

Food Systems in Protracted Crises: Strengthening Resilience against **Shocks and Conflicts**

Evert-jan Quak Institute of Development Studies (IDS) 25 September 2018

This K4D Helpdesk report was used as the input report for the K4D Learning Journey on Changing Food Systems' second thematic session on 'Food Systems in the Context of Protracted Crises' (4 October 2018, London).

Question

What are the characteristics for the working of food systems in the context of protracted crises? What is the evidence on good practice and lessons learned of interventions and solution seeking (e.g. new technologies) to strengthen resilience and effectiveness of food systems in situations of protracted crises?

Contents

- 1. Summary
- 2. The characteristics of protracted crisis
- 3. The links between protracted crises and food insecurity and malnutrition
- 4. How are food systems affected by protracted crises?
- 5. Interventions to build resilient food systems in protracted crises
- 6. References
- 7. Appendix
- Acknowledgement

The K4D helpdesk service provides brief summaries of current research, evidence, and lessons learned. Helpdesk reports are not rigorous or systematic reviews; they are intended to provide an introduction to the most important evidence related to a research question. They draw on a rapid deskbased review of published literature and consultation with subject specialists.

Helpdesk reports are commissioned by the UK Department for International Development and other Government departments, but the views and opinions expressed do not necessarily reflect those of DFID, the UK Government, K4D or any other contributing organisation. For further information, please contact helpdesk@k4d.info.

1. Summary

Food systems are changing and will continue to change in the near future due to many transformative drivers, such as population growth, globalisation, climate change, and pollution. The K4D DFID Learning Journey on Changing Food Systems examines several of these drivers. A key trend in food systems is that food insecurity and malnutrition are increasingly concentrated in countries with protracted crises. This rapid literature review provides an overview of the recent evidence on what food systems look like in protracted crises and the interventions mentioned in the literature to build more resilient food systems against shocks and conflicts.

Key trends

According to the FAO (2018, p.5), 40% more of ongoing food crises are considered to be protracted than in 1990; approximately half a billion people are currently affected by protracted crises, mainly situated in sub-Saharan Africa and the Middle East; and, the majority of humanitarian assistance between 2005 and 2015 was directed at protracted crises. Almost all countries going through a protracted crisis (the FAO currently counts 19 countries) have experienced some form of violent conflict over a prolonged period and 13 countries are still affected by conflict. Overall:

- The number of conflicts is increasing and the world is becoming more violent, in increasingly intractable ways (IEP, 2018).
- Data from the Uppsala Conflict Data Programme shows that non-state conflicts have increased by 193% from 2010 to 2017, surpassing all other types of conflict to the highest level since it started measuring conflicts in 1975.
- Since 2010, there has been a rising trend in the proportion of people in countries with protracted crises facing undernourishment, whereas it has been declining for all other developing countries (FAO, 2016b). This shows that conflict compounded by fragility and other stress factors leading to protracted crises substantially increases the likelihood of undernourishment.
- Almost 122 million, or 75%, of stunted children under age five live in countries affected by conflict (FAO/WFP, 2017).

Food insecurity is not only a consequence of conflict, but can also fuel and drive conflicts, especially in the presence of unstable political regimes, a youth bulge, stunted economic development, slow or falling economic growth, and high inequality. Countries with protracted crises also often show high vulnerability to extreme weather conditions, climate change and agricultural productivity losses. Some literature shows that climate change in specific local circumstances, and in relation with other aspects, may be linked with the rise in conflicts. The high vulnerability to climate change impacts in countries with protracted crises is for a large part due to weak governance and broken institutions that cope inadequately with natural disasters. IFPRI (2015) concludes that global chronic undernutrition becomes increasingly concentrated in conflict-affected countries (IFPRI, 2015).

Food systems in protracted crises

Most of the literature on protracted crises looks at separate parts of the food system, mainly related to agriculture. However, there is an acknowledgement that food insecurity, undernutrition,

vulnerabilities to shocks and conflicts, extreme poverty and youth unemployment are all related to food systems. In countries in protracted crises, food markets and input markets still exist; however, actors have to work differently due to high risks, insecure situations (vulnerable to shocks and conflicts) and mistrust, owing to a complex mix of weak governance, broken local institutions and influx of emergency assistance (e.g. Hillen et al., 2014).

While stressing the importance of access to agriculture inputs, food markets, service providers and infrastructure as prerequisites for successful and efficient food systems, this report shows that all these features of chain processes are heavily affected in countries in protracted crises. Horizontal and vertical linkages in food systems are broken or shortened. For example, input use is low and often of bad quality, inputs are unavailable, or only available through informal institutional arrangements. Selling produce is often done through incidental transactions, with producers being highly dependent on middlemen. Bad and unsafe roads, high transaction costs and lack of electricity in these contexts decrease the quality and increase the costs on goods that flow along these chains. They also show a large involvement of aid actors, for issues such as financial services, credit, savings and legal support. In countries in protracted crises, formal financial institutions are either lacking or not fully equipped to deal with the task of supporting stakeholders in food value chains to increase their produce, quality, and access and position in markets. Furthermore, government institutions for quality monitoring or extension services are often ill-equipped to fulfil most, or indeed any of these tasks. However, actors have adapted to these circumstances by making use of other institutional arrangements, building on kinship, social networks, social institutions and others. Socio-cultural institutions form part of the business environment and determine entry and scope of participation in the value chain.

In crises or after severe shock situations, men, women, boys and girls are exposed to different types of risks and challenges, and have specific coping strategies related to food and nutrition security. The literature shows that the normalisation of violence, especially in prolonged conflict settings, exposes men to a greater risk to loss of life or life-long disabilities. As a result, the engagement of men in conflict puts greater responsibility in the hands of women in sustaining the livelihood of the household, including for the access to food, nutrition and health care of household members (e.g. FAO/WFP, 2017). Furthermore, conflict situations are often characterised by increased sexual violence, mostly targeted at women. Such violence and trauma not only cause direct harm to women, but also tend to affect their ability to support their families due to reducing the capacity and productivity of survivors as a result of illness, injury, stigma and discrimination, and this result in food security issues. Only in cases where women gain more control of resources during crises, household food consumption tends to increase and child nutrition improve.

Lessons learned from interventions

The literature shows that interventions in food systems that increase food security and nutrition (also through job creation, access to knowledge and finance) are important to reduce violence and conflict and to become more resilient to shocks. For the best outcome, interventions should be conflict sensitive, nutrition-sensitive, gender-sensitive and climate change sensitive. Furthermore, the literature shows three pathways in which such interventions should work: livelihood support that addresses the root causes of conflicts and conflict stressors, and that promotes re-engagement in productive economic activities, including cash transfers and social protection; facilitated community-based approaches that help build relationships and social cohesion, improving aspirations, confidence and trust; interventions that contribute to building the

capacity of institutions and local actors in the food system, improving governance and entrepreneurship to deliver equitable services (FAO/WFP, 2017, p.62). Specific attention should be given to:

- Linking emergency assistance and food aid to development and vice versa (e.g. local purchasing, cash based approaches). Encouraging local procurement and the use of local organisations in the implementation of humanitarian food assistance and livelihood programmes to support economic recovery and development is essential. Any external assistance should aim to build on existing traditional coping mechanisms to maintain agricultural production and avoid establishing parallel systems that may undermine existing capacities.
- Implementing social protection schemes. Social protection, including in-kind and cash assistance, can offer valuable peace dividends and contribute to restoring trust in government and rebuilding social capital. This could keep purchasing power at a certain level, it could help food producers to continue to invest in their crops, fishery and livestock, and could (if well adopted) be linked with nutrition and health. However, many countries with protracted crisis have no social protection scheme in place or may have longstanding, politically difficult to revoke social protection policies that benefit very small and/or better-off populations. Even where this is not the case, there may be a greater risk of corruption, diversion and capture of cash by elites or by armed groups. In such cases, several emergency programmes (cash, vouchers, and cash for work programmes in emergencies) can be adapted to develop nascent structures able to respond in the context of predictable and recurrent risks. These schemes should be shock-responsive and be seen through a nutrition-lens.
- Private sector development in food systems. One of the main objectives of private sector development in protracted crises is to increase market and job opportunities (in particular for the youth). As the food economy is one of the most promising sectors in most countries in protracted crises, agricultural and food value chain development poses opportunities for youth employment. However, the linkages between youth un- or underemployment and violence and instability are diverse and complex, and are therefore often misunderstood. In some cases, such limited understanding of the matter has led to an overconfidence in employment creation as a panacea for peaceful reintegration. Applying a conflict-sensitive approach and taking into account the potential impact of fragility (including violent conflict) on value chains will be key to operationalise a long-term sustainable and inclusive approach to youth employment.
- Access to finance by building financial systems, but not with the aim to indebt the vulnerable even more. Cash transfers and vouchers and use of mobile technologies (e.g. for market information and disease reporting) are promising options to support rural livelihoods during protracted crises. Cash and voucher-based interventions (including production of animal feed for pastoralists, construction of dams and water holes) drastically reduce the cost for technical interventions in comparison to in-kind provision. However, El-Zoghbi et al. (2017) are critical about the reliance on voucher and other closed systems, as they do not link recipients to financial services. Interoperable payments systems or systems that connect multiple types of providers to the same system have to be developed. Remittances are also an important part of receiving cash in protracted crises. By increasing the safety and ease of sending money, payments services allow people to leverage their networks for support during challenging times. Therefore, investments in a resilient digital payments infrastructure need to be prioritised.

Developing the institutional environment. Increasing food subsidies is a favourite policy measure in times of crises, which helps keep poverty and food insecurity levels lower than they would otherwise be. However, IFPRI (2015) does not qualify such measures as resilience building, because they are not expected to help countries become better off. Going forward, reforming subsidy systems (e.g. by making them more efficient) would lead to savings that could be invested in more targeted food-security and nutrition interventions as well as job-creating initiatives in poorer areas. This in turn may contribute to creating more opportunities, especially for young people, reducing their motivation for participating in conflict (IFPRI, 2015). Implementation of regulations is also important for (re)building food systems to increase quality control and for food safety, which could create business opportunities. Furthermore, addressing historic grievances and injustices, in particular in response to local needs and restoring historic land rights are as essential to peacebuilding as economic goals. Enhanced service delivery only improved trust in public services if accompanied by improvements in other forms of societal trust, including through community participation in voicing grievances. At the same time, improved service delivery should not exacerbate inequalities in fragile situations, as this could risk re-igniting conflict.

2. The characteristics of protracted crisis

Protracted crises include situations of prolonged or recurrent crises and, according to the FAO (2016a, p.4), are among the most challenging contexts in which to fight hunger, malnutrition and poverty. Although each situation is different, the recurrent causes include both human-induced factors and natural hazards – often occurring simultaneously and reinforcing each other. While no internationally agreed definition exists for protracted crises, the characterisation provided in the State of Food Insecurity in the World (FAO/WFP, 2010, p.12) is now often used in literature as reference for protracted crises. It uses the definition of Harmer and Macrae (2004, p.1), which states that protracted crises are "those environments in which a significant proportion of the population is acutely vulnerable to death, disease and disruption of livelihoods over a prolonged period of time. The governance of these environments is usually very weak, with the state having a limited capacity to respond to, and mitigate, the threats to the population, or provide adequate levels of protection".

The FAO/WFP (2010, p.12) recognises that protracted crisis situations are not all alike, but they share some of the following characteristics.

- **Duration or longevity.** Afghanistan, Somalia and the Sudan, for example, have all been in one sort of crisis or another since the 1980s.
- **Conflict.** Conflict is a common characteristic, but conflict alone does not make for a protracted crisis, and could be a factor in only part of the country (e.g. Ethiopia or Uganda).
- Weak governance or public administration. This may simply be a lack of capacity in the face of overwhelming constraints, but may also reflect lack of political will to accord rights to all citizens.
- Unsustainable livelihood systems and poor food security outcomes. Protracted crises affect the four dimensions of food security (availability, access, stability, and utilisation) and the nutritional status of a significant number of people. Unsustainable livelihood systems are not just a symptom of protracted crises; deterioration in the

sustainability of livelihood systems can be a contributing factor to conflict, which may in turn trigger a protracted crisis.

• **Breakdown of local institutions.** This is often exacerbated by state fragility. Relatively sustainable customary institutional systems often break down under conditions of protracted crisis, but state-managed alternatives are rarely available to fill the gap.

40% more ongoing food crises are considered to be protracted than in 1990 (FAO, 2018, p.5). Of 46 countries and territories affected by conflict, the FAO currently identifies 19 countries with a protracted crisis situation. Of these, 14 have been in this category since 2010, 11 of which are in Africa (FAO et al., 2017, p.103). Approximately half a billion people are currently affected by protracted crises, mainly situated in sub-Saharan Africa and the Middle East (FAO, 2018, p.5). The 19 countries are: Afghanistan, Burundi, Central African Republic, Chad, Democratic People's Republic of Korea, Democratic Republic of the Congo, Djibouti, Eritrea, Ethiopia, Haiti, Kenya, Niger, Somalia, South Sudan, Sudan, Syrian Arab Republic, Yemen and Zimbabwe.

The 2014-2015 Global Food Policy states "global chronic undernutrition becomes increasingly concentrated in conflict-affected countries" (IFPRI, 2015, p.52). The latest figures of the FAO show that complex conflicts halted the progress made over many years to secure food and nutrition security (FAO et al., 2017, p.5). Significant population movements are also a feature for protracted crises, as they have international, regional and trans-boundary aspects and impacts, including the presence of refugees, who are often in protracted refugee situations (CFS, 2016, p.3). In 2016, over 65 million people worldwide were forcibly displaced – the highest number since the end of World War II – and the growth was mainly related to countries in protracted crises (UNHRC, 2016, p.6).¹

Some combination of conflict, occupation, terrorism, man-made and natural disasters, natural resource pressures, climate change, inequalities, prevalence of poverty, and governance factors are often underlying causes of food insecurity and undernutrition in protracted crises (CFS, 2016, p.2). The majority of humanitarian assistance between 2005 and 2015 was directed at protracted crises (FAO, 2018, p.5). Two key issues can be linked to the challenges for interventions in countries with protracted crises (FAO/WFP, 2010, p.16):

- The way in which the development community perceives protracted crises and its relationship to the development process. Development is sometimes viewed as a gradual improvement in quality of life. Disasters or acute emergencies (briefly) interrupt this trend, but the expectation is that a situation will return to the "normal" upward trend once the crisis is over. However, in protracted crises the trend line is likely to be unpredictable for an extended period: not necessarily sharply downwards as in an acute emergency, but not upwards either at least not for a long time.
- The way in which aid is used to respond to protracted crises (aid architecture). The architecture of intervention in a protracted crisis is typically similar to that designed for short crises followed by a return to some degree of long-term improvement. "Yet this clearly does not fit the characteristics of most protracted crisis situations. International engagement in protracted crises is not well matched to the problems encountered, and

¹ The growth was concentrated between 2012 and 2015, driven mainly by the Syrian conflict along with other conflicts in the region such as in Iraq and Yemen, as well as in sub-Saharan Africa including Burundi, the Central African Republic, the Democratic Republic of the Congo, South Sudan and Sudan (UNHCR, 2016).

the approach used is not sufficiently flexible to adjust to changing realities" (FAO/WFP, 2010, p.17).

3. The links between protracted crises and food insecurity and malnutrition

Conflict and food security

The number of conflicts is increasing and the world is becoming more violent, in increasingly intractable ways (OECD, 2016, p.20). It is estimated that in 2030 60% of the global poor will be in fragile contexts (OECD, 2016, p.20-21). The 2018 Global Peace Index Report concluded that the world is less peaceful now than it has been in the last decade, marking the fourth successive year of deterioration (IEP, 2018, p.2). Data from the Uppsala Conflict Data Programme² shows that non-state conflicts – between two organised armed groups of which neither is the government or a state – have increased by 193% from 2010 to 2017, surpassing all other types of conflict to the highest level since it started measuring conflicts in 1975. State-based conflict also rose by 58% in the same period. "The number of conflicts and of displaced populations caused by internal or intrastate conflict are signs that current trends are likely to continue over the coming years" (FAO/WFP, 2017, p.33).

Almost all countries with a protracted crisis have experienced some form of violent conflict over prolonged periods and 13 countries are still affected by conflict (FAO et al., 2017, p.103). These countries have suffered from conflict for 10.5 years on average over the last two decades. In six countries, conflict has been ongoing for at least 18 of the last 20 years (FAO et al., 2017, p.31). Most of these countries have witnessed multiple types of conflict over time, with many experiencing different forms simultaneously and/or overlapping, and in varying geographical locations. Almost all have experienced periods of low-intensity conflict, often combined with periods of higher-intensity violent conflict (i.e. war or limited war) (FAO et al., 2017, p.31).

Since around 2010, there has been a rising trend in the proportion of people in countries with protracted crises that face undernourishment, whereas this has been declining for all other developing countries in the same period (FAO, 2016b, p.2). In 2005-07 the prevalence of undernourishment as a percentage of the total population in the countries with protracted crises was 37%, rising to 39% in 2010-12 (see figure 1). More generally, in 2016, it was measured that on average, 24% of the population in all countries affected by conflict were undernourished, compared to 16% for all countries unaffected by conflict (see figure 2). Data that looks at the population-weighted average of the prevalence of undernourishment in countries in protracted crises was slightly lower, but still shows that conflict compounded by fragility and other stress factors leading to protracted crises substantially increases the likelihood of undernourishment (see figure 3). The weighted average prevalence of undernourishment in the 46 countries affected by conflict. Where compounded by conditions of fragility, the prevalence is between 11-18% higher, and for protracted crises the prevalence is about 2.5 times higher than for countries not affected by conflict (FAO et al., 2017, p.35).

² See on the website of the Uppsala Conflict Data Programme: http://ucdp.uu.se/



Figure 1. Prevalence of undernourishment (%) (Source: FAO, 2016b, p.2)

Figure 2. Prevalence of undernourishment (%) (Source: FAO et al., 2017, p.36)



NOTES: Prevalence and number of undernourished people in low- and middle-income countries with and without conflict, 2016. See Annex 2 (p. 102) for the list of countries affected by conflict, and for definitions. SOURCE: UCDP for classification of countries affected and not affected by conflict; FAO for data on prevalence of undernourishment.



Figure 3. The population-weighted average of the prevalence of undernourishment (Source: FAO et al., 2017, p.37)

Almost 122 million, or 75%, of stunted children under age five live in countries affected by conflict (FAO et al., 2017, p.36). "[W]hile most countries have achieved significant 25-year gains in reducing hunger and undernutrition, such progress has stagnated or deteriorated in most countries experiencing conflict. Conflict is a key factor explaining the apparent reversal in the long-term declining trend in global hunger, thereby posing a major challenge to ending hunger and malnutrition" (FAO et al., 2017, p.30). The result is an increasing concentration of hunger and undernutrition in countries in fragile situations and those affected by conflict, in particular in the context of protracted crises (see Map 1 in the Appendix). All 19 countries in protracted crises are amongst the countries with the worst situation to produce sufficiently their own food (in total a list of 34 countries).³ Furthermore, the Global Report on Food Crises 2017 indicates that more than 15.3 million people were displaced by six of the worst food crises (Syria, Yemen, Iraq, Southern Sudan, North East Nigeria, Somalia) triggered by conflict in 2016 (FSIN, 2017, p.14). A recent study of the World Food Programme (WFP, 2017, p.6) found that countries with the highest levels of food insecurity coupled with armed conflict also have the highest outward migration of refugees. The study estimates that refugee outflows increase by 0.4% for each additional year of conflict, and by 1.9% for each additional year of food insecurity.

There is a consensus in the literature that confirms that there is a clear link between conflicts and food and nutrition insecurity. The World Bank (2011) showed that conflict reduces food availability by destroying agricultural assets and infrastructure. Conflict also often increases the security risks associated with accessing food markets, thus driving up local food prices. This negative impact on food availability is accompanied by conflicts' detrimental impacts on household-level food security, particularly on key determinants of food insecurity such as nutrition, health, and education. Households reduce production during violent conflict to reduce their risk of being targeted by armed groups. While this reflects the complex navigation of risk, it

³ World Atlas: https://www.worldatlas.com/articles/the-countries-importing-the-most-food-in-the-world.html

can also mean overall stocks of food can suffer (UNDP, 2012, p. 43). Research on violent conflict and displacement in the Central African Republic, shows that communities reported that households that had been displaced as a result of conflict were less likely to re-invest in household assets or plant the full amount of seed to which they had access, due to fear of a future cycle of conflict and the potential for further displacement (Concern, 2018, p.19).

Food insecurity is not only a consequence of conflict, but can fuel and drive conflicts, especially in the presence of unstable political regimes, a youth bulge, stunted economic development, slow or falling economic growth, and high inequality (Maystadt et al., 2014; Brinkman & Hendrix, 2011; Pinstrup-Andersen & Shimokawa 2008). The WFP (2017, p.7) found that when coupled with poverty, food insecurity increases the likelihood and intensity of armed conflicts, thus creating a potential downward spiral of further refugee outflows. In particular, increases in food prices have greatly increased the risk of political unrest and conflicts (Arezki & Brückner, 2011; Bellemare 2011). Maystadt et al. (2014) showed that food insecurity at the national and household levels is a major cause of conflict in Arab countries - more so than in the rest of the world. However, the literature is also clear that the causes of armed conflict go far beyond food insecurity and malnutrition alone. The World Bank's 2011 World Development Report concluded that there is no simple causal explanation for conflict. The causes of conflict are complex, nonlinear, and mediated by a host of factors, including political institutions and economic structures (World Bank, 2011).

The impacts of climate change, natural disasters and weak governance on food security in protracted crises

Conflict is one of the main characteristics of all countries with protracted crises. But it is not the only one. They have been prone to various natural disasters, weather shocks, and other impacts of climate change (see table in appendix). For the period 2006-2016 the agricultural sector counted for 23% of the total natural disaster damage to assets and infrastructure and losses in production in all sectors for Asia, Africa and Latin America (FAO, 2018, p.17). The costs of agricultural production losses over the same period are higher (31% of all sectors) than the damage to assets and infrastructure (16% of all sectors); furthermore, drought was by far the most damaging factor, responsible for 83% of the total damage and loss in agriculture as measured as a percentage of all sectors (FAO, 2018, p.17 – see also figures in appendix). The data also shows that between 2006 and 2016 crops suffered the most from floods (causing 65% of total damage and loss), fisheries and aquaculture suffer mainly from floods (44%) and storms (38%), and the forestry sector suffers the most from storms (counting for 64% of all the damage and loss) (FAO, 2018, p.19 – see also figures in appendix).

The literature shows that climate-related disasters are increasing in number and severity (Guha-Sapir et al., 2017), with more people affected by natural disasters between 1990 and 2016. One study by the Centre for Global Development (Wheeler, 2011) shows that from the 50 countries that face the most direct risk of severe weather, 9 are in protracted crises. However, by looking at the overall vulnerability to severe weather conditions 13 countries with protracted crises are at the highest risk (topped by Somalia). Nearly all countries in protracted crises are in the top 25 of countries that are the most vulnerable for agricultural productivity losses due to climate change (topped by Somalia). Measuring on the overall vulnerability for the impact of climate change

there are 12 countries with protracted crises in the top 20.⁴ The Global Report on Food Crises 2017 also shows the vulnerability of countries in protracted crises to extreme weather conditions in 2016 (FSIN, 2017).

The literature on the impact of climate change on conflict is divided. East African data show that extreme rainfall variation in either direction — both too much or too little — increases conflict risks (Raleigh & Kniverton, 2012). Fluctuations in livestock prices and changes in local seasonal migrations, which are both influenced by rainfall, are associated with risks of violence (Maystadt & Ecker, 2014). However, recent attempts to identify climate change as a driver of large-scale armed conflict have been criticised, with the plea that connections are complicated and highly nuanced (Raleigh et al., 2015). Recent studies disagree on both the magnitude of the impact of climate change on conflict and the direction of the effect. One noted that "research to date has failed to converge on a specific and direct association between climate and violent conflict" (Buhaug et al., 2014, 394–395). However, there is data that shows that the likelihood of conflicts increases with the length of drought periods (Von Uexkull et al., 2016).

Hence, from the literature it is clear that countries with protracted crises are highly vulnerable to the impacts of climate change. The literature also shows that climate change could, in specific local circumstances and in relation with other aspects, be linked with the rise in conflicts. This raises the question, why are these countries extra vulnerable to the impacts of climate change? One of the main conclusions is the weak or broken institutions that cope inadequately with natural disasters by reducing distress among the populations. For example, did the protracted drought in Syria from 2006–2010 help spark the conflict that erupted in 2011? Researchers' findings on Syria detail the gravity of drought and groundwater depletion, and suggest that these elements might have contributed to the 2011 unrest (Kelley et al. 2015). One researcher, De Châtel (2014), argues that government policies, including bureaucrats' long-term mismanagement of natural resources, were to blame, as small farmers were neglected and impoverished combined with neglecting the humanitarian crisis and food price increases. With drought continuing in the region and without adequate interventions Syria could face continued food insecurity and conflict in the country. Zurayk (2014b) writes: "The drought will further damage the resilience of the people who have stayed behind, and who are not on the distribution list for food aid. These farming communities rely on whatever the land produces to survive."

In general, in protracted crisis, constraints, shocks or stresses often overwhelm the capacity of governance institutions and this may also reflect deficits of representation, legitimacy or accountability of these institutions, or lack of political will to address this problem. The Work Bank Worldwide Governance Indicators, indeed show the weak governance structure of most of the countries with protracted crises as they score the lowest levels of most of the countries.⁵ There is an exception for Kenya, Djibouti, Ethiopia, Niger and Liberia (although not for all indicators). In the Legatum Prosperity Index 2017 the index on governance shows ten countries with protracted crises ranked as having the weakest governance (although South Sudan, Eritrea, North Korea and Syria were not measured in the index).⁶

⁴ 1. Somalia; 2. Burundi; 3. Myanmar; 4. Central African Republic; 5. Eritrea; 6. Guinea-Bissau; 7. Zimbabwe; 8. Liberia; 9. Ethiopia; 10. Democratic Republic of the Congo; 11. Afghanistan; 12. Niger; 13. Rwanda; 14. Sudan; 15. Malawi; 16. Sierra Leone; 17. Bangladesh; 18. Togo; 19. Chad; 20. Guinea.

⁵ See for more information on the WGI webpage: http://info.worldbank.org/governance/wgi/#home

⁶ See for more information: https://www.prosperity.com/

4. How are food systems affected by protracted crises?

Problem setting

Where the part above looks to conflict and shocks in relation to food security in countries in protracted crises, this part of the report shows how actors in food systems are affected by protracted crises. Livelihoods and food systems are often severely disrupted in protracted crises. Some studies that look at the working of value chains during and after periods of conflict, show that conflict affects the value chain by a large negative effect on food markets, infrastructure, business environment, the lack of regulation and, in case of prolonged conflict, a lack of knowledge exchange among people that all affects the long-term competiveness of a chain (Hiller et al., 2014, p.23). For example, illegal checkpoints could force farmers and local brokers to pay 'taxes' that force them to raise their prices, thus shrinking the direct market for their goods. Duggleby et al. (2008, p.11) describe the effect of war-induced disruptions in Democratic Republic of the Congo, which led to the deterioration of infrastructure and market linkages, almost completely severing rural-urban relations and rendering cities completely dependent on imported goods. Wodon et al. (2008, p.48) note that for Burundi "most food crops are consumed with little or no processing. Industrial processing of food crops is almost totally non-existent at present following the total breakdown of the agro-processing sector during the conflict and the continuing absence of demand for processed products as local purchasing power is limited". Protracted displacement can lead to the loss of traditional agricultural knowledge and practice as it is often not passed on (Lautze et al, 2012, p.4).

Livestock: The trade in livestock in South Sudan became more difficult due to corruption, political instability and ethnic tensions that disrupted the movement of livestock to find traders (Hiller et al., 2014, p.23). Livestock markets such as cattle or camel markets are particularly under threat of attack because the unit cost per animal is very high. With protracted crises, the livestock sector not only faces disruption to livestock markets and value chains, but the reduction in access to veterinary services and inputs affects the health of animals, undermining pastoralist livelihoods, as well as the physical loss of productive assets due to conflict (FAO, 2016c, p.1).⁷ The impact of the Darfur crisis in Sudan shows that pastoralists in North Darfur lost over half of their livestock in the first three years of the conflict - around a quarter of their herd was looted while an even larger proportion died because poor security limited their access to feed and water supplies (FAO/WFP, 2010, p.18). "As the crisis became protracted, assets continued to be lost through a gradual process of attrition. As the economy shrank and freedom of movement declined, livelihood options inevitably became fewer. Many people became dependent on marginal subsistence activities" (FAO/WFP, 2010, p.18). In Kismavo district in Somalia, the average livestock holding - a key factor in determining households' resilience - decreased dramatically during the period 1988–2004 as a result of the protracted crisis. The average

⁷ "In Kenya, the livestock sector was most severely affected during the 2008–2011 droughts. In 2011, Kenya had the highest number of people in need of humanitarian assistance – 3.75 million. The droughts depleted pastures and water, especially in the arid and semi-arid land areas, resulting in the deterioration of livestock body condition and reduced immunity. This triggered massive migration of livestock to other regions with better water sources, and the congregation of migrating herds led to increased and widespread disease outbreaks in most parts of Kenya. Livestock mortality from starvation and disease affected 9% of livestock, while disease incidence reached more than 40% of herds in the affected districts. This has changed livestock composition and usage, and depressed livestock productivity, leading to food insecurity, loss of earnings, separation of families, environmental degradation and resource-based conflicts. In addition, high food prices have reduced the purchasing capacity of households and the terms of trade for pastoralists (50–60% below the five-year average)." Source: FAO, 2016c, p.3.

holding of households in the middle poverty quartiles fell from 6 to 2.5 tropical livestock units (Little, 2008).⁸

Crops: In eastern part of Democratic Republic of the Congo, the local crop productivity levels fell to a minimum for agriculture-based livelihoods as a result of insecurity and the repeated displacement of households: in North Kivu during the peak of the war, bean productivity fell 72%, that of manioc by 53% and bananas by 45% (Raeymaekers, 2008). The grape sector in Afghanistan shows how the conflict caused the breakdown of trust and social networks and led to high risk aversion. People do not want to collaborate and do not trust their neighbours; this makes it very difficult to improve the linkages in value chain that are needed to improve quality (Hiller, 2014, p.23).

Increase of risk and reduce in trust levels are important components within food systems in the context of protracted crises (Hiller et al., 2014, p.24).

- Risk increases for all actors during and after crisis, increasing transaction costs. As Grossmann et al. (2009, p.72) mention: "At the intermediate and micro levels, financial intermediaries and their service providers may be directly or indirectly affected by violence, for example due to declining business activities and eroding loan repayment discipline. Usually they will withdraw their services from conflict-affected regions. As a result, people's access to financial services becomes even more restricted".
- Trust among key stakeholders can be negatively influenced by on-going political and economic processes. "Conflict damages trust, and trust is one of the principle risk-mitigation factors that enable healthy economic relationships" (Channell, 2010, p.2). Socio-economic networks are broken, or reshuffled, by displacement processes. On the other hand, a shared exposure to violence may also increase levels of trust within a community (Besley & Persson, 2012). For example, migrants are able to make effective linkages that did not exist in pre-conflict years, and as such expand the possibilities of reaching new markets.

The literature shows that higher risk levels and less trust damage horizontal and vertical linkages within the food systems. Although this is not the case for all countries in protracted crises, civil society organisations and farmer and producer organisations are weak (Hiller et al., 2014, p.28). For example, farmer organisations lack market capacity as they are unable to aggregate commodities from members, suffer from transportation constraints due to bad infrastructure and furthermore lack warehouse and cleaning facilities and access to credit (Hiller et al., 2014, p.28). Even though producer organisations increase the horizontal linkages between producers, they cannot overcome their market access problems.

