

From food security towards a resilient society

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Introduction: why explore the linkages between food security and stability

Poverty is increasingly concentrated in fragile and conflict-affected areas. Conflicts are highly destructive to the development process and a major cause of development failure. About 1.5 billion people live in fragile, conflict and violence affected areas (Breisinger et al., 2014), among which more than half of these people live in poverty (Burt et al., 2014). According to the 2011 World Development Report, these people are twice as likely to be undernourished and die during infancy (World Bank, 2011). Vulnerable population groups living in fragile and conflict-affected areas are not protected and suffer from protracted crises that result in extreme hunger. Moreover, conflicts sometimes spill over into neighbouring states, spread diseases and illegal drugs, displace large amounts of refugees, and lead to the collapse of social trust (Taeb, 2004; Brinkman and Hendrix, 2011).

Rising food prices contribute to food insecurity, which is a threat and an impact multiplier for violent conflict. Households in fragile and conflict-affected areas that spend a large share of their income on food are vulnerable to high food prices. In 2007-2008, food price related protests and riots broke out in 48 countries. The mass uprisings of the Arab Spring in 2010-2012 had profound implications that high food prices are one of the contributing factors for the unrests. On the other hand, conflicts further lead to higher food prices and more acute food insecurity, thus contributing to a vicious cycle (Brinkman and Hendrix, 2011).

Some literature argues that if food insecurity is a threat multiplier for conflict, then improving food security may reduce tensions and contribute to a more stable environment (Hendrix and Brinkman, 2013; Breisinger et al., 2014). Appropriate food security interventions at the national and household levels not only help countries and people cope with and recover from conflict, but also become better off (Breisinger et al., 2014).

Objectives

The objectives of this article are to firstly provide an overview on linkages between food security and stability, and secondly to explore possible contributions of food security to build a stable and resilient society.

Quite a lot of literature addresses the linkages between food security and stability. However, terms used in the literature are rather muddled (e.g. food insecurity, conflict, violence, fragile, instability) and not always interchangeable. This article intends to provide state-of-the-art literature that explores relationships between food security and stability. Terms used in this article depend, to a large extent, on the cited literature.

Food insecurity as a cause of conflict

Slower and less inclusive economic growth as well as political instability are the main factors that contribute to food insecurity (FAO, IFAD and WFP, 2015). Food insecurity can be a cause as well as a consequence of conflict (Brinkman and Hendrix, 2011; Breisinger et al., 2014; FAO, IFAD & WFP, 2015). Conflicts are caused by a complex mixture of factors. These factors include poverty, under-employment of young men, income inequality, limited access to land, scarcity of natural resources, natural disasters, and poor governance (Breisinger et al., 2014). Brinkman and Hendrix (2011) investigated the link between food insecurity and violent conflict. They pointed out that food insecurity is a threat and impact multiplier for violent conflict. Food insecurity (especially when caused by a rise in food prices) might not be a direct cause and rarely the only cause, but combined with other factors it could be the factor that determines whether and when violent conflicts erupt. They investigated that in fragile areas that have a high share of food imports, households that spend a large share of their income on food are vulnerable to higher food prices. Moreover, such vulnerability increases over time.

High food prices can trigger conflict and increase affected groups' willingness to fight. Maystadt et al. (2014) assessed the key global drivers of conflicts in four Arab countries of Tunisia, Egypt, Libya and Yemen. Based on a dataset from 1960 to 2010 and improved econometric techniques, results of their quantitative analysis revealed that unlike other studies where per capita incomes, inequality, and poor governance are the major determinants of conflict, food insecurity at macro and micro-levels emerged as the main cause of conflicts in the Arab world (Maystadt et al., 2014). They further explained that all Arab countries are net food importers and the majority of their population are net food consumers, which makes Arab countries highly sensitive to global food prices spikes. This research results suggests that improving food security is not only important for poverty reduction but also for a peaceful economic transition.

Although Maystadt et al. (2014) pointed out that food insecurity is the main cause of conflicts, they also pointed out that it is not the only cause. Lack of opportunities for an increasingly educated young populace that does not find adequate jobs also contributes to conflict. Unlike in most regions, unemployment rates are high among more educated youth, and education systems in many Arab countries have produced a large volume of graduates with high career aspirations who do not have skills matching the labor markets (Maystadt et al., 2014).

Pinstrup-Andersen and Shimokawa (2008) discovered that poor health and nutrition are associated with greater probability of civil conflict. Natural disasters, such as drought and excess rainfall, reduce agricultural production and lead to conflict. Moreover, conflict is also more likely in the aftermath of quick-onset natural disasters (Brinkman and Hendrix, 2011).

Food insecurity as a consequence of conflict

On the other hand, conflict has become increasingly the main underlying cause that leads to food insecurity (FAO, IFAD & WFP, 2015). Conflict and violence not only hinder development progress but also destroy development gains in fragile areas. The direct consequences of conflict on food security are the displacement of people and the disruption of agricultural production and food distribution that leaves tens of millions of people at risk of hunger and famine (FAO, 2002)¹. The disruption of agricultural production reduces food availability. The disruption of food distribution reduces food accessibility.

Conflict destroys agricultural assets and infrastructure such as roads. It disrupts agricultural production and flows of food. It reduces access to food market and further drives up local food prices (Breisinger et al., 2014; Brinkman and Hendrix, 2011; Deininger and Castagnini, 2006; Collier and Hoeffler, 2004). In rural areas caught up in conflicts, crops cannot readily be planted, weeded, or harvested and yields decline drastically, especially in places where landmines have been laid (Taeb, 2004). Commercial agriculture may disappear completely because input delivery and markets are disrupted and infrastructure deteriorates. If some farms manage to stay in agriculture, they might reduce to subsistence production (Taeb, 2004). Relocation is one of the main survival mechanisms of a rural population to escape conflict (Taeb, 2004).

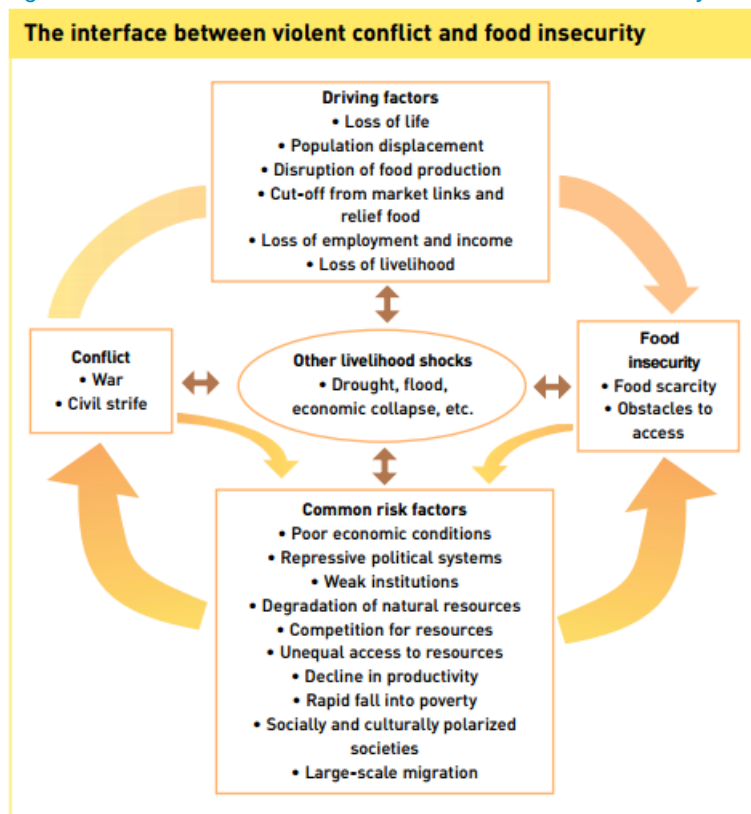
Moreover, in fragile areas with recurring conflicts, mortality caused by food insecurity and famine far exceeds deaths directly caused by violence (FAO, IFAD & WFP, 2015). The effects of conflict-induced food insecurity are both immediate and long term. Children in Burundi and Zimbabwe are significantly shorter (stunted) than others after experiencing violent conflict. Their health, education and productivity are affected throughout their lives (Brinkman & Hendrix, 2011).

¹ It is clear that migration is closely linked to conflict and food insecurity and is often overlooked by most literature. In the Appendix, links between food security and migration are briefly investigated.

Linkages between food insecurity and violent conflict

As food insecurity can be the cause as well as the consequence of conflict, the interface between food insecurity and conflict has critical implications for food security and conflict prevention programmes (FAO, 2002). In FAO's 2002 publication, "The state of food insecurity in the world", a figure was presented in order to capture the complex linkages between food insecurity and conflict (see Figure 1).

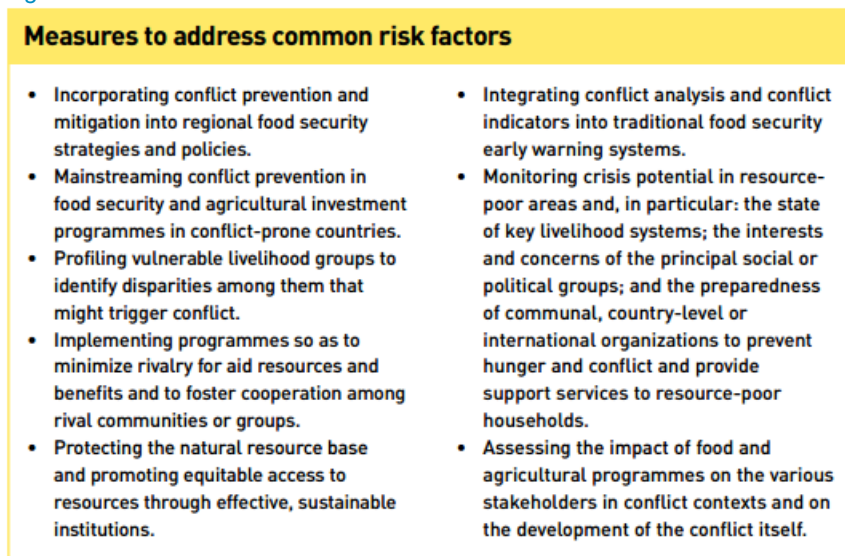
Figure 1: The interface between violent conflict and food insecurity



Source: FAO, 2002.

Figure 1 suggests that food insecurity and conflict are both consequences of a common set of risk factors. Common risks require coordinated action. This indicates that food security interventions and agricultural policies should take into account conflict prevention in conflict-prone areas. FAO (2002) also recommended measures that tackle common risk factors (see Figure 2).

Figure 2: Measures to address common risk factors



Source: FAO, 2002.

A closer look at how food security contributes to stability at national and household levels

Protracted crises (recurring conflicts) have become an increasing global problem and negatively impact food security and nutrition. Since food insecurity is one of the courses of conflict, a lot of literature has inferred that tackling food insecurity contributes to conflict prevention and that food security interventions may contribute to reduce instability. Breisinger et al. (2014) pointed out that building resilience to conflict through food security policies and programmes “helps countries and households to prevent, anticipate, prepare for, cope with, and recover from conflicts, not only bounce back to where they were before the conflicts occurred but become even better off”. They further elaborated such concepts at the national level and the household level (see Figure 3). According to Breisinger et al. (2014), building resilience to conflict through food security policies at the national level is mainly related to macroeconomic stability, sector policies and governance. Good examples of well-implemented policies are public spending that supports economic growth and job creation, institutions that include people in the process of governing, and social safety nets that are targeted for the poor. Countries with weak governance are more vulnerable to shocks. Building resilience to conflict through food security policies at the household level is mainly related to the motivation to participate in conflicts and the opportunity costs of doing so. Good examples of food security policies and interventions are employment creation programmes for the poor, targeted social safety nets, and specific health and nutrition programmes (Breisinger et al., 2014).

Figure 3: The conflict resiliency – food security framework



Source: Breisinger et al., 2014.

But where is the evidence?

