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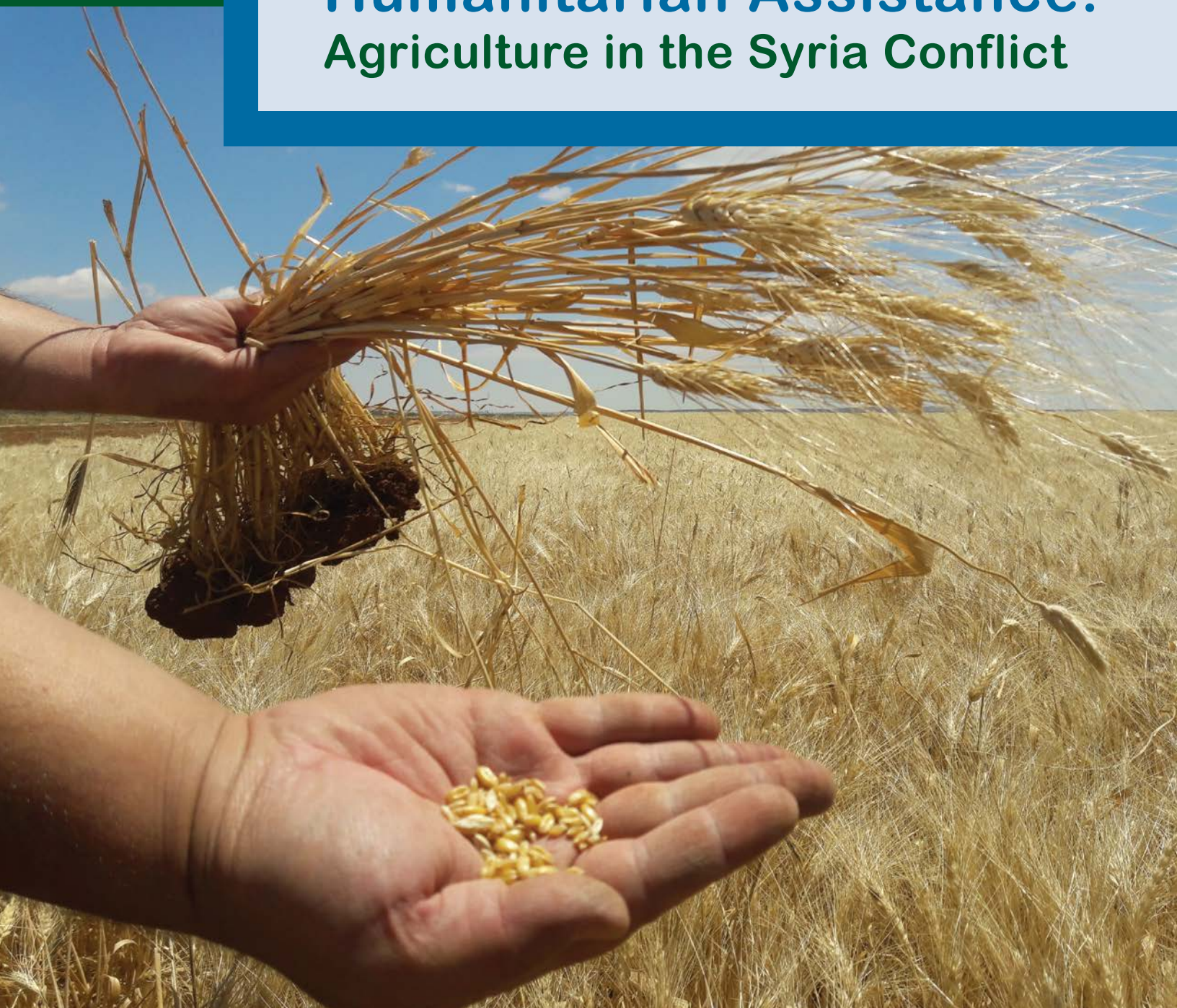
Resilience through Humanitarian Assistance:
Agriculture in the Syria Conflict



Resilience through Humanitarian Assistance: Agriculture in the Syria Conflict

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Executive Summary

Resilience through Humanitarian Assistance: *Agriculture in the Syria Conflict seeks to address a complex question: how can humanitarian assistance more effectively help vulnerable communities in the long-term? In this case, we specifically focus on the challenge of providing humanitarian support to sustain local agricultural capacities in conflict-affected north-west Syria.*

Agriculture in Syria (pages 8-13)

Syria's history provides both benefits and barriers for an agricultural resilience approach. The benefits include the size of Syria's agriculture sector, which used to account for 40 percent of employment and 27 percent of GDP. The barriers include the pre-conflict centralized control by the government of every aspect of agriculture. With the drought of 2006-10 and the subsequent reduction of government subsidies, the agriculture industry was plunged into crisis, which was a precipitating stressor for the conflict This, in turn, led to the breakdown of the agricultural system in areas of Syria outside government control. The challenge from a capacity standpoint is that centrally managed public facilities (such as irrigation canals) have not been maintained and farmers are historically unused to dealing with planning and market forces in crop sales, for example. The impact of the conflict on displacement, poverty and damage to the sector further challenges food security and production.

Humanitarian Assistance and Agriculture (pages 14-15)

Resilience programming in the context of Syria can bridge humanitarian and development interventions, by directing humanitarian assistance to strengthen the Syrian agricultural sector at the individual, household and community levels. It can target stakeholders ranging from professional agronomists and veterinarians to farming households and community-based organizations, such as farmers' unions. A resilience-building intervention can strengthen the sector by improving infrastructure that serves agriculture, and it can increase communities' capacities to maintain them.

Case Studies: Agriculture and Resilience in Syria (pages 16-21)

This section provides examples of resilience-focused agricultural work in Syria. This includes:

- **Kitchen gardens (page 16):** Designed to be grown on relatively small areas, kits contain a variety of seeds for vegetables, as well as crops which can be grown inside tents and other shelters. This work has been primarily targeted at IDPs living in a displaced person camp, who either plant near their tents or rent or share land with landowners near the camps.

- **Small Farm Kits (pages 17-18):** These kits, tailored for either the winter or spring/summer growing season, contain a variety of seeds for staple crops and vegetables. They also contain the tools and fertilizers necessary to cultivate crops and manage larger plots of land.

- **Agriculture extension visits (page 19):** This involves upgrading agricultural extension services, such as those by veterinarians and agronomists, equipping them with necessary tools for providing mobile services to farmers and animal breeders.

- **Irrigation canal rehabilitation (page 20):** Irrigation canals are one example of public infrastructure that has been rehabilitated to help farmers.

- **Disaster risk reduction (DRR) – fire response (page 21):** Crop fires can be disastrous for farmers in Syria. DRR efforts emphasize rapid response capability through collaboration with local councils and farmers to identify those with tractors/disk plows in strategic locations; provide a strategic reserve of fuel dedicated for use only in the event of a crop/orchard fire; and have response team members identified and trained to ensure teams are prepared for deployment.

Agriculture in a Conflict Zone: Lessons Learned from Practical Implementation (pages 22-32)

This section focuses on efforts to adapt elements of the humanitarian system to implement successful resilience programming.

- **Participant Selection: need, vulnerability, technical capacity (page 22-24)** Resilience-oriented agricultural programs require nuanced beneficiary selection criteria, essentially, two sets: the household or individual's need as well as the technical prerequisites for implementation (such as experience, assets and skills). The latter will differ depending on the type of assistance provided. This means that one cannot always select the most vulnerable as they would not have the resources to use the intervention effectively.

- **Working with local communities to secure access (page 25-26):** In order to implement programs, NGOs must secure access to those communities. Working in Syria requires close partnership with local stakeholders

for this purpose. INGOs maintaining humanitarian principles should work with local councils only to get operational access to a community.

• **Partnering with local NGOs (page 27-31):** Partnering with local NGOs requires careful scrutiny of the organization, beginning with the basics of internal controls, reviewing organizational capacity and for best practices such as an annual external audit. Global Communities checks all organizations through databases, such as the US Treasury Office of Foreign Assets Control, to ensure that there is no risk of funds going to sanctioned individuals or organizations.

• **Monitoring & Evaluation (page 31-32):** Measuring resilience in a humanitarian context is challenging. In this context, M&E mostly focuses whether aid was delivered to the right people at the right time and used appropriately. This makes it challenging for organizations attempting to provide resilience programming to truly verify the actual impact of their work. Resilience could be measured by the capacity to manage assets, maintain function and availability of services and markets and reduce dependency on negative coping mechanisms.

• **Exit Strategy and Sustainability Planning (page 32):** INGOs and donors are not permanent market actors which makes handing over longer term projects important but challenging. The humanitarian principle of neutrality means that working with local governments – who may be aligned with any of the armed actors or are unelected – is unacceptable. The capacity of local Syrian NGOs has been expanding and improving rapidly, but managerial skills remain uneven. Farmers' unions and irrigation committees were known entities before the war, but they did not have actual ownership and governance responsibility. While there is no single solution to the challenge of sustainability, improving the capacity of local communities to manage small-scale infrastructure is essential.

Conclusion (page 33)

Despite an uncertain of the future and the risks to investments, many in the farming community are keeping the Syrian agriculture sector alive, showing their resilience in the face of conflict.

• Focusing entirely on pure humanitarian assistance that looks for quick impact actually undermines the agriculture sector in the longer term by building dependency rather than building on people's capacities. The type of support that the agriculture sector needs fundamentally does not mesh with the paradigm that favors immediate impact rather than a long-term approach.

• Not all organizations and donors define resilience the same way; there is significant variation in how it is understood and therefore how programming is implemented. Humanitarian organizations and donors need to work together to develop a shared definition of resilience that can be used as the basis of such programming.