Agricultural production

In protracted crises, agricultural production is often physically damaged by conflict or natural disasters. Natural disasters are physically destructive, destroying or damaging crops and crop lands, physical infrastructure, storage facilities, seed stores, polytunnels, livestock shelters, irrigation systems, veterinary services, agricultural tools, equipment, and machinery for instance (Chapagain & Raizada, 2017, p. 2, 5; Daly et al, 2017, p. 218). The destruction or damage of seed storage means surviving seed is also more vulnerable to rains post-disaster (Chapagain &

⁸ 1 Tropical Livestock Unit (TLU) = 1 head of cattle equivalent.

Raizada, 2017, p. 8). Crops, livestock, and fisheries may be more vulnerable to diseases and pests post-disaster (Daly et al, 2017, p. 225).

In conflicts agriculture is sometimes deliberately targeted as a weapon of war. Ongoing conflicts such as in Syria, Iraq, and Yemen have seen agriculture being used as a weapon of war (RFSAN, 2016, p. 1). Produce in the field or in storage may be burned or plundered, stored seed for the next planting season destroyed, water resources and agricultural land polluted, equipment looted or damaged and livestock killed or stolen (Özerdem & Roberts, 2012, p.20; FAO, 2017, p.7; IMU, 2017, p.35; RFSAN, 2016, p.9; Kimenyi et al, 2014, p.23). Large scale aerial bombing can damage crops and kill or maim livestock; chemicals remaining after bombing can contaminate the soil and water; while unexploded bombs can restrict access to the land (Özerdem & Roberts, 2012, p. 20). Landmines also "prevent safe access to land for crop production, grazing, water, wood, and other resources long after fighting has ceased" (Özerdem & Roberts, 2012, p.20; Lautze et al, 2012, p.5).⁹ However, there is also evidence that farmers turn to non-food cash crops in countries in protracted crises, like qat cultivation for local consumption in Yemen¹⁰ or poppy cultivation for international drug trade in Afghanistan.¹¹

The changed demographics of the rural agricultural workforce may have an impact of the type of agricultural that is practiced post-conflict (Moore, 2017, p. 3). In Liberia, for example, the post-conflict workforce was mainly made up of women and over 50s who were less suited to reinstituting plantation-style agriculture and thus the majority of post-conflict agricultural production was small scale and largely for subsistence purposes (Moore, 2017, p. 3; see also Sierra Leone in Bolten, 2012, p. 237). However, in some cases the demobilisation of male combatants can result in women losing their agricultural sector jobs when the men return after war, which was the case in Nicaragua in 1988 (Young & Goldman, 2015, p. 402).¹²

Input markets

Low input usage leads to lower yield and less quality. In conflict-affected areas formal markets for inputs can be disrupted or credits in the form of input supplies becomes too risky. Inputs, such as improved seed varieties, chemical fertilisers, herbicides and pesticides are often more difficult to obtain in fragile states (Hiller et al., 2014). Local input markets, in particular seed markets, do not completely stop functioning during crisis, but in fact might take different forms. As Sperling and McGuire (2010, p.197) point out, local farmers in protracted crises tend to procure seeds from a range of different actors such as neighbours, family and informal markets. In Afghanistan, for example, the grape chain is affected by a lack of young plants to replace old and diseased plants. The few suppliers of pesticides and fertiliser have to cope with great mistrust by the farmers which makes it difficult to convince them of the benefits for production (Hiller et al., 2014, p.33). Furthermore, improved seed varieties are not always better than the varieties farmers rely on during crisis. Sperling and McGuire (2010, p.198) note that very often improved varieties do not respond well to the low-input conditions that they are used in, and local varieties in

⁹ See for more information in the K4D Helpdesk Report: Rohwerder, B. (2017). Supporting agriculture in protracted crises and rebuilding agriculture after conflict and disasters. K4D Helpdesk Report. Brighton, UK: Institute of Development Studies.
¹⁰ Read for example article in The Economist: https://www.economist.com/middle-east-and-africa/2018/01/04/the-drug-that-isstarving-vemen

¹¹ Recent source on the poppy harvest: https://www.rferl.org/a/afghan-poppy-harvest/29191529.html

¹² This part comes from K4D Helpdesk Report: Rohwerder, B. (2017). *Supporting agriculture in protracted crises and rebuilding agriculture after conflict and disasters.* K4D Helpdesk Report. Brighton, UK: Institute of Development Studies.

comparison give better results. Agricultural inputs sourced from informal markets, such as pesticides, may be of poor quality, or even dangerous (FAO, 2017, p.13).

These impacts lead to increased expenses and reductions in income, and if not addressed, can result in significant loss of productive assets, compromising the capacity of populations to recover and cope with future shocks, and in some cases irreversibly compromising the livelihood system, thus aggravating the crisis.

Processing and marketing food

Conflict and protracted crises also disrupt food markets and value chains. Destroyed roads and bridges prevent access to local, national, and international markets for both small and large scale agricultural producers (Özerdem & Roberts, 2012, p.22). The access to and relationships between farmers and others along the supply chain (suppliers of agricultural inputs, traders and markets) are often damaged, transaction costs are high, and there is little access to credit and information (Cordaid, 2015, p.7; Kimenyi et al, 2014, p.21). The lack of access to markets "can lead to a shrinkage of the agricultural sector because there is no incentive to engage in agricultural production beyond the subsistence level" (Özerdem & Roberts, 2012, p.22). The provision of food aid during conflict can affect the profitability of staple food production for local farmers when brought in from outside the community, as the market for their produce shrinks (Wright & Weerakoon, 2012, p.109).

As a result of higher production and marketing costs, and very constrained purchasing power, farmers make much less money on their agricultural produce in protracted crises (FAO, 2017, p.6). Smallholders face difficulties becoming part of upgraded value chains, often because few upgraded value chains exist in countries with protracted crises or because specific farmer groups are blocked from access to these chains. Miller (2008, p.1) studied market access in South Sudan, and states that "as a result of the underdeveloped marketing arrangements post-harvest losses at the farm level and within markets are very high, as are food prices". He also writes that where both agricultural input and product markets are underdeveloped, no effective investment can be made in agriculture in scaling up production. "The period of civil disorder has largely destroyed the traditional market linkages and channels – including the complex set of social and economic relationships between intermediaries necessary for markets to work" (Miller, 2008, p.1).

Most farmers deal with traders who buy their products individually. In the Afghanistan saffron chain, middlemen visit the farmers before the harvest and make a deal to buy all their different products. For farmers this can be challenging as they get their money in advance and need to fulfil their obligations at the end of the harvest (Hiller et al., 2014, p.33). In the coffee chain in Burundi farmers sell their coffee cherries to the local washing station or to rural collectors who collect the coffee and sell it to the same washing station. The farmers have a guaranteed market for their product, but due to perishability they have to sell their product within six hours after harvesting and thus have no other choice but to sell to the nearest washing station (Hiller et al., 2014, p.34). In other occasions smallholder farmers receive a down payment from the traders and receive the final payment after the trader has sold their product leaving the risk with the farmer.

Infrastructure

Infrastructure is crucial for processing products and transporting them through the country or abroad. Bad quality of road infrastructure makes it difficult or impossible to transport perishable crops. Without electricity, crops cannot be kept in cold storage and machinery cannot be used to add value to products. The WFP (2010, p.2) indicates that in the Democratic Republic of the Congo, conflict has contributed to a deterioration of the transportation infrastructure which was considered the key barrier to market development. Basdevant (2009, p.6) describes how conflict and displacement in Burundi affected infrastructure, as land, equipment and infrastructure were no longer maintained. Damaged infrastructure means in most cases that food crops were characterised by low value to weight ratios, making it unprofitable to transport them over large distances because transport costs quickly eat into profit margins. Producers therefore must sell their output in the immediate area where demand may be weak and unpredictable (Wodon et al., 2008, p.50).

Additionally, transaction costs for traders and transporters increase when the security situation deteriorates as more time is needed to access the best ways to transport goods and control the reliability of involved actors. Parker (2008, p.17) stated that "border crossings introduced multiday delays and other burdens. These barriers to transit reflected poor policies and regulations, and in some cases, security concerns". Transport goods on damaged roads is difficult, but it becomes more complicated when traders also have to cope with illegal taxation and banditry. Ouma and Jagwe (2010) describe how in Burundi there are several tax revenue collection points between Cibitoke and Bujumbura, therefore "most of the traders in Cibitoke incur high taxation costs, comprising 30% of total cost".¹³

Furthermore, availability of electricity increases the storage life of products, the use of machinery in the production process and of computers to collect information. According to the WFP (2010, p.2) the lack of electricity for basic drying, cleaning, and processing equipment reduces farmers' ability to add value to commodities. The lack of long-term storage facilities for food crops combined in some cases with their perishability means that many farmers are forced to sell during the post-harvest period when prices are at their lowest.

Access to finance

When risk increases it reduces the options to get credit. Especially for smallholder farmers, small entrepreneurs and traders in the food sector, credit and insurances are hard to find. Access to and use of financial services is complicated by legal barriers, like the absence of valid identification documentation that prevents around 375 million adults from accessing accounts (World Bank, 2016, p.5). Borrowers in countries with humanitarian crises are nearly half as likely to have borrowed from a formal financial institution. Only 9% in low- and middle-income countries and 5% in countries with humanitarian crises report borrowing from a formal financial institution (EI-Zoghbi et al., 2017, p.10). Informal financial services tend to be flexible and close to where poor people live. In South Sudan the clans and villages provide social safety nets (Hiller et al., 2014, p.44).

In Afghanistan, for example, people do not dare to make investments due to the unstable security situation and the difficulties in reaching the export market, while machinery and

¹³ Cited from: Hiller et al., 2014, p.39.

production plants in the raisin industry are in a state of disrepair (Hiller et al., 2014, p.43). Embedded credit, which is credit provided by actors within the chain, could be a solution. However, it limits the bargaining power of actors when selling their product to the trader who gave them credit: cash now, often means receiving a lower price later. The fact that the farmers are paid for their products upfront can be a large burden as production has to live up to expectations (FAO, 2016d, p.5; Hiller et al., 2014, p.44).

Finance is not only about credits, once farmers have accumulated assets and start earning an income, they will have a need for saving facilities. Informal community savings and lending schemes are common and related to credit systems like rotating saving and credit associations among a group of people or self-help groups (EI-Zoghbi et al., 2017, p.11). Hiller et al. (2014, p.44) show that in the saffron chain in Afghanistan, actors prefer to directly spend their money or invest in their business activity. Farmers buy land when they earn a lot of money as a means of savings. Furthermore, insurances are a way to cope with risk which improves the investment climate. However, due to freeriding, insurances are difficult to develop even in non-fragile states (EI-Zoghbi et al., 2017, p.17). In protracted crises, benefits will probably not outweigh costs considering the higher monitoring and control costs. Furthermore the vulnerability for climate change and natural disasters in these countries makes it more expensive.

Access to nutritious food, quality control and food safety

In protracted crises food quality control is in most cases done on the basis of personal expertise and intuition of the actors within the sector without formalised quality systems. Often, quality control is only happening post-harvest, when traders and middlemen test the quality of the product to determine the price (Hiller et al., 2014, p.34). Institutions are needed for objective standardisation and quality control and are part of upgraded value chains. Without such systems into place in the context of protracted crises, this means that farmers are seldom rewarded for quality and consumers lack food safety controls. Hiller et al (2014) give several examples. In Afghanistan, the middlemen test the saffron based on colour and aroma. In DR Congo the quality of the honey is determined in the processing stage. As the processing is mostly done at home there is no quality control and quality varies a lot. There are neither quality systems operating in the grape value chain in Afghanistan. Testing facilities for certifying raisins against international grades and standards are extremely limited and required tests are not available. In South Sudan there is no effective body to regulate food quality. Public health officers and animal health officers are important actors in improving livestock and milk quality and safety, but there are too little resources to support them.

This report showed in earlier parts the clear link between protracted crises and high malnutrition levels. However, one area did not get attention: displacement in urban areas. Displacement to urban areas is a common feature in countries in protracted countries, with urban areas dealing with accelerated processes of rural–urban migration (FAO/WFP, 2010, p.19). Displacement is increasingly an urban and dispersed phenomenon, with settled camps becoming the exception. At least 59% of all refugees are now living in urban settings, a proportion that is increasing annually (Crawford et al., 2015, p.1). The majority of Internally Displaced People (IDPs) are likewise outside identifiable camps or settlements, and instead live dispersed in urban settings. They are less dependent on food aid and more self-reliant (Crawford et al., 2015, p.27). Furthermore, migration to urban areas may also jeopardise migrants' rights to the land they have left behind in rural areas, making them for the long term dependent on purchasing power to access food (FAO/WFP, 2010, p.19).

This occurred throughout most of the Sudan. Khartoum grew rapidly as more than 4 million people were displaced during two decades of civil war in the south of the country. Around half of the displaced people have remained in urban areas, especially Khartoum, even after the Comprehensive Peace Agreement was signed in early 2005 (FAO/WFP, 2010, p.19). The town of Nyala, the commercial centre of Darfur, has grown to approximately three times the size it was when the conflict began, and is now home to well over a million people. Similar trends have been recorded elsewhere: it is estimated, for instance, that the urban population grew by a factor of eight in Luanda in Angola, five in Kabul in Afghanistan and seven in Juba in South Sudan (FAO/WFP, 2010, p.19). Such changes in settlement patterns bring with them a significant change in livelihoods, with an increase in the number of people dependent on the urban food markets for their daily food intake. Some studies show that urban population in countries with protracted crises tend to consume more diverse food, compared to rural areas (Lovon, 2016, p.15). However, some specific displaced urban groups could live in protracted urban situations.

Access to land and water

In crisis and resettlement situations land rights can become insecure while competition and conflict over access and use of natural resources increase in number and severity. In a fragile and conflict context this may represent the difference between maintaining stability and relapsing into conflict (Moore, 2017, p.2; RFSAN, 2016, p.10). When people are forced to move, they abandon their physical assets such as land and property, and only carry their skills and movable assets such as livestock. Access to water becomes a critical problem, most particularly in areas where natural disasters (such as hydrological extremes) are combined with armed conflict. In such situations, traditional transhumance coping mechanisms are no longer viable (FAO, 2016e, p.7). Physical barriers, threats from armed groups, landmines and even poisoning have been employed to block communities' access to known water points (e.g. river base-flows, springs and functioning wells) in times of drought (FAO, 2016e, p.7).

Furthermore, various forms of tenure can create a complex pattern of rights and other interests, particularly when statutory rights are granted in a way that does not take account of existing customary rights (e.g. for agriculture and grazing) (FAO, 2016e, p.5). There is strong evidence of this in Darfur, where competition between pastoralists and farmers over the natural resource base has intensified as both groups have become increasingly dependent on strategies such as grass and firewood collection to replace pre-conflict livelihood strategies that are no longer possible (FAO, 2010, p.19). In Jubba Region in Somalia, increased competition over irrigated land, resulting from the conflict, led to a further marginalisation of the Bantu groups whose livelihoods depend on agriculture (Little, 2008). Similarly, in eastern Democratic Republic of the Congo, farmers moved from central Lubero to the forests of West Lubero to regain access to the land lost because of the conflict and institutional breakdown. Tensions with local communities and customary landlords led to marginalisation of newcomers (Raeymaekers, 2008). In Afghanistan, land is a problem as warlords introduced a feudal system where farmers have to give part of their produce to the warlords and grow opium for them (Hiller et al., 2014).