Given that food security interventions are highly context specific, four case studies (Yemen, Egypt, Somalia, and Sudan) are described by Breisinger et al. in an attempt to show how specific food security interventions contribute to build resilient society. However, none of the cases provide evidence that proves food security programmes do contribute to stability. For example, the Yemen case showed that there is a positive association between the levels of conflict and food insecurity but fails to prove that the increase of food security and per capita incomes after the ease of some major conflicts is mainly due to food security interventions. The case showed that Yemenis reached an agreement for a peaceful change in 2014 to indicate that peace is expected to follow. It further recommends how to build resilience through the National Food Security Strategy (NFSS) instead of showing that the NFSS has significantly contributed to building resilience (or peace), as the reader may logically expect such evidence. Such pattern is much the same with the other three cases as only policy recommendations are drawn after the approval of positive association between food insecurity and conflict.

Motives of an individual to join conflict and opportunity costs

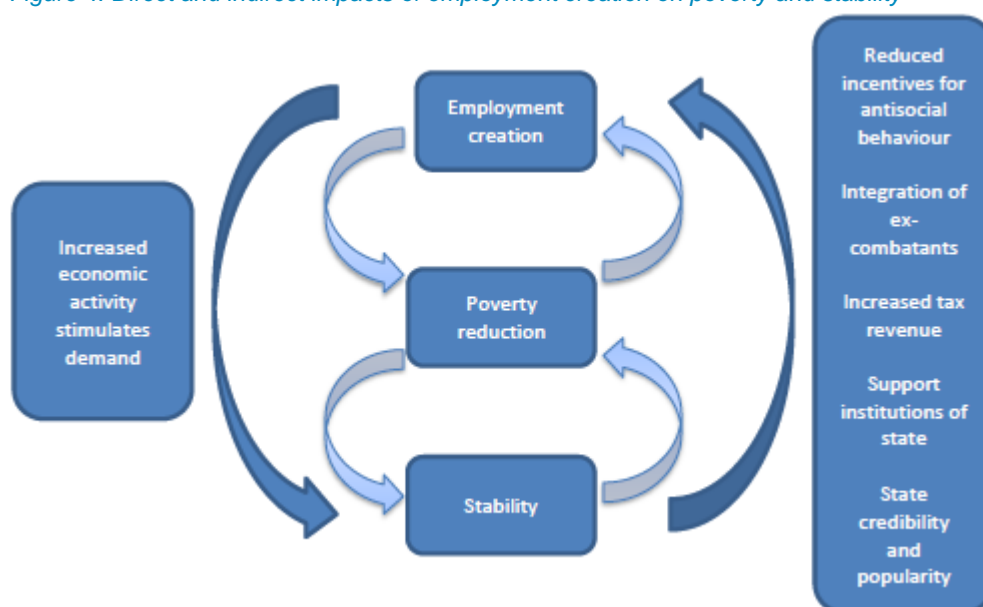
According to Brinkman and Hendrix (2011), the linkages between food insecurity to conflict lack micro-foundational evidence that is based on actions of individuals to explain how the mechanism works. However, many theories explain this from the perspective of motivation and the opportunity cost of an individual to join the conflict. Food insecurity leads to economic and social grievances that provides motivation to rebel (Lagi et al., 2011). Under this circumstance, an individual associates the benefits of engaging in predation with protection from violence and material gains such as food, clothing, shelter, etc. (Brinkman and Hendrix, 2011). These benefits clearly outweigh the costs of joining the conflict, which are associated with scarce income and survival opportunities of an individual (Taeb, 2004). Therefore, better economic conditions, such as sufficient income and decent rural employment, reduce the likelihood that an individual will join the rebellion (Taeb, 2004).

Employment and stability

As was concluded in the last paragraph that decent rural employment might reduce the likelihood of an individual joining the rebellion, this section shall further explore how employment contributes to stability.

It was indicated in 2011's World Development Report that a lack of employment opportunities threatens post-conflict recovery and stability (World Bank, 2011). The effects of employment on stability are that it reintegrates ex-combatants and reduces chances that they return to rebellion groups. Moreover, employment contributes to social inclusion and cohesion in fractured communities that has long-term impacts on building a resilient society (Ralston, 2014). Ralston (2014) further argued that employment is a catalyst for further economic development such as income growth, poverty reduction and improved living standards. Moreover, employment creation generates an increased tax revenue that supports the institutions and processes critical for the effective functioning of a state (ILO, 2009; World Bank, 2011). All these casual relationships are captured by an extensive literature review conducted by ODI in searching for evidence on the impact of employment creation on stability and poverty reduction in fragile areas (Holmes et al., 2013). In their study, Holmes et al. presented the cycle of direct and indirect positive impacts of employment creation on stability and poverty reduction as anticipated in the literature (see Figure 4). In Figure 4, it is assumed that employment creation contributes to a virtuous cycle of poverty reduction and improved stability, with mutually reinforcing outcomes.

Figure 4: Direct and indirect impacts of employment creation on poverty and stability



Source: Holmes et al., 2013.

However, a few important pieces of literature pointed out the lacking evidence in support of positive impacts of employment creation on stability (Holmes et al., 2013; Ralston, 2014; Brück et al., 2015). As Holmes et al. (2013) summarized in their study:

Despite the centrality of employment creation as an instrument to promote stability in the fragile areas policy discourse, no robust qualitative or quantitative evidence was found to illustrate this relationship in the literature. Currently there is not a strong evidence base from which to assess the efficacy of direct employment, enabling macro-policies, or the promotion of self-employment on stability. This absence of evidence is generally acknowledged within the policy community. (Holmes et al., 2013, p.26)

They eventually concluded that there is a significant research gap in terms of providing empirical evidence on the impact of employment creation interventions on poverty and stability in fragile areas.

Brück et al. (2015) concluded in their research that the most important gap in the academic literature on employment and stability relates to the influence of perceptions, expectations and coping strategies on stability, and the effect that stability may have on social capital and productivity is the least researched. There is an urgent need for more and better micro-level data to bolster understanding of the linkages between conflict and employment.

Ralston (2014) concluded in her study that although micro-level data in Afghanistan, Iraq and the Philippines show a robust negative correlation between unemployment and violence, more needs to be understood about how job creation programmes support stabilization and recovery outcomes in practice.

Employment and food security

Many countries experiencing recurring conflicts depend heavily on agriculture, such as South Sudan, Yemen, Burundi, Afghanistan, Chad, etc. (Taeb, 2004). Improving the food security situation in these countries requires not only economic growth and higher income, but also, more importantly, adequate access to adequate food. Agriculture in the countries that are vulnerable to conflict account for the largest portion of employable economic activity. A large amount of unemployed rural youth seeking income-earning opportunities are often recruited by the armed groups to join conflicts. Hence agricultural development, as part of economic and social changes that provide the vulnerable groups better livelihood, is keen to enhance food security and reach a stable environment in fragile areas (Taeb, 2004; Breisinger et al., 2014). Therefore, creating new jobs and upgrading the conditions of existing ones should pay closer attention to rural areas (FAO, 2012).

There are strong linkages between rural employment² and the four dimensions of food security (see Figures 5) (FAO, 2012). It is believed that a decent employment generates income that not only provides access to food but also increases opportunity costs of those who might engage in conflicts. Decent rural employment³ is essential for sustainably increasing agricultural productivity and improving rural poor's access to food (FAO, 2012). Therefore, only employment which is decent can present a powerful driver for long-term food security.

Figure 5: Linkages between decent rural employment and the four dimensions of food security



Source: FAO, 2012.

Summary

The objective of this article is to provide an overview on linkages between food security and stability and to look for evidence that supports the assumption that food security interventions contribute to stability. A collection of literature suggested that food insecurity can be a cause as well as a consequence of conflict. Food insecurity (especially high food prices) as one of the factors that cause conflict, is a threat and impact multiplier for violent conflict. Other factors are poverty, under-employment of young men, income inequality, land conflict, scarcity of natural resources, natural disasters, and poor governance. Conflict is the main underlying cause that leads to food insecurity. The direct consequences of conflict on food security are the displacement of people and the disruption of agricultural

² Rural employment here refers to any activity, occupation, work, business or service performed by rural people for remuneration, profit or family gain, or by force, in cash or kind, including under a contract of hire, written or oral, expressed or implied, and regardless of whether the activity is performed on a self-directed, part-time, full-time or casual basis. Rural employment is comprised of **agricultural** and **non-agricultural employment**, and it includes production of economic goods and services for own and household consumption (FAO, 2011).

³ Decent rural employment here refers to opportunities for productive work that delivers a fair income, security in the workplace and social protection for families; better prospects for personal development and social integration; freedom for people to express their concerns, to organize and participate in the decisions that affect their lives; and equality of opportunity and treatment for all women and men (ILO, 2006).

production and food distribution. Other consequences are stunted children and their affected education and productivity.

The conflict resiliency, the food security framework recommended by IFPRI, suggests that building resilience through food security at the national level requires country-specific policies and inclusiveness in the decision-making processes and to provide adequate services. Household-level resilience requires specific programmes to address factors related to the motivation to participate in conflicts and the opportunity costs to do so. It is assumed that employment opportunities not only prevent people (especially unemployed rural youth) in joining rebellion groups, but also promote further economic development due to income generation. There are strong linkages between rural employment and the four dimensions of food security. It is believed that creating new jobs and upgrading the conditions of existing ones are powerful drivers for long-term food security.

However, some literature concluded that a significant research gap exists in providing empirical evidence on the impact of employment creation on poverty and stability in fragile areas.

Policy recommendations⁴

1. It is very important to *assess the impacts* of different types of employment creation interventions on stability as the first step in developing a better understanding of what works and what does not. Such assessment should be based on rigorous, qualitative and quantitative methodologies.⁵
2. Food price stabilization measures are important tools to prevent food prices from rising and causing unrest. *Safety nets* are critical instruments that mitigate the negative effect of short-term spikes in food prices on food security, prevents conflicts and contributes to long-term development. Moreover, safety nets have positive impacts on equality issues, especially on unemployed young men.⁶
3. It is important to *integrate food security interventions into peacebuilding approaches*. Food security interventions generate peace dividends, reduce conflict drivers, enhance social cohesion, and build legitimacy and capacity of governments.⁷
4. Policy recommendations on *food security interventions* include the following⁸:
 - a. The design of policy and programme should take into account the interdependencies between different types of shock such as economic crisis, price shocks, and natural disasters.
 - b. Reform subsidy systems would lead to savings that could be invested in more targeted food security interventions as well as job creating initiatives in poorer areas.
 - c. Climate change adaptation should be an integral part of conflict prevention and food-security strategies in part.
 - d. Price information systems and safety nets may help people better cope with droughts and related price shocks.
 - e. Functioning and effective institutions are essential to build resilience to conflict.
 - f. Interventions should pay attention to the integration of returnees (either refugees or internally displaced persons) and ex-combatants.

⁴ Policy recommendations listed here are summarized from the literature referred to in this article.

⁵ Holmes et al. (2013), Ralston (2014), and Brück et al. (2015).

⁶ Brinkman and Hendrix (2011).

⁷ Hendrix and Brinkman (2013).

⁸ Breisinger et al. (2014).

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Appendix: Linking Migration with food security

There exists a research gap in terms of investigating the linkages between food insecurity, conflict, and migration. According to Crush (2013), migration and food security are both issues that have the world's current attention but neither agenda looks at each other. One of the main reason is the fragmented nature of the institutional architecture concerned with both issues. The thematic disconnect is also institutional. However, both agendas recognize rapid urbanization. The rapid urban transition is largely due to internal migration, natural population increase, and cross-border movement within the region (Crush, 2013).

If food insecurity is one of the reasons that lead to conflict and migration as one of the consequences of conflict, not only people that are displaced face the threats of food insecurity, but also the sudden increase in population of the region puts pressure on the local food supply that may push up the food prices and spark conflicts.

Crush (2013) found that only 13% of households were made up entirely of people born in the city they lived in. Mixed households accounted for 49% and the remaining 38% consisted entirely migrants. Urban migrant households are more severely food insecure than others. Moreover, positive impacts of migration on food security are (1) remittance flows increase rural households' source of income that may reduce poverty and promote development; (2) diasporas can contribute to development in "home" countries, through investment, knowledge exchange, philanthropy and other means; (3) temporary circular migration produces a "triple win" through benefiting countries of origin, meeting the labor needs of destination countries, and helping migrants themselves who are able to find jobs.

Relevant research questions to this nexus could be: (1) Are migrants in the city more or less food insecure than other urban dwellers and why? (2) Does having migrants in cities reduce the food insecurity of people in the countryside? (3) How are the hungry cities of the global south to be fed? Is there a role for policy intervention and what kinds of policies?

Reference:

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