning opportunities for women in food-for-assets programs (which enabled women to afford school fees and stationery materials for their children).

Second, gender equality programming was found to improve safer access to sanitation and water and better health, particularly among women and girls. Building infrastructure and the participation of women in local decision-making proved to be some of the most significant pathways to these outcomes.

Third, and of particular relevance to this study, the study showed that gender equality programming in humanitarian interventions – of which food interventions play a large role – was associated with dual improvements in food access and food security and in gender equality in terms of food access and consumption.

The most successful interventions were those that (i) prioritized women as the collectors of food, (ii) ensured women's participation in economic activities (notably, food-for-work programs), and (iii) distributed seeds to women. Other studies have also found that policy responses that have aimed to empower women and increase their role and bargaining power within the household have been successful at reducing food insecurity for the whole household, as well as increasing the household resources directed towards health, food, and education (IFPRI 2003, Brody 2015, FAO and ADB 2013). Overall, there is however very limited systematic evidence on the effects of nutrition

and food security interventions on gender equality – either in peaceful or conflict-affected contexts. But some of the findings above suggest that food and nutrition security interventions, with specific measures in place for gender equality programming, may have the potential to increase gender equality outcomes, while also being more effective in their food security and nutrition outcomes.

3.3. The relationship between gender roles, violent conflict and peacebuilding

3.3.1. The effect of violent conflict on gender roles

Several studies have shown that violent conflicts have specific gender-differentiated effects (see reviews in Justino 2012a, 2015). This is particularly true in terms of nutrition, food security and education outcomes. However, to date, econometric studies have not shown a clear pattern: sometimes women and girls suffer more during armed conflicts (particularly in terms of sexual violence, malnutrition during pregnancy and returning to school); at other times boys and men are more victimized (in terms of conflict-related deaths and injuries, education losses and recruitment and abduction). Nonetheless, violent conflicts have substantial effects on gender roles. Notably, armed violence typically results in changes in (i) how families are structured and the role of individuals within, (ii) the economic roles of women and men, and (iii) how men and women participate in society and in political life (Justino et al. 2012a).

Violent conflict has a large impact on family roles. One of the key findings in emerging research on the consequences of violent conflict is the fact that during violent conflicts women tend to adopt new roles within their families, notably as household heads and breadwinners. Studies on conflicts in Angola, Bosnia and Herzegovina, Cambodia, Colombia, Guatemala, Kosovo, Mozambique, Nepal, Rwanda, Somalia, Sudan and Timor Leste have shown evidence for a substantial increase in the number of female household heads in conflict-affected areas (Bouta et al. 2005, El-Bushra et al. 2002, Kumar 2001, Menon and Rodgers 2011, Schindler 2010, UN 2001, Greenberg and Zuckerman 2009). Women also tend to marry and have children at younger ages due to male shortages (Shemyakina 2011, Schindler 2010). Another significant change has to do with increases in female participation in labor markets across most conflict-affected countries (see review in Justino et al. 2012a). This is due to two factors. The first is the increase in the number of femaleheaded households due to the death or disappearance of male workers. The second is the fact that income generating opportunities men relied on before the conflict (such as land, animals and other assets) may not be available, particularly when these assets were targeted by armed groups, or when people were forced into displacement and refugee camps. Survival needs result in turn in considerable changes in the economic roles of women and men.

Violent conflict leads to substantial changes in the economic roles of men and women. One of the major livelihood adaptation strategies adopted by households in conflict-affected countries is a change in the customary gender divisions of labor: women typically take on earning roles within the household during and shortly after the conflict to replace lost (male) workers (see review in Justino et al. 2012a). Evidence on these effects ranges from examples from World War II (Acemoglu et al. 2004, Akbulut-Yuksel et al. 2011) to modern civil wars (Menon and Rodgers 2011, Shemyakina 2011, Lehrer 2010, Kondylis 2010, Calderon et al. 2011, Kumar 2000, Date-Bah 2003, Allden 2008, Adam 2008, El-Bushra and Sahl 2005).

However, it is important to note that rarely does this rise in female labor market participation translate into improved gender equality. This issue was researched in detail in Justino et al. (2012a) using micro-level statistical evidence from Bosnia and Herzegovina, Colombia, Kosovo, Nepal, Tajikistan and Timor Leste. In line with the existing literature, the study found that women participated more actively in labor markets during conflict in all case studies. But the results showed also that despite increases in labor supply, women faced limitations in terms of access to employment, the types of employment available to them, and the levels of wages received. Notably, women were typically employed in low-skilled jobs in the informal sector, earned less and tended to lose their jobs once the war was over due to pressures to return to traditional roles and high levels of unemployment rates among returning men (see also Kumar 2000, Date-Bah 2003). Second, the study found that, in general, economic vulnerability among women increased during conflict, particularly among female-headed households due to increases in dependency rates, increases in labor market participation without any visible reduction in other obligations, and the low salaries received. However, and against all odds, the study also found that increases in the labor participation of women in conflict-affected areas were in some cases associated with increases in overall household and community welfare. This result was more significant when women were employed in better paid jobs, but positive effects were still found in some case studies despite the low status jobs performed. This is an interesting finding because it emphasizes how women's agency during conflict may benefit their families and communities - a process that could potentially be supported through well-targeted food market interventions.

Violent conflict also results in changes in women's social and political roles. Some case studies have shown evidence for an intensification in the levels of female civic engagement, individually and through women's organizations, in conflict and post-conflict contexts. This may be due to changes in gender roles within households and the increased allocation of women's time to productive activities outside their households, as discussed above, which may promote social relations and alter women's preferences for political and social engagement. Women may also have to step in during conflict to fill leadership positions left vacant by migration, displacement or deaths of male relatives. These results are less strong than the labor market effects discussed above and based mostly on a small number of descriptive case studies. Rigorous empirical evidence on the impact of conflict on civic and political engagement is extremely limited and, within it, gender-differentiated analyses are practically non-existent due to lack of appropriate sex-disaggregated data on social capital and political engagement in household surveys. Overall, descriptions abound of women in conflict areas engaging with a number of organizations including churches, schools, hospitals and charities, selfhelp groups and local political institutions (Kumar 2000, Rehn and Johnson Sirleaf 2002, Sorensen 1998). These examples suggest that women's organizations, when supported can potentially play an important role in supporting gender equality and peace in post-conflict contexts. Nevertheless, there is limited evidence so far on whether and how women's organizations involved in peacebuilding remain active in the long-term and on their contribution to postconflict recovery and peacebuilding processes.

3.3.2. From gender equality to conflict and peace

UNSCR 1325 and subsequent resolutions have highlighted women's role as key actors in economic recovery, social cohesion and political legitimacy. Notably, the United Nations Security Council Resolution 2122 (2013) recognizes that "the economic empowerment of women greatly contributes to the stabilization of societies emerging from armed conflict". The recent empirical findings highlighted above show the differentiated impact of violent conflict across gender, suggesting that

men and women experience and participate in different ways in economic recovery and sustainable peace efforts. Despite these important advances, there is still limited understanding about the ways in which interventions can strengthen the inclusion of women, alongside men, in peacebuilding processes. While strong assumptions prevail in the literature about the role of women in peacebuilding, rigorous evidence on the potential effects of gender equality on peacebuilding outcomes is very scarce. This is due in part to the still limited body of evidence on the differential impact of violent conflict on gender roles, and in part to the scarcity of sex-disaggregated data in peacebuilding interventions and lack of rigorous evaluation of peacebuilding interventions in terms of their gender equality outcomes. What is then the state of the evidence on the effect of gender equality on peacebuilding?

Measures of gender equality are associated with reduced potential for conflict. There is some evidence that increases in female civic and political engagement in conflict-affected areas positively affect the quality of local institutions, thereby contributing to more stable peace outcomes. For instance, Petesch (2011)'s cross-country analysis of conflict-affected communities shows that economic recovery and poverty reduction are greater in communities reporting higher levels of female empowerment. Another body of literature has shown that gender equality - measured in terms of low birth rates and a high percentage of women in parliament - has been found to be associated with a lower risk of inter-state conflicts (Regan and Paskeviciute 2003). Proxies for gender equality have also been linked to lower risk of intra-state conflicts across countries. Caprioli (2005) reports that countries with high fertility rates (3.01 and higher) are nearly twice as likely to experience internal conflict as states with low fertility rates (3 and below). Similarly, states with 10% women in the labor force are nearly 30 times more likely to experience internal conflict than are states with 40% women in the labor force. Gender equality has also been linked to improved respect for human rights (Melander 2005), the promotion of democracy (Barro 1997), and lower corruption in society (Swamy et al. 2001, Dollar et al. 2001), factors that arguably may be central to successful peacebuilding processes. This evidence is, however, patchy and subject to some statistical concerns to do with issues around reverse causality and omitted variable biases.

Women's participation in formal peacebuilding activities are usually short-term. In contrast with the evidence above, there is strong evidence that even though women take on new responsibilities during the conflict – many as peace-builders – traditional patriarchal values tend to restrict these opportunities once the conflict ends (Handrahan 2004, Date-Bah 2003). Furthermore, some evidence on gender roles in post-conflict periods has reported alarming rises in domestic violence, which can be a decisive factor in rolling back women's gains and limiting their roles in peacebuilding activities (Date-Bah 2003, Calderon et al. 2011). These findings suggest that although gender roles may change during the conflict, gender identities remain unchanged and women are generally left out of formal peace processes (Justino et al. 2012a). Whether further inclusion of women in peace processes will generate the expected positive outcomes depends on the type of recovery and political trajectories followed by different conflict-affected countries, where different economic and political interests often clash. At present, we have limited handle of these questions as we know too little about how gender programing may work in post-conflict settings.