This clash of *de jure* rights (existing because of the formal law) and *de facto* rights (existing in reality) often occurs in already stressed marginal rain-fed agriculture and pasture lands (FAO, 2016e, p.5). "The layers of complexity and potential conflict are likely to be compounded where, for example, state ownership is statutorily declared and state grants or leases have been made without consultation with customary owners (who are not considered illegal), and where squatters move illegally onto the land" (FAO, 2016e, p.5). The "great African land-grab" (Cotula,

2013) - in which local elites and foreign corporations are taking the land from millions of smallholders – often in a post-conflict setting is contributing to deep human insecurity and grievance, which has led to both nonviolent and violent resistance in countries as diverse as Ethiopia and Sierra Leone (see for Sierra Leone: Zurayk, 2014, p.18).

Understanding gender dynamics is critical. For many women, their autonomy depends on land – a loss of land means a loss of identity (FAO, 2016e, p.6). In the case of the saffron chain in Afghanistan land rights are a problem as women are the main producers of saffron while they depend on their male relatives for land and the right to use the land for saffron production (Hiller et al., 2014). Furthermore, land rights can become subject to dispute during crises while formal legal systems and local legal institutions often are broken down during the conflict (see more below in Governance issues). IFDC (2010) described the situation in Kivu, DR Congo, where traditional land tenure arrangements mean that smallholders use plots that are officially owned by traditional leaders and large private owners, leading to land insecurity and hesitation on the part of users to invest in the land.

Governance issues

Governments play an important role in creating rules, regulations and institutions that are necessary for food systems to work efficiently. The government also has a role in encouraging domestic producers and exporters, in gathering revenue from industry and trade, issuing licences, monitoring business practices and ensuring that imported products meet basic standards. Kaplan (2008, p.5) describes the effect of conflict on the institutional environment and transaction costs: "Political fragmentation directly impinges on the ability of (post-crisis) countries to foster the positive institutional environment necessary to encourage productive economic, political, and social behaviour. It undermines the usefulness of traditional, informal institutional systems and squanders built-up social capital while disabling attempts to construct robust formal governing bodies. The net result is societies with low levels of interpersonal trust and extraordinarily high transaction costs".

Authorities are too weak and the environment too unstable during conflict to initiate or continue to implement coherent national agricultural, food security and nutrition programmes to improve agricultural production, create jobs in the food economy and fight against food insecurity and malnutrition (Özerdem & Roberts, 2012, p.23). Ongoing protracted conflict can reduce governments' ability to support farmers to the extent they were previously able to, which is problematic when agricultural subsidies were substantial, as was the case in Syria (FAO, 2017, p.13). The period without coherent national programmes can set agricultural development back decades, and the "level of investment in time and resources needed to rehabilitate agricultural production to match pre-conflict levels can be huge" (Özerdem & Roberts, 2012, p.23). External assistance provided during conflict can have a negative impact on agriculture (Özerdem & Roberts, 2012, p.24). The provision of food, for example, can create a dependency culture and the impetus to be self-sufficient is removed, which can result in the loss of the skills necessary to farm effectively (Özerdem & Roberts, 2012, p.24).¹⁴

Legal protection through court systems are an important mechanism to reduce the risk for trade actors. However these formal systems are seldom in place in protracted crises. In addition, often only a few transactions are formal, reducing the potential use of the legal system. Traditional

¹⁴ This part comes from K4D Helpdesk Report: Rohwerder, B. (2017). *Supporting agriculture in protracted crises and rebuilding agriculture after conflict and disasters.* K4D Helpdesk Report. Brighton, UK: Institute of Development Studies.

local courts and village elders could fulfil important legal functions (UNDP, 2014, p.14). In the Afghanistan no official system in place to protect actors in the value chain. In case of a serious complaint people can go to a village elder. Disputes are settled through village elders (Hiller et al., 2014, p.42). Even if courts would be available to small farmers they would probably not be trusted enough to be used, Hiller et al. (2014) argue. They also mention that in South Sudan, traditional leaders are important in solving (tribal) disputes.

When formal courts are in place, chain actors do not necessarily make use of them, sometimes due to the informal nature of the trade that takes place (UNDP, 2014, p.16). Little (2005, p.1; 2008, p.100) describes the informal trade in Somalia. Trans-border trade in the Horn of Africa is often an unofficial sector activity. On the one hand, it epitomises the essence of informal or 'shadow' trade, operating along remote borders in a vast region where government presence is particularly weak or absent. In many instances it represents the only type of exchange in the area, since extremely poor regional infrastructure and communications impede official trade between neighbouring states. For some commodities, like livestock and grain, unofficial exports to neighbouring countries can exceed officially licensed trade by a factor of 30 or more (Little, 2005, p.1).

Conflict, displacement and resettlement can also undermine traditional governance systems for managing natural resources (Özerdem & Roberts, 2012, p.23). In Sudan for example, traditional systems enabled pastoralists and farmers to coordinate their uses of the same piece of land but years of conflict and increasing desertification have disrupted these traditional livelihood patterns and conflict-management mechanisms, exacerbating tension between the two groups (Özerdem & Roberts, 2012, p.23).

Gender issues

Men and women often have different roles and responsibilities in securing adequate food and nutrition at the household level. In crises situations, men, women, boys and girls are exposed to different types of risks and challenges, and have specific coping strategies related to food and nutrition security (FAO, 2016f, p.2). Protracted, prolonged or recurrent crises affect the food security and nutritional status of households, because natural and man-made hazards cause the destruction of household assets, and change the social fabric of societies (social norms), impacting the roles of men and women, both within the family and as economic actors (FAO, 2016f, p.3). Men and boys are more likely to be engaged in the fighting and are at greater risk of being forcibly recruited into military groups and socialised into adopting violent concepts of masculinity (Brinkman et al., 2013). The normalisation of violence, especially in prolonged conflict settings, exposes them to a greater risk to loss of life or life-long disabilities. As a result, the engagement of men in conflict puts greater responsibility in the hands of women in sustaining the livelihood of the household, including for the access to food, nutrition and health care of household members.

Conflict situations often are characterised by increased sexual violence, mostly targeted at women (Gender-based violence). Limited opportunities leave many women and girls with untenable options for their own and their families' survival, including exchanging their bodies for food and basic commodities, and early or forced marriages for daughters. Such violence and trauma not only cause direct harm to women, but also tend to affect their ability to support their families due to reducing the capacity and productivity of survivors as a result of illness, injury, stigma and discrimination (FAO, 2016f, p.4). Refugee and rural women often have less access to resources and income, which makes them more vulnerable and hence more likely to resort to

riskier coping strategies. These strategies may affect their health, which in turn is detrimental to the food security of the entire household as food production and the ability to prepare food decreases with illness (Brinkman et al., 2013). The psychological stress and collapse of social structures that may have previously provided protection can have serious implications for violence and aggression, particularly towards women and children. In crisis situations and among refugees, one in every five women of childbearing age is likely to be pregnant. Conflicts put these women and their babies at increased risk if health-care systems falter and their food security situation deteriorates (UNFPA, 2017).

Protracted crises often lead to an increase in the work burden for women and children. Evidence shows that in prolonged situations of conflict women participate more in labour. The number of female-headed households tends to increase and women take on new economic roles within the household and the community (FAO/WFP, 2017, p.50). This is often the result of the loss of income-generating assets that male household members relied on before the conflict, such as land or livestock that may have since been stolen or destroyed (Justino, 2012). This often results in increased vulnerability, as women have less access to assets and resources (they do not have rights to own or inherit land and to access input or credit markets), and receive lower salaries, while their domestic work burden stays the same or increases (FAO/WFP, 2017). Children's roles in the household and community can also be severely affected, as many are at risk of being pulled into child labour in its worst forms during times of conflict.

Shifting gender roles can in some cases also have beneficial effects on household welfare. Where women gain more control of resources, household food consumption tends to increase and child nutrition improve (FAO/WFP, 2017, p.50). Their economic empowerment may further give them greater voice in household and community decision-making. For example, the experience in Somalia shows that – during the conflict – women's contribution to household income generation increased along with their influence on decision-making (FSNAU, 2012). Similarly, comparative case studies in Bosnia and Herzegovina, Colombia, Nepal, Tajikistan and Timor-Leste found that armed conflict led to an increase in female labour participation, albeit mainly in low-paid unskilled work and often exposing women to unsafe and insecure labour conditions (Justino et al., 2012).

5. Interventions to build resilient food systems in protracted crises

Interventions in food systems to mitigate or prevent conflict

Building resilience by promoting sustainable peace is critical to improving food security and nutrition outcomes in areas with recurrent crises (Kurtz & McMahon, 2015). However, the literature also shows that there is a significant role for food security and nutrition interventions to prevent or mitigate conflicts and potentially contribute to sustaining peace (FAO et al., 2017). Interventions in support of food security, nutrition and agricultural livelihoods to contribute to conflict prevention and sustaining peace, should not only address the symptoms, but also the root causes of conflict. For example through shielding consumers and producers from food price shocks with price stabilisation measures and social protection interventions, or with interventions that aim at diversifying rural livelihoods, creating decent jobs and reinstall local institutions (IFPRI, 2015; Maxwell, 2011).

There have been efforts to strengthen the resilience of agricultural livelihoods in protracted crises, which involve investing in information and early-warning systems; addressing immediate needs in combination with longer-term interventions to strengthen resilience, including through cash transfers and support for commercialisation; supporting agricultural systems and food value chains (including support for production, processing, storage, marketing and business development); maintaining the services needed to protect against disease; facilitating dialogue and peacebuilding; and using climate smart agricultural practices (Mayen, 2016, p.5-12; Cordaid, 2015, p.4). As conflicts in countries with protracted crises typically coincides with other shocks, it is also essential to enhance resilience to these (Breisinger et al., 2015). For example, efforts to strengthen resilience to droughts may include the introduction of drought-resistant crops, water harvesting, livelihood diversification and increased access to risk-based insurance.

Three pathways have been identified through which support to livelihoods, food security and nutrition can help build resilience in food systems against conflict and contribute to sustaining peace (FAO/WFP, 2017, p.62):

- Livelihood support that addresses the root causes of conflicts and conflict stressors, and that promotes re-engagement in productive economic activities, including cash transfers and social protection;
- Facilitated **community-based approaches** that help build relationships and social cohesion, improving aspirations, confidence and trust;
- Interventions that contribute to **building the capacity of institutions and local actors**, improving governance to deliver equitable services.

The FAO/WFP report (2017) shows several food security and agriculture-based livelihood support and community-based support interventions, which are mentioned in Box 1. There are three main lessons from these support interventions (FAO/WFP, 2017):

- Developing people-centred approaches to increase trust and gender-sensitive approaches that understand the role of women in securing peace and food security.¹⁵ Facilitating a dialogue between important actors could increase some trust levels that are needed for rebuilding linkages in the food value chain. The FAO/WFP report (2017) mentioned that women's contributions to peace were most notable when they worked together to bridge differences in religion, ethnicity, class and between urban and rural divides. Working across divides has allowed more-robust organisations and networks to emerge, as well as preparing the ground for peace within the larger population. In Burundi, after the peace agreement was signed in 2000, women's organisations were supported in developing radio programmes to share concerns and information. They also received training on conflict resolution, which facilitated the creation of mutual-aid and conflict-resolution networks and female-run production cooperatives (CDA, 2012).
- Reducing food price volatility and strengthening risk management capacities in a comprehensive approach from macro level to household level. At the macro level,

¹⁵ A strong body of evidence exists to prove that hunger and rural poverty can be reduced when gender equality is factored into programming. According to a recent study by the UN Women and Institute of Development Studies (IDS) humanitarian interventions which ensured women's participation in economic activities were the most successful in delivering food security outcomes. Policy responses aimed at women's empowerment and increasing their role and bargaining power within the household successfully reduced food insecurity for the whole household. Resources and income controlled by women are more likely to be used to improve family food consumption and welfare, reduce child malnutrition, and increase the overall wellbeing of the family, with positive impacts on health, and food and nutrition security.

this might involve stricter rules on food commodity speculation and the institutionalisation of grain reserves to stabilise prices in times of crisis. It also includes investment in creating price information systems, as well as expanding credit and insurance markets. Adopting agricultural practices and livelihood strategies for climate change adaptation, strengthening productive sectors, improving basic social services, and establishing productive safety nets all should be promoted as an integral part of these interventions. Evidence from the Sudan shows that providing services such as health, education and physical security in remote areas characterised by chronic vulnerability to food insecurity, and to inter-ethnic and cross-border violence, can contribute to sustaining peace and longer-term resilience (FAO/WFP, 2017).

• Access to predictable, sizeable and regular cash flows protect poor households from the impacts of shocks in the short term, thereby minimising negative coping practices that have lasting consequences. Over time, by helping vulnerable households manage risks better, social protection can induce investments in livelihoods that enhance people's resilience to future threats and crises (FAO, 2017c). In several countries, school meal programmes have contributed to sustaining peace, especially in the post-conflict phase. Social protection can help create a sense of structure and normality, as well as enhance equity and cohesion among conflict-affected populations (Brinkman & Hendrix, 2011).

Box 1.: Cases of food security and agriculture-based community and livelihood support interventions

The WFP **Livelihood Asset Recovery Programme in Liberia** (2009–2012), supported by FAO, enabled rural communities to build and restore irrigation systems, roads and agro-processing facilities. This raised farm productivity and food availability, improving household income and access to food and thereby addressing some of the root causes of conflict. In the short term, the project provided work for unemployed rural youth, helping to defuse an impending cause of conflict during a post-conflict recovery; with about 90% of surveyed participants saying they believed these short-term jobs helped to promote peace and reconciliation.

The **agriculture-based Ex-Combatant Reintegration in Liberia programme** provided participants with meals, clothing, basic medical care and personal items, as well as training and agricultural tools and supplies. An evaluation showed the programme led to the increased engagement of youth in agriculture and reduced involvement in illicit mining. Participants were also much less likely to have joined local armed groups involved in an outbreak of violence in Côte d'Ivoire.

In response to the 2011 famine in Somalia, FAO significantly scaled up its support to existing **Cash-for-Work interventions in Somalia's central and southern regions**. Since then, the FAO has continued to support through a range of activities designed to improve the resilience of vulnerable communities, rather than merely offering short-term support for food security. In the absence of a functioning government, FAO provided basic services (such as livestock vaccinations) along with an ambitious programme to build and rehabilitate rural infrastructure (such as water catchments, irrigation canals) through Cash-for-Work schemes. These rural assets were chosen for their potential to increase the resilience of farmers and pastoralists to shocks.

The **UN Peacebuilding Fund (PBF)** has supported interventions in multiple contexts to address conflict drivers, rehabilitate agriculture and restore productive assets, while the Safe Access to Fuel and Energy programme has helped reduce tensions arising from competition over natural resources, by building more resilient livelihoods and connecting displaced and host communities.

The **UN Security Council Resolution 1325151** addresses not only the inordinate impact of conflict on women, but also the pivotal role they should, and do, play in conflict management, resolution and sustainable peace. A study of the impacts of implementation of this resolution found significant progress in supporting women's participation in electoral processes, the security sector, and gender mainstreaming in policies. However, only modest impacts were found in other areas including protection for women against conflict-related sexual violence and for women serving in peacekeeping forces.

People-centred, negotiated approaches can address issues of land access, use and management and trust building. For example, FAO's provision of community-based animal health services and livestock vaccinations to the Dinka Ngok and Misseriya communities in the contested Abyei area of South Sudan and Sudan, working with local government bodies, UN peacekeepers and other UN entities, has been an effective entry point for re-establishing intercommunity dialogue, leading to a local-level peace agreement. Different groups often blame one another as the source of animal disease outbreaks, which can reignite violence. Enhancing mutual trust and basic stability is therefore essential for sustainable recovery and development programming, as recognised in the Security Risk Management Process for the Abyei area. Interaction between groups to address mutual problems is often a good starting point for building trust and establishing cooperation, thereby facilitating further collaboration between conflicting parties on more sensitive topics.

(Source: FAO/WFP, 2017, p.62-65)

On the institutional level, food security and nutrition interventions could strengthen national, local and non-state institutions. Resilience to multiple food security shocks must include national-level interventions, to enhance government capacity in critical areas such as food security, emergency preparedness and response and delivery of basic services such as health, nutrition, education, water and sanitation. Strengthening regional and national institutions by **capacity building interventions** is critical for the effective design and implementation of food security and nutrition information systems and disaster risk prevention and reduction mechanisms. The literature emphasises four pathways to make policy and interventions in food systems in protracted crises more effective with long-term benefits:

- Conflict sensitive food and agriculture interventions.¹⁶ Kimenyi et al (2014, p. 25) warn providing support in conflict zones has a risk of exacerbating conflict dynamics and the activities taken should be conflict sensitive food and agriculture interventions. Cordaid (2015, p.6) also highlight the importance of agricultural programmes in crises starting with a thorough conflict analysis to ensure that interventions do not stabilise or deepen conflicts. Lautze et al (2012, p.12) highlight the recommendation that agricultural interventions in protracted crises should "be designed according to the broader political and security environment and based on an understanding of vulnerability that incorporates notions of powerlessness". In particular to natural resources, access to land, water and energy.
- Climate change sensitive food and agriculture interventions. The FAO in Syria highlights that an "important consideration for recovery of the agriculture sector is the question of production incentives, and the linked issues of irrigation and climate smart agriculture" as Syrian farming will need to cope with increased temperatures and more frequent droughts in the future (FAO, 2017, p.19). Interventions in the food system should be looked at through a climate lens. Climate-smart agriculture (CSA) is an approach that helps drive the actions needed to transform and reorient agricultural systems to effectively support development and ensure food security in a changing climate. However, it is more than production, also relevant for food markets, education (life-style changes) and the linkage with social protection measures.
- Gender sensitive food and agriculture interventions. For example, women's empowerment through milk merchandising in South Sudan is an alternative model for pastoralist livelihood and education in South Sudan's Lakes State with the funding of EU (FAO, 2016c). Under the "Zonal Effort for Agricultural Transformation Bahr el-Ghazal

¹⁶ Information on Conflict Sensitivity can be found on the website of Swiss Peace, including their Working Paper (2016): http://www.swisspeace.ch/topics/conflict-sensitivity.html; or for the interpretation of Conflict Sensitivity according to USAID: http://www.dmeforpeace.org/peacexchange/wp-content/uploads/2016/03/Conflict-Sensitivity-in-Food-Security-Programming.pdf

Effort for Agricultural Development" project, FAO has been working with UNESCO to develop a learning curriculum for adults, youth and children that integrates pastoral field school and pastoral education approaches. Combining literacy and numeracy skills development with training in animal health and production, this pilot curriculum provides a critical opportunity to empower pastoralist households to improve their livelihoods and communities in South Sudan. Women from the cattle camps will learn the techniques to improve the hygiene of the milk they sell in urban markets, while gaining the numeracy skills needed to count and record the cash they earn, protecting them from being cheated out of their earnings, which has often been the case.

Nutrition sensitive food and agriculture interventions. Applying a nutrition lens means supporting affected and at-risk populations through, for example (FAO, 2016b): input distribution of nutrient-dense crops and varieties to meet nutrient requirements; vegetable gardening including in urban settings to increase consumption of nutrient-rich foods; development of small livestock schemes to diversify livelihoods and improve consumption of nutritious foods; promotion of community-managed fisheries for sustainable harvesting of fish as a source of animal proteins, micronutrients and vitamins; promotion of post-harvest conservation techniques and adequate cooking practices to improve availability of diverse foods year round and preserve the nutritional value of foods; strengthening food safety policies and actions along the entire food chain in ways that prevent contamination and foodborne illness and strengthening capacities and the effective participation of local food producer and consumer organisations to improve food safety in protracted crises. Nutrition education to increase the consumption of diverse foods and the probability that additional resources are spent on supporting healthy diets and appropriate health and care; creation of saving groups/mechanisms to allow vulnerable people to access diverse foods, and care and health services year round.

Recognising that policies and actions should contribute to resolving and preventing the underlying challenges, in 2015 the Committee on World Food Security endorsed a **Framework for Action for Food Security and Nutrition in Protracted Crises**. The framework included a specific principle for addressing food insecurity and undernutrition in a conflict-sensitive manner and for contributing to peace objectives through food security and nutrition-related interventions (CFS, 2017). It encompasses activities aimed at preventing the outbreak, escalation, continuation and recurrence of conflict, including by addressing root causes and moving towards recovery, reconstruction and development. While economic revitalisation and resilient and sustainable livelihoods should be key elements of a coordinated and coherent approach to sustaining peace, they need to be combined with establishing political processes, improving safety and security, re-establishing the rule of law and respect for human rights, restoring social services and supporting core government functions (PBSO, 2017).

Box 2. Cases on land and nutrition

Land rights - Liberia Contingency Plan of 2012 to resettle refugees from Ivory Coast, is an example of the importance of land governance as a fundamental element in resettlement. In 2012, about 130,000 refugees from Ivory Coast arrived in Liberia in the wake of the post-election violence in their country. The Liberia Contingency Plan enabled refugees to remain with host communities closer to the border rather than moving into camps. Refugees and host communities would both be targeted for aid, thus avoiding resentment and promoting the development of very remote and underdeveloped areas. Refugees and host communities were initially provided with food aid, seeds and tools for agriculture. But, without a deep understanding of the existing tenure governance systems, this solution, designed to increase resilience and diminish dependency on aid, generated situations of conflict and abuse. The Contingency Plan did not map the capacity of the different communities or establish who could access what land under what conditions. The refugees' only way to access land was as

labourers, or by occupying somebody else's land. Within a few months this approach had to be stopped in favour of refugee camps. (Source: FAO, 2016b)

Fresh food markets for displaced people - In Warrap State, South Sudan, high rates of malnutrition are reported. In order to prevent malnutrition problems in IDP camps, FAO implemented a food voucher scheme to complement the general food distribution. The specific objectives of the "Nutrition vouchers" were to improve the availability of and access to complementary nutritious food sources for IDPs and to guarantee a market for traders from the host communities. Markets for fresh foods were organised twice a week; using their nutrition vouchers, 1 600 IDPs could purchase from traders a variety of locally produced fresh food items (e.g. tomatoes, onions, okra and dried fish). The programme also includes training on business and quality preservation of fresh foods for traders. Positive impacts on beneficiaries' dietary diversity and nutrition were reported even though the programme did not directly collect nutrition-related indicators. The beneficiaries appreciated the choice, quality and quantities of provided food items, as well as the intervals (twice a week) at which the voucher-based market was held. The cash injected boosted the local economy and encouraged others to engage in trading. One of the programme challenges is to ensure provision and availability of fresh foods for IDPs all year round, whereas vegetables are generally home-grown from September to November. *(FAO, 2016e)*.

Linking emergency assistance with development interventions

Emergency livelihood interventions, like food aid, seeds, and Cash-for-Work are often provided in countries with protracted crises. Food aid and (re)building agricultural markets should go hand in hand and should not be a constraint for local producers to sell their produce on local food markets. Özerdem & Roberts (2012, p.31) indicate that it is important for relief projects providing food aid in conflict and protracted crises to have a long-term vision for reconstruction, perhaps by providing it as an exchange for labour input in the rehabilitation of agricultural facilities such as irrigation systems. Roberts & Wright (2012, p.253) argue that any external assistance should aim to build on existing traditional coping mechanisms to maintain agricultural production and avoid establishing parallel systems that may undermine existing capacities.

The provision of free seeds, tools and inputs to farmers in the emergency phase and later on may create a 'dependency syndrome' that can undermine future capacity building efforts (Moore, 2017, p. 7). In addition, there are concerns that the provision of free services such as seeds and free livestock treatment will undermine efforts to establish a private sector capable of providing farmers with these services in the long run (Levine & Sharp, 2015, p.24). The type of seeds provided may also cause problems (Wright & Weerakoon, 2012, p.106). In post-conflict Sri Lanka, farmers were provided with hybrid seed varieties, which meant communities had to purchase new seeds for every cropping season, incurring expenses that were beyond their capacity to pay for (Wright & Weerakoon, 2012, p.106). Rural populations in Syria suggest that even under current protracted conflict conditions agricultural production could be kick-started if they were initially provided with inputs (in particular fertiliser and seeds in the case of crops and feed and medicines for livestock), and then credit, marketing and processing support, as well as asset repair (FAO, 2017, p.16). Therefore, local farmers, traders and entrepreneurs in the food system should participate in the process (Roberts & Wright, 2012, p.251-252).

Encouraging **local procurement** and the use of local organisations in the implementation of humanitarian food assistance and livelihood programmes to support economic recovery and development is essential. The World Food Programme (WFP) implemented the **Purchase for Progress (P4P)** project in a number of post-conflict countries during its pilot phase (WFP, 2015, p.8). The WFP aimed to use P4P to use its food purchases for general food distribution, school feeding, food for assets, and institutional feeding programme activities more effectively to help

develop staple crop markets and spur improvements in smallholder agriculture (WFP, 2015, p.8-9). P4P provides smallholder farmers with an assured formal market while improving their access to knowledge and resources (WFP, 2015, p.9). WFP (2015, p.9) finds that the market opportunity they offer is an "incentive for smallholder farmers and their organisations to invest in agricultural productivity by using improved inputs and learning new skills".

In the DRC, P4P supported the rehabilitation of nearly 200 kilometres of rural roads between farms and markets, in partnership with the government, FAO and UNOPS, and communities were encouraged to contribute materials and labour for road maintenance through WFP's food assistance for assets programme, which provides food in exchange for work on rehabilitation projects (WFP, 2015, p. 23). In Liberia, P4P worked with FAO, other United Nations agencies and the Ministry of Agriculture, to encourage farmers to join cooperatives and realise that it was worth their while to put the effort into producing high-quality rice, as farmers were not willing to invest time and resources in increasing production with no assurance their efforts would pay off (WFP, 2015, p. 54-55). In 2015, WFP found that farmer's organisations were growing and 'functioning as effective businesses with timely deliveries and fewer defaults' (WFP, 2015, p. 55).

However, an evaluation of the pilot phase of the programme notes that purchasing from smallholder farmers in post-conflict areas means the WFP have to bear higher costs than if they purchased from elsewhere (Percy et al, 2014, p. vi, xi). The mid-term evaluation of P4P in Kenya shows that P4P was too bureaucratic paying local farmers within months instead of days, a crucial factor for farmer engagement in the programme (Levine et al., 2011). Furthermore, it has also been recognised in literature that P4P could so better to improve women empowerment. A study (WFP, 2014) shows there is an increase of women participation, however, more efforts need to be made to have women within farmer organisations and other partners of the P4P in countries. The website talks about 300.000 women that are benefiting from the P4P.¹⁷

The FAO's publication *The Right to Food in Emergencies* can be referenced for the range of specific legal provisions on which to draw for a protection agenda for agriculture (Lautze et al, 2012, p.12). Agricultural assistance provided by the humanitarian community should take care not to endanger beneficiaries by their presence (Lautze et al, 2012, p.12). The *Sphere Standards*, minimum standards for humanitarian assistance, make some mention of agriculture, taking a holistic approach to agricultural support, and encouraging participatory input from local populations (Roberts & Wright, 2012, p.252).

Social protection

There is a growing consensus around the need to build regular, predictable, flexible and shock-responsive social protection systems and programmes.¹⁸ Social protection, including in-kind and cash assistance, can offer valuable peace dividends and contribute to restoring trust in government and rebuilding social capital (Brinkman & Hendrix, 2011). This could keep

¹⁷ Retrieved from website World Food Programme (September 2018): http://www1.wfp.org/purchase-for-progress

¹⁸ Social protection has been recognised as a critical strategy to reduce poverty, build resilience and enable development: evidence from Latin America and sub-Saharan Africa shows clear positive impacts in terms of food security, nutrition and human capital development. Social protection impacts have also been seen as enhancing the economic and productive capacity of even the poorest and most marginalised communities. Beyond poverty alleviation, the combination of social and economic impacts can strengthen resilience: enhancing the capacity of poor households to cope with, respond to and withstand natural and human-induced crises. Access to predictable, sizeable and regular social protection benefits can, in the short term, protect poor households from the impacts of shocks, including erosion of productive assets, and can minimise negative coping practices. In the longer term, social protection can help to build capacity, smoothing consumption and allowing for investments that contribute to building people's resilience to future threats and crisis. (FAO, 2017b, p.5).

purchasing power at a certain level, it could help food producers to continue to invest in their crops, fishery and livestock, and could (as well adopted) be linked with nutrition and health (Frankenberger, 2012). Social protection has the potential to address peace and social cohesion by building institutions, policy and partnerships although the empirical evidence supporting this is very thin. There is still a gap in terms of evidence to show which are the most effective pathways to maximise the potential (Schultze-Kraft & Rew, 2014; Mc Candless et al., 2012). The relationship between social protection interventions and violent conflict is complex, working through multiple causal mechanisms that are not necessarily cumulative, linear or even positive (Beazley et al., 2015). In conflict-affected situations, delivering social protection through a conflict-sensitive approach is essential to first "do no harm". Building on what communities are doing to effectively respond to crises and protect community members as well as supporting transitional service delivery may also build peace and social cohesion, although more research is needed to understand if and how supporting social protection or service delivery can contribute to peace and state-building (CFS, 2016).

In order to integrate humanitarian and development interventions, it is important to look at the mechanisms and adjustments needed so existent social protection schemes can effectively and rapidly respond in the event of a crisis (FAO, 2016d, p.12). However, many countries with protracted crisis have no social protection scheme in place, in such case several emergency programmes (cash, vouchers, cash for work programmes in emergencies) can be adapted to develop nascent structures able to respond in the context of predictable and recurrent risks (FAO, 2016d, p.12). There are several opportunities related to social protection interventions that must be considered in an effort to develop and/or strengthen shock-responsive social protection programmes:

- **Targeting:** targeting of social protection interventions tends to be based on economic (wealth and income)-related criteria. In order to be able to respond to the varied risks faced by vulnerable households, targeting should adopt a multidimensional approach (including environmental and conflict-related risks) (FAO, 2016d, p.12).
- Using localised grassroots models by strengthening capacity at local and community level: Strengthening local capacity include sub-national delivery mechanisms as well as community-level structures that can support the effective identification of vulnerable populations, optimise linkages and coordination, messaging and household support, treatment of grievances, and create opportunities to build on informal community redistribution mechanisms (FAO, 2017b; Oxford Policy Management, 2017; FAO, 2016b). Based on empirical studies in 30 districts in six African countries, Awortwi (2018, p.898) makes the case that highly localised grassroots models with no state support may not be perfect, but are probably the best fit for implementing an all-encompassing social protection policy in Africa. The challenge for policy, he argues, will be to harness this potential not by trying to turn grassroots organisations into something they are not, but by supporting what they already are (Awortwi, 2018, p.908).
- **Multiple objectives:** Public works can be designed in such a way as to contribute to increased household income, while at the same time engaging communities in climate-smart agriculture and generation of 'green jobs' in areas such as waste management, reforestation and soil erosion prevention. Combining access to social protection key financial services, such as credit and weather insurance, and Climate Smart Agriculture practices, is a feasible strategy to mitigate the impacts of climate variability (FAO, 2017b; FAO, 2016d).

- **Coordinated systems combined with technology:** The use of smart cards, mobile money, digital registration systems, and advanced technical capacity at local government level, are enabling actors to reach economies of scale by working together and investing in systematic solutions where possible and appropriate (Idris, 2017). These provide new and innovative opportunities to design and implement a coordinated response and explore the potential of using common platforms for assessment and delivery (FAO, 2017b).
- **Trigger events:** It is vital that early warning systems are designed to trigger action prior to an emergency to reduce the negative impact. These systems should trigger contingency and sector awareness plans and response mechanisms within each social protection management and information systems (MIS) should be scaled up in order to meet emergency needs (FAO, 2016d).

Despite the opportunities, there are also significant political, financing and programmatic challenges in strengthening social protection systems in protracted crises (e.g. Idris, 2017; Brinkman & Hendrix, 2011; Ovadiya et al., 2015; Simmons, 2013).

- State-led social protection systems: Social protection in development contexts relates to building state capacity to deliver social protection to ensure sustainability and accountability, and as an integral part of supporting a social contract between a state and its citizens. In humanitarian interventions and in the context of protracted crises, engagement with governments has at times been limited (FAO, 2017b; Oxford Policy Management, 2017). At the core of the challenge is the question of how to strengthen capacities at national and subnational level and how to relate to state authorities in effectively responding to crisis. The challenge is not simply a technocratic process of bringing together humanitarian and development instruments but often involves reconciling fundamental differences in terms of principles, trust and approach (Oxford Policy Management, 2017).
- Weak information quality and access: Countries with protracted crises are also difficult places in which to operate as data availability is poor, staff turnover is higher, access is often constrained and insecurity makes monitoring and accountability challenging (FAO, 2017). This means that reaching the populations most in need is expensive and dangerous. Whilst the ultimate objectives of social protection may well remain the same, achieving them is therefore a long-term prospect in protracted crises (Oxford Policy Management, 2017).
- Immediate response vs. building capacity: As expediency takes precedence in addressing emergency needs in the wake of disasters, systems must be built while demands for lifesaving assistance are being met. This can raise issues of effective coordination, cooperation, and coherence among stakeholders as well as country ownership, participation, stakeholder buying, and accountability, all of which are fundamental to social protection (Oxford Policy Management, 2017).

The consequences for social protection programming of these challenges are summarised by Ovadiya et al. (2015) and include the following: weak state capacity constrains the ability of governments both to plan and to ensure the safe delivery of social protection programmes; weak and/or damaged infrastructure risks limiting the options for payment mechanisms, e.g. because of the absence of a banking system; weak markets bring a possibility of creating inflation; and a lack of social cohesion, meaning that programmes can end up being regressive either by design or during implementation. Furthermore, fragile and conflict sensitive countries may have

longstanding, politically difficult to revoke social protection policies that benefit very small and/or better-off populations (FAO, 2017b). Even where this is not the case, there may be a greater risk of corruption, diversion and capture of cash by elites or by armed groups. If some parts of a country are fragile and some are not there may be the risk of discontent at a lack of assistance in less affected areas (Oxford Policy Management).

Ovadiya et al. (2015) find that in protracted context, countries tend to have a stronger focus on social assistance than any other type of social protection. Across all 36 fragile states looked at in their study there is a noticeable trend toward cash transfers, public works, and skills development programmes and/or self-employment support, and maintained support for community-based services. Although there is limited evidence on the impact of social protection programming and policies on social cohesion, Ovadiya et al. (2015) suggest that social protection can be an important platform for promoting voice and participation through programme processes; improving social inclusion through temporary labour market participation; and smoothing social tensions and building trust in response to sudden shocks as well as longer term fragility.

Applying a nutrition lens to social protection is important, because of the high malnutrition levels and stunting of children in countries with protracted crises. Social protection can positively impact nutrition by improving dietary quality, increasing income and improving access to health services. In addition to the direct links related to the diversity, safety and quantity of food consumed by individuals, social protection can also influence other determinants of nutrition, e.g. practices related to care, sanitation and education or basic causes of malnutrition, such as inadequate access to resources (FAO, 2015, p.13). In order to maximise policy and programmatic synergies between nutrition and social protection, the following points should be considered:

- **Targeting of social protection should also reach nutritionally vulnerable groups**, especially women and children, for example through geographic targeting to overlap areas with high levels of poverty and malnutrition. However, social protection alone is insufficient to combat malnutrition (FAO, 2015).
- **Multi-sectoral and multi-stakeholder alignment.** Search for linkages with health, sanitation, education, and private sector actors (FAO, 2017, p.64). For example, School Food and Nutrition programmes, which link local procurement of food from family farmers to schools, are a prime example of such an engagement between sectors including agriculture, social protection, education and health to improve the nutrition of vulnerable populations in household, community and school settings (FAO, 2015).

The FAO recognises also the role of unconditional cash transfers for countries with protracted crises, and supports the findings, recommendations and committees of the Inter-Agency Standing Committee (IASC) principals and the "Grand Bargain" on Humanitarian Cash Transfers, around expanding the use of cash-based approaches and multiyear funding (see box 2).

Box 2: The "productive transfers" approach (CASH +)

The "productive transfers" (CASH +) approach combines, in a flexible manner, unconditional cash transfers and transfers of productive assets in kind. This approach means that households' urgent needs can be addressed and their assets protected from decapitalisation, while, through the productive asset component, helping stimulate a positive cycle of production and income generation that supports economic empowerment, strengthens asset ownership, and contributes to the diversification of household diet. Implemented in Burkina Faso and Niger, the CASH+ programme has helped increase incomes, savings, asset ownership by beneficiaries, improve their food security and diversify their diet (82% of beneficiary households in the country had an acceptable diet two years after the intervention). The project evaluation has also shown that coupling

cash transfer with poultry distribution has a significant impact on household food security (greater than with distribution of goats or seeds). In the wake of this success, FAO is currently reproducing the same approach in Mali and Mauritania. This approach holds great potential to be scaled up within the framework of broader national social protection programmes when provided in a timely, regular, predictable and reliable manner.

Source: FAO, 2016d, p.15

Private sector development in food systems

Private sector development in the agrifood sector in countries with protracted crises is very much needed, but also risky. Most of these countries (including fragile states and post-conflict economies) lie at the bottom of the World Bank's Doing Business ranking. The World Bank promotes for fragile and conflict-affected situations the Public Private Dialogues as a structured engagement mechanism that aims to bring together all relevant stakeholders, in a balanced and inclusive manner, to assess and prioritise issues, and achieve sustainable results, facilitated through a trust enabled convening platform (World Bank, 2014).

One of the main objectives of private sector development in protracted crises is to increase **job opportunities**, in particular for the youth. As agriculture is one of the most promising sectors in most fragile and conflict-affected environments, agricultural and food value chain development poses opportunities for youth employment. According to the World Bank (2013) informal economies and agriculture constitute the two most promising sectors in terms of job creation in most fragile and conflict-affected states on the continent. However, the linkages between youth un- or underemployment and violence and instability are diverse and complex, and are therefore often misunderstood (Desmidt, 2017, p.14). In some cases, such limited understanding of the matter has led to an overconfidence in employment creation as a panacea for peaceful reintegration (International Alert, 2014). Applying a conflict-sensitive approach and taking into account the potential impact of fragility (including violent conflict) on value chains will be key to operationalise a long-term sustainable and inclusive approach to youth employment (Desmidt, 2017, p.15).

FAO has engaged in strategic partnerships with private sector actors, to taking advantage of innovative solutions (e-payments) to effectively deliver assistance to vulnerable populations, particularly in emergency settings (Farrington, 2011). For activities requiring engagement with the private sector (whether buying and selling agricultural or other products, selling labour, meeting consumption needs) the approach will aim to strengthen relations between households and individuals on the one hand and the private sector on the other. This may involve direct support to businesses to re-establish themselves, though, as examples from the livestock trade in Sudan (Alinovi et al., 2007) and from the seeds industry (Sperling & McGuire, 2010) make clear, business is remarkably resilient in the face of disorder. More commonly, the types of intervention it requires will include (Farrington, 2011, p.92-93):

- Re-establishment of an orderly environment for "doing business", including restoration of the rule of law, enforcement of property rights and contracts and reduction in corruption and extortion, including demands for bribes within business and between business and government, military or para-military organisations. The rebuilding of trust is important in many aspects of livelihoods, including business but also in rebuilding governance and social capital more generally.
- Removing restrictions on the free movement of people and goods, and on the provision of and access to services. For example, in most pastoral areas, implementation of

veterinary interventions during protracted crises has been controversial in the last decade, due to subsidised and free distribution of veterinary medicines, which undermines the existing private primary animal health service delivery systems.

- Making less coercive, exploitative, illegal or environmentally damaging the activities in which people engage during crisis, and/or helping them to move out of these altogether.
- Promoting the post-conflict development of skills, which has helped to incorporate those such as ex-combatants who might otherwise remain "dividers".
- Increasing and making more reliable the funds which people can access and then spend for consumption or investment purposes. In Liberia, Oxfam used Emergency Market Mapping Analysis (EMMA) in the early weeks of a sudden onset crisis as a prelude to fuller livelihood assessment, which pointed the way to increased cash transfers and support to markets, including local sourcing.

Due to displacement processes and a reduced access to information channels (lack of horizontal and vertical linkages within food systems), actors in food systems may have limited opportunity to effectively produce, trade, exchange knowledge and to link to high-value value chains (Hiller et al., 2014). Extension services or business service providers are often not available, lack resources or do not have the capacity to support others. Without support systems, these actors are less innovative and productivity gains remain small even after a crisis (Kawasimi & White, 2010, p.25). Capacity building in such context is important, but not only are skills and business services often underdeveloped in protracted crises, working in such contexts require additional skills and services to cope with the challenging conditions (Hiller et al., 2014).

Improving access to finance

Social protection interventions, in particular in the form of cash transfers or Cash-for-Work arrangement, will provide necessary cash to vulnerable people in protracted crises. Cash-for-works schemes have been put in place to provide farmers with capital to invest in restarting their agricultural livelihoods (Wright & Weerakoon, 2012, p.106). Cash transfers and vouchers and use of mobile technologies (e.g. for market information and disease reporting) are promising options to support rural livelihoods, especially when facing the need for finding alternatives to market commercialisation during protracted crises when markets are adversely affected. Cash and voucher-based interventions (including production of animal feed for pastoralists, construction of dams and water holes) drastically reduce the cost for technical interventions in comparison to in-kind provision. However, EI-Zoghbi et al. (2017) are also critical to reliance on voucher and other closed systems that do not link recipients to financial services. Interoperable payments systems or systems that connect multiple types of providers to the same system have to be developed, because "by the time a crisis happens, it is often too late to address systemic issues to respond to immediate needs" (EI-Zoghbi et al., 2017, p.27).

Remittances are also an important part of receiving cash for people in protracted crises (El-Zoghbi et al., 2017, p.15). By increasing the safety and ease of sending money, payments services allow people to leverage their networks for support during challenging times. In Kenya, for example, mobile money (M-Pesa) increased a household's resilience in dealing with negative shocks related to weather or illness (Jack & Suri, 2014). Specifically, while shocks reduced consumption by 7% for households without access to M-Pesa, the consumption of households with access remained unaffected, due to an increase of inward remittances after the negative shock. Similarly, in Rwanda, households sent airtime credits to people affected by natural disasters (Blumenstock et al., 2016). The way in which remittances are sent has changed, often

creatively so, to avoid obstacles associated with the conflict. And peer lending and rotating credit may offer opportunities for providing farmers in conflict with low-risk credit (Kimenyi et al, 2014, p.24). This support could enable crop and livestock farmers to absorb conflict-associated costs and develop their businesses (Kimenyi et al, 2014, p.24).

El-Zoghbi et al. (2017, p.27) write: "While supporting the ability of affected communities to leverage financial services is the ultimate goal, this can happen only when a basic financial infrastructure is in place. Thus it is not feasible to improve financial services for crisis-affected people without addressing system-wide and infrastructure issues". They argue for prioritising investments in a resilient digital payments infrastructure that includes (El-Zoghbi et al., 2017, p.27):

- sufficient access points for cash-in/cash-out and other transactions, whether via mobile phones, point of sale devices, agent networks, ATMs, or branches;
- well-managed agent and merchant networks that are equipped to manage liquidity needs at access points;
- adequate mobile and broadband connectivity to enable real-time, online transactions and settlement.

Ensuring that these systems are responsive to shocks should be a component of a country's preparedness strategy, which should include regulatory reforms that enable digital financial services and mobile money, including the acceptance of alternative means of identification for refugees to address Customer Due Diligence (CDD) requirements (El-Zoghbi, 2017, p.27). Interventions are also needed to provide incentives for private-sector actors and partners to roll out sustainable financial services. Targeted subsidies should encourage market development, specifically mitigating risk to encourage long-term provision of financial services by private operators during periods of crisis (Farrington, 2011, p.93). Ultimately, financial services providers need to continue to provide services well beyond the emergency crisis response period, therefore they must adapt to crisis environments, for example, by ensuring that they have adequate risk management and liquidity/provisioning structures in place. While investments in payments infrastructure should be a priority well before crisis ensues, crises also present an opportunity to "build it back better" by investing in infrastructure or expanding the payments infrastructure into areas or populations previously excluded. This includes building out agent networks for cash-out points and investing in adequate mobile and broadband connectivity (El-Zoghbi, 2017, p.4).

Building an institutional environment

Increasing **food subsidies** is a favourite policy measure in times of crises, which helps keep poverty and food insecurity levels lower than they would be without subsidies. However, such measures do not qualify as resilience building because they are not expected to help countries become better off (IFPRI, 2015). The cases of Egypt and Yemen show that rising subsidies not only have contributed to growing budget deficits but also were not well targeted and, in the case of Egypt, may have contributed to the double burden of malnutrition (IFPRI, 2015). Going forward, reforming subsidy systems (e.g. by making them more efficient) would lead to savings that could be invested in more targeted food-security and nutrition interventions as well as job-creating initiatives in poorer areas. This in turn may contribute to creating more opportunities, especially for young people, reducing their motivation for participating in conflict (IFPRI, 2015).

Implementing regulations is one important step for (re)building food systems. Regulations are in particular needed to increase quality control and for food safety. For example, in Somalia, some 135,000 meat sector stakeholders have benefited from the Meat Inspection and Control Act, Meat Hygiene Code and the quality assessment system (QAS) (FAO, 2016c, p.8). The capacity of public and private sector institutions to regulate the meat sector and consumer protection has been enhanced, resulting in better quality meat in local markets, the prevention of food-borne diseases and increased trust in the quality of inspected meat. Business opportunities in Somali meat exportation, and boosting the local economy through the production of by- and core-livestock products have diversified project beneficiaries' sources of income and created new employment opportunities. However, efforts to "regularise" access to resources and reduce risk may have unintended outcomes. For instance, in northern Uganda, official programmes for the sedenterisation of pastoralists aimed to provide ensured access to water and grazing, as well as protecting herds from theft. However, it resulted in reduced herders' flexibility to cope by shifting cattle to new grazing areas in response to rainfall patterns.

Building trust and linkages among actors in food systems can only be achieved if local institutions are in place. Even if traditional dispute resolution and local governance institutions may have broken down during the conflict they still represent institutional memory. They are accessible at local level, and are cost-effective and sustainable. They should be supported and strengthened in order to provide people faced with the consequences of conflict a viable alternative to violence. Addressing historic grievances and injustices, responding to local needs and in particular restoring historic land rights are as essential to peacebuilding as economic goals (FAO, 2016g). The GreeNTD approach of the FAO is a people-centred and processoriented approach, with a stronger socio-ecological focus on territorial development. It is based on a multi-stakeholder engagement, which promotes local institutions and a parallel process of strengthening the weaker stakeholders and enabling them to actively participate in decisionmaking processes. FAO is using the GreeNTD approach, engaging local stakeholders through providing vaccination and treatments of both communities' livestock and promoting an informed negotiation process over the access, use and management of natural resources, using animal health interventions to break the ice between the two main groups and facilitate further joint action.

Food security interventions that build the capacity of institutions to deliver equitable access to services may help to restore confidence in state effectiveness and legitimacy, while increasing incentives for the population to maintain peace and stability. This could be equally true for building the capacity of non-state-level institutions (such as farmer cooperatives, water user associations, women's groups, and community grain banking groups) to provide better services for local communities. Many see functioning and effective institutions as essential for building resilience to conflict (Breisinger et al., 2015). Poor basic service delivery can undermine state legitimacy and perpetuate conflict. However, contrary to conventional wisdom, improved service delivery does not necessarily enhance state legitimacy (McLoughlin, 2015). Research by Sturge et al. (2017) in the Democratic Republic of the Congo, Nepal, Pakistan, Sri Lanka and Uganda found that poor experiences of service quality indeed led to less-favourable perceptions of the state. At the same time, it concluded that enhanced service delivery only improved such perceptions if accompanied by improvements in other forms of societal trust, including through community participation in voicing grievances. This more nuanced relationship between service delivery and state legitimacy was also identified elsewhere, such as in the provision of water services in Iraq (Denney et al., 2015). At the same time, improved service delivery should not exacerbate inequalities in fragile situations, as this could risk re-igniting conflict.

Strengthening regional and national institutions is critical for the effective design and implementation of food security and nutrition information systems and disaster risk prevention and reduction mechanisms.

6. Acknowledgement

We would like to thank the following experts who voluntarily provided suggestions for relevant literature or other advice to the author to support the preparation of this report. The content of the report does not necessarily reflect the opinions of any of the experts consulted.

- **Eckart Woertz** (Senior research fellow at the Barcelona Centre for International Affairs and scientific advisor to the Kuwait Chair at Sciences Po in Paris).
- **Rami Zurayk** (Professor and Chair, Department of Landscape Design and Ecosystem Management, Faculty of Agricultural and Food Sciences, American University of Beirut. Member of the High Level Panel of Experts on Food Security and Nutrition).
- Lewis Sida (humanitarian aid consultant who works in operations, policy and evaluation across the sector).

7. References

Arezki, R., Brückner, M. (2011). *Food Prices and Political Instability*. IMF Working Paper 11/62. https://www.imf.org/en/Publications/WP/Issues/2016/12/31/Food-Prices-and-Political-Instability-24716

Awortwi, N. (2018). Social protection is a grassroots reality: Making the case for policy reflections on community-based social protection actors and services in Africa. *Development Policy Review*. 36(S2), p.897-913. https://doi.org/10.1111/dpr.12364

Basdevant, O. (2009). *How Can Burundi Raise its Growth Rate? The Impact of Civil Conflicts and State Intervention on Burundi's Growth Performance*. IMF Working Paper 9(11). https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1356438

Bellemare, M. (2011). *Rising Food Prices, Food Price Volatility, and Political Unrest*. Munich Personal RePEc Archive Paper 31888. https://mpra.ub.uni-muenchen.de/31888/1/MPRA_paper_31888.pdf

Besley, T., Persson, T. (2011). *Institutions, Violence and Growth in Fragile States.* Paper for the IGC Oxford Workshop on Fragile States.

Blumenstock, J.E., Eagle, N., Fafchamps, M. (2016). Airtime Transfers and Mobile Communications: Evidence in the Aftermath of Natural Disasters. *Journal of Development Economics* 120, p.157-181.

http://www.jblumenstock.com/files/papers/jblumenstock_2016_JDE.pdf

Bolten, C. (2012). *The Only Way to Produce Food is to Cooperate and Reconcile? Failures of Cooperative Agriculture in Post-war Sierra Leone*. In: A. Özerdem, & R. Roberts (eds). (2012). Challenging Post-conflict Environments: Sustainable Agriculture. Taylor and Francis.

Breisinger, C., Ecker, O., Trinh Tan, J.F. (2015). *Conflict and food insecurity: How do we break the links*? In IFPRI, eds. Global Food Policy Report 2014-2015, p. 51–59. https://www.ifpri.org/sites/default/files/gfpr/2015/feature_3086.html

Brinkman, H., Hendrix, C.S. (2011). *Food Insecurity and Violent Conflict: Causes, Consequences, and Addressing the Challenges.* World Food Programme. Occasional Paper no.24. https://ucanr.edu/blogs/food2025/blogfiles/14415.pdf

Brinkman, H., Attree, L., Hezir, S. (2013). *Addressing horizontal inequalities as drivers of conflict in the post-2015 development agenda*. Global thematic consultation on addressing inequalities: the heart of the post- 2015 development agenda and the future we want for all. UNPBSO, Saferworld.

https://www.researchgate.net/publication/267764858_Addressing_horizontal_inequalities_as_drivers_of_conflict_in_the_post-2015_development_agenda

Buhaug, H. et al. (2014). One Effect to Rule them all? A Comment on Climate and Conflict. *Climatic Change*. 127(3-4), p.391-397). https://link.springer.com/article/10.1007/s10584-014-1266-1

CDA (2012). *Women, gender and peacebuilding: Do contributions add up*? Understanding cumulative impacts of peacebuilding. Issue paper. The Reflection on Peace Practice Program. Collaborative Learning Projects. https://www.cdacollaborative.org/publication/women-gender-and-peacebuilding-do-contributions-add-up/

CFS (2016). *Framework for Action for Food Security and Nutrition in Protracted Crises*. Committee for Global Food Security. http://www.fao.org/3/a-bc852e.pdf

Channell, W. (2010). Business Environment Reform in Conflict-Affected Contexts. Strengthening the Economic Dimensions of Peacebuilding. Practice Note 2. International Alert. https://www.enterprise-development.org/wp-content/uploads/IntlAlert_PracticeNote_BER_March2010.pdf

Chapagain, T., Raizada, M.N. (2017). Impacts of natural disasters on smallholder farmers: gaps and recommendations. *Agriculture & Food Security*. 6(39), p.1-16. https://doi.org/10.1186/s40066-017-0116-6

Crawford, N., Cosgrave, J., Haysom, S., Walicki, N. (2015). Protracted displacement: uncertain paths to self-reliance in exile. HPG Commissioned Report. Overseas Development Institute (ODI). https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/9851.pdf

Concern Worldwide (2018). Conflict and Displacement: Voices of Displacement and Return in Central African Republic's neglected Crisis.

https://www.concern.net/sites/default/files/resource/2018/06/conflict_and_displacement_voices_of_displacement_and_return_in_central_african_republics_neglected_crisis.pdf

Cordaid. (2015). *Smallholders and food security in fragile contexts - Cordaid's approach and track record.* Cordaid. https://www.cordaid.org/en/wp-content/uploads/sites/3/2015/06/Cordaid-Position_paper_FoodSecurity-LR.pdf

Cotula, L. (2013). *The Great African Land Grab? Agricultural Investments and the Global Food System*. Zed Books.

https://www.press.uchicago.edu/ucp/books/book/distributed/G/bo20842571.html

Daly, P., Halim, A., Nizamuddin, Ardiansyah, Hundlani, D., Ho, E., Mahdi, S. (2017). Rehabilitating coastal agriculture and aquaculture after inundation events: Spatial analysis of livelihood recovery in post-tsunami Aceh, Indonesia. *Ocean & Coastal Management.* 142, p.218-232. http://dx.doi.org/10.1016/j.ocecoaman.2017.03.027

De Chatel, F. (2014). The Role of Drought and Climate Change in the Syrian Uprising: Untangling the Triggers of the Revolution. *Middle Eastern Studies*. 50(4), p.521-535. https://doi.org/10.1080/00263206.2013.850076

Denney, L., Mallett, R., Mazurana, D. (2015). *Thematic paper on peacebuilding and service delivery*. United Nations University, Centre for Policy Research. https://pdfs.semanticscholar.org/950b/b8bc64dd3c00a59fc989385024aca55fb058.pdf

Desmidt, S. (2017). Agricultural value chains and their potential for youth employment in fragile and conflict-affected contexts. Great Insight, p.14-15. In: Great Insight. Youth Employment in Fragile Countries. Volume 6, Issue 1. ECDPM. http://ecdpm.org/wp-content/uploads/Great_Vol6_Issue1_Youth_Employment_fragile_countries_web.pdf

Duggleby, T., Beauvy, M., Degnan, C. (2008). *Cross-Sectoral Youth Project: Rapid Assessment for Project Design.* Education Development Centre. http://csy.edc.org/pdf/DR_Project%20Design.pdf

El-Zoghbi, M., Chehade, N., McConaghy, P., Soursourian, M. (2017). *The Role of Financial Services in Humanitarian Crises*. Access to Finance Forum. CGAP, SPF, World Bank Group. http://www.cgap.org/sites/default/files/Forum-The-Role-of-Financial-Services-in-Humanitarian-Crises_1.pdf

FAO (2018). *The impact of disasters and crises on agriculture and food security 2017.* Food and Agriculture Organisation of the United Nations. http://www.fao.org/emergencies/resources/documents/resources-detail/en/c/1106859/

FAO. (2017a). *Counting the Cost - Agriculture in Syria after six years of crisis*. Food and Agriculture Organisation of the United Nations. http://www.fao.org/3/b-i7081e.pdf

FAO (2017b). Social Protection and Resilience. Supporting Livelihoods in Protected Crises and Fragile and Humanitarian Contexts. Position Paper. Food and Agriculture Organisation of the United Nations, and the Institute of Development Studies (IDS). http://www.fao.org/3/ai7606e.pdf

FAO (2017c). Social Protection Framework: promoting rural development for all. www.fao.org/3/a- i7016e.pdf

FAO, IFAD, UNICEF, WFP, WHO (2017). *The State of Food Security and Nutrition in the World 2017. Building resilience for peace and food security.* Published by the Food and Agriculture Organisation of the United Nations. http://www.fao.org/3/a-17695e.pdf

FAO (2016a). *Increasing the resilience of agricultural livelihoods.* Food and Agriculture Organisation. http://www.fao.org/3/a-i5615e.pdf

FAO (2016b). *Nutrition in Protracted Crises. Breaking the vicious circle of malnutrition.* Guidance note. Food and Agriculture Organisation of the United Nations. http://www.fao.org/3/a-i6631e.pdf

FAO (2016c). *Livestock in Protracted Crises. The Importance of Livestock for resilience-building and food security for conflict-affected populations.* Guidance Note. Food and Agriculture Organisation of the United Nations. http://www.fao.org/3/a-i6637e.pdf

FAO (2016d). Land and People in Protracted Crises. Building Stability on the Land. Guidance Note. Food and Agriculture Organisation of the United Nations. http://www.fao.org/3/a-i6635e.pdf

FAO (2016e). *The Role of Social Protection in Protracted Crises. Enhancing the Resilience of the most Vulnerable.* Guidance Note. Food and Agriculture Organisation of the United Nations. http://www.fao.org/3/a-i6636e.pdf

FAO (2016f). *Gender, Food Security and Nutrition in Protracted Crises. Women and Girls as Agents of Resilience*. Guidance Note. Food and Agriculture Organisation of the United Nations. http://www.fao.org/3/a-i6630e.pdf

FAO (2016g). Negotiation, environment and territorial development Green Negotiated Territorial Development (GreeNTD). Working Paper. http://www.fao.org/3/a-i6603e.pdf

FAO (2015). *Nutrition and Social Protection*. Food and Agriculture Organisation of the United Nations. http://www.fao.org/3/a-i4819e.pdf

FAO/WFP (2010). *The State of Food Insecurity in the World. Addressing food insecurity in protracted crises.* Food and Agriculture Organisation of the United Nations and the World Food Programme. http://www.fao.org/docrep/013/i1683e/j1683e.pdf

Farrington, J. (2011). Stabilizing and Improving Livelihoods in Fragile and Conflict-Affected Situations (FCAS) – the Search for Frameworks and Evidence. *Sri Lankan Journal of Agricultural Economics*. 12, p.83-98. https://ageconsearch.umn.edu/record/205977/files/5.pdf

FSNAU (2012). Gender in emergency food security, livelihoods and nutrition in Somalia. A compendium of what we know, and recommendations on what we need to know for enhanced gender analysis. Food Security and Nutrition Analysis Unit Somalia. Baseline Study. http://www.fao.org/3/a-as801e.pdf

Frankenberger, T.R. (2012). *Can food assistance promoting food security and livelihood programs contribute to peace and stability in specific countries?* Paper for high-level expert forum on food insecurity in protracted crises. Food and Agriculture Organisation of the United Nations.

FSIN (2017). *Global Report on Food Crises 2017.* Food Security Information Network. https://documents.wfp.org/stellent/groups/public/documents/ena/wfp291271.pdf?_ga=2.2523316 57.1485169248.1537369841-316901579.1535967723

Grossmann H., Bagwitz, D., Elges, R., Kruk, G., Lange, R. (2009). *Sustainable Economic Development in Conflict-Affected Environments: A Guidebook.* GTZ (Deutsche Gesellschaft für Technische Zusammenarbeit).

https://reliefweb.int/sites/reliefweb.int/files/resources/837EE31FC02BF0C4852576160068F32C-GTZ_Jun2009.pdf

Guha-Sapir, D., Hoyois, P., Wallemacq, P., Below., R. (2017). *Annual Disaster Statistical Review 2016: The Numbers and Trends*. Centre for the Research on the Epidemiology of Disasters (CRED). University of Leuven. https://www.emdat.be/sites/default/files/adsr_2016.pdf

Harmer, A., Macrae, J. (2004). *Beyond the continuum: aid policy in protracted crises.* HPG Report 18. Overseas Development Institute.

Hiller, S., Hilhorst, D., Weijs, B. (2014). *Human Security in Fragile States. Value Chain Development in Fragile Settings.* Occasional Paper no.14. IS Academy. http://edepot.wur.nl/342676

IEP (2018). *Global Peace Index 2018.* Institute for Economics and Peace. http://visionofhumanity.org/app/uploads/2018/06/Global-Peace-Index-2018-2.pdf

IFDC (2010). *Building for the Future*. IFDC Annual Report 2009-2010. https://ifdc.org/wp-content/uploads/2015/05/ifdc_annual_report2009__2010.pdf

Idris, I. (2017). *Conflict-sensitive cash transfers: unintended negative consequences*. K4D Helpdesk Report 200. Brighton, UK: Institute of Development Studies. https://assets.publishing.service.gov.uk/media/59df6771e5274a11ac1c4964/200-Conflict-Sensitive-Cash-Transfers-Unintended-Negative-Consequences.pdf

IFPRI (2015). 2014–2015 Global Food Policy Report. International Food Policy Research Institute. http://ebrary.ifpri.org/cdm/ref/collection/p15738coll2/id/129072

IFPRI (2014). *How to Build Resilience to Conflict: The Role of Food Security*. International Food Policy Research Institute.

Jack, W., Suri, T. (2014). Risk Sharing and Transactions Costs: Evidence from Kenya's Mobile Money Revolution. *American Economic Review*. 104(1), p.183-233. https://www.aeaweb.org/articles?id=10.1257/aer.104.1.183

Justino, P. (2012). *Resilience in protracted crises: exploring coping mechanisms and resilience in households, communities and local institutions*. High Level Expert Forum on Food Security in Protracted Crises, Rome, 13–14 September 2012.

www.fao.org/fileadmin/templates/cfs_high_level_forum/documents/Resilience_in_protracted_cris es_PJustino_01.pdf

Justino, P, Cardona, I., Mitchell, R., Müller, C. (2012). *Quantifying the impact of women's participation in postconflict economic recovery*. HICN Working Paper 131, Household in Conflict Network. Brighton, UK, Institute of Development Studies.

Kaplan, S. (2008). Fixing fragile States. *Policy Review*. 152, p.63-77. https://www.fragilestates.org/wp-content/uploads/2014/03/Fixing-Fragile-States-by-Seth-Kaplan-Chapter-1-Excerpt.pdf

Kawasimi, H., White, S. (2010). *Towards a Policy Framework for the Development of Micro, Small and Medium-sized Enterprises in the Occupied Palestine Territory*. Assessment Report, Ministry of National (Palestine) Economy and the International Labour Organisation. https://www.researchgate.net/publication/265671248_MINISTRY_OF_NATIONAL_ECONOMY_ Towards_a_Policy_Framework_for_the_Development_of_Micro_Small_and_Mediumsized_Enterprises_in_the_Occupied_Palestine_Territory_Assessment_Report

Kelley, C.P., Mohtadi, S., Cane, M.A., Seager, R., Kushnir, Y. (2015). *Climate change in the Fertile Crescent and implications of the recent Syrian drought*. Proceedings of the National

Academy of Sciences of the United States of America (PNAS). https://doi.org/10.1073/pnas.1421533112

Kimenyi, M., Adibe, J., Djiré, M., Jirgi, A.J., Kergna, A., Deressa, T.T., Pugliese, J.E., Westbury, A. (2014). *The impact of conflict and political instability on agricultural investments in Mali and Nigeria*. Africa growth initiative working paper 17. https://www.brookings.edu/wp-content/uploads/2016/06/14-07-22-Impact-of-Conflict-MaliNigeria_FINAL.pdf

Kurtz, J., McMahon, K. (2015). *Pathways from peace to resilience: evidence from the Greater Horn of Africa on the links between conflict management and resilience to food security shocks.* Mercy Corps. https://www.mercycorps.org.uk/sites/default/files/pathways_from_peacefull_report.pdf

Lautze, S., Raven-Roberts, A., Sotomayor, D., Seid, F., Martin-Greentree, M. (2012). *Agriculture, Conflict and Stability: A call for renewed focus on protection and conflict sensitive programming in agriculture and food and nutrition security*. High level expert forum on food insecurity in protracted crises.

http://www.fao.org/fileadmin/templates/cfs_high_level_forum/documents/Agriculture-Conflict-Stability_Lautze_01.pdf

Levine, S., Adoko, J., Nzuma, J. (2011). WFP 2008 – 2013 Purchase for Progress (P4P) Initiative: A Strategic Evaluation (mid-term). Strategic Evaluation World Food Programme. https://docplayer.net/56166163-Wfp-purchase-for-progress-p4p-initiative-a-strategic-evaluationmid-term.html

Little, P. (2008). Livelihoods, assets and food security in a protracted crisis: the case of Jubba region, southern Somalia. In: Alinovi, Hemrich and Russo (2008), Beyond Relief: Food Security in Protracted Crises. p. 107–126.

https://www.researchgate.net/profile/Luca_Russo3/publication/257825324_Alinovi_L_Hemrich_G _Russo_L_editors_Beyond_Relief_Food_Security_in_Protracted_Crises_Evidence_from_Sudan _Somalia_and_the_Democratic_Republic_of_Congo_Practical_Action_London_2008/links/00b7 d525fb5b549b1a000000/Alinovi-L-Hemrich-G-Russo-L-editors-Beyond-Relief-Food-Security-in-Protracted-Crises-Evidence-from-Sudan-Somalia-and-the-Democratic-Republic-of-Congo-Practical-Action-London-2008.pdf#page=188

Little, P. (2005). Unofficial Trade When States are Weak The Case of Cross-Border Commerce in the Horn of Africa. Research Paper 2005 (13). EGDI–WIDER. https://www.wider.unu.edu/publication/unofficial-trade-when-states-are-weak

Lovon, M. (2016). Adapting to an Urban World Somalia Case Study. Somalia Food Security Cluster, World Food Programme, Global Food Security Cluster. https://fscluster.org/sites/default/files/documents/adapting_to_an_urban_world_somalia_urban_a ssessment_report_somalia_fsc_0.pdf

McLoughlin (2015). When does service delivery improve the legitimacy of a fragile or conflictaffected state? *Governance: An International Journal of Policy, Administration, and Institutions*. 28(3): 341–356.

Maxwell, D., Russo, L., Alinovi, L. (2011). Constraints to Addressing Food Insecurity in Protracted Crises. *Sustainability Science*. 109(31), p.1231-12325. https://doi.org/10.1073/pnas.0913215108 Maystadt, J., Ecker, O. (2014). Extreme Weather and Civil War: Does Drought Fuel Conflict in Somalia through Livestock Price Shocks? *American Journal of Agricultural Economics*. 96(4), p.1157-1182. https://doi.org/10.1093/ajae/aau010

Maystadt, J., Trinh Tan, J., Breisinger, C. (2014). Does food security matter for transition in Arab countries? *Food Policy*. 46, p.106–115. http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.688.5855&rep=rep1&type=pdf

McCandless, E., Smith, D., Prosnitz, B. (2012). *Peace dividends and beyond: Contributors of administrative and social services to peacebuilding*. United Nations.

Miller, C. (2008). South Sudan Agricultural Market Investment Innovative Use of a PPP to Build Institutional Capacity Rapidly. Food and Agriculture Organisation of the United Nations. http://www.fao.org/docs/up/easypol/521/3-4_Sudancase_150EN.pdf

Moore, A. (2017). *Agricultural Extension in Post-Conflict Liberia: Progress Made and Lessons Learned*. In: P.E. McNamara & A. Moore (eds). Building Agricultural Extension Capacity in Post-Conflict Settings. CAB International.

https://cab.presswarehouse.com/sites/stylus/resrcs/chapters/1786390590_1stChap.pdf

OECD (2016). *States of Fragility 2016: Understanding Violence*. Organisation for Economic Cooperation and Development. http://www.oecd. org/dac/states-of-fragility-2016-9789264267213-en.htm

Oxford Policy Management (2017). *Shock-Responsive Social Protection Systems Research: Literature review* (2nd Edition). OPM, Oxford. https://www.opml.co.uk/files/Publications/a0408-shock-responsive-social-protection-systems/srsp-literature-review.pdf?noredirect=1

Ovadiya, M., Kryeziu, A., Masood, S., Zapatero Larrio, E. (2015). Social protection in fragile and conflict-affected countries: trends and challenges. Social Protection and Labor Discussion Paper no. 1502. World Bank Group. https://openknowledge.worldbank.org/handle/10986/22077

Özerdem, A., & Roberts, R. (eds). (2012). Challenging Post-conflict Environments: Sustainable Agriculture. Taylor and Francis.

Parker, J. (2008). A synthesis of practical lessons from value chain projects in conflict-affected environments, report value chain development in conflict affected environments project. USAID. https://reliefweb.int/report/world/synthesis-practical-lessons-value-chain-projects-conflict-affected-environments

Percy, R., Buckley, J., Carpio, A., Guest, M., Jones, S., & Uppal, V. (2014). Strategic evaluation -WFP 2008-2013 Purchase for Progress Pilot Initiative: Evaluation Report - Volume I. WFP. http://documents.wfp.org/stellent/groups/public/documents/reports/wfp271430.pdf?_ga=2.23125 5711.1449806757.1513307058-953569664.1511223871

PBSO (2017). Guidance note: Sustaining peace. United Nations Peacebuilding Support Office. https://www.youth4peace.info/node/168

Pinstrup-Andersen, P., Shimokawa, S. (2008). Do poverty and poor health and nutrition increase the risk of armed conflict onset? *Food Policy*. 33(6), p.513-520. http://www.sciencedirect.com/science/article/pii/S0306-9192(08)00037-7 Raeymaekers, T. (2008). *Conflict and food security in Beni-Lubero: back to the future*? In: Alinovi, Hemrich and Russo (2008), Beyond relief: food security in protracted crisis. p.169–195. https://www.researchgate.net/profile/Luca_Russo3/publication/257825324_Alinovi_L_Hemrich_G _Russo_L_editors_Beyond_Relief_Food_Security_in_Protracted_Crises_Evidence_from_Sudan _Somalia_and_the_Democratic_Republic_of_Congo_Practical_Action_London_2008/links/00b7 d525fb5b549b1a000000/Alinovi-L-Hemrich-G-Russo-L-editors-Beyond-Relief-Food-Security-in-Protracted-Crises-Evidence-from-Sudan-Somalia-and-the-Democratic-Republic-of-Congo-Practical-Action-London-2008.pdf#page=188

Raleigh, C., Choi, J., Kniveton, D. (2015). The devil is in the details: An investigation of the relationships between conflict, food price and climate across Africa. *Global Environmental Change*. 32, p.187-199. https://doi.org/10.1016/j.gloenvcha.2015.03.005

Raleigh, C., Kniveton, D. (2012). Come Rain or Shine: An Analysis of Conflict and Climate Variability in East Africa. *Journal of Peace Research*. 49(1), p.51-64. https://doi.org/10.1177/0022343311427754

RFSAN (2016). *Food Security and Livelihood Assessment – Syria*. Regional Food Security Analysis Network. http://rfsan.info/storage/app/uploads/public/594/e53/522/594e53522065c155816938.pdf

Roberts, R., & Wright, J. (2012). Concluding Remarks: Looking to the Future – Agriculture Postconflict. In A. Özerdem, & R. Roberts (eds). (2012). Challenging Post-conflict Environments: Sustainable Agriculture. Taylor and Francis.

Schultze-Kraft, M., Rew, M. (2014). What works for rural development in fragile states? Evidence from Afghanistan, the Democratic Republic of the Congo, Yemen, Nepal, and Bolivia. Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), GmbH (GIZ), and the Institute of Development Studies (IDS).

Sperling, L., McGuire, S. (2010). Persistent Myths about Emergency Seed Aid. *Food Policy*. 35, p.195-201. https://doi.org/10.1016/j.foodpol.2009.12.004

Sturge, G., Mallett, R., Hagen-Zanker, J., Slater, R. (2017). *Tracking livelihoods, services and governance: panel survey findings from the Secure Livelihoods Research Consortium.* London: Secure Livelihoods Research Consortium. https://securelivelihoods.org/wp-content/uploads/Tracking-livelihoods-service-delivery-and-governance_Panel-survey-findings-from-the-Secure-Livelihoods-Research-Consortium.pdf

Uexkull, N. Von, Croicu, M., Fjelde, H., Buhaug, H. (2016). *Civil Conflict Sensitivity to Growing-Season Drought*. Proceedings of the National Academy of Sciences of the United States of America (PNAS). https://doi.org/10.1073/pnas.1607542113

UNDP (2012). *Africa 2012: Towards a Food Secure Future.* United Nations Development Programme. http://www.afhdr.org/the-report/

UNDP (2013). Strengthening the Rule of Law in Crisis-Affected and Fragile Situations. UNDP Global Programme Annual Report 2013. United Nations Development Programme. http://www.undp.org/content/dam/undp/library/crisis%20prevention/UNDP%20RoL%20Annual%2 0Report%202013%20-%20Web.pdf UNFPA (2017). Humanitarian emergencies. In: Emergencies. United Nations Population Fund. http://www.unfpa.org/emergencies

UNHCR (2016). *Global Trends: Forced Displacement in 2016.* United Nations High Commissioner for Refugees. http://www.unhcr.org/5943e8a34.pdf

WFP (2017). At the Root of Exodus. Food Security, Conflict and International Migration. World Food Programme. https://docs.wfp.org/api/documents/WFP-0000015358/download/?_ga=2.76218901.1485169248.1537369841-316901579.1535967723

WFP (2014). P4P's Women's Empowerment Pathways: Roadblocks and Successes. World Food Programme. P4P Global Learning Series.

https://documents.wfp.org/stellent/groups/public/documents/special_initiatives/wfp265434.pd f

WFP (2010). *Democratic Republic of DR Congo.* P4P Country Programme Profile. World Food Programme.

https://documents.wfp.org/stellent/groups/procuweb_content/documents/reports/wfp226767. pdf?_ga=2.48777314.592673214.1537704802-316901579.1535967723

Wheeler, D. (2011). *Quantifying Vulnerability to Climate Change: Implications for Adaptation Assistance*. Centre for Global Development. Working Paper 240. https://www.cgdev.org/publication/quantifying-vulnerability-climate-change-implications-adaptation-assistance-working

Wodon, Q., Morris, M., Glaesener, V., Zoyem, J.P., Larbouret, P., Moens, M., Dianga, E., Mdaye, B., Kavalec, A. (2008). *Agricultural Recovery: Food Security and Beyond*. MPRA Paper 15410. https://core.ac.uk/download/pdf/7301643.pdf

World Bank (2014). *Public-Private Dialogue in Fragile and Conflict-Affected Situations: Experiences and Lessons Learned.* The World Bank Group. https://www.wbginvestmentclimate.org

World Bank (2011). *Conflict, Security and Development.* World Development Report 2011. The World Bank Group. http://siteresources.worldbank. org/INTWDRS/Resources/WDR2011_Full_Text.pdf

World Bank (2016). *Identification for Development: Strategic Framework*. World Bank Group. http://pubdocs.worldbank.org/en/179901454620206363/Jan-2016-ID4D-Strategic-Roadmap.pdf

WFP (2014). *P4P's Women's Empowerment Pathways: Roadblocks and Success*. World Food Programme.

https://documents.wfp.org/stellent/groups/public/documents/special_initiatives/wfp265434.pdf?_g a=2.128630858.792983651.1542235266-316901579.1535967723

Wright, J., Weerakoon, L. (2012). Taking an Agroecological Approach to Recovery: Is it worth it and is it possible? In: A. Özerdem, & R. Roberts (eds). (2012). Challenging Post-conflict Environments: Sustainable Agriculture. Taylor and Francis.

Young, H., Goldman, L. (2015). Managing natural resources for livelihoods: Helping post-conflict communities survive and thrive. In H. Young & L. Goldman (eds.). Livelihoods, Natural Resources, and Post-Conflict Peacebuilding. Environmental Peacebuilding.

Zurayk, R. (2014). Looking at Sierra Leone's Ebola epidemic through an agrarian lens. *Journal of Agriculture, Food Systems, and Community Development*. 5(1), p.15–20. http://dx.doi.org/10.5304/jafscd.2014.051.005

Zurayk, R. (2014b). The fatal synergy of war and drought in the eastern Mediterranean. *Journal of Agriculture, Food Systems, and Community Development.* 4(2), p.9–13. http://dx.doi.org/10.5304/jafscd.2014.042.013

8. Appendix

Maps that show level of food crises measured among population in IPC/CH Phase 3 Crises and above. (Source: FSIN, 2017, p.16)









Figures of damage (assets and infrastructure) and loss (production) in agriculture (Source: FNIS, 2017, p.17)

Climate related natural disasters in conflict areas in 2016 (Source: FAO et al., 2017, p.40)

Country	Main climate/weather adverse effect on food security	Number of food-insecure people (IPC/CH phase 3+) in millions
Afghanistan	Floods, landslides in winter; drought in Ghor province	8.5
Burundi	El Niño phenomenon	2.3
Central African Republic	Localized floods	2.0
Democratic Republic of the Congo	El Niño phenomenon	5.9
lraq*	Drought	1.5
Somalia	El Niño-related drought	2.9
South Sudan	Drought and floods	4.9
Sudan	El Niño phenomenon	4.4
Syrian Arab Republic*	Drought in Aleppo, Idlib and Homs	7.0
Yemen	Flooding, heavy rains and tropical cyclones	14.1
Total		53.5

TABLE 4 CONFLICT AND CLIMATE-RELATED SHOCKS ASSOCIATED WITH FOOD CRISIS SITUATIONS IN 2016

NOTE: Figures for food-insecure populations for countries indicated with an asterisk are reported by the government, Food Security Cluster (HNO or HRP) or WFP-CARI; figures for South Sudan and Somalia refer to IPC analyses conducted in January and February 2017, using data from 2016. SOURCE: Food Security Information Network (FSIN). 2017. *Global Report on Food Grises 2017*. Rome.

Suggested citation

Quak, E. (2018). Food Systems in Protracted Crises: Strengthening Resilience against Shocks and Conflicts. K4D Helpdesk Report 447. Brighton, UK: Institute of Development Studies.

About this report

This report is based on five days of desk-based research. The K4D research helpdesk provides rapid syntheses of a selection of recent relevant literature and international expert thinking in response to specific questions relating to international development. For any enquiries, contact helpdesk@k4d.info.

K4D services are provided by a consortium of leading organisations working in international development, led by the Institute of Development Studies (IDS), with Education Development Trust, Itad, University of Leeds Nuffield Centre for International Health and Development, Liverpool School of Tropical Medicine (LSTM), University of Birmingham International Development (IDD) and the University of Manchester Humanitarian and Conflict Response Institute (HCRI).

This report was prepared for the UK Government's Department for International Development (DFID) and its partners in support of pro-poor programmes. It is licensed for non-commercial purposes only. K4D cannot be held responsible for errors or any consequences arising from the use of information contained in this report. Any views and opinions expressed do not necessarily reflect those of DFID, K4D or any other contributing organisation. © DFID - Crown copyright 2018.

