

#### Syrian Arab Republic: Conflict and Food Insecurity

## Updated 21 January, 2021

# **Highlights**

- Since the start of conflict in 2011, subsequent years of insecurity, widespread displacement, destruction of infrastructure, and economic woes have contributed to reduced levels of agricultural production and increased food insecurity.
- In the first three months of 2020, conflict escalated in some areas and triggered one million new displacements in the northwest. (Figure 1).
- Despite generally improved security across much of the country, as of 2020, the World Food Programme (WFP) estimated that 9.3 million Syrians were food insecure with a further 2.2 million people at risk of food insecurity, an increase from 7.9 million and 1.9 million respectively in 2019 as a result of the declining economy.
- In 2020, wheat production was estimated to be above the five-year average due to improved security and favourable weather conditions, though it remained well below the pre-crisis production levels.
- To contain the COVID-19 pandemic, the country introduced a number of measures which have further constrained the economy and livelihood options.

# Density of Violent Attacks in Syria from January to March 2020



Figure 1: Density of violent attacks in Syria from January 1 to March 31, 2020. Number of events extrapolated from ACLED data warehouse using violent event types (battles, explosions/remote violence, and violence against civilians). Source: ACLED

### **Overview**

In 2011, anti-Government protests spread throughout the Syrian Arab Republic (hereinafter referred to as "Syria"), marking the start of organized insurgency. Civil insecurity was soon exploited by extremist groups which triggered international intervention. Conflict reached its height in 2014 to 2016 but has declined in recent years as the Syrian Government forces are now in control of the majority of the country's area with opposition strongholds remaining across the north and northwest. Despite security improvements and the return of many Internally Displaced Persons (IDPs) to farmland, damaged infrastructure during years of conflict has resulted in a significant loss in agricultural production potential for the country's staple crops, including wheat.

Although the intensity of the conflict has generally abated across the country, an escalation in the first three months of 2020 triggered an additional one million new displacements in the northwest. During the conflict, widespread displacement has been one of the main factors contributing to decreased agricultural production as households lost their livelihoods and no longer had access to fields or productive assets. Furthermore, nearly a decade of conflict destroyed agricultural land, infrastructure, irrigation systems, and food processing and storage facilities. Although inputs for agriculture remained generally available, they came at a high cost and often compromised quality. Together, these factors limited production capacity, and many previously productive households instead became reliant on market purchases. However, market supply, market access, and household purchasing power have been constrained by conflict and economic crisis, contributing to increasing levels of food insecurity.



# **Background of Crisis**

In 2010, a wave of protests, uprisings, and armed rebellions known as the Arab Spring spread across the Middle East and North Africa, including Syria.<sup>1</sup> In March 2011, anti-Government protests began in Dar'a in the southwest and spread across the country.<sup>2</sup> Βv September 2011, rebel militias regularly engaged in armed combat with Government forces, marking the start of organized insurgency and soon transitioning into a full-fledged civil war between the Syrian Government and the various anti-Government rebel groups, each side backed by different international allies.<sup>3</sup> Most of the rebel groups were small and operated at the local level, but some exercised influence across the country or had formed alliances with other groups.4

In 2014, the Islamic State of Iraq and Syria (ISIS), also known as the Islamic State in Irag and the Levant (ISIL) the Islamic State (IS), or Daesh, with previous links to Al-Qaeda – Iraq, announced an establishment of a so-called caliphate to exploit insecurity and take control of large areas of Syria and Iraq (Figure 2).<sup>5</sup> This triggered direct U.S. military interventions against ISIS targets which were followed by growing Russian military interventions against rebel factions in 2015 and 2016.6 From September to December 2018, the Kurdish-led Syrian Democratic Forces launched an offensive against ISIS that significantly reduced the group's remaining territory (Figure 2).7 As of mid-2020, the Syrian Government forces were in control of approximately two-thirds of the country's area across southern, central, and eastern parts of the country, while areas of the north and northwest remain in control of other groups, including Syrian rebels, Turkish-backed Syrian rebels and the Turkish military, Kurdish forces, and Jihadist forces (Figure 3).8

#### Syria Conflict Timeline



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#### Distribution of Zones of Influence in Syria in 2010, 2014, and 2018



Figure 2: Distribution of zones of influence in Syria at the end of 2010 (Top Left), 2014 (Top Right), and 2018 (Bottom Left), and the share of land control between the warring parties (Bottom Right). Source: Ali Mohamed, Mohamed, Julian Anders, and Christoph Schneider. "Monitoring of Changes in Land Use/Land Cover in Syria from 2010 to 2018 Using Multitemporal Landsat Imagery and GIS." MDPI. July 11, 2020. https://www.mdpi.com/2073-445X/9/7/226/htm.