There is a need to broaden concepts of formal peacebuilding. One challenge faced by peacebuilding initiatives is the limited understanding of what peace, security and peacebuilding mean to local communities, and the men and women in them. State- and internationally-led peacebuilding efforts emphasize 'ending the war' (Anderlini et al. 2010: 11). But often local communities understand peace and security to be more than the absence of physical insecurity, and include within notions of peace

broader concepts such as access to employment and basic services, political participation and freedom to adopt cultural identities and practices (Donini et al. 2005). In a recent study, Justino et al. (2012b) found large gender-differentiated notions of peace which may go some way towards explaining the limited roles women have to date played in (formal) peacebuilding activities. While men generally adopt traditional notions of peacebuilding (avoiding armed fighting), women associated peace and peacebuilding with the fulfilment of basic human rights such as access to education, food and livelihood opportunities and the reduction of household conflicts (including domestic violence). The study also found that women's involvement in peacebuilding is usually carried out through their participation in a number of support networks and groups in the domestic sphere whereby women mediate disputes among themselves and among other members of the community, promote the involvement of women in power positions within communities (like school teachers, community police members, and women's representatives in traditional conflict resolutions mechanisms), support women's access to justice, start productive activities (such as cooperative farming, commercialization or credit schemes), and conduct community campaigns (such as promoting children attendance to school). Women have also a strong contribution to local resource management, which could potentially be another entry point to understand women's contributions to maintaining peaceful relations at the community level (UNEP at al. 2013). This evidence suggests that broadening our understanding of peacebuilding may allow us to better identify what policy interventions - including nutrition and food security interventions - are more or less likely to sustainably contribute to gender equality and peace in the long term.

4. Pathways for action

The sections above reviewed existing evidence on the two-way links between (i) armed conflict and nutrition and food security, (ii) gender equality and nutrition and food security, and (iii) gender roles and conflict/peacebuilding. The key lesson from this review is the serious lack of evidence about the role of nutrition and food security on peace and gender equality outcomes. However, lack of evidence need not constitute a bottleneck for action. In fact, lack of evidence about these complex relationships is in part a reflection of lack of action with regards to the design of nutrition and food security interventions that are sensitive to the different social dynamics that characterize conflict-affected contexts – and the measurement, rigorous assessment and evaluation of what actions work or not in such contexts. How then can nutrition and food security interventions support and encourage the dual processes of peacebuilding and gender equality?

Taken together, the literature above suggests a number of pathways through which these effects may take place. Building on disperse insights, I propose here a conceptual framework that maps how nutrition and food security may affect dual processes of peacebuilding and gender equality. These 'pathways for action' are anchored around five key mechanisms that shape these complex relationships:

- behavior, agency and aspirations;
- social norms about gender roles and equality;
- institutions and governance;
- agriculture and employment markets; and
- local collective action and equal representation within.

These five mechanisms offer important theoretical hypotheses about key pathways through which nutrition and food security interventions may shape peacebuilding processes and gender equality in post-conflict societies. They also provide potential entry points for the design, implementation, measurement and evaluation of nutrition and food policy in conflict-affected contexts that test these hypotheses on the ground in order to learn about how, why and when nutrition and food interventions may (or may not) affect the dual objectives of sustainable peace and gender equality.

4.1. Behavior, agency and aspirations

One key lesson from the literature reviewed above is the fact that individual and household behavior shapes how nutrition and food security may affect the dual goals of sustainable peace and gender equality. This is because, as argued in Justino et al. (2013: 4): "At a fundamental level, the factors that explain the outbreak, the continuation, the end, and the consequences of violent conflict are closely interrelated with how people behave, make choices, and interact with their immediate surroundings, and how all these factors may shape the lives and livelihoods of those exposed to conflict and violence. [...] [I]ndividuals, households, groups, and communities are at the centre of processes and dynamics of violent conflict. Understanding these processes is critical, shaping how we support institutional, social, political, and economic capacity in areas of violent conflict, identify factors leading to the success or failure of conflict prevention measures, and improve options for conflict mediation, prevention, and resolution". The review conducted in the previous section contains several accounts of how individual and household behavior may shape the outcomes of nutrition and food security outcomes. The focus here is on two important examples: women's agency and the role of aspirations among conflict-affected populations.

Women's agency. As discussed above, changes in gender roles during violent conflicts – even if often temporary – have important implications for how individuals, households and communities cope with and recover from violent conflict, with implications for both peacebuilding and gender equality objectives. These include how individuals and households access markets and livelihoods, how intra-household decisions are made (about, for instance, child schooling, food distribution, marriage or daily expenditures), how community relations, local markets and local politics are structured, and how men and women relate to each other and to their social and economic networks in the aftermath of violent conflicts. Notably, the literature shows that women, individually and collectively, contribute to peacebuilding in many ways. Yet, their contributions are often overlooked because they take unconventional forms, occur outside formal peace processes, or are considered extensions of women's existing gender roles. Examples include the roles of women in household welfare distributions (IFPRI 2003), in community-level economic recovery and peacebuilding (Justino et al. 2012b), and the involvement of women in local resource management (Agarwal 2013, Ceneri 2014, FAO 2012, UNEP et al. 2013).

These roles are generally perceived as limited. But when different forms of individual behavior are taken into consideration, there may be scope for interventions to strengthen the ability of women and men to contribute towards sustainable peace processes. For instance, Justino et al. (2015) showed how gender equality programming in food-for-work programs has played a crucial role in ensuring gender equality in humanitarian settings. Although there is limited evidence, it is possible that enhanced confidence among program beneficiaries may allow the space for further female

participation in peacebuilding activities. In this, it is important also to remember that boys and men also have specific needs, aspirations and hopes that at times remain unaddressed.⁶

The role of aspirations. Issues around confidence, hope and dignity shape people's aspirations about their future lives and relations with others – including perceptions and attitudes towards social cooperation and social cohesion, arguably key to sustaining peace. Recent research on behavioral economics has shown that aspirations are crucial mechanisms shaping economic development and social interactions (Bernard, Dercon and Taffesse 2011, Manski 2004, Ray 2006; see also Parker et al. 2013 for a concrete application among conflict-affected populations). Some of these results have led researchers and practitioners to advocate for the implementation of social training programs and improved skills training among young people involved in violent conflicts that improve aspirations.

One example is the Northern Uganda Social Action Fund and Youth Opportunities Program implemented by Innovations for Poverty Action (IPA) (Blattman, Fiala and Martinez 2014). This program provided cash transfers (\$7,100) to groups of young adults (16-35) to be used in skills training and self-employment trades. Among other results, the evaluation of the program found evidence for modest increases in social cohesion (measured by an index of community participation). A second example is the Ex-Combatant Reintegration in Liberia program implemented by IPA and Landmine Action (Annan and Blattman 2011). This agriculture training program included meals, clothing, basic medical care and personal items, with the additional benefit of participants receiving \$1,250 worth in tools and supplies. The evaluation of the program reported increased engagement of youth in agriculture, and less hours spent in illicit mining. The program had no effect on measures of aggressive behavior but program participants were much less likely to have joined local armed groups involved in an outbreak of violence in Cote d'Ivoire at the time of the program implementation.

More recently, Blattman, Jamison and Sheridan (2015) have shown that interventions aimed at improving self-control and fostering positive aspirations among criminally-engaged young men in Liberia reduced acts of crime and violence by 20-50%. Another interesting example is that of FAO-funded Junior Farmer Fields and Life Schools. These initiatives have been set up in a number of conflict-affected countries to bring together communities affected by armed violence and promote reconciliation and trust (FAO 2013). Many 'schools' target youth (boys and girls) involved in fighting or affected directly by violence (FAO 2008). All these are important examples of how excluded population groups can be supported to engage in forms of constructive citizenship in the post-conflict period through small behavioral changes that enhance positive aspirations and, hopefully, avoid risks of violence re-ignition. These programs have rarely been evaluated in ways that allow an in-depth understanding of how they can contribute towards the dual objective of peace and gender equality. However, combining some aspects of these initiatives within nutrition and food security interventions could potentially generate positive outcomes in terms of sustainable peacebuilding.

4.2. Transforming social norms on gender roles and relations

⁶ Justino et al. (2015) report that men that are not included in gender equality programming tend to be uneasy and resentful towards the targeting of women and girls, something that may restrict progress in achieving gender equality and peacebuilding outcomes.

⁷ See also the guidelines produced under the United Nations Peacebuilding Support Office's Global Forum on Youth, Peace and Security: http://www.un.org/en/peacebuilding/pbso/policy.shtml.

A second important pathway through which improved nutrition and food security may affect gender equality and peacebuilding processes is through transforming gender relations by strengthening those social norms within households and in the wider community that support gender equality Some of the evidence reviewed in the previous section suggested that (i) gender equality may have important positive effects on nutrition and food security outcomes, and (ii) gender equality may improve – albeit temporarily – during conflicts. Taking these findings together, it seems likely that interventions that foster those changes in social norms that improve women's position and their bargaining power within the household and the community may have positive impacts for peacebuilding processes, reduce the likelihood of conflict reigniting and improve gender equality.

The evidence so far shows that despite increases in female labor market participation in conflict-affected areas and their active engagement in local peacebuilding activities, improvements in women's empowerment are often temporary. However, some studies indicate that rises in women's civil engagement during and after violent conflict may influence important social attitudes. In Guatemala, for example, women's groups have been central to changing social attitudes towards domestic violence through awareness raising campaigns, while in Sierra Leone women's groups have promoted the social acceptance of women's political participation (see review in Justino et al. 2012b). Changes in women's social roles seem also to be associated with a more visible presence of women in the political sphere of post-conflict countries (Sorensen 1998). For instance, in Sudan and Kosovo, women's groups have been able to mobilize women to take part in elections and local consultation processes (Castillejo 2010), and lobbying campaigns by women have been associated with the improved representation of women in parliament and in government positions (Castillejo 2010, O'Connell 2011, Kumar 2000, Greenberg and Zuckerman 2009, UNIFEM 2002).