• Moving away from stop-gap measures requires a range of different resilience-oriented approaches. Consequently, organizational support systems need to be aligned with the intended purpose of resilience approaches, making it possible to determine whether they are relevant, appropriate and effective.

• Aid must always be implemented with an eye to the long-term, even when the sought-after impact is intended to be immediate. No matter the outcome of the conflict, the agriculture sector, though damaged, will not start from point zero. The overarching system might have changed, but the farming community, its knowledge and experience, remains.

Introduction

Global Communities has been responding to the Syrian conflict since 2013. In that time, we have sought to address food insecurity with solutions that can potentially bridge an emergency response with more long-term, post-conflict recovery.

Between 2014 and March 2018 we provided agricultural assistance as well as livestock and livelihoods support to a population of more than 83,000 individuals in opposition-held northwest Syria. Building on these experiences, we believe it is useful to share our perspectives, as well as those of other organizations working in this space, in an effort to answer this complex question: by thinking longer term, how can humanitarian assistance more effectively help vulnerable communities? In this case, we consider the specific challenge of providing humanitarian support to sustain local agricultural capacities in north-west Syria, even as the uncertainties and difficulties associated with the conflict continue.

Global Communities' decision to pursue a resilience approach in Syria through agriculture emerged directly from our core competencies and past experience. Global Communities is a sustainable development organization focused on community-based development which has developed expertise in humanitarian assistance, rather than the other way around. Our approach has never been to focus on handouts or immediate assistance, but always to approach humanitarian efforts with a long-term, development lens. And with our background in community-based development, we seek to work as closely as possible with people in the communities affected by crises and take our cues from them. We consider the resilience element first, then relief second.

When we began working on the Syria crisis, humanitarian groups were relying heavily on food kits, but with agriculture playing such a large role in the country's economy historically, we looked to see how we could work with what remained of the system to help communities help themselves. We recognized that conflict evolves: not all parts of Syria are at war at all times, and the front line shifts, so there are areas where, with the right approach, it is possible to get permission to work and access to communities.

Humanitarian activities are guided by the principles of humanity, neutrality, impartiality and independence. Humanitarian initiatives traditionally do not seek to strengthen structures or systems, as this could undermine the principle of independence. As a result, adherence to these principles, while crucial, may lead many humanitarian assistance providers to do little to maintain social or economic capacities that existed before the crisis or conflict. Bridging this need for neutrality and impartiality with strengthening a sector is a core challenge that we address in this volume.

Overall, this volume's objective is to share with program designers, implementers, donors, policymakers and other interested parties, recommendations, considerations and questions on how to build on Syria's own capacities by maintaining and strengthening its agricultural resilience, with an eye to eventual resolution of the conflict.

Informing this volume is the content gathered during interviews with more than 50 key informants from 20 different organizations working on Syrian agriculture. These interviews were gathered from organizations and individuals working in opposition-held areas of north-western Syria, not within the Syrian government-held areas nor the north-east, whose experiences will be different. The experiences of respondent organizations and individuals rely on self-reported information that has not been independently verified.

The volume is broken down into these sections:

1. **Agriculture in Syria** – a brief history of agriculture in Syria and the impact of the conflict
2. **Humanitarian Assistance and Agriculture** – an overview of the issues facing humanitarian assistance organizations approaching the agriculture sector
3. **Case Studies: Agriculture and Resilience in Syria** - examples of Global Communities' work in agriculture in Syria
4. **Agriculture in a Conflict Zone: Lessons Learned from Practical Implementation** – from implementers and donors in agriculture in Syria
5. **Conclusion** – steps forward for implementing and expanding agricultural programming in Syria

Agriculture in Syria

The Syrian conflict (2011-present) has generated the largest migration of refugees and internally displaced persons in the Western hemisphere since World War II. From an estimated prewar population of 22 million people,[1] as of October 2017, some 5.3 million Syrians are registered refugees[2] and another 6.5 million, including 2.8 million children, are estimated to have been internally displaced.[3]

Armed conflict has created a state of chronic vulnerability for millions of Syrians. UNOCHA estimated in 2017 that 69 percent of Syrians now live in extreme poverty, on less than $2 a day, and 35 percent live in abject poverty "characterized by severe deprivation of the basic food required to survive."[4] The Syria Humanitarian Needs Overview of 2018 reports that 54 percent of people in Syria are food insecure, with 6.5 million Syrians acutely food insecure and a further 4 million people are at risk of becoming acutely food insecure.[5]

Public and private assets have been decimated, with housing and infrastructure damages estimated at around $90 billion in 2016. The gross domestic product, $60.2 billion in 2010, is now at $27.2 billion. Total losses in the economy incurred in the first five years of the conflict are estimated at $259.6 billion ($169.7 billion in negative GDP growth and $89.9 billion in damage to capital stock).[6] Around 15 million people do not have safe water[7] and electricity generation dropped by half from 2010-2014.[8]

These figures paint a portrait of a country in the grip of a violent crisis, with conditions deteriorating constantly as the conflict continues. But the crisis did not emerge overnight. Environmental, economic and governance pressures played a significant role in the eruption of violence, and nowhere was this more evident than in Syria's most crucial sector: agriculture.

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1 United Nations statistics as cited in The Economist, "Syria's Drained Population," September 30, 2015, https://www.economist.com/blogs/graphicdetail/2015/09/daily-chart-18.

2 UNHCR, Situation Syria Regional Refugee Response, http://data.unhcr.org/syrianrefugees/regional.php.

3 UNHCR, Internally Displaced People, July 7, 2016, http://www.unhcr.org/sy/29-internally-displaced-people.html.

4 UNOCHA, 2017 Humanitarian Needs Overview, December 1, 2016, http://www.unocha.org/sites/dms/Syria/2017_Syria_hno.pdf.

5 Whole of Syria Food Security Cluster, Food Security Situation in Syria, November 2017, https://hno-syria.org/data/downloads/fss.pdf.

6 UN ESCWA & University of St. Andrews, Syria at War: Five Years On, 2016, https://www.unescwa.org/sites/www.unescwa.org/files/publications/files/syria-war-five-years-english_1.pdf.

7 UN News, "Children's access to safe water and sanitation is a right, not a privilege – UNICEF," August 29, 2017, https://news.un.org/en/story/2017/08/564002-childrens-access-safe-water-and-sanitation-right-not-privilege-unicef#.WaXVo5OGNBw.

8 International Energy Agency, Syrian Arab Republic, https://www.iea.org/statistics/statisticssearch/report/?country=SYRIA&product=Indicators&year=2010.

Agriculture in Syria – Background

Agriculture has long been a major source of national pride and identity for Syrians as well as the backbone of the national economy, and was historically managed and regulated by the central government. The agricultural sector contributed as much as 27 percent of GDP in 2001 and, despite falling to 17 percent in 2010, it still accounted for more than twice the share of manufacturing.[9] Agriculture accounted for up to 40 percent of employment in Syria at the start of the conflict in 2011,[10] and up to 80 percent in rural areas.[11] Women made up a significant part of that work force.

Sustaining the agriculture sector has always been a priority and a challenge for Syria. Following Syrian independence at the end of World War II, the government sought to achieve food self-sufficiency and promote cash crops for export. Agriculture was further emphasized with the 1970s rise of the Ba'ath party for whom poor farmers and rural residents were an important base. The government selected key crops to promote and followed the Soviet buy-high, sell-low model, setting prices for crops higher than the market while subsidizing the costs of fuel and fertilizer.[12] Water was managed by a Ministry for Irrigation which oversaw all the relevant infrastructure (dams, lakes, rivers and so on) which also controlled and penalized the construction of private wells on farmland. All water sources in Syria do not originate in Syria, so the need for coordination was very high, to make sure the limited resources were well managed.

The government also outlawed the practice of grazing tribal lands. As a land management policy, the diminishment of tribal oversight proved disastrous, resulting in the conversion of some grazing areas to crop cultivation and thus increasing animal density and overgrazing on the remaining pasture land. The thin soils of the pasture land could handle neither the frequent plowing required for crop cultivation nor the strain of overgrazing. Soil depletion and desertification were the eventual results.

The 2006-2010 Drought

All these issues came to a head when the 2006-2010 drought converged with a shift in government agricultural policy regarding subsidies for irrigation and fertilizer. The withdrawal of these subsidies and the low rainfall combined to reduce production significantly. What in part made the drought so uniquely destructive were the Syrian government policies of the previous 70 years that had aimed to buoy the sector.[13]

Syria lies within an arid zone. Drought cycles are part of life and farmers in the region have found ways to cope for centuries. Syria received below-average rainfall for that four-year period, increasing demand for the groundwater-pumped irrigation that government subsidies had made possible in the first place. The state chose that moment, however, to retract some of its pro-farmer policies in an effort to integrate Syrian agriculture into the global economy. The Assad government ended the subsidies for fuel in 2008, making the cost of pumping irrigation water from the underground wells surge, and then ended fertilizer subsidies in 2009.

Agricultural production, and with it the nation's food security, dropped precipitously. The average yield of irrigated crops fell by 43 percent and nearly 79 percent for rain-fed crops in 2008 and 2009 respectively. Pasture land dried up and fodder became unavailable, forcing many to sell off their herds.[14]

USAID's Knowledge Services Center describes the situation thus: "The Syrian government was quick to blame global climate change, an increasing population, and global food market prices for the crisis. While all of these reasons likely increased the impacts of the drought, the government refused to recognize the fact that the Syrian agricultural sector had been poised for such a disaster for decades due to the unsustainable scale of agriculture promoted by the government."[15]

9 Christopher Chapman, Syrian Agriculture: Historical and Environmental Context, (Washington, DC: USAID Knowledge Services Center, June 18, 2014).

10 Carnegie Middle East Center, "Food insecurity in war-town Syria: From decades of self-sufficiency to food dependence," Syrian Economic Reconstruction Project, June 4, 2015, http://carnegieendowment.org/2015/06/04/food-insecurity-in-war-torn-syria-fromdecades-of-self-sufficiency-to-food-dependence-pub-60320.

11 Beatrix Buecher et al., Women, Work and War: Syrian women and the struggle to survive five years of conflict, (CARE, March 2016), https://www.care.org/sites/default/files/documents/Syria_women_and_work_report_logos_07032016_web.pdf.

12 J. Barnes, "Managing the Waters of Ba'th Country: The Politics of Water Scarcity in Syria," Geopolitics 14(3) (2009): 510-530, as cited in Chapman (2014).

13 For more information on the government policies see https://propertibazar.com/article/syrian-agriculture-usaid_5a21b5cdd64ab26a9ec33739.html

14 Francesca De Chaâtel, "The Role of Drought and Climate Change in the Syrian Uprising: Untangling the Triggers of the Revolution," Middle Eastern Studies, (London: Routledge, January, 2014): 1-15, as cited in Chapman (2014).

15 Christopher Chapman, Syrian Agriculture: Historical and Environmental Context, (Washington, DC: USAID Knowledge Services Center, June 18, 2014).

Impact of the Conflict

The conflict, following the drought, has further depleted every major sector of Syria's agricultural capacity. A 2017 report from the Food and Agriculture Organization of the United Nations[16] surveyed the agriculture sector throughout the whole of Syria to determine the conflict's effect on food security.

- $16 billion in total losses and damage to the agricultural sector between 2011-2016
- $7.2 billion in total losses and damage to crop production
- $5.5 billion in total losses and damage to the livestock sector
- $80 million in total losses and damage to fisheries
- $3.2 billion in total losses and damage to agricultural infrastructure and assets (e.g., irrigation canals and wells, veterinary clinics, storage and processing facilities, etc.)
- 800 percent increase in the index of food consumer prices between 2010 and 2016
- 90 percent of households now spend more than half their income on food
- 85 percent of communities report that agricultural support has either decreased significantly or stopped entirely
- Jobs that used to exist in agriculture that supported farming households no longer exist and the source of income has diminished.

2011, the year used by the FAO report uses as a best-case scenario, was itself a turning point for Syrian agriculture. Many farmers were forced by the drought to abandon their land and move to cities, especially Damascus and Homs, to try to find a new way to survive. The transfer of jobs to urban, industrial areas created a notable gender employment gap as the majority of newly created jobs went to men.[17] The lack of economic opportunity they found in these areas became a significant precipitating stressor to the civil unrest that erupted in 2011.[18]

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

17 Beatrix Buecher et al., Women, Work and War: Syrian women and the struggle to survive five years of conflict, (CARE, March 2016), https://www.care.org/sites/default/files/documents/Syria_women_and_work_report_logos_07032016_web.pdf.

18 Francesca De Chaâtel, "The Role of Drought and Climate Change in the Syrian Uprising: Untangling the Triggers of the Revolution," Middle Eastern Studies, (London: Routledge, January, 2014): 1-15, as cited in Chapman (2014).

DOWN TO THE LAST DONUM: THE AGRICULTURAL SECTOR IN PRE-WAR SYRIA

In pre-conflict Syria, it can be useful to consider the agricultural sector as a massive nationwide public utility. Syrian agronomists described the former process: at the beginning of each growing season, the central planners based in Damascus would calculate the total metric tonnage of each crop required to ensure the nation's food security, and to export for cash. Every farmer in every village throughout Syria would meet with a government agriculture extension unit and be told which crops and in which quantities to plant for each season. The government subsidized the cost of all inputs—seeds, fertilizer, pesticide, fuel. The government also guaranteed the prices it would pay farmers for the harvest, especially for basic crops such as wheat, cotton and sugar beet. The government also fixed the market price to consumers of food staples such as bread and milk.

In response to the conflict, Syria's farmers are not so much reacting to radical changes in market forces so much as they are learning to grasp, conceptually, what market forces are. Multiple key informants reported that only since the war began had they started monitoring crop and livestock prices on the international commodities markets—or even known that such markets existed. Donor nations with philosophical objections to state-controlled economic planning and investment must recognize the significance of the shift to free market principles for farmers whose land has been centrally managed down to the last donum for generations.

Note: 10 donums = one hectare

The Outlook for Support to the Sector

Before 2011, there was a multitude of centralized, state-run institutions involved in the formulation and implementation of agriculture, including the Ministry of Agriculture and Agrarian Reform, the National Agricultural Policy Center, and the Ministry of Economy and Trade. At the time of writing, the government apparatus largely remains in place in the government-controlled areas of Syria, but not in the opposition-controlled areas such as the northwest. In these areas, the enabling environment for agriculture has disintegrated, leaving a vacuum that is being partially filled by fragmented programming implemented by various NGOs.

Although multiple key informants (most of whom were Syrian agronomists in exile) expressed an implicit or explicit wish for the restoration of a centrally-run enabling environment, the Syrian agricultural sector collapsed because the government's buy-high, sell-low model was unsustainable. Other key informants made the point that whatever future direction Syria's agricultural sector might take after the war, a return to the previous model is unlikely. Donor nations' aid policies tend to reflect their economic philosophies, and Western free-market nations are unlikely to allow a highly controlled and subsidized state sector to direct a nation's economy, much less be that economy's major driver.

As the FAO in Counting the Cost described it: "In a situation where so much has been destroyed and so many people have been displaced or have lost their livelihoods, any attempt to prioritize areas for support will likely be contested."[19] The report notes, however, that the agricultural sector must be a priority given its major share of the economy including job creation, its central role in food security, and also its role in advancing social cohesion and stability—94 percent of the FAO report's respondents agreed that support for agriculture would discourage rural dwellers from migrating or encourage those who had already migrated to return.

Agriculture in Syria Today

Despite the destruction of significant parts of the agricultural system, not everything has been destroyed. Farming remains a major occupation for Syrians and there is much that can be built upon, even if the public structure that supported the sector has disintegrated in opposition-held areas.

According to the FAO, non-internally displaced households in rural areas still depend on agriculture as their main livelihood, with around 80 percent involved in annual crop production, 60 percent in perennial crop production and 60 percent in livestock rearing. It is important to note that this applies for men and women, as the sector employs both; however, women have not had the same preconditions as men to succeed, nor is their contribution recognized equally. More than 75 percent of rural households still grow food for their own consumption. At the same time, food consumer prices increased 800 percent between 2010 and 2016, leading 90 percent of households to spend more than half their income on food, compared to 25 percent before the conflict. Only 25 percent of all households have access to finance from any source, compared to 60 percent before the crisis.[20]

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

20 Ibid.

WHO STAYS TO FARM?

Who stays to farm in Syria during the conflict? In our experience there are several categories of people who stayed. Firstly, those who were simply unable to leave, whether through the inability to afford to pay traffickers, a lack of family in neighboring countries, or any number of reasons. Another key group who stay to farm are families who can afford to leave, but select a member of the family to remain behind to look after the land. Sometimes those families also circulate different family members to care for the land, taking turns to go back to Syria. These landowners will also negotiate with poorer families to look after the land, either through sharecropping or paying a salary. This ensures they retain a presence and ownership of the land for whatever comes in the post-conflict period. Throughout this publication, when we refer to "households," this does not necessarily imply a traditional family unit, but any constellation of people living together.

Poverty and displacement have compounded the struggle to manage their assets and capacities. The longer Syrian farmers are away from their land—the longer the habits and rhythms of agricultural life are disrupted and the more their land and other assets are degraded—the less likely they will be able to return, or that they will be able to make a success of farming if they do return. Productive assets – such as land, seeds and tractors – have been divorced from the system that supported them. Financial pressures force households to sell these assets to pay for immediate needs, thus reducing their ability to be productive long-term.

Public assets, such as the mills for grain processing or markets for selling, no longer have funding or oversight from a central government body and are not maintained. Global Communities' own needs assessment,[21] in several regions of opposition-held Syria, identified a systemic shortage in the availability of key products, such as spray irrigation systems, pesticides, fungicides, vaccines, animal feed, and seeds, among others. The greatest shortages – in pesticides and fertilizers – have been supplemented by highly-priced, illegal and unsafe versions of these products that have entered the market.

There has also been a significant breakdown in water infrastructure. The once-tight controls maintained by the government of Syria over misuse or excessive exploitation of underground water aquifers are no longer in place. Farmers, desperate for water, routinely drill new underground wells to irrigate farmland that cannot be utilized otherwise, causing potential future damage to aquifers. Irrigation structures have been damaged, along with processing and storage facilities and farming equipment. Lack of fuel and electricity cuts have also affected water supply and have contributed to an increase in the social tensions among farmers. These pressures are increased by limited access caused by security issues and lack of free movement.

Violence, drought and disease have depleted livestock by at least 40 percent, and poultry by 70 percent, compounded by access issues reducing pasture availability. Veterinary services, including livestock medicines, are drastically lacking. Meat has become mostly unaffordable to low-income Syrians, with Global Communities' needs assessment reporting that in one region of north-west Syria, 24 percent of families have meat only once a week and 69 percent never at all.

Syria's agricultural sector is already being transformed by the ongoing conflict. The challenge facing institutions, donors, policymakers, and humanitarian assistance organizations is how to arrest or at least ameliorate the further disintegration of this vital sector. Can we even begin to build the substratum of a new agricultural sector that will be more resilient than the previous model? The next section of this publication will examine the framework for meeting this challenge.

21 For the purposes of security, the areas will not be identified in this publication.

PROTECTION CONCERNS: GENDER AND YOUTH

The conflict has caused significant changes in how agricultural sector work is distributed. Key informants note that prior to the conflict, women were half the workforce. They were mostly involved in tending fields and breeding livestock as well as food production with products from the animals, such as cheese or other dairy products. However, they also took on managerial roles, for example, as team leaders for day workers. Now the role of women has changed. This is sometimes attributed to the mentality of the armed groups, but is also a fairly common phenomenon in conflicts worldwide, as conservative norms are often reinforced and women's movements are controlled. Key informants also report an increase in child labor which further reduces opportunities for education as children work in the fields, especially boys.

See the Gender and Resilience box out on page 24 for more.

Humanitarian Assistance and Agriculture

The decimation of the agriculture sector has had a devastating impact on food security and access to livelihoods and income in Syria. Subsequent interventions range from traditional humanitarian action, including food distribution, to efforts that aim to have a more sustainable impact, such as the distribution of agricultural inputs. Whereas food distribution can be helpful, there is also concern that it is not sustainable and creates dependency. Yet given the active conflict, the context is not ready for a systemic approach to rebuilding the agriculture sector, considering the institutional backing it needs. In the end, either approach comes up short in meeting the multiple needs of maintaining the Syrian agricultural sector.

The Syrian agriculture sector needs a coordinated approach to save the assets and capacities to make it function sustainably. Development actors who focus their efforts on medium- and long-term programming would usually carry out such interventions. They aim to eliminate the root causes by strengthening systems and governance, and bolstering enabling environments for businesses and markets. This involves engaging with a range of stakeholders, including governmental actors and regulatory bodies. It also requires that a state mechanism take over custodianship of the sector. However, during an ongoing conflict this is not possible, and the shape of a post-conflict state is as yet unclear. It also does not address the most immediate needs that are present when large percentages of the population are displaced.

Humanitarian aid, which focuses on saving lives and alleviating suffering, aims to target such priorities. Yet since the impact is immediate, it does not provide space for systemic and structural interventions. This is underscored by donor policies and humanitarian funding cycles, which are short-term (often less than a year). Furthermore, the principles by which humanitarian actors operate do not allow them space to work with governmental structures because of how they can potentially rebalance power. To effectively function in conflict zones, namely to gain access to affected populations, humanitarian organizations must both act with neutrality and be perceived to be neutral.[22] This inherently limits their ability to work with de facto local, regional or national governments,[23] who in the context of an ongoing conflict are also parties to the conflict.

22 UNOCHA, OCHA on Message: Humanitarian Principles, June 2012, http://www.unocha.org/sites/dms/Documents/OOM-humanitarianprinciples_eng_June12.pdf.

23 Emmy Simmons, Harvesting Peace: Food Security, Conflict, and Cooperation, (Washington, DC: Wilson Center ECSP, 2013), https://www.wilsoncenter.org/sites/default/files/HarvestingPeace.pdf

There is, however, a space for interventions that can bridge humanitarian emergency assistance and systemic, structural, or transformational development programming. This can all be done while maintaining adherence to humanitarian principles. In humanitarian assistance discourse, this approach is referred to as building resilience.

Resilience in Humanitarian Assistance

Resilience is a relatively recent, yet already widely used term with varying meanings. Derived from disaster risk reduction efforts and responses to natural disasters, the concept is defined by the International Federation of the Red Cross/Red Crescent (IFRC) as: "the ability of individuals, communities, organizations or countries exposed to disasters, crises and underlying vulnerabilities to anticipate, prepare for, reduce the impact of, cope with and recover from the effects of shocks and stresses without compromising their long-term prospects."[24]

Resilience-thinking recognizes that these entities have the capacity to face shocks, and often draw on local resources to do so. Thus, assistance can be targeted as interventions to strengthen such capacities, which in turn will help individuals or systems to better prevent, mitigate or recover from shocks. In the case of Syria, while this began with drought and changing economic policies, these are now primarily armed conflict but can also be the influx of internally displaced persons or environmental disaster (e.g.: disease).

Resilience programming in the context of Syria can used to bridge humanitarian and development interventions, by effectively directing humanitarian assistance to strengthening the Syrian agricultural sector at the individual, household and community level. It can target stakeholders and elements ranging from professional agronomists and veterinarians to farming households, and community based organizations, such as farmers' unions. Increasing their capacity can include supporting them to maintain and use their assets most effectively. A resilience-building intervention can strengthen the sector by improving infrastructure that serves agriculture (common assets such as irrigation canals or mills), as well as to increase the communities' capacities to maintain them.

By directing humanitarian efforts toward addressing immediate needs that can have a more long-term or sustainable impact, we are able to build the resilience of those engaging in agriculture and, by extension, the sector, and thus begin to bridge the gap between traditional humanitarian and developmental assistance. The following section provides case studies of resilience-type programming in the humanitarian context of Syria.

24 International Federation of Red Cross and Red Crescent Societies, IFRC Framework for Community Resilience, (Geneva: IFRC, 2014), http://www.ifrc.org/Global/Documents/Secretariat/201501/1284000-Framework%20for%20Community%20Resilience-EN-LR.pdf.

Case Studies: Agriculture and Resilience in Syria

What does resilience programming in agriculture look like in Syria? To help cement understanding of what type of work can be considered resilience programming, this section provides examples of Global Communities' resilience-focused agricultural work in Syria, explaining the programming, impact and resilience aspects of each. This is an illustrative, not exhaustive list, and for security reasons, locations and donor institutions are not named.

Kitchen Gardens

Food baskets provided through emergency relief usually include staples such as grains and oils that, while important for meeting caloric needs, often lack proper nutrients when not supplemented with other foodstuffs. Global Communities therefore provides small kitchen garden kits to select beneficiaries. Kitchen gardens increase food availability, diversify consumption, and help provide a source of income through sale of excess produce. Also, they can help make individuals more effective partners by invoking their own capacity to supply healthy food for their family. The specific crops provided for in the kitchen kit are designed to complement the food baskets many families already receive, contributing to better nutrition among vulnerable populations.

Designed to be grown on areas of no more than 200 square meters, these kits contain a variety of seeds for vegetables including beans, onions, and radishes, as well as the newly introduced crop of mushrooms, which can be grown inside tents and shelters. Since 2014, more than 6,700 families, approximately 40,000 individuals, have received these kitchen gardens, with a special focus on IDPs and those living on less than $200 per month. This work has been primarily, but not solely, targeted at people living in a displaced person camp, who either plant near their tents or rent or share land with landowners near the camps. Of 5,274 camp households that received kitchen gardens, 99 percent said that the service improved their living conditions and were satisfied with the kit. Around 60 percent planted seeds from the kit; the remainder sold the contents of the kit to help subsidize household costs.

Small Farm Kits

The next step in our agricultural programming is small farm kits. Displacement and desperate measures – including selling assets including tools and land – and the depletion of local markets have severely damaged household-level agricultural capacities. As a result, many have lost the ability to stay self-sufficient and productive as farmers. These kits, tailored for either the winter or spring/summer growing season, contain a variety of seeds for staple crops such as wheat, potatoes, and beans, as well as vegetables such as eggplant, okra and spinach. They also contain tools and fertilizers necessary to cultivate the crops and manage the land.

From 2016-2017, surveying a sample of beneficiaries of farm kits, 68 percent reported an increase in income, with 41 percent reporting between 10-25 percent increase in income. 81 percent reported that the project had increased the availability of food for their families. From this, we have seen that the kits have had a positive impact in improving resilience among farming families by empowering them to better make use of their assets. They not only helped farmers feed themselves by ensuring up to four months of food security; they helped them get back to the business of being farmers by helping them to grow their assets and capacities. 60 percent of farmers surveyed also reported taking some of their yields and saving seeds for the next year, reducing the cost for next year's planting, or investing in crop irrigation. Many sold part of their yields on the market, helping not only to stimulate the market but also earning them expendable income that was used to expand livestock production or procure assets to generate additional returns. Our experience is that a $300 kit produces, on average, about $1,000 worth of produce.

Accompanying distribution are extension visits. These are bilateral or group-training sessions that allow for the dissemination of knowledge and give farmers the chance to learn how to better address common challenges around crop production and protection, weather, accessing agriculture inputs such as tools and fertilizer, security, and pre- and post-harvest practices. Since 2015, more than 7,751 households, 6,707 male headed and 1,044 female-headed, have received support, providing assistance to nearly 57,000 individuals.

In addition to the income, the intervention grows the capacity of the farmer, teaching farmers new practices that help address some of the challenges they face and improve yields. The intervention has also helped protect the land from potential overuse which would diminish agricultural livelihood opportunities further due to reduce productivity. As demand for crops grows with increased insecurity, it is important for farmers to know how they can be effective stewards of the land. Capacity in planting and rotating crops, tending them, and irrigating them properly will contribute to the sustainability of the land itself and allow farmers to continue farming in coming years.

With increased food security, improved livelihoods, and a strengthened local agricultural sector, many farmers reported they opted to stay on their land rather than become internally displaced people or refugees. One farmer used the money from his yield of crops to repair his house that had been damaged in the fighting. Such examples show that by improving conditions where people live, small farm kits can prevent further strain on already overtaxed camps and urban centers. Although claiming evidence of a trend beyond these anecdotal claims lies beyond the scope of traditional humanitarian monitoring and evaluation practices (see below, page 31), all are examples of resilience in the face of conflict: households capably responding to shocks or positioning themselves to do so.

THE BENEFICIARY IS THE LAND

"In agricultural projects, we must focus on the outputs, because the outputs will contribute to food security. When we support farmers who cultivate a wide area in some region, that means we are supporting all population in this region because that approach will produce food for all people in this area and the food will be available in the local market at a reasonable price. But when we distribute a food parcel for one family or support this family to cultivate a micro-garden or something like that, they will produce the food for their family only—and sometimes they will not succeed.

So metaphorically we can say that the direct beneficiary in agricultural projects is the land—if it is under the care of an experienced farmer who knows how to get the most yield from it while preserving its long-term health."

—Syrian agronomist working for an NGO

Agriculture Extension Visits

Prior to the conflict, government extension services provided support to farmers and breeders by directing their farming operations. In areas outside the control of the government, such as northwest Syria, these established systems have essentially disappeared. As a result, not only has the knowledge of farmers themselves been depleted but also a large part of the sector's professionals. This loss of structure and capacity has been detrimental to the sector as a whole.

In order to support the extension service component of the agriculture sector, Global Communities worked with two partners in north-west Syria to rebuild capacity through vocational training of veterinarians and agronomists. Global Communities worked to upgrade extension services, equipping them with necessary tools for providing mobile services to farmers and animal breeders. During the course of the project, professionals used the equipment during visits to farmers and breeders, who were also beneficiaries of the project.

Maintaining the technical and professional capacity of the sector is both an end and a means to sustaining the agriculture sector. Strengthening these services has helped preserve knowledge by locating capacity in the community and thus ensuring that the services can be used beyond the life of project. Both the implementation of the knowledge, as well as the actual retention of the knowledge, are critical to ensuring the resilience of the sector.

IMPROVISATION

A major problem Syria's wartime agricultural effort faces is the lack of testing laboratories. Fortunately, many of the nation's leading agronomists are still working in the sector, albeit from, for example, Turkey. One INGO key informant reported that their experts can give a general opinion about whether livestock food is good quality by relying on their senses. But without testing facilities, they cannot verify the food's protein, carbohydrate, vitamin, or mineral content.

Global Communities conducts its own seed germination verification in our offices.

One veterinarian working on livestock projects for a Syrian NGO noticed an outbreak of what he strongly believed to be PPR (peste des petits ruminants), a highly contagious, potentially fatal livestock disease. He took samples from affected animals, intending to verify his diagnosis at a laboratory in Turkey since there was no comprehensive facility accessible to him in the opposition-held areas of Syria. But because the government cited the culture as a biohazard, he was not permitted to bring the disease culture across the border. In the end, the veterinarian treated the animals with medicine that could cure them if his guess was right, or kill them if he was wrong. Fortunately, he was right. Professional expertise, however great, should be a complement to testing, not a substitute for it.

Before

After

Irrigation Canal Rehabilitation

Irrigation in Syria often runs on communal systems in which multiple farmers draw upon one water source. Prior to the conflict, communities relied on the central government to manage everything related to irrigation (see Down to the Last Donum), including cleaning and maintaining the canals. Since fighting began, many of the canals in northwest Syria have fallen into disuse because the system that previously existed no longer functions and farmers themselves lack the resources to repair the damage or the necessary experience to clean and maintain the facilities.

As with other public services in Syria, the vacuum left by the government is being filled by INGOs, NGOs and community-based organizations and committees; multiple canal restoration projects are underway throughout opposition-held areas. Global Communities recently completed two such projects in the north-west region of the country, involving:

- Cleaning 43 km of irrigation canals that had been covered in dirt and weeds.
- Repairing the irrigation systems of the concrete canals and restoring the damaged concrete.
- Installing new concrete pipes of 8 m length x 1 m diameter for better water flow.
- Working with community-based entities, including water committees and farmers' unions, to form and train irrigation management committees responsible for developing a transparent procedure for water use and management.
- Providing ongoing technical assistance to the irrigation committees upon request.

These interventions led to some significant results: 2,500 farmers regained access to irrigation water, which resulted in the planting of 4,050 hectares of land with summer and fall vegetables. A population of 150,000 people benefited from this produce. The renewed irrigation, from our interviews with beneficiaries and market observations, reduced the cost of water-per-hour from approximately $4 to 90 cents, thus reducing the burden on farmers' incomes. Additionally, soil quality improved, the silt removed from the canals was used as organic fertilizer, insect and rodent infestations decreased, and civil society, in the form of the community-based irrigation management committees, was strengthened.

Global Communities is not the only organization working on irrigation canal rehabilitation. Projects have also been implemented by UNFAO/the Qatar Red Crescent Society and others. Cost recovery is an area of much investigation and experimentation. One key informant reported that farmers in its irrigation canal cooperative are happy to pay the requested fee for water, rather than trucking water in for their crops at their expense. The co-op's water is much more readily available, much less expensive—and they are in charge of it.

So far, irrigation repair projects are pointing toward indicators that would imply more resilient communities and a more resilient agricultural sector by both reducing household vulnerability and strengthening organization, as well as improving the quality of land, thereby reinvigorating a central component of the agriculture sector.

Disaster Risk Reduction: Crop Fire Response

Crop fires can be disastrous for farmers in Syria. Since the conflict began, the risk of crop fires has increased due to new sources of danger, such as deliberate targeting of fields by armed groups or stray mortar rounds (see table below). As well as these increased risks, outside of government-held areas, the fire response services are no longer effectively functional.

Along with the risks to human and animal life, such fires can quickly destroy hundreds of thousands of dollars' worth of crops, heavy machinery, and irrigation infrastructure, none of which can be readily replaced given the current conditions. The impact on community food security can be severe, even for small, quickly contained fires.

Reports from Global Communities' field team working in north-west Syria estimated that more than 1,000 hectares (10,000 donum) of wheat and orchards were burned in 2015 in northwestern Syria, largely a result of artillery fire. In 2017, three fires reported to Global Communities resulted more than 110 donum of crops burnt, for a total loss of 45 tons of barley, wheat and lentils. At $250-290 per ton, that is a financial loss of as much as $13,000 for the farmers.

The capacity of communities to respond effectively to such fires varies. In some communities, organizations such as the civil defense or the White Helmets have been able to respond. However, Global Communities saw the need to strengthen this capacity, in part by localizing the response in each community.

Causes of crop fires

Pre-conflict	Since conflict
• Lightning strikes • Broken glass shards (which trap and focus intense sunlight) • Human error (carelessness with cigarettes or chaff burning) • Tractor or other machinery fires	All of the pre-conflict causes (in the left column) ***plus:*** • Deliberate targeting by armed groups (to degrade morale, destroy enemy hiding places) • Collateral damage from bombing, mortar strikes, etc.

Global Communities reported these findings to the Food Security and Livelihoods cluster[25] and helped design a disaster risk reduction (DRR) training plan for both Turkey-based and in-country implementing partners. The DRR plan emphasizes rapid response capability through collaboration with local councils and farmers to identify those with tractors/disk plows in strategic locations; provide a strategic reserve of fuel dedicated for use only in the event of a crop/orchard fire; and have response team members identified and trained to ensure teams are prepared for deployment.

The responders focus on proven methods to contain fires, including: cooling, which involves reducing the heat of the combustion with water; throttling, or cutting off the oxygen supply, usually also with water; and starvation, which reduces the amount of material that can burn, which is done by cutting trenches to contain the fire.

During the implementation of the intervention in 2017, Global Communities-trained DRR teams responded to fires in six villages. The creation of trained teams to respond to crop fires increases the ability of communities and farmers to resist and mitigate shocks, as well as improving their organization and asset-management skills and promoting more resilience at the community level.

The above are Global Communities-specific examples of agricultural resilience programming in Syria. Other organizations are also implementing programs with this approach. The following section describes some of the key lessons learned from implementation as well as the major challenges facing the sector in ensuring that this work is sustainable and effective.

25 See for example: RFSAN, Fires and Cropland in Syria, (May 2015), http://rfsan.info/storage/app/uploads/public/595/76d/c01/59576dc013565022466104.pdf, produced in collaboration with FAO.

Agriculture in a Conflict Zone: Lessons Learned from Practical Implementation

The following section of the report is a practical examination of lessons learned and challenges from implementing agricultural resilience programming in Syria, based on both Global Communities' experience and that of the many key contributors to the publication. The following is structured to approximately follow the humanitarian program cycle,[26] focusing on how a resilience approach is integrated in the implementation of the cycle.

The central challenge for humanitarian actors seeking to undertake resilience programming in a conflict context like Syria is time. Humanitarian intervention, along with all its systems for implementation, is predominantly set up for short-term delivery of assistance that aims to have an immediate impact. As such, it is difficult to adjust it to be relevant for implementing resilience programming, which seeks some structural change and to address underlying vulnerabilities. This section focuses on efforts to adapt elements of the humanitarian system to implement successful resilience programming, while operating in a cross-border setting.

Participant Selection: Need, Vulnerability, Technical Capacity

Participant selection primarily depends on project goals. Emergency humanitarian relief focuses on the most vulnerable, due to how they have been affected by conflict. All displaced persons, for example, need immediate shelter, hygiene, clean drinking water, food and medical attention. Vulnerability status (such as women-headed households, unaccompanied children and the elderly) can exacerbate these needs.

Meanwhile, the resilience-oriented agricultural programs described in the last section require a more nuanced mix of criteria. Essentially, there are two sets of criteria: the household or individual's need as well as the technical prerequisites for implementation such as experience, assets and skills. The latter will differ depending on the type of assistance provided (agricultural kits, livestock kits, extension services and so on). Effectively, this means that one cannot always select the most vulnerable as they would not have the resources to be able to make use of the intervention. Different organizations apply different criteria to determine the right candidates for resilience programming (see box out on next page).

Juxtaposing vulnerability and resilience requires deep analysis. A war widow who has never worked outside the home and abruptly becomes the sole breadwinner and caregiver for her children is undeniably vulnerable. But she may not necessarily be the best candidate to undertake a livelihood as labor- and skill-intensive as agriculture beyond subsistence-level. On the other hand, an experienced farmer who prior to the war successfully managed a 100-hectare operation and a large herd of animals may appear on the surface to be well-off and not a priority for assistance. Addressing this contradiction is an important decision-making process that needs to be undertaken by any organization trying to use humanitarian funding to implement a resilience approach.

Meanwhile, as described on page 13, the Syrian agriculture sector was an extensive structure that ascribed different roles to men and women. As such, resilience-oriented programming that aims not only to build the capacity of households and the community, but the entire agriculture sector, must consider this diversity when planning, particularly in the phase of beneficiary selection.

26 For more on the Project Cycle, see: IASC, The Humanitarian Programme Cycle, Version 2.0, July 2015, https://interagencystandingcommittee.org/system/files/hpc_reference_module_2015_final_.pdf.

TWO SETS OF FILTERS

A key informant from a large INGO described its eligibility criteria for agricultural programming as two categories: threshold eligibility and then determination of vulnerability. The criteria are as follows:

Eligibility criteria

1. Household should have access to land area of more than 10 donums (one hectare).
2. Household should have safe access to water for irrigation, as needed.
3. Agriculture must be the main source of income.
4. Crops must be summer season and household should have previous experience in crop farming.
5. Household must not receive any agriculture support from other NGOs for this year.
6. Household must have no more than one cow or 10 sheep.
7. Household must have limited or no regular income

Vulnerability criteria

1. Household does not have access to its own agricultural machinery.
2. Dependency rate to be one person supporting four people.
3. Households with more than six members.
4. Family headed by a female.
5. Families with children.
6. Household with pregnant and/or nursing women.
7. The household is headed by a child (<18).
8. The household has one or more disabled or chronically ill members.
9. The household is caring for a child with no living parents.

A key informant from a second large INGO described a stepped approach to its agricultural participant selection. The INGO's work with more experienced small-scale farmers (those working one to nine donums) involves one kick-off training day and one day of on-site field visits by the INGO team to the farm. Then the farmer receives the associated inputs (seeds for the crop farmers, tools for those working orchards) and ongoing extension services. They note that the role formerly played by government-sponsored extension agents is being largely filled by NGOs at the moment, especially for technical assistance with drip irrigation systems, but that the small-farm program participants (unlike kitchen-garden participants, for example) tend to be experienced farmers.

GENDER AND RESILIENCE

It is vital in resilience-oriented work to properly account for differences in need and capacity among gender and age. Since resilience builds on strengthening the collaborative capacity of households and communities, assessing and relying on all available resources is key. Therefore, when looking to support and reinvigorate the sector, it is important to be equitable in this approach.

Farming is a household activity in Syria. Before the conflict, men and women participated almost equally in the agriculture sector, specifically in the actual farming, but not necessarily equitably. While women shared the burden of the work and the joint household income, the actual control of agricultural assets was primarily in the hands of men, including land, livestock, equipment and machinery. Women's control over assets in Syria has been severely restricted. They own less than five percent of the land (compared to women in Oman, where women own no land at all, or Egypt, where women own about a quarter of the land). Only seven percent own animals, and about 16 percent own some form of agricultural equipment or machinery.[27] Unfortunately, the agricultural programming of INGOs often reinforces this inequity throughout program implementation. Humanitarian programming interventions are apt to target the head of household, who in the majority of cases is male. Particularly in farming communities, it is less likely that the head of household is female, although this is certainly more common after the onset of the conflict, which has left many women widowed.

By targeting interventions in this way, INGOs prolong inequity in the sector. Global Communities' impact assessment of its distribution of agriculture kits to small farm households found women beneficiary informants reflecting that they were "happy to be able to support their husbands in providing for their families." Rather than seeing their work as a direct contribution to their family equal to that of the men, they saw themselves as a support function. It is important, therefore, that such projects target all individuals in the household to avoid strengthening women's own perception of their role in the agriculture sector as less important.

Women and men clearly have different needs to work equally in the agricultural sector, but to ensure equal opportunities, their different needs must be recognized. To realize this, organizations must ensure the voice of women is reflected in reporting. As women in Syria are less likely to speak to male interviewers/enumerators who come to their homes, organizations must hire more women on their field teams to be able to reach out to women and speak to them directly.

27 Alessandra Galiè, The empowerment of women farmers in the context of participatory plant breeding in Syria: towards equitable development for food security, (Wageningen, NL: Wageningen University, 2013), http://edepot.wur.nl/272924.

Working with Local Communities to Secure Access

In order to actually implement in the selected target area, NGOs must secure access to those communities. Working in Syria requires close partnership with local stakeholders for this purpose. In doing so, they must manage conflict dynamics carefully to maintain humanitarian principles.

In opposition-held Syria, there are no official elections sanctioned by higher governing authorities. So-called local councils are effectively self-imposed authorities. Some are aligned with armed actors, some are not; all are effectively parties to the conflict from a humanitarian perspective. But in order to maintain principles of impartiality and neutrality, it is important not to work with them in a way that buttresses their authority or reaffirms any political alliances that may exist. INGOs maintaining humanitarian principles should work with local councils only to get operational access to a community.

Some local leaders are helpful because they know who the most skilled farmers are and who the most vulnerable families are, for example. However, relying on their input can put the NGO in a position where it cannot undertake impartial needs and capacity assessments. In order to navigate this challenging context, many key informants reported that their organizations reach out to local councils, engaging them early in the process and formalizing the relationship with a memorandum of understanding (MOU). Most MOUs spell out an advise-and-consent role for the local councils: the local NGOs retain operational responsibility and the INGOs are the sole fiduciary agent. This is important as it deflects direct pressure for funds from local NGOs, and insulates on-the-ground staff from making decisions in potentially difficult circumstances.

FAIR AND TRANSPARENT

Working with the local councils is like any new venture where people begin working as relative strangers. We take the time to explain what we are trying to do and why, so that the program and its selection criteria are as fair and transparent as possible. We also realize that the local councils are in a delicate position: they have to keep most of the community happy to keep their jobs, but they also have to deliver for their own base to show strength.

One time, we had our whole program mapped out and at the last minute, the local council handed us back the participant list and had added 20 new names we had never seen before. They told us the program could not move forward unless these 20 people could participate. We told them "no," and referred them to the MOU they had signed. They insisted, saying they would kill the program if these 20 people were not added. So we called their bluff. That night, we printed up flyers announcing that the local council's insistence on adding unqualified participants had forced us to cancel the program for everyone. We posted the flyers all over the village. The resulting outcry forced the local council to back down, and we launched our program as agreed.

--Syrian program manager of an NGO

Across opposition-held areas of Syria, local councils vary significantly. Some are composed of educated, technically skilled individuals with the community's best interests at heart; others less so. Some local councils have stronger allegiances to various armed factions. Global Communities requires a firm assurance to allow us to uphold the Joint Operating Principles, the protocol followed by humanitarian actors in north-western Syria for engaging with parties to the conflict. They know that if they do not respect these principles, the community will go unserved.

POLITICIZATION

Throughout the interviews with key informants, there was a widely shared concern about the politicization of aid, which runs counter to the essence of humanitarian principles. Informants believed that most NGOs adhere to those principles—in the areas where their nations' respective foreign policies allow them to operate. But informants pointed out that some nations prioritize opposition-held areas over regime-held areas, others will not work in the Kurdish-held areas, and so on. As one informant put it: "The more donors and policymakers direct their resources on the basis of which armed actor holds which area, the more those divisions become entrenched. This is not the way to go if you want to see Syria emerge intact from this crisis."

Partnerships with Other NGOs and INGOs

Much of the humanitarian work in north-western Syria is implemented through partner Syrian organizations which are registered in Turkey. This is inevitable, as most INGOs have to operate via cross-border, often through remote management.

Prior to the war, nongovernmental organizations were virtually unknown in Syria. These organizations have emerged since the conflict began as a product of the exodus of experts from Syria to surrounding countries, who nonetheless still have strong ties to Syria and a desire to alleviate suffering in the midst of the crisis.

Today, many of these organizations carry out tasks ranging from agriculture to provision of drinking water to healthcare and education, all of which were formerly managed by the central government. Key informants estimate that between those headquartered in Turkey and Syria, there are around 500 Syrian NGOs.

Key informants also noted that while INGOs refer to these Syrian NGOs as a nascent "civil society," to most of the Syrians themselves this is a new term and a new way of thinking, particularly when it comes to humanitarian programming. That said, their capacity should not be underestimated as the people who make up these NGOs are technical experts, many of whom played a central role in the governmental system prior to the conflict. For Global Communities to work with a Syrian NGO, these partners are required to abide by the same humanitarian principles that humanitarian organizations abide by. Of course, individuals have their political opinions, but in the implementation of their work, neutrality and impartiality is required, and these organizations are staffed predominantly by technocrats – technical experts in the areas such as agriculture.

The community of Syrian agricultural experts was tight-knit before the war and is even more so in exile. Many of the major agronomists know each other well, have worked together, have been each other's students or professors at Syria's leading agricultural universities. In some cases, an INGO's agricultural program design process may begin with finding out which expert landed at which new local NGO, and then vetting that organization for partnership in order to utilize their human capital.

Partnering with Local NGOs – Global Communities' Approach

In Syria, Global Communities does not partner with for-profit entities or with individuals. Our first step is to get to know the proposed partner organization. We look for the basics of internal controls, review organizational capacity and award extra points for best practices such as an annual external audit compliant with Generally Accepted Accounting Principles.

Global Communities conducts the "Pre-Award Assessment for Financial Responsibility," an intensive review of the organization's practices in finance, procurement, audit, and codes of conduct. Entities that Global Communities partners with must have adequate internal controls to meet the requirements of our donors (such as government aid agencies and UN bodies). Internal control comprises plans, methods, policies and procedures used to ensure the organization can fulfill its mission, goals and objectives in a way that demonstrates effective and efficient stewardship of donor resources. Internal control is the first line of defense in safeguarding assets and minimizing risk to the entity, to Global Communities, and to the donor. Finally, we conduct an on-site visit to verify all the reported information, holding extensive interviews with (at a minimum) the Chief Executive Officer, the Chief Operating Officer, the head of human resources, and the finance team. All organizations are checked through various databases, such as the US Treasury Office of Foreign Assets Control, to ensure that there is no risk of funds going to sanctioned individuals or organizations.

Once this assessment is completed and signed by the proposed sub-awardee NGO, the Global Communities' local team sends it on to the headquarters office for final scoring. If it is scored "low risk," the NGO is cleared for inclusion in the project. A "medium risk" score does not necessarily eliminate an NGO from contention. If a local NGO is programmatically strong but lacks robust back-office capacity, Global Communities will work with them to strengthen those functions and to move the NGO from the "medium" to the "low" risk category by preceding the sub-award with special award conditions and/or other recommendations. In addition to financial risk management, partners are vetted for security risks. If a potential sub-awardee triggers a negative assessment in the Office of Foreign Assets Control, System for Award Management or UN databases, we immediately cease the sub-awarding process and will not work with the organization.

Some informants from INGOs accustomed to working with major institutional donors that have more stringent reporting and legal requirements sometimes reported that they considered themselves at a competitive disadvantage for attracting the best local NGO sub-awardees because of the reporting and compliance requirements put upon the local partners. Global Communities' policy stresses moral and practical support, such as mentorship and training to help partners meet those needs. We conduct regular workshops for our sub-awardees on reporting, sub-grant administration, financial and project management, and other topics geared toward international standards. This builds their capacity longer-term and feeds into the broader resilience approach: organizations and individuals that have the ability to run tight financial and compliance controls will be better able to manage in the eventual post-conflict environment.

SYRIAN NGOS

Maintaining Syrian Capacity

A resilience approach to the Syrian agricultural sector requires supporting as much of the sector that survives as possible. Ensuring that knowledge is maintained and new capacity built is vital. As noted previously, the concept of a nongovernmental organization was little known in Syria prior to the conflict. Hundreds have been launched in the past seven years, and their capacity has steadily increased. Most key informants expressed an awareness, however, that the stringent contractual compliance that major donors/INGOs require remains beyond the scope of Syrian NGOs. They describe the working relationships between the INGOs and their Syrian NGO implementing partners as collegial and effective for the most part. The Syrian NGOs, however, believe that the INGOs' tendency is to respond to donor requests for proposals, designing programs and work plans, and then handing the Syrian NGOs a set of marching orders to execute. They believe that programming would be far more effective if the local NGOs were involved in the planning and design phases, not just the implementation. They also admire the donors (the United Kingdom's Department for International Development was cited in this regard several times) who keep a channel of direct communication open with the local NGOs, even if the INGOs remain the direct report and fiduciary agent.

Coordination

Multiple Syrian informants expressed a wish for a supra-national entity that might lead a serious and sustained effort to reactivate Syria's agricultural capacity. They recognized the ambitious and currently unrealistic nature of that vision, yet consistently cited the need for some entity to play the "honest broker" role in coordinating agricultural activity on a whole of Syria basis. The humanitarian cluster architecture comes closest to this concept; it works predominantly as a platform for sharing information around decision-making and to coordinate and influence program design, which could be a useful expanded role for the cluster system.

Another effort is the Assistance Coordination Unit, or ACU, a Syrian NGO which aims to build a network of "executing nucleus" efforts around the major agricultural initiatives in the opposition-held areas where ACU works. They describe their wheat cultivation joint venture with the General Organization for Seed Multiplication (GOSM) and Qatari Red Crescent as a pilot to test true operational collaborations among the NGO community. ACU reports that one of the biggest concerns about such joint ventures is a fear on the part of each NGO of losing or diluting its relationships with major donors. ACU includes major donors at the large organizational meetings where these joint ventures are meant to be formed so that NGOs can hear directly from the source that operational collaborations will mean more support, not less.

At the tactical level, many key informants suggested that the Agricultural Working Group, currently a working group under Food Security and Livelihoods (FSL), should become its own cluster. Informants reported that the FSL cluster has simply become too big. It is difficult for all attendees to hear, let alone actively participate, or to get through an agenda in the time allotted. However, food security and livelihood programming should be informed by agricultural programming. Whether the answer is breaking into two clusters or simply managing the cluster more effectively remains to be seen.

Procurement

Procuring quality goods and services at reasonable prices is difficult in a conflict environment and even more challenging when operating across borders. This is for a myriad of reasons ranging from fluctuating prices, to the concept of conflict commodities, quality control (see “Improvisation” box, page 19) as well as the potential for corruption that must be avoided in any procurement. For its agricultural programming, Global Communities procures livestock, fodder for livestock, seed kits, tools and concrete pipes related to irrigation canal rehabilitation. The market for all these items is also an important component of the agriculture sector.

In order to determine quality, Global Communities requires product samples to be submitted alongside financial offers. Our staff inside Syria follow specific Standard Operating Procedures to conduct the sample evaluation to determine technical acceptability. The cross-border office supports remotely via telecommunication with a technical expert and procurement expert to facilitate the discussion in a fair and transparent manner to determine whether the vendor meets the required specifications at the lowest cost. Once the potential vendor(s) have been chosen, Global Communities conducts site visits to the supplier’s facilities, and takes an additional random sample to evaluate the supplier’s stock against the samples received. Finally, upon delivery to the warehouse, spot checks are conducted on a reasonable sample size of the items delivered as a third mechanism for quality control before the goods are accepted.

In the early stages, Global Communities procured materials from Turkey. There was easier access to a greater variety of goods, which offset the difficulties of transferring goods across the border. But the downside, especially the agricultural programming, is that preserving Syria’s productive capacity is one important program goal, and procuring outside the country defeats that purpose. Today, procurement is done within Syria where possible, and – in very limited instances – from neighboring countries where this is not feasible.

FUEL AND FERTILIZER

The politics of the conflict have had a significant impact on the availability of key inputs for agriculture: fuel and fertilizer. No fuel means no working tractors. No fuel also means no generators to run pumps and wells, which means no water. Key informants understood—and shared—donor concerns about sourcing fuel from forbidden areas and effectively financing terrorism. But they fear that by forcing fuel procurement into the black market, even more money could reach armed actors. Virtually everyone identified a solution to the fuel shortage—finding a way to source and deliver fuel from responsible players and get it, at affordable cost, into the hands of the farmers who need it—as possibly the most urgent priority. Nitrogenous fertilizer followed close behind. Drought conditions require nitrogenous fertilizer, but because such fertilizers can be a base ingredient in explosives, many donors prohibit their procurement. Key informants urged donors to focus on solutions that might get fertilizers to responsible farmers who need them while putting safeguards in place to prevent their diversion.

Implementation: Choice of Modalities - Cash, Vouchers, in Kind

Every NGO must decide on the modality assistance should take: cash, vouchers or in-kind. A key informant from an INGO named the voucher modality as one of its agricultural program's key successes. This was because it is not always possible for participants to know for certain in advance what they will need or in what quantities, and the voucher system gives participants more flexibility to choose their own goods, along with reducing the logistical burden on the NGO. The NGO also pre-screens and monitors the selected vendors, and encourages them to open temporary shops in the local communities so that participants will not have to travel too far.

Perspectives differ, however, on vouchers as well as on the other main assistance-transfer modalities. A 2016 report[28] co-sponsored by the Cash-Based Response Technical Working Group (CBR-TWG) evaluated the advantages and disadvantages of in-kind, cash-based, and voucher approaches. It found that cash assistance was acceptable to the greatest number (94.2 percent) of respondent households, followed by in-kind (91 percent), and then vouchers (79.4 percent). "Consensus among community key informants was that vouchers are the least appealing form of assistance: although few participants had actually received voucher assistance, most expressed concerns that [they] would be least effective in meeting beneficiary needs because vendors will raise prices for items purchased with vouchers."[29] NGO and donor respondents also expressed misgivings about vouchers, mostly because of the additional monitoring that must be put in place to prevent fraud or manipulation.

Cash and in-kind assistance have their own drawbacks too. Moving in-kind merchandise—especially when this involves time-sensitive agricultural inputs like seeds or live animals—is a major logistical undertaking. Cash-based assistance, in the context of Syria, is no easy matter either given the lack of a bank system. The alternatives are to have someone carry physical cash, a security risk, or else to rely on the informal money transfer systems (trust-based networks of cash-in, cash-out brokers who transfer money without written contracts or promissory notes) that are commonly used throughout the region. The CBR-TWG report found that money transfer networks, which typically handle relatively small remittances between family members, could potentially scale up to handle cash-based humanitarian assistance. There have been cases where donor agency-derived humanitarian assistance has moved via money transfer in conflict settings (e.g., in the case of the World Bank-funded Microfinance Support for Facility for Afghanistan), but this is usually a last resort. The unregulated, informal and undocumented nature of such transactions raises serious concerns about money laundering and terrorist financing.[30]

The CBR-TWG report recommends shifting from in-kind assistance to a blended approach of cash-based with in-kind still provided where necessitated by specific programmatic needs or contextual constraints. Global Communities is planning to use vouchers in some contexts and eventually to pilot cash-based assistance—but only after we have developed the strict audit and oversight capacity that such a pilot would require.

Monitoring & Evaluation

One of the major challenges in determining effectiveness of a resilience approach is monitoring and evaluation (M&E). There is significant debate on the challenges of measuring resilience in long-term development programs; doing so in a humanitarian context is even more difficult. In this context, M&E mostly focuses on process and performance – whether the aid was delivered to the right people at the right time, whether it was used appropriately, and ensuring it was delivered in an effective and principled approach. Compared to development programs where organizations can develop baseline and end-line surveys to measure impact over multiple years, this is a very different discipline. For example, resilience could be measured by the capacity to manage assets, maintain function and availability of services and markets and reduce dependency on negative coping mechanisms. Key informants reported, however, that their humanitarian M&E systems in Syria are more focused on logistical and methodological set-up that respond to the political context in which we operate, rather than to demonstrating longer-term impact and sustainability. This makes it challenging for organizations attempting to provide resilience programming to truly verify the actual impact of their work.

Take for example an NGO working to rehabilitate water stations to support communities to be less dependent on emergency measures such as water-trucking. The nature of humanitarian programming means that the NGO will focus on the quantitative rather than the qualitative, such

28 Shannon Doocy et al., Cash-Based Response Feasibility Assessment in Northern Syria, (Silver Spring, MD: Global Communities & Cash Based Response Technical Working Group, 2016), https://www.globalcommunities.org/publications/Cash%20Based%20Response%20Syria%202016.pdf.

29 Ibid.

30 For an excellent discussion of how informal money transfer systems work, and the AML/CTF concerns they raise, see: Marie Chêne, Hawala remittance system and money laundering, (Transparency International, May 23, 2008), https://www.u4.no/publications/hawala-remittance-system-and-money-laundering/pdf.

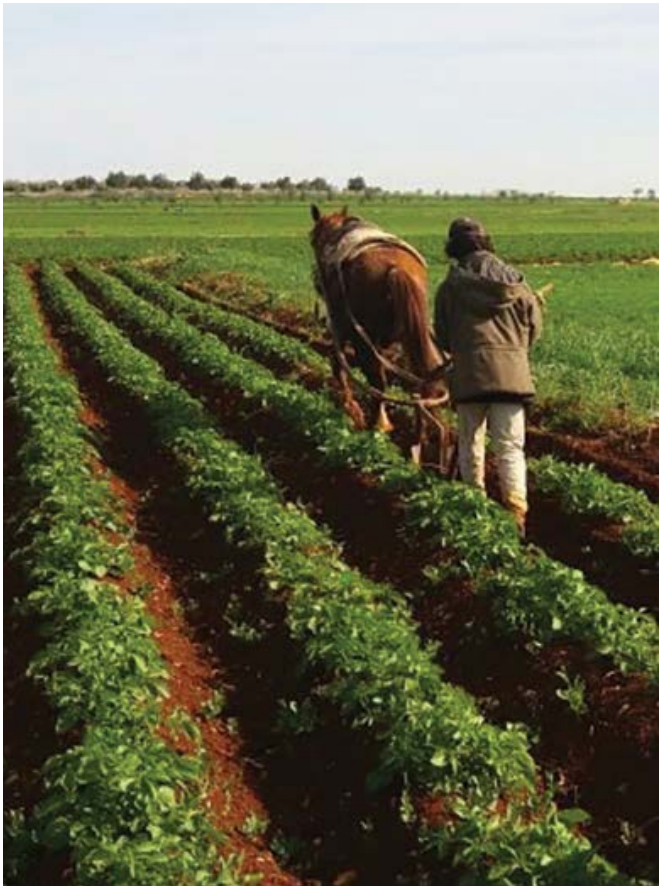
as how many individuals and households will be served by the rehabilitation, by counting the population of the community where the station is located. However, following an initial check of the water quality, the NGO may not return to conduct testing, nor check on the repairs needed to ensure a system that can serve a community for the long term. It also makes it difficult to disaggregate the impact on the community by, for example, gender or youth.

Some organizations are taking steps to go back to communities and conduct impact-oriented assessments. This will determine whether interventions are evidence-based and effective. How to ensure this is done when invoking a resilience perspective is an industry-wide challenge which will require an industry-wide response. If we are to move away from dependency and into investing in capacity, donors must be willing to expend resources on actually measuring resilience. This would include focusing on metrics such as the avoidance of use of negative coping mechanisms, faster recovery from shocks, household preparedness, and so on. While not monetary, there will be greater returns for the affected populations by strengthening their agency in building back their own lives.

Exit Strategy and Sustainability Planning

International NGOs – especially humanitarian assistance organizations – and donors are temporary facilitators, not permanent market actors. In the case of infrastructure, for example, once the irrigation canal is restored the INGO should hand off the project to a competent and trustworthy local entity. In Syria, the question is, to whom? The humanitarian principle of neutrality means that working with local governments – who may be aligned with any of the armed actors or are unelected – is unacceptable, before even capacity or conflict-driven impermanence are taken into account. The capacity of local Syrian NGOs has been expanding and improving rapidly, but managerial skills remain uneven. Farmers' unions and irrigation committees were known entities before the war, but they did not have actual ownership and governance responsibility: the government owned and ran everything.

Key informants varied in their opinions about who should run communal facilities after donors and INGOs depart especially as, even in the event of a political resolution to the conflict, there will be a period of transition before effective governance structures are established. Some were running projects with a cost-recovery model already in place and a clear plan to turn over operations to a farmers' union or irrigation committee. They expressed confidence that those entities would be up to the task



of having a sustainability plan in place by the end of a project. Others believed that resilience-level projects should remain under the governance of the INGO/donor community until there is a political resolution to the conflict, at which point a governmental entity should assume responsibility. Multiple informants proposed a phased approach with a claw-back option: the INGOs would remain in charge, gradually ceding more day-to-day governance responsibility to farmers' unions and providing salaries to those people for their effort in running the facilities. At some point, the INGOs would ease the local entity off the payroll and transition full responsibility for operations to those entities. But for some contractually defined period, the INGO would reserve the right to take back responsibility if the local entity proved incompetent, dishonest, showed undue favoritism, or allied with any armed faction.

So far, there is no clear single solution to the challenge of sustainability. Nevertheless, by improving the capacity of local communities to manage small-scale infrastructure, and by improving the capacity of those involved in the agricultural sector to provide services, cope with shocks, and improve production and quality, the basics of resilience are put in place, as we seek to deliver a longer-term benefit.

Conclusion

Too often, conflict is presented as leaving a blank slate in its wake. Yet reality is nothing like that. While most people are not surprised to learn that Syrian agricultural yields have plummeted, they might be surprised to learn that Syrian farmers are still working the land, that they are still breeding livestock, and that they are still looking for ways to protect and preserve their fields. Despite the uncertainty of the future and the risks to investments, many in the farming community are keeping the Syrian agriculture sector alive, showing their resilience in the face of conflict.

The ongoing struggle of Syrian agriculture is truly illustrative of the impact that conflict has had on the country, and simultaneously demonstrates the resilience of the community in the face of such violent upheaval. Several of the broader causes of the conflict are rooted in the agriculture sector, such as the policies that affected food security and were aggravated by years of drought. Addressing these causes can be seen as analogous to a sustainable rebuilding process. However, as the country still reels in conflict, that step seems far away. It is therefore essential to continue distributing immediate assistance while also keeping an eye towards the long term.

As such, agriculture becomes a serious challenge for humanitarian response. Focusing entirely on pure humanitarian assistance that looks for quick impact will actually undermine the agriculture sector in the longer term by building dependency rather than building on people's capacities. It ignores building on the resilience that so many farmers are now exhibiting. Rebuilding food security sustainably cannot merely rely on food baskets; one must also engage the Syrian farming household. Yet the type of support that the agriculture sector needs fundamentally does not mesh with the available paradigm that favors immediate impact rather than a long-term approach. This said, efforts to bolster the self-reliance of Syrian households and contribute to their resilience in spite of conflict is not only being done but is requested by Syrians and implementers, as has been shown in this publication.

While some donors have started to make the change and are looking for opportunities to strengthen resilience in an ongoing conflict, challenges remain. The first issue is the definition of resilience. Not all organizations and donors define resilience similarly; there is significant variation in how it is understood and therefore how programming is implemented. Humanitarian organizations and donors need to work together to develop a shared definition of resilience that can be used as the basis of such programming. A common understanding would help in managing the challenges and risks associated with this work. This common understanding needs to be part of a coordinated approach in Syria that goes beyond agriculture and addresses broader resilience issues through the humanitarian lens. In this publication, we have used the ICRC definition as a starting point.

The humanitarian sector is built on principles and systems meant to ensure some guarantees in the midst of risk and instability; is not possible for it to be successful without these underpinnings. Funders and implementers are continuously working to ensure that their work is having an impact for the sake of accountability, both to the affected population and to those financing their work. In addition, they are constantly called on to demonstrate that the input is not going to the wrong person in a context populated with armed groups, where basic controls have broken down. A shift away from stop-gap measures requires a range of different resilience-oriented approaches, as we have described in this publication, with the right one applied at the right time, in the right context and with the right preconditions in order to be successful, and accountable. Organizational support systems need to be aligned with the intended purpose of resilience approaches, making it possible to evaluate that they are relevant, appropriate and effective. This alignment may be resource-intensive, and can motivate some organizations to focus on immediate interventions rather than approaching them with a longer-term perspective.

Aid always needs to be implemented with an eye to the long-term, even when the sought-after impact is meant to be immediate. No matter the outcome of the conflict, the agriculture sector, though damaged, will not start from point zero. The overarching system might – or might not – have changed, but the farming community, its knowledge and experience, remains. The Syrian agricultural community deserves that we build a bridge between the immediate needs for survival and the capacity that will support them to rebuild their livelihoods along with the country.

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