#### Distribution of Zones of Influence in Syria as of 2020

Figure 3: Distribution of zones of influence in Syria as of February 24, 2020 (Right) and reference location map (Left). Source: "Syria War: 'Russian Air Strikes Kill Dozens' in Idleb." BBC News. October 26, 2020. https://www.bbc.com/news/world-middle-east-54693472.



# **Background of Agriculture**

Crop cultivation and livestock rearing in the fertile crescent between the Tigris and Euphrates Rivers have played a central role in the livelihoods of many Syrians,<sup>9</sup> and the Syrian economy has been strongly dependent on agriculture.<sup>10</sup> However, record drought in 2008 deteriorated the existing socio-economic environment in the country and contributed to a large-scale migration of an estimated 1.5 million Syrians from the countryside to cities.<sup>11</sup> The move left many farms to fallow, put a strain on resources in urban areas, and exacerbated poverty and economic downturn as unemployment numbers surged.<sup>12</sup> Even so, in 2010, prior to the onset of conflict, agriculture comprised 18 percent of the country's Gross Domestic Product (GDP) and engaged 17 percent of the total production labour force. Of the total population, 46 percent were rural residents, of which the majority depended on income from agriculture.<sup>13</sup>

Of Syria's total land area of 185,180 km<sup>2</sup>, the Central Bureau of Statistics in Syria estimated in 2016 that 6.1 million hectares or 33 percent of the total land was arable, and 4 million hectares or 66 percent of the arable land was cultivated.<sup>14</sup> As depicted in Figure 4, the majority of agricultural area in Syria falls along the northeast, north, and central areas, primarily in Al-Hasakeh, Ar-Raqqa, Aleppo, Hama, Homs, and Rural Damascus governorates along with some western governorates.<sup>15</sup> Of the cultivated land, 62 percent is located in the northern governorates of Aleppo, Ar-Raqqa, and Al-Hasakeh.<sup>16</sup>



Agro-Ecological Zones and Land Cover in Syria

Figure 4: Left: Agro-ecological zones in Syria. Zones 1-3 are arable and suitable for cropping, Zone 4 is a marginal zone between arable zones and the desert zone and is only suitable for barley or permanent grazing, and Zone 5 is a desert and steppe zone that is not suitable for rain-fed cropping, except for some areas adjacent to rivers, and provides only sparse natural rangeland. Source: "FAO - WFP Crop and Food Security Assessment Mission to The Syrian Arab Republic." Food and Agriculture Organization of the United Nations. September 5, 2019. http://www.fao.org/3/ca5934EN/ca5934en.pdf. Right: Map of Syria, the 14-governorates administrative divisions and false colours composite of Landsat 8 OLI image of 2018 (band 6-5-4 as RGB). Source: Ali Mohamed, Mohamed, Julian Anders, and Christoph Schneider. "Monitoring of Changes in Land Use/Land Cover in Syria from 2010 to 2018 Using Multitemporal Landsat Imagery and GIS." MDPI. July 11, 2020. https://www.mdpi.com/2073-445X/9/7/226/htm.