Evidence accumulated in the context of India has further demonstrated that when opportunities are available, cultural norms around gender roles will change. Beaman et al. (2011) have shown that small increases in female leadership positions across villages in India led to rises in the aspirations of girls and their parents through a role model effect. Jensen (2010) has, in addition, revealed that the creation of employment opportunities for girls across villages in India caused other girls to enroll and remain in school – with support from their parents – in the expectation that they will also be able to access those better jobs. This evidence suggests that specific policy interventions that improve political and economic opportunities for women may result in significant changes in norms and beliefs around gender roles. Adapting the design of these interventions to nutrition and food security policy could potentially yield similar benefits. It is also worth remembering that women are also responsible for how social norms around violence may be embedded within households and across generations (Moser and Clark 2001). Therefore, supporting changes in social norms that encourage gender equality may have also important effects in terms of ensuring more sustainable peace outcomes.

4.3. The role of institutions and governance

The literature review in the previous section illustrates the strong role played by institutions in how nutrition and food security interventions may affect the dual processes of gender equality and peacebuilding. Three institutional processes appear to play key roles: governance systems by different armed factions, informal networks and land tenure rights. Armed conflicts are to a large extent a contestation of the role of incumbent state institutions. As a result, state

structures tend to be absent, do not work or are illegitimate in the eyes of some population groups. In the absence of the state or in the presence of weak and fragile state institutions, non-state armed actors and other informal structures emerge to provide security, food and basic services, and governing access to land and markets.

Wartime institutions. Institutions in the post-conflict period are largely determined by wartime institutions that arise from the interaction between civilians and different warring factions. These institutions are important for the success of nutrition and food security interventions in supporting gender equality and peacebuilding objectives because (i) they tend to persist even when the conflict is over, and (ii) they determine control over local markets, local politics and social norms, including gender norms. Notably, wartime institutions shape the access of individuals and households to education opportunities, to buy land and other assets, to borrow funds and invest them in productive activities and to have a voice in socio-political decisions in their communities (including voting). Institutions that favor corrupt and rent-seeking behavior will perpetuate dysfunctionality. But organizations that promote some rule of law and impose sanctions for undesirable behavior may improve the living conditions of those under their control and administration.⁸

Further advances in understanding the role of political institutions on the economic well-being of individuals and households – including nutrition and food security – during and after armed conflicts requires, however, more detailed analysis of the endogenous dynamic relationship between violence and governance than what is currently offered in the literature. Of particular importance is the role of governance exercised by a variety of non-state armed groups including rebel groups, militias, paramilitary groups, warlords, gangs, mafia, drug trafficking factions, private security providers and vigilante groups. The author has not been able to identify any studies up to date that would have investigated the role of wartime institutions on the effectiveness of nutrition and food security interventions in post-conflict societies.

The role of informal institutions. Another important characteristic of conflict-affected countries is the fact that authority is typically fragmented. Existing models of food delivery and other nutrition and food security interventions implicitly assume that there is some form of state authority that can support programs, particularly large-scale programs implemented at the national level. This is not the case of conflict-affected countries - or post-conflict situations - where state institutions and authority are weak and fragmented. A small but growing body of evidence has suggested that the governance of nutrition and food security is an important but largely overlooked dimension of policy responses to nutrition and food security (Gillespie et al. 2013). In particular, the multi-sector coordination required to ensure adequate nutrition and food security is rarely possible in contexts in which state capacity is weak. However, food insecurity and undernutrition are increasingly more prominent in contexts of widespread state failure or extremely weak state capacity (FAO 2010). One important feature of such contexts is the emergence of a myriad of non-state actors and organizations that provide food and regulate access to markets, aid and local services. These include village councils, self-help groups, local private providers of water, sanitation and security, traditional authorities, and community volunteer mobilizing groups (Beaman et al. 2004, Wilson et al. 2013), as well as armed actors as discussed above (Mampilly 2011). These hybrid or parallel structures of local governance are likely to have a significant impact on the effectiveness of nutrition and food security interventions, which to date has remained under-researched.

⁸ This argument is akin to Olson (1993)'s distinction between 'stationary bandits' and 'roving bandits'.

Land tenure rights. Land is central to the success of any nutrition and food security intervention. Access to land is also closely related to processes of gender equality and peacebuilding. Unequal access to land has been at the center of many violent conflicts, and systems of land redistribution typically feature heavily in many peace processes. Land tenure rights remain, however, elusive in most post-conflict contexts, particularly for women. One of the common challenges for women in the post-conflict period is women's limited access to land and credit (Agarwal 2013, Kumar 2000, Lastarria-Cornheil 2005, Greenberg and Zuckerman 2009). Some laws governing access to land include inequitable and exclusionary provisions, while customary rules and practices often limit women's access to key resources such as land and credit, which in turn is likely to affect household nutrition and food security.

Improvements in nutrition and food security that are coordinated with effective changes in property rights that discriminate against women are more likely to lead to benefits in terms of gender equality and be sustained in the long run (UNEP et al. 2013). Notably, women's ownership over agricultural and forest lands can encourage better food production as well as the security of women, ¹⁰ particularly since women's dependence on the agriculture sector in most conflict affected countries has grown as men are recruited into armies or choose non-farm jobs in the aftermath of the conflict.

4.4. Agriculture and employment markets

Empirical evidence on the operation of markets during armed conflict is to date scarce and contradictory (see Azam, Collier and Cravinho 1994, Bundervoet 2006, Verpoorten 2005). Available evidence suggests that if households are not able to diversify livelihood activities or cannot access credit, insurance or alternative employment, economic shocks and violence exposure during armed conflict may result in significant reductions in household welfare. These households typically resort to subsistence activities, which, as discussed above, may protect households against severe destitution and insecurity, but may hinder their long-term welfare and reduce their levels of resilience to future economic and political shocks. Market recovery may therefore be an important way in which nutrition and food interventions may support conflict-affected populations. A more detailed discussion follows below on the the role of exchange markets and prices, the role of employment markets and how market recovery could operate in tandem with safety net transfers and private remittances.

Exchange markets and prices. One key mechanism that determines the operation of local markets and how people access them is prices – food prices, in particular. When food prices increase, we expect households to reduce their food consumption. But if the household is a consumer as well as a producer of those goods, we must take into consideration the positive profit effect of the price change, which may outweigh the negative effect on price increases on consumption (Singh, Squire and Strauss 1986). Empirical evidence on price effects of armed conflict is scarce, though two studies have reported an increase in prices of staple foods during civil wars (see Verpoorten 2005,

⁹ See, for instance, Brockett (1990) and Richards et al. (2007). FAO-WFP (2010) discusses how inclusive consultative processes to develop a new land law contributed to peace in Mozambique.

¹⁰ See for instance the example of the India state of Odisha: http://wcdodisha.gov.in/sites/default/files/pdf/Odisha%20State%20Policy%20for%20Girls%20and%20Women%2C%202014%20%28English%29.pdf. Similar programmes are in practice in other Indian states such as Andhra Pradesh, Kerala and West Bengal.

Bundervoet 2006). However, the same studies also reported large reductions in prices of commodities produced and assets held by households in areas of conflict, particularly cattle and other livestock. Some evidence has suggested that rises in food prices may feed into violent protests and riots, although evidence for an association with armed conflict is more limited. Understanding the role of nutrition and food security in peacebuilding processes requires therefore understanding further the role of exchange markets both as an opportunity for predatory behavior, and as a source of livelihood for those involved in armed conflict (Justino 2011).

Employment markets. Employment markets also matter considerably – in terms of how food interventions may affect peacebuilding outcomes, but also in how gender equality may be achieved. Very few studies to date have analyzed the relationship between armed conflict and employment markets, whether it be the supply of labor by the household or the demand for household labor from off-farm sources. Studies on the causes of armed conflict often mention the presence of a large group of unemployed youth as a pre-condition for the effective recruitment of fighters and, therefore, for the rise of armed rebel groups (Collier 2007). In addition, some of the evidence reviewed in the previous section suggested that individuals may join armed groups in order to ensure access to basic needs. It seems likely that interventions that reduce food vulnerabilities and improve access to (rural) employment may have positive impacts for peacebuilding processes and reduce the likelihood of conflict reigniting. As far as the author can assess, however, no study has provided rigorous evidence on whether improving nutrition and food security will prevent the participation in and support for violent armed groups. We also have to date very limited knowledge and evidence on how labor market characteristics (e.g. unemployment, discrimination, exclusion, and so forth) may shape violence during armed conflict (to control populations, resources and territories) and how labor markets are shaped by armed conflict.

In terms of gender equality, the evidence is also scarce. However, there is some indication that employment generation programs – food-for-work interventions in particular – that target women in humanitarian settings may improve women's economic autonomy, leading to improved outcomes in terms of nutrition and food security and health (Justino et al. 2015). But there is also evidence that many employment training activities for women tend to be gender-stereotyped (sewing, knitting and hairdressing), resulting in the oversupply of certain products and services (Date-Bah 2003). The evidence largely shows that any gender equality gains in terms of employment during conflict tend to be lost in the post-conflict period, and it is unclear whether existing employment generation programs are able to support the continuing involvement of women in labor markets during the post-conflict period. This may be due to an almost complete lack of rigorous evaluation of existing programs and the dominance of untested assumptions about the role of women and men in post-conflict societies (Justino et al. 2012a).

Cash transfers and remittances. Some recent evidence has shown that safety net interventions may complement market effects in conflict-affected contexts. Some examples of ongoing programs the food distribution program in Afghanistan (Beath, Christia and Enikolopov 2012), the Familias en Accion cash transfer program in Colombia (Bozzoli and Wald 2011), the Punjab Education Voucher Scheme and the Benazir Income Support Programme in Pakistan (UNICEF and UIS 2013a) and the Samurshi Poverty Alleviation Program in Sri Lanka (UNICEF and UIS 2013b). Results on the impact of these programs are so far mixed, and interventions have rarely been evaluated in terms of food security, gender equality or peace outcomes. But cash transfers and other safety net programs could provide interesting entry points for future nutrition and food security interventions in post-conflict settings. Remittances may also potentially complement access to markets and jobs. Several

international efforts are currently in place to monitor and limit the international transfer of funds to conflict regions (Collier 2007). But at the micro-level remittances seem to play a key role in mitigating some of the negative effects of armed conflict on livelihoods and household welfare and improve the economic resilience of conflict-affected populations at the initial stages of economic and market recovery programs (Engel and Ibanez 2007, Lindley 2007). Future work to improve credit, employment, exchange and insurance markets in conflict-affected countries should potentially take into greater consideration the role of complementary safety net transfers and remittances.

4.5. Local collective action and equal representation within

The final pathway through which nutrition and food security interventions may support gender equality and positive peace outcomes in the aftermath of armed conflict is through improvements in social cohesion and local collective action. A large body of literature has argued that social cohesion and strong local institutions are fundamental for the establishment of economic stability in conflict-affected contexts (Justino 2009), and are critical elements in the state's ability to mediate between competing groups within society (Hutchison and Johnson 2011). Local collective organizations, in particular, are important institutions in areas where public goods provision is limited and state institutions are weak (or non-existent), shaping key development outcomes – including nutrition and food security outcomes. In these settings, local collective action may solve coordination problems (Ostrom 1990), and provide networks of support (Foster and Rosenzweig 2001, Fafchamps and Lund 2003). One the key findings in Justino et al. (2015) is that gender equality programming in humanitarian interventions affects gender equality mostly by contributing to women's social and economic empowerment, their participation in decision-making in collective processes and, crucially, the presence of women in leadership positions in local collective organizations.¹¹

The importance of local collective organizations in conflict affected countries has been emphasized by the growing number of community-driven development (CDD) programs implemented in post-conflict settings (World Bank 2006). In principle, CDD programs, supported by the World Bank, are based on an approach that emphasizes community control over planning decisions and investment resources. Despite of the often explicit objective of CDD programs to contribute to social cohesion, their effectiveness in improving peacebuilding outcomes has been at best mixed (Acemoglu, Reed and Robinson 2013, Barron, Diprose and Woolcock 2011, Crost, Felter and Johnston 2014, Casey, Glennerster and Miguel 2012, Fearon, Humphreys and Weinstein 2009). Moreover, in some cases the CDD interventions appear to have led to increased conflict (Barron, Diprose and Woolcock 2011, Crost, Felter and Johnston 2014, Nunn and Qian 2014). Another potential explanation to the weak peacebuilding performance is whether the design of these programs supports the genuine empowerment of excluded groups (the poor, women, and minorities in particular): if excluded groups do not acquire sufficient bargaining strength and organizational skills to withstand the pressures and influence of local elites, these programs are likely to be ineffective (Platteau 2004).

Other forms of collective organization such as women' groups and farmers' organizations appear to have more positive outcomes both in terms of gender equality and positive local peace outcomes

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¹¹ See www.safwcofoundation.org for examples of work done to improve collective organisations that promote food security and gender equality among conflict-affected populations.

(see DasBarwa 2014, IFAD 2014). 12 Interventions that promote dialogue across communities also appear promising, as illustrated by a recent program implemented by Mercy Corps in the Central African Republic (Mercy Corps 2015). The program arranged for Muslim and Christian communities to work together in order to manage local tensions and rebuild community cohesion in Bangui and Bouar, and resulted in improvements in trust and cooperation between communities exposed to violence. A related example is that of FAO and its partners' Cultivating Peace initiative in Kara Suu in Kyrgyzstan, which aimed to bring communities together in the delivery of irrigation water. The main objective was the promotion of reconciliation and dialogue through the equal access to resources and the establishment of collective local conflict management structures (FAO 2013c). An interesting and relevant feature of this project was the provision of compensation in terms of fortified staple foods to participants through collaboration with a locally ongoing WFP Food for Work program, which targeted severely food-insecure households to volunteer as active participants in the project. Another interesting example is that of FAO-Dimitra Clubs, a set of community listeners' clubs of women, men, and youth, facilitated with a participatory and empowering approach to mobilize collective action and dialogue. The Dimitra Clubs have so far been set up in Niger, Democratic Republic of Congo, Burundi, Ghana and Senegal. (FAO-Dimitra 2011).¹³

These initiatives provide potential entry points to how food security interventions may strengthen collective action in ways that promote community cohesion and gender equality. However, evidence on these effects is to date unsystematic and localized to small case studies. Though a promising pathway, we are still far from having a clear understanding about the role of collective action in the success of nutrition and food interventions to support gender equality and peace outcomes in conflict affected countries.

5. Future directions for action

The conceptual framework outlined above puts forward five pathways through which nutrition and food interventions may support the dual goals of peacebuilding and gender equality. These pathways suggest in turn a number of recommendations for the design and implementation of such interventions that will strengthen individual agency and aspirations, social norms about gender equality, institutions of governance, markets and inclusive collective action – without forgetting that each of these pathways interacts closely with all others since individual behavior, social norms and political, economic and social institutions do not operate (and thus cannot be affected) in isolation from each other.

This section discusses these recommendations in detail and proposes in addition two further important points for action that cut across the five main recommendations: the importance of thinking and acting over the long-term, and the need for much more engagement and action from FAO and its partners in the collection of rigorous evidence and program evaluation.

(1) Interventions should aim to support individual agency and foster aspirations: Nutrition and food security interventions that aim at supporting processes of gender equality and peacebuilding – as well as building the resilience of populations to further economic and political shocks – could be strengthened through simple behavioral changes in terms of promoting women's agency and

¹² See also http://www.ifad.org/farmer/.

¹³ See also http://www.fao.org/dimitra/home/en/.

positive aspirations – such as hope, sense of meaning, dignity, confidence, – among populations affected by armed conflict.

In particular, early interventions during conflict or in the immediate aftermath of the conflict could yield important benefits if they manage to take advantage of changes in gender roles that take place during the conflict before roles are irremediably reversed. Some promising interventions include the provision of in-kind food incentives to keep girls in school, the provision of school meals, the implementation of awareness campaigns about the economic and social value of gender equality that engage closely with men and boys, the support for and provision of rural income earning opportunities for women, and encouraging their participation in local decision-making about the distribution of aid and development programs (including food).

Harnessing women's roles and knowledge about resource management and improving their access to land could also provide an important entry point (UNEP et al. 2013). Women are generally the primary providers of water, food and energy at the household and community levels. Their role in the management of natural resources can therefore be used to enhance women's engagement and empowerment in peacebuilding processes. More equal access to land will be important in supporting women's agency in conflict contexts as it would allow more autonomy in agriculture and livestock production, as well as access to credit, insurance and other markets (see discussion below).

Another important dimension is the strengthening of aspirations and hope among people affected by violence, young people in particular. Training and cognitive development programs, such as the Junior Farmer Field Schools (FAO 2008, Friis-Hansen et al. 2012), seem quite promising, and could easily be integrated with more traditional agricultural and food provision interventions.

- (2) Part of the solution to ensuring greater gender equality in post-conflict societies will require changes in social attitudes and norms about gender roles and relations. Recent evidence in the context of India has shown that when economic opportunities are made available locally, cultural norms around gender roles may change quite rapidly (Beaman et al. 2011). It is therefore possible that nutrition and food security interventions may achieve similar goals when designed in ways that promote effective change in social norms about gender roles. Promising interventions include combining traditional food supply interventions with training activities and awareness raising campaigns about gender inequality and women's empowerment, and actions that hone women's leadership and negotiation skills, for example in producer organizations, agricultural cooperatives and water user associations. It is, however, important to note that effective social change through training and education campaigns and, importantly, the promotion of women's leadership skills requires long-term engagement of humanitarian and development actors because social norms only change gradually over several years or (more typically) decades.
- (3) Interventions must acknowledge wartime institutions and work with informal structures of governance: Nutrition and food security interventions cannot be de-coupled from institutional and political processes that emerge during violent conflict and continue to persist in the aftermath of the conflict. Effective intervention that contributes positively towards the dual goals of gender equality and peacebuilding requires systematic knowledge of and engagement with how state and non-state actors act and compete throughout the conflict, and how they interact with local populations. The institutions that emerge from these complex processes of interaction between state actors, non-state armed actors, other informal actors and different population groups are important for the success of nutrition and food interventions because they shape how property rights, justice, security, food

distribution systems, employment programs and social service provision may support or fail to support local populations. Although engagement with some non-state (often armed) actors may cause concerns about the political feasibility of nutrition and food programs, at the very minimum awareness of the role and actions of non-state political actors and concrete plans for dealing with these institutional and governance challenges will be crucial to the success of any interventions in conflict-affected countries.

- (4) Interventions that aim to strengthen markets and market access will have long-term benefits: Exchange, credit, insurance and employment markets are central to the effectiveness of interventions in improving nutrition and food security and potentially support peacebuilding and gender equality objectives. Particularly important are policies that support agricultural production (e.g. provision of seeds, tools, fertilizer, and other inputs, irrigation technologies, extension services) and market access (e.g. infrastructure such as feeder roads, processing facilities) as they may help households to move from subsistence agriculture and allow them renewed access to markets. These forms of local intervention will require also policies that prevent price volatility - particularly of staple goods – at more macro levels, and the restructuring of rural credit and insurance markets. It is also important to acknowledge that market interventions may affect women and men differently. Part of the solution to ensuring greater gender equality and sustainable peace in post-conflict societies will require therefore a restructuring of markets and economic structures away from the low-paid, low-skilled female opportunities that emerge during civil wars and towards more stable, skilled and better paid jobs along the value chains that offer women (and men) better economic perspectives. This will require bridging the gender gaps in access to productive resources, assets and services, and targeted support to women in agriculture. Experimentation with policy interventions aimed at improving nutrition and food security through local markets may yield interesting lessons in terms of peace outcomes that may be worth pursuing. In particular, market recovery interventions may benefit from public and private complementary transfers (cash transfers, other safety nets and remittances) that may further facilitate equitable access to livelihoods, credit and social insurance, and improve resilience by providing buffer mechanisms against future shocks.
- (5) Interventions must support positive collective action: Despite lack of hard evidence, it is likely that nutrition and food security interventions may be able to better influence gender equality and peace outcomes when combined with measures that strengthen collective action among women, men and excluded population groups for instance, agricultural cooperatives, community organizations, women's networks, that provide local public goods and engage both men and women on an equal basis. This is because collective action is typically associated to higher levels of social cooperation, central to how people trust and relate to each other, to how society is organized and to how countries and populations affected by violence recover in the aftermath of violent conflict. There is also fairly large evidence that nutrition and food outcomes among households and communities improve when women are better able to organize themselves and hold leadership positions at both local and national levels. Interventions that combine nutrition and food security policy with the strengthening of local collective action are likely to result in positive impact in terms of gender equality and local peace outcomes.
- (6) It is important to think and act over the long term. The pathways and recommendations discussed above involve the interaction of nutrition and food interventions with complex processes of social change that shape and are shaped by individual and household behavior, social norms, institutions, the operation of markets and collective action. These pathways have in common the fact that all involve processes of change that operate over the long-term. This is because reducing

entrenched gender inequalities and supporting sustainable peace requires interventions over long periods of time. This long-term pathway approach to improving food and nutrition policy and action in conflict-affected contexts has particular implications for the longstanding debate over the delimitations of humanitarian aid and development intervention. The pathway approaches discussed above emphasize the impossibility of separating these somehow artificial distinctions. In particular, the long-term pathway perspective advocated in this study suggests that humanitarian interventions should be used to sow the seeds for long term positive and sustainable institutional change. This requires much better coordination between humanitarian and development actors than what exists today in order to ensure that early nutrition and food security interventions result into positive long term change in terms of gender equality and sustainable peace. Even the best designed nutrition and food security interventions in humanitarian contexts will have limited success in fostering sustained gender equality and stability if not coordinated with development and economic recovery policies once the conflict is over.

(7) It is fundamental that existing evidence basis is strengthened considerably. The studies and policies reviewed in this paper suggest that there is large scope and potential for considerable positive effects of nutrition and food interventions on gender equality and peace outcomes in post-conflict contexts. The evidence base that may support the design, targeting and implementation of such interventions is, however, abysmally weak. Improving the state-of-the-art of evidence on these complex relationships will involve:

Collecting more and better data on causal mechanisms: To date, there is very limited rigorous evidence about the causal mechanisms that may shape the relationship between nutrition and food security, peacebuilding and gender equality. At the very minimum, better efforts need to be made to ensure the collection of data disaggregated by sex and age at small geographical units, as well as information on conflict experiences. This requires humanitarian and development agencies and governments alike to build the capacity of their statistical apparatus to compile this data and make it available at all administrative levels. In the more immediate term, large gains can be made by adapting ongoing survey data collection in countries of interest. For instance, Brück et al. (2013, 2015) have designed a conflict-sensitive module that can be easily integrated in ongoing socio-economic surveys, as well as in program evaluation baseline or end-line surveys. Alternatively, ongoing surveys that be combined or merged with external information on localized conflict event data, which often provides reliable information on conflict exposure. Another easy solution is the incorporation of behavioral experiments that test for mechanisms around social cooperation, trust and aspirations within these ongoing data collection efforts in order to test more rigorously some of the behavioral and normative pathways suggested above.

Evaluating programs rigorously: There is also a lack of rigorous program evaluation. Notably, policy interventions implemented in conflict contexts – including nutrition and food security interventions

¹⁴ Research programmes at the forefront of new data collection efforts in conflict-affected countries include the MICROCON programme at IDS funded by the European Commission FP6 Framework (www.microconflict.eu), the Households in Conflict Network (www.hicn.org), the Program on Order, Conflict and Violence at Yale University (http://www.yale.edu/macmillan/ocvprogram/index.html), and the "A Comprehensive Study of Civil War" project at the Peace Research Institute Oslo (http://www.prio.no/CSCW).

¹⁵ There are several sources that can be used for this purpose, including the IISS Armed Conflict Database, CEWARN Reporter, ACLED, and CERAC, among others. See http://www.cewarn.org/; http://www.cewarn.org/; http://www.cewarn.org/

– very rarely attempt to assess how local human and institutional experiences conflict may shape the intervention, or how the intervention may affect peace outcomes or the likelihood of conflict reignition. Some projects report information such as gender ratios in user committees, workforce participation in cash and food transfer programs and outcomes in terms of social cohesion that inform on how many times and how many people attend certain meetings and training programs. This information is relevant but is of very limited use for monitoring and evaluation of peacebuilding and gender equality outcomes that involve actual change in behavior, norms and institutions. Rarely do programs include rigorous baseline data that can be used as the basis for future evaluations – a situation that needs to change rapidly in order to better support how nutrition and food security interventions may successfully result in better peace and gender equality outcomes. Defining baselines and agreeing on the measurement of specific outcomes in precise ways is important for the rigorous design and implementation of evidence-gathering methods, but also fundamental to establishing the boundaries of what nutrition and food interventions can do in terms of promoting specific and realistic outcomes in terms of gender equality and sustainable peace.

References

Acemoglu, D., D. Autor and D. Lyle. 2004. "Women, War, and Wages: The Effect of Female Labor Supply on the Wage Structure at Midcentury", *Journal of Political Economy*, 112(3), pp. 497-551.

Acemoglu, D., Reed, T. and Robinson, J. 2014. "Chiefs: Economic Development and Elite Control of Civil Society in Sierra Leone", *Journal of Political Economy* 122 (2): 319-368.

Adam, J. 2008. "Displacement, Coping Mechanisms and the Emergence of New Markets in Ambon", Working paper N°9, Conflict Research Group, Ghent University.

Agarwal, B. 2013. "Food Security, Productivity and Gender Inequality", in *Handbook of Food, Politics and Security*, New York: OUP.

Akbulut-Yuksel, M. 2009. "Children of War: The Long-Run Effects of Large-Scale Physical Destruction and Warfare on Children", HiCN Working Paper no. 62, Households in Conflict Network (www.hicn.org).

Akbulut-Yuksel, M., M. Khamis and M. Yuksel. 2011. "Rubble Women: The Long-Term Effects of Postwar Reconstruction on Female Labor Market Outcomes", *IZA Discussion Papers*, No. 6148, Bonn: Institute for the Study of Labor.

Akresh, R., Bhalotra, S., Leone, M. and Osili, U. 2012. "War and Stature: Growing Up During the Nigerian Civil War", HiCN Working Paper 113.

Akresh, R., Lucchetti, L. and Thirumurthy, H. 2010. "Wars and Child Health: Evidence from the Eritrean-Ethiopian Conflict", HiCN Working Paper 89.

Akresh, R., Verwimp, P. and Bundervoet, T. 2007. "Civil War, Crop Failure and Child Stunting in Rwanda", Policy Research Working Paper Series 4208, The World Bank.

Alderman, H., Hoddinott, J. and Kinsey, B. 2006. "Long Term Consequences of Early Childhood Malnutrition", Oxford Economic Papers, 58 (3): 450-474.

Aldoori, W., Armijo-Hussein, N., Fawzi, W. and Herrera, M.G. (1994) 'Child Nutrition and Armed Conflicts in Iraq', *Journal of Tropical Pediatrics* 40: 32–36.

Alldén, S. 2008. "Microfinancial Entrepreneurship: A tool for peacebuilding and empowerment in Timor-Leste and Cambodia?" International Studies Association (ISA), annual congress, 26-29 March, San Francisco.

Almedom, A. M., Tesfamichael, B., Saeed Mohammed, Z., Mascie-Taylor, G. C. N. and Alemu, Z. 2007. "Use of 'Sense of Coherence (SOC)' Scale to Measure Resilience in Eritrea: Interrogating both the Data and the Scale", *Journal of Biosocial Science* 39: 91-107.

Anderlini, S.N. and Tirman, J. 2010. "What the Women Say: Participation and UNSCR 1325", A Case Study Assessment by the International Civil Society Action Network and the MIT Center for International Studies, Cambridge, MA: MIT Center for International Studies.

Annan, J. and Blattman, C. 2011. "Reintegrating and Employing High Risk Youth in Liberia: Lessons from a Randomized Evaluation of a Landmine Action Agriculture Training Program for Ex-Combatants". New Haven: Innovations for Poverty Action.

Arjona, A. and Kalyvas, S. 2006. "Preliminary Results of a Survey of Demobilized Combatants in Colombia", unpublished manuscript, Yale University

Attanasio, O.P. and V. Lechene. 2010. "Conditional Cash Transfers, Women and the Demand for Food", IFS Working Paper 10/17, Institute for Fiscal Studies, London.

Azam, J-P., Collier, P. and Cravinho, A. 1994. "Crop Sales, Shortages and Peasant Portfolio Behaviour: An Analysis of Angola", *Journal of Development Studies* 30 (2): 361-379.

Barro, R.J. 1997. The Determinants of Economic Growth: A Cross-Country Empirical Study, Cambridge: MIT Press.

Barron, P., Diprose, R. and Woolcock, M. 2011. Contesting Development. Yale University Press.

Bauer, M., Cassar, A., Chytilova, J. and Henrich, J. 2011. "Warfare during Ontogeny Increases Egalitarian and Parochial Motivations", Working Paper, University of San Francisco.

Beaman, L., E. Duflo, R. Pande, and P. Topalova. 2006. "Women Politicians, Gender Bias, and Policy-making in Rural India." Background Paper for the UNICEF's The State of the World's Children Report 2007.

Beaman, L., E. Duflo, R. Pande, and P. Topalova. 2011. "Female Leadership Raises Aspirations and Educational Attainment for Girls: A Policy Experiment", *Science* 335 (582).

Beath, A., Fotini, C. and Enikopolov, R. 2013. "Empowering Women through Development Aid: Evidence from a Field Experiment in Afghanistan", *American Political Science Review* 107: 540-557.

Bellows, J. and Miguel, E. 2009. "War and Local Collective Action in Sierra Leone", *Journal of Public Economics* 93: 1144-1157.

Bernard, T., Dercon, S. and Taffesse, A. S. 2011. "Beyond Fatalism: An Empirical Exploration of Self-Efficacy and Aspirations Failure in Ethiopia", Working Paper 2011-03, Centre for the Study of African Economies, University of Oxford.

Bowles, S. and Gintis, H. 2011. A Cooperative Species: Human Reciprocity and Its Evolution. Princeton University Press, Princeton N.J.

Bhalotra, S. R. and I. Clots-Figueras. 2011. "Health and the Political Agency of Women," IZA Discussion Papers 6216, Bonn: Institute for the Study of Labor.

Blattman, C., Jamison, J. C. and Sheridan, M. 2015. "Reducing Crime and Violence: Experimental Evidence on Adult Noncognitive Investments in Liberia", http://dx.doi.org/10.2139/ssrn.2594868

Blattman, C., Fiala, N. and Martinez, S. 2014. "Generating Skilled Self-Employment in Developing Countries: Experimental Evidence from Uganda", *Quarterly Journal of Economics* 129 (2): 697-752.

Blattman, C. and Annan, J. 2009. "The Consequences of Child Soldiering", Review of Economics and Statistics.

Bohstedt, J. 2014. "Food Riots and the Politics of Provisions in World History", *IDS Working Paper* 444. IDS: Brighton.

Bouta, T., G. Frerks and I. Bannon. 2005. *Gender, Conflict, and Development*, Washington, D.C.: The World Bank.

Bozzoli, C. and Wald, N. 2011. "Bullet Proof? Program Evaluation in Conflict Areas in Colombia", Proceedings of the German Development Conference, Berlin.

Brinkman, H-J. and Hendrix, C. 2011a. "Food Insecurity and Violence Conflict: Causes, Consequences, and Addressing the Challenges", Occasional Paper 24 World Food Programme.

Brinkman, H-J. and Hendrix, C. 2011b. Food Insecurity and Conflict: Applying the WDR Framework. Background paper, World Development Report 2011.

Brinkman, J-J. and Hendrix, C. 2012. Food Security and conflict dynamics – Casual linkages and Complex Feedbacks. High-Level Expert Forum, Rome: FAO.

Brockett, C. D. 1990. Land, Power, and Poverty: Agrarian Transformation and Political Conflict in Central America. Unwin Hyman, Boston.

Brody, A. 2015. Gender and Food Security: Towards Gender-Just Food and Nutrition Security – Overview Report. BRIDGE Cutting Edge Programmes: Brighton.

Brown, R. 2014. "The Mexican Drug War and Early Life Health: The Impact of Violent Crime on Birth Outcomes", unpublished manuscript.

Brück, T., Justino, P., Verwimp, P., Avdeenko, A. and Tedesco, A. 2013. *The Conflict Survey Sourcebook*. The World Bank, Washington D. C.

Brück, T., Justino, P., Verwimp, P., Avdeenko, A. and Tedesco, A. 2015. "Measuring Violent Conflict in Micro-Level Surveys: Current Practices and Methodological Challenges", World Bank Research Observer, in press.

Brück, T. 2004. "The Welfare Effects of Farm Household Activity Choices in Post-War Mozambique", HiCN Working Paper no. 04, Households in Conflict Network (www.hicn.org)

Bundervoet, T., Verwimp, P. and Akresh, R. 2009. "Health and Civil War in Rural Burundi", *Journal of Human Resources*, 44 (2).

Bundervoet, T. and Verwimp, P. 2005. "Civil War and Economic Sanctions: An Analysis of Anthropometric Outcomes in Burundi", HiCN Working Paper no. 11, Households in Conflict Network (www.hicn.org).

Bundervoet, T. 2006. "Livestock, Activity Choices and Conflict: Evidence from Burundi", HiCN Working Paper no. 24, Households in Conflict Network (www.hicn.org).

Calderon, V., M. Gafaro and A.M. Ibanez. 2011. "Forced Migration, Female Labour Force Participation, and Intra-household Bargaining: Does Conflict Empower Women?", MICROCON Research Working Paper 56, Brighton: Institute of Development Studies (www.microconflict.eu).

Camacho, A. 2008. "Stress and Birth Outcomes: Evidence from Terrorist Attacks in Colombia", *American Economic Review* 98 (2): 511-15.

Caprioli, M. 2005. "Primed for Violence: The Role of Gender Equality in Predicting Internal Conflict", *International Studies Quarterly*, 49(2), pp. 161–178.

Casey, K., Glennerster, R. and Miguel, E. 2012. "Reshaping Institutions: Evidence on Aid Impacts Using a Preanalysis Plan", *Quarterly Journal of Economics* 127 (4): 1755-1812.

Castillejo, C. 2010. "Building a State that Works for Women: Integrating Gender into Post-conflict State Building", Working Paper No 107, Madrid: The Fundación para las Relaciones Internacionales y el Diálogo Exterior (FRIDE).

Cenerini, C. 2014. "The Somali Challenge: Gender Equality in Natural Resources Management", Nature & Faune 28 (1): 87–91.

Chattopadhyay, R. and E. Duflo. 2004. "Women as Policy Makers: Evidence from a Randomized Policy Experiment in India," *Econometrica*, 72(5), pp. 1409-1443.

Cliffe, S., Guggenheim, S. and Kostner, M. 2003. "Community-Driven Reconstruction as an Instrument in War-to-Peace Transitions", CPR Working Paper No.7, Social Development Department Environmentally and Socially Sustainable Development Network, Washington, DC: The World Bank.

Collier, P. 2007. The Bottom Billion: Why the Poorest Countries Are Failing and What Can Be Done About It. Oxford: Oxford University Press.

Crost, B., Felter, J. and Johnston, P. 2014. "Aid under Fire", *American Economic Review* 104(6): 1833-56.

Date-Bah, E. 2003. Jobs after War: A Critical Challenge in the Peace and Reconstruction Puzzle, Geneva: ILO.

DasBarwa, S. 2014. Project on Strengthening the Role of Women in Agriculture for Improved Household Food Security and Nutrition.

Debalen, A. and Paul, S. 2013. "Effect of Conflict on Dietary Energy Supply: Evidence from Cote d'Ivoire", HiCN Working Paper 156. The Households in Conflict Network.

Deininger, K. 2003. "Causes and Consequences of Civil Strife: Micro-Level Evidence from Uganda", Oxford Economic Papers 55: 579-606.

de Walque, D. 2006. "The Long-Term Legacy of the Khmer Rouge Period in Cambodia", paper presented at the First Annual Workshop, Households in Conflict Network, Berlin January 15-16.

Dollar, D., R. Fisman and R. Gatti. 2001. "Are women really the "fairer" sex? Corruption and women in government", *Journal of Economic Behavior & Organization*, 46, pp. 423-429.

Domingues, P. 2010. "The Health Consequences of Mozambican Civil War: An Anthropometric Approach", Documents de Travail du Centre d'Economie de la Sorbonne - 2010.10.

Donini, A., Minear, L., Smillie, I., van Baarda, T., & Welch, A. C. (2005). Mapping the Security Environment: Understanding the Perceptions of Local Communities, Peace Support Operations, and Assistance Agencies. A Report Commissioned by the UK NGO-Military Contact Group. Feinstein International Famine Center, Tufts University.

D'Souza, A. and Jolliffe, D. 2012. "Conflict, Food Price Shocks and Food Insecurity: The Experience of Afghan Households" IZA Discussion Paper 6621.

Duflo, E. 2003. "Grandmothers and granddaughters: old-age pensions and intrahousehold allocation in South Africa", *World Bank Economic Review*, 17 (1), pp. 1–25.

Duflo, E. and C. Udry. 2004. "Intrahousehold Resource Allocation in Côte d'Ivoire: Social Norms, Separate Accounts and Consumption Choices", NBER Working Paper Series No. 10498, Cambridge, MA: National Bureau of Economic Research.

Duque, V. 2014. "Early Life Conditions, Parental Investments and Child Development: Evidence from Violent Conflict", unpublished manuscript, Columbia University.

El-Bushra J. and M.G. Sahl. 2005. Cycles of Violence: Gender Relations and Armed Conflict, Nairobi and London: ACORD.

El-Bushra, J., A. El-Karib, and A. Hadjipateras. 2002. Gender-Sensitive Program Design and Planning in Conflict-Affected Situations, London: ACORD.

Engel, S. and Ibáñez, A. M. (2007), "Displacement Due to Violence in Colombia: A Household-Level Analysis", *Economic Development and Cultural Change* 55: 335-365.

Fafchamps, M. and F. Shilpi. 2011. "Education, Preferences, and Household Welfare", CSAE Working Paper Series 2011-12, Oxford: Centre for the Study of African Economies, University of Oxford.

Fafchamps, M. and Lund, S. 2003. "Risk-Sharing Networks in Rural Philippines", *Journal of Development Economics* 71 (2): 261-287.

FAO, IFAD and WFP. 2015. Strengthening Resilience for Collaboration and Partnership among the Rome-Based Agencies. United Nations, Rome.

FAO. 2015a. Framework for Action for Food Security and Nutrition in Protracted Crises (CFS-FFA). Food and Agriculture Organization of the United Nations, Rome.

FAO. 2015b. The State of Food Insecurity in the World: Addressing Food Insecurity in Protracted Crises (SOFI). Food and Agriculture Organization of the United Nations, Rome.

FAO. 2014. The State of Food Insecurity in the World: Strengthening the Enabling Environment for Food Security and Nutrition. Food and Agriculture Organization of the United Nations, Rome.

FAO. 2013a. FAO Policy on Gender Equality: Attaining Food Security Goals in Agriculture and Rural Development. Food and Agriculture Organization of the United Nations, Rome.

FAO. 2013b. Supporting Communities in Building Resilience through Agro Pastoral Field Schools. Food and Agriculture Organization of the United Nations, Rome.

FAO. 2013c. Cultivating Peace: Using Water-Based Agriculture to Facilitate Reconciliation among Multi-Ethnic Residents of Kara Suu. Food and Agriculture Organization of the United Nations, Rome.

FAO. 2012. Improving Gender Equality in Territorial Issues (IGETI). Integrated Guidelines. Food and Agriculture Organization of the United Nations, Rome.

FAO. 2011. The State of Food and Agriculture, 2010-2011: Women in Agriculture: Closing the Gender Gap for Development. Food and Agriculture Organization of the United Nations, Rome.

FAO. 2010. The State of Food Insecurity in the World: Addressing Food Insecurity in Protracted Crises (SOFI). Food and Agriculture Organization of the United Nations, Rome.

FAO. 2008. Sharing Junior Farmer Field and Life School Experiences, Challenges and Innovations. Food and Agriculture Organization of the United Nations, Rome.

FAO. 1996. Declaration and Agenda for Action of the World Food Summit. Food and Agriculture Organization of the United Nations, Rome.

FAO and ADB. 2013. Gender Equality and Food Security: Women's Empowerment as a Tool against Hunger. Asian Development Bank, Philippines.

FAO-Dimitra. 2011. Community Listeners' Clubs: Stepping Stones for Action in Rural Areas. Food and Agriculture Organization of the United Nations, Rome.

Fearon, J., Humphreys, M. and Weinstein, J. 2009. "Can Development Aid Contribute to Social Cohesion After Civil War?", *American Economic Review: Papers and Proceedings* 99 (2): 287-291.

Foster, A. and Rosenzweig, M. 2001. "Imperfect Commitment, Altruism, And The Family: Evidence from Transfer Behavior in Low-Income Rural Areas", Review of Economics and Statistics 83 (3): 389-407.

Friis-Hansen, E., Duveskog, D. and Taylor, E. 2012. "Less Noise in the Household: The Impact of Farmer Field Schools on Gender Relations", *Journal of Research on Peace, Gender and Development* 2 (2): 44-55.

Fukuda-Parr, S. 2016. "Re-Framing Food Security as If Gender Equality and Sustainability Mattered", in Leach, M. (ed.), *Gender Equality and Sustainable Development*. Routledge, Chapter 4, pp. 82-104. In press.

Gáfaro, M., Ibáñez, A. M. and Justino, P. 2014. "Local Institutions and Armed Group Presence in Colombia", HiCN Working Paper no. 178, The Households in Conflict Network.

Gambetta, D. (1996). The Sicilian Mafia: The Business of Private Protection. Cambridge: Harvard University Press.

Gillespie, S., Haddad, L., Mannar, V., Menon, P. and Nisbett, N. 2013. "The Politics of Reducing Malnutrition: Building Commitment and Accelerating Progress", *The Lancet* 382.9891: 552-569.

Gitter, S. R. and B. Barham. 2008. "Women's Power, Conditional Cash Transfers and Schooling in Nicaragua", *World Bank Economic Review*, 22 (2), pp. 271-290.

Gleditsch, N. P. 2012. "Whither the Weather? Climate Change and Conflict", *Journal of Peace Research* 49 (3).

Goodwin, J. 2001. No Way Out: States and Revolutionary Movements 1945-1991. Cambridge Studies in Comparative Politics, Cambridge: Cambridge University Press.

Greenberg, M. E. and Zuckerman, E. 2009. "The Gender Dimensions of Post-Conflict Reconstruction: The Challenges in Development Aid", in *Making Peace Work: The Challenges of Social and Economic Recontruction*, ed. by T. Addison and T. Brück, Helsinki: Palgrave MacMillan and UNU-WIDER.

Grossman, H. I. 2002. "Make Us a King: Anarchy, Predation, and the State", European Journal of Political Economy 18(1): 31-46.

Guerrero-Serdan, G. 2009. "The Effect of the War in Iraq on Nutrition and Health: An Analysis Using Anthropometric Outcomes of Children", *HiCN Working Paper* 55, Household in Conflict Network.

Gurr, T. R. 1970. Why Men Rebel, New York: Princeton University Press.

Haddad, L. 2012. "How Can We Build an Enabling Political Environment to Fight Undernutriton?", European Journal of Development Research 25 (1): 13-20.

Handrahan, L. 2004. "Conflict, Gender, Ethnicity and Post-Conflict Reconstruction", Security Dialogue, 35(4), pp. 429:445.

Hirshleifer, J. 2001. The Dark Side of the Force: Economic Foundations of Conflict Theory, Cambridge: Cambridge University Press.

Hoddinott, J. and L. Haddad. 1991. "Household Expenditures, Child Anthropometric Status and the Intrahousehold Division of Income: Evidence from the Cote d'Ivoire", Discussion paper 155, Research Program in Development Studies, Woodrow Wilson School of Public and International Affairs, Princeton University.

Hossain, N. and Kalita, D. 2014. "Moral Economy in a Global Era: The Politics of Provisions during Contemporary Food Price Spikes", *Journal of Peasant Studies* 41(5): 815-831.

Humphreys, M. and Weinstein, J. 2008. 'Who Fights? The Determinants of Participation in Civil War', *American Journal of Political Science* 52(2): 436-455.

Hutchison, M.L. and K. Johnson. 2011. "Capacity to Trust? Institutional Capacity, Conflict, and Political Trust in Africa, 2000–2005", *Journal of Peace Research*, 48, pp. 737-752.

Ibáñez, A. M. and Moya, A. 2006. "The Impact of Intra-State Conflict on Economic Welfare and Consumption Smoothing: Empirical Evidence for the Displaced Population in Colombia", HiCN Working Paper no. 23, Households in Conflict Network (www.hicn.org).

IFAD. 2014. La Agricultura Familiar en America Latina: Un Nuevo Analisis Comparativo. International Fund for Agriculture Development.

IFPRI. 2003. Household Decisions, Gender and Development. IFPRI: Washington D.C.

Jaspars, S., S. O'Callaghan and E. Stites. 2007. "Linking Livelihoods and Protection: A Preliminary Analysis Based on a Review of the Literature and Agency Practice". HPG Working Paper

Justino, P. 2015. "Violent Conflict and Changes in Gender Roles: Implications for Post-Conflict Economic Recovery", in Haynes, Dina, Fionnuala Ni Aoláin, Nahla Valji and Naomi Cahn (eds.), Handbook of Gender and Conflict, Oxford University Press, forthcoming.

Justino, P., Poeschl, C., Salardi, P. and Tranchant, J-P. 2015. "The Effect of Gender Equality Programming on Humanitarian Outcomes: Synthesis and Case Studies in Kenya, Nepal and the Philippines", UN Women.

Justino, P., Brück, T. and Verwimp, P. 2013. A Micro-Level Perspective on the Dynamics of Conflict, Violence and Development. Oxford University Press.

Justino, P. 2013. "Research and Policy Implications from a Micro-Level Perspective on the Dynamics of Conflict, Violence and Development", in Justino, P., Brück, T. and Verwimp, P. (eds.) A Micro-Level Perspective on the Dynamics of Conflict, Violence and Development. Oxford University Press.

Justino, P. 2012a. "War and Poverty", in Michelle Garfinkel and Stergios Skaperdas (eds.), *Handbook of the Economics of Peace and Conflict*, Oxford University Press, Chapter 27.

Justino, P. 2012b. "Coping Strategies and Resilience in the Context of Protracted Crises", background paper for High Level Experts Panel on Food Security in Protracted Crises, FAO.

Justino, P., Cardona, I., Mitchell, B. and Muller, C. 2012a. "The Role of Women in Post-Conflict Economic Recovery", UN Women, New York.

Justino, P., Cardona, I., Mitchell, B. and Muller, C. 2012b. "From the Ground Up: Women's Roles in Local in Peacebuilding', Report to Action Aid and WomenKind.

Justino, P. 2011. "The Impact of Armed Civil Conflict on Household Welfare and Policy Responses", in Richard Kozul-Wright and Piergiuseppe Fortunato (eds.), Securing Peace: State-Building and Economic Development in Post-Conflict Countries, Bloomsbury Academic in association with the United Nations.

Justino, P. 2009. "Poverty and Violent Conflict: A Micro-Level Perspective on the Causes and Duration of Warfare", *Journal of Peace Research*, 46 (3).

Kalyvas, S. N. 1999. "Wanton and Senseless? The Logic of Massacres in Algeria", Rationality and Society 11 (3): 243-285.

Kalyvas, S. N. 2006. The Logic of Violence in Civil Wars. Cambridge: Cambridge University Press.

Kalyvas, S. and Kocher, M. 2007. "How 'Free' is Free-Riding in Civil Wars?", World Politics 59 (2): 177-216.

Keen, D. 1998. "The Economic Functions of Violence in Civil Wars", *Adelphi Paper* no. 320. International Institute of Strategic Studies, Oxford.

Kondylis, F. 2010. "Conflict Displacement and Labour Market Outcomes in Post-War Bosnia and Hersegovina", *Journal of Development Economics*, 93(2), pp. 235-248.

Kondylis, F. 2007. "Agricultural Outputs and Conflict Displacement: Evidence from a Policy Intervention in Rwanda", HiCN Working Paper n. 28, Households in Conflict Network (www.hicn.org).

Kondylis, F. 2008. "Conflict Displacement and Labor Market Outcomes in Post-War Bosnia & Herzegovina", HiCN Working Paper n. 45, Households in Conflict Network (<u>www.hicn.org</u>).

Kumar, K. 2000. Women and Women's Organizations in Post-Conflict Societies: The Role of International Assistance, Washington, DC: USAID.

Lastarria-Cornheil, S. 2005. *Gender and Property Rights within Post-conflict Situations*. United States Agency for International Development, Washington D.C.

Lehrer, K. 2010. "Gender Differences in Labour Market Participation During Conflict: Evidence from Displaced People's Camps in Northern Uganda", The Centre for the Study of African Economies, Department of Economics, University of Oxford, *Unpublished manuscript*.

Lindley, A. 2007. "Remittances in Fragile Settings: A Somali Case Study", HiCN Working Paper no. 27, Households in Conflict Network.

Mampilly, Z. 2011. Rebel Rulers: Insurgent Governance and Civilian Life During War. Cornell University Press.

Manski, C. 2004. "Measuring Expectations", Econometrica 72 (5): 1329-1376.

McKay, A. and Loveridge, S. 2005. "Exploring the Paradox of Rwandan Agricultural Household Income and Nutritional Outcomes in 1990 and 2000", Staff Paper 2005-06, Department of Agricultural Economics, Michigan State University, Michigan.

Mehlun, H., Moene, K. and Torvik, R. 2006. "Parasites". In Simon Bowles, Steven Durlauf and Karla Hoff (eds.), *Poverty Traps*. Princeton University Press.

Melander, E. 2005. "Political Gender Equality and State Human Rights Abuse", *Journal of Peace Research*, 42(2), pp. 149-166.

Menon, N. and Y. V. D. M. Rodgers. 2011. "War and Women's Work: Evidence from Conflict in Nepal", Policy Research Working Paper 5745, Washington, DC: The World Bank.

Mercy Corps. 2015. Building Community Resilience during Violent Conflict: Lessons Learned from Mercy Corps Stabilizing Vulnerable Communities Program in the Central African Republic. Mercy Corps.

Minoiu, C. and Shemyakina, O. 2014. "Armed Conflict, Household Victimization, and Child Health in Côte d'Ivoire", *Journal of Development Economics* 118: 237-255.

Moser, C. and McIlwaine, C. 2004. Encounters with Violence in Latin America: Urban Poor Perceptions from Colombia and Guatemala. Routledge, London.

Nasir, M. 2015. "Violence and Child Health Outcomes: Evidence from the Mexican Drug War", unpublished manuscript, Clark University.

Nepal, A. K. 2015. "Armed Conflict and Child Health: Evidence from Nepal's Maoist People's War", unpublished manuscript.

Nordstrom, C. 1997. A Different Kind of War Story. University of Pennsylvania Press.

Nunn, N. and Qian, N. 2014. "US Food Aid and Civil Conflict", American Economic Review 104 (6): 1630-1666.

O'Connell, H. 2011. "What are the Opportunities to Promote Gender Equity and Equality in Conflict-Affected and Fragile States: Insights from a Review of Evidence", *Gender & Development*, 19(3): 455-466.

Olson, M. 1993. "Dictatorship, Democracy and Development", *American Political Science Review* 87 (3): 567-576.

Ostrom, E. 1990. Governing the Commons: The Evolution of Institutions for Collective Action, Cambridge: Cambridge University Press.

Parker, J., Tiberi, L., Akhilgova, J., Toirov, F. and Almedom, A. 2013. "Hope is the Engine of Life'; 'Hope Dies with the Person': Analysis of Meaning Making in FAO-Supported North Caucasus Communities Using the 'Sense and Sensibilities of Coherence' (SSOC) Methodology", *Journal of Loss and Trauma: International Perspectives on Stress & Coping* 18 (2): 140-151.

Parlow, A. 2012. "Armed Conflict and Children's Health - Exploring New Directions: The Case of Kashmir", MPRA Paper No. 38033.

Petesch, P. 2011. Women's Empowerment Arising from Violent Conflict and Recovery: Life Stories from Four Middle-Income Countries, USAID, Washington, DC: U.S. Agency for International Development.

Pinchotti, S. and Verwimp, P. 2007. "Social Capital and the Rwandan Genocide: A Micro-Level Analysis", HiCN Working Paper no. 30, Households in Conflict Network (<u>www.hicn.org</u>).

Platteau, J-P. 2004. "Monitoring Elite Capture in Community-Driven Development", *Development and Change* 35.

Qian, N. 2008. "Missing Women and the Price of Tea in China: The Effect of Sex-Specific Earnings on Sex Imbalance", *Quarterly Journal of Economics* 123: 1251-1285.

Rangel, M.A. 2006. "Alimony Rights and Intrahousehold Allocation of Resources: Evidence from Brasil", *Economic Journal* 116: 627–658.

Ray, D. 2006. "Aspirations, Poverty, and Economic Change", in A. Banerjee, R. Benabou and D. Mookherjee (eds.) *Understanding Poverty*, Oxford University Press.

Rehn, E., and E. J. Sirleaf. 2002. Women, War and Peace: The Independent Expert's Assessment on the Impact of Armed Conflict on Women and Women's Role in Peacebuilding, New York: UNIFEM.

Regan, P.M. and A. Paskeviciute. 2003. "Women's Access to Politics and Peaceful States", *Journal of Peace Research*, 40(3), pp. 287-302.

Richards, P., Chauveau, J-P., Hussein, K., Mathieu, P. and Ouedraogo, H. 2007. Land, Agricultural Change and Conflict in West Africa: regional Issues from Sierra Leone, Liberia and Cote d'Ivoire. OECD.

Schindler, K. 2010. "Who Does What in a Household after Genocide? Evidence from Rwanda", HiCN Working Paper 90, Households in Conflict Network.

Sen, A.K. 1982. Poverty and Famines: An Essay on Entitlement and Deprivation. Oxford University Press.

Shemyakina, O. 2011. "The Effect of Armed Conflict on Accumulation of Schooling: Results from Tajikistan", *Journal of Development Economics* 95 (2); 186-200.

Simmons, E. 2013. Harvesting Peace: Food Security, Conflict, and Cooperation, Environmental Change & Security Program Report Vol. 14, Issue 3. Washington DC: Woodrow Wilson International Center for Scholars.

Singh, I. Squire, L. and Strauss, J. 1986. *Agricultural Household Models: Extensions, Applications and Policy*, Baltimore: Johns Hopkins University Press.

Sörensen, B. 1998. "Women and Post-Conflict Reconstruction: Issues and Sources", Occasional Paper 3, UNRISD/The War-Torn Societies Project, Geneva: UNRISD.

Swamy, A., S. Knack, Y. Lee, and O. Azfar. 2001. "Gender and Corruption", *Journal of Development Economics*, 64: 25-55.

Thomas, D. 1990. "Intra-household Resource Allocation: An Inferential Approach," *Journal of Human Resources*, 25(4), pp. 635-664.

Thomas, D. 1997. "Incomes, Expenditures and Health Outcomes: Evidence on Intrahousehold Allocation", in *Intrahousehold Resource Allocation in Developing Countries*, ed. by L. Haddad, J. Hoddinott, & H. Alderman, Baltimore: Johns Hopkins University Press for IFPRI.

Tranchant, J-P., Justino, P. and Muller, C. 2014. "Political Violence, Drought and Child Malnutrition: Empirical Evidence from Andhra Pradesh, India", HiCN Working Paper 173. The Households in Conflict Network.

UN 2015. Report of the High Level Independent Panel on Peace Operations. UN Security Council, United Nations, New York.

UN. 1994. An Agenda for Development: Report of the Secretary-General, UN Doc A/48/935, 6 May. United Nations, New York.

UNEP, UN Women, PBSO and UNDP. 2013. Women and Natural Resources: Unlocking the Peacebuilding Potential. United Nations Environment Programme (UNEP), United Nations Entity for Gender Equality and the Empowerment of Women (UN Women), United Nations Peacebuilding Support Office (PBSO), and United Nations Development Programme (UNDP). United Nations, New York.

UNICEF and UIS (2013a). Pakistan: Out-of-School Children in the Balochistan, Khyber Pakhtunkhwa, Punjab and Sindh Provinces of Pakistan. Global Initiative on Out-of-School Children, UNICEF and UNESCO Institute of Statistics.

UNICEF and UIS (2013b). Out-of-School Children in Sri Lanka: Country Study. Global Initiative on Out-of-School Children, UNICEF and UNESCO Institute of Statistics.

UNIFEM. 2002. Report of the Learning Oriented Assessment of Gender Mainstreaming and Women's Empowerment Strategies in Rwanda, United Nations Development Fund for Women.

UN Women. 2015. Preventing Conflict, Transforming Justice, Securing the Peace: A Global Study on the Implementation of the United Nations Security Council Resolution 1325. UN Women, New York.

Valente, C. 2011. "Children of the Revolution: Fetal and Child Health amidst Violent Civil Conflict", Draft paper.

Verpoorten, M. 2009. "Household Coping in War and Peacetime: Cattle Sales in Rwanda, 1991-2001", Journal of Development Economics 88: 67-86.

Verwimp, P. 2005. "An Economic Profile of Peasant Perpetrators of Genocide: Micro-Level Evidence from Rwanda", *Journal of Development Economics* 77: 297-323.

von Grebmer, K., Nestorova, B., Quisumbing, A., Fertziger, R., Fritschel, H., Pandya-Lorch, R. and Yohannes, Y. 2009. *The Global Hunger Index. The Challenge of Hunger: Focus on Financial Crisis and Gender Inequality*. Washington DC: IFPRI.

Wallensteen, P. and M. Sollenberg. 2001. "Armed Conflict 1989–2000", *Journal of Peace Research*, 38(5), pp. 629–644.

Walter, B. F. 2004. "Does Conflict Beget Conflict? Explaining Recurring Civil War", *Journal of Peace Research*, 41 (3): 371-88.

Weinstein, J. 2007. Inside Rebellion: The Politics of Insurgent Violence, Cambridge: Cambridge University Press.

WFP. 2014. Summary Evaluation Report of the WFP Gender Policy 2008-2013. World Food Porgramme, Rome.

WFP. 2009. Promoting Gender Equality and the Empowerment of Women in Addressing Food and Nutrition Challenges. World Food Programme, Rome.

Wilson, S. E., Morris, S. S., Gilbert, S. S., Mosites, E., Hackleman, R., Weum, K. L. M., Pintye, J., Manhart, L. E. and Hawes, S. E. 2013. "Scaling Up Access to Oral Rehydration Solution for Diarrhea: Learning from Historical Experience in Low–and High–Performing Countries", *Journal of Global Health* 3 (1): 1-14.

Wood, E. J., 2003. *Insurgent Collective Action and Civil War in El Salvador*. Cambridge Studies in Comparative Politics. New York: Cambridge University Press.

World Bank. 2012. World Development Report 2012. World Bank, Washington, D. C.

World Bank. 2011. World Development Report 2011. World Bank, Washington, D. C.

World Bank. 2006. Community-Driven Development in the Context of Conflict-Affected Countries: Challenges and Opportunities, Report No. 36425 – GLB, Social Development Department, Environmentally and Socially Sustainable Development Network, The World Bank.