# **Impacts of Conflict on Agricultural Production**

Since the onset of conflict in 2011, there has been a substantial decline in agricultural production that has significantly affected farming and herding households. The overall financial damage in the agricultural sector for the 2011 to 2016 period was estimated at the time to be equivalent to about a third of Syria's GDP in 2016, and the governorates with the largest losses included Al-Hasakeh, Ar-Raqqa, Rural Damascus, Deir-ez-Zor, Dar'a, and Idleb. By 2017, cultivated rainfed land area decreased 30 percent, and cultivated irrigated land area decreased 50 percent, mostly due to damages to irrigation infrastructure and expensive fuel to run the pumps.<sup>17</sup>

However, even during conflict, agriculture remained an important sector of the economy and was the secondlargest contributor to GDP after Government services in 2017.<sup>18</sup> As of 2020, the agricultural sector was estimated to account for 26 percent of GDP and to provide a critical safety net for 6.7 million Syrians, including those



residing in conflict areas.<sup>19</sup>

Wheat is Syria's major staple food commodity and is a primary agricultural crop.<sup>20</sup> In the five years prior to conflict (including the drought-stricken 2008 harvest) wheat production averaged 3.6 million tonnes, and in 2011, the country produced 3.9 million tonnes of wheat. However, in the past decade following the onset of violence, wheat production decreased as a result of both declined harvested area and actual yields due to conflict, destruction of the economic environment, and rainfall amounts and distribution. Consequently, production reached a minimum of 1.2 million tonnes, nearly a 50 percent decrease from pre-crisis levels and the lowest crop production since 1989.

However, according to the 2019 joint assessment by the Food and Agriculture Organization of the United Nations (FAO) and World Food Programme (WFP), increased security, reopening of supply routes, the return of IDPs to farmland, and favourable rainfall conditions for the 2018/2019 agricultural season resulted in a significant expansion of planted area of cereals. Abundant and well-distributed rainfall allowed for 93 percent of planted area to be harvested, compared to only 59 percent of planted area harvested in 2018.<sup>21</sup> The good rains also allowed farmers to irrigate their crops less frequently, which reduced the overall cost of production as farmers did not have to pay for the use of public irrigation or additional fuel costs. Overall, wheat production in 2019 increased 21 percent compared to the 2018 level.<sup>22</sup> Still, as of 2019, Syria's domestic wheat production was not sufficient to meet demand, and imports were sourced from Russia and Turkey. Food assistance by international agencies also contributed to a decreased deficit in the country.

In 2020, improved security conditions and favourable weather resulted in an expansion of crop cultivation and increased cereal production for a second consecutive year.<sup>23</sup> Wheat production was estimated at 2.8 million tonnes, a 27 percent increase compared to 2019 and a 52 percent increase compared to the five-year average, though still well below the 2002-2011 pre-crisis average of 4.1 million tonnes.<sup>24</sup>

The discrepancy is due to continuing impacts from the conflict and remaining hindrances to agricultural production including but not limited to; factors that impact field access including widespread displacement of farmers during the conflict and presence of improvised explosive devices (IEDs) and unexploded ordinances (UXOs) on cropland and pasture land; factors that impact production including field fires (both naturally occurring and maliciously started, particularly in active conflict areas), lack of quality inputs, destruction of productive assets and agricultural infrastructure, and economic downturn, currency depreciation, and increased cost of production; factors that impact post-production activities including high transportation costs and limited processing and marketing opportunities; and finally, factors that impact livestock production including a decrease in livestock numbers and pastureland productivity.

#### Widespread Displacement

As of September 2019, the UN Refugee Agency (UNHCR) estimated that 12 million Syrians had been displaced since the onset of conflict in 2011, of which 7 million moved from insecure to secure areas within the country, primarily to rural Damascus and Aleppo, and 5 million left the country as refugees.<sup>25</sup> The actual number of refugees is likely to be higher as many might have not sought official refugee registration.

Also, from 2011 to 2016, more than 30 percent of the rural population moved out of agricultural areas while urban populations increased slightly. Of the households still residing in agricultural areas in 2017, 80 percent were involved in annual crop production, and 60 percent were engaged in livestock rearing.<sup>26</sup>

With improved security across much of the country in recent years, significant numbers of IDPs, mostly farmers, have returned to their places of origin and farms, primarily in Aleppo, Deir-ez-Zor, Rural Damascus, and Dar'a. Many returnee farmers also resumed agricultural activities across the more stable central, eastern, and southern parts of Syria, increasing the agriculturally productive population from its 2017/2018 low level. The largest number of returns were recorded in Deir-ez-Zor Governorate, mostly returning from Al-Hasakeh and Damascus governorates, and in Idleb, Dar'a, and Homs governorates, mostly returning from areas within each governorate. In 2018 and 2019, The UN Office for the Coordination of Humanitarian Affairs (UN OCHA) estimated that 930,000 IDPs returned to their land.<sup>27</sup> Additionally, refugees, especially those who had been residing in Lebanon, have started returning to Syria, although economic conditions in both countries worsened since 2020. Figure 5 depicts the decade long trend in both total and new internal displacements in Syria from prior to the start of conflict in 2009 to the most recent 2019 estimate from the Internal Displacement Monitoring Centre.

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Figure 5: Total number of Internally Displaced Persons (IDPs) in Syria from 2009 to 2019. Source: "Syria." Internal Displacement Monitoring Centre. https://www.internal-displacement.org/countries/syria.

#### **Presence of Field Mines**

Although increased security in recent years has greatly improved farmers' access to fields, the presence of IEDs and UXOs remains a hindrance to field accessibility and crop cultivation in some areas, particularly ones previously occupied by ISIS.<sup>28</sup> Reports indicate that the group planted complex and multifaceted mines in most agricultural land and houses in villages under its control during the final battles in 2018 in southwest Syria. Mine planting was also used by other participants in the conflict. Though the Government has undertaken efforts to remove the explosive devices,<sup>29</sup> the country remains littered with landmines and UXOs buried with the soil among fields, posing a significant risk to farmers.<sup>30</sup> As of 2019, in Dar'a (an important food-producing governorate with fertile soil, a favourable climate, and abundant water sources), large areas of agricultural land remained unfarmed as farmers were reluctant to approach them for fear of mines, and some areas remained off-limits to their owners.<sup>31</sup> As depicted in Figure 6, the presence of unexploded landmines remains a disincentive to cultivate or graze lands, especially in areas previously occupied by ISIS.<sup>32</sup>

#### Density of Remote Explosive/Landmine/IED Detonations in Syria from January to November 2020



Figure 6: Density of remote explosive/landmine/IED detonations in Syria from January 1 to November 1, 2020. Number of detonations extrapolated from ACLED data warehouse. This sub-event type is coded whenever remotely- or victim-activated devices are detonated in the absence of any other engagement. Examples include landmines, improvised explosive devices (IEDs) whether alone or attached to a vehicle, or any other sort of remotely detonated or triggered explosive. Unexploded ordinances (UXOs) also fall under this category.



#### Field Fires and Destruction of Agricultural Land

Field fires in cereal crops are a somewhat common occurrence in the country, particularly during the harvest time. They are becoming an increasing threat as rising temperatures and longer periods of drought create optimal conditions for accidental burning.<sup>33</sup> Although most fires are weather-related and accidental, there is evidence to suggest some fires were started maliciously in areas of active or recently ceased conflict<sup>34</sup> as groups might have sought to increase their territory or avenge their losses.

#### **Input Availability**

Prior to conflict, the agricultural sector was highly centralized and subsidized, and Government expenditure on agricultural subsidies comprised three percent of GDP in 2011. However, the Government's ability to support farmers, including the provision of subsidized inputs, has declined after years of crisis. Although inputs are generally available on the markets, farmers report facing high costs and low quality. For example, in 2017, more than 25 percent of farming households reported lacking seeds, and more than 50 percent lacked sufficient amounts of fertilizer needed for agricultural production.<sup>35</sup>

#### Limited Seed Availability

Prior to 2011, the General Organization for Seed Multiplication (GOSM) provided a substantial portion of the seed requirement for farming. However, conflict at one point destroyed the majority of physical facilities of GOSM and resulted in a 50 percent decline of skilled staff. While GOSM has increased its activity in recent years, only 2 of 13 seed-processing centres were operating as of 2019, and the organization was only able to provide less than 20 percent of the country's annual wheat seed requirement. Additionally, during the height of conflict, GOSM's headquarters in Aleppo were occupied by rebel forces, and many of its seed cleaning and screening facilities and warehouses were damaged or destroyed. Some farmers reported contamination of seed with barley or wild oat and compensated by using a higher seed rate to achieve higher yields. In recent years, the primary sources of seed include limited supply directly from GOSM, grain purchased by GOSM from the General Establishment for Cereal Trade and Processing (Hoboob) to be used as seed, farmers' saved seed from the previous season, seed borrowed or purchased from neighbours, seed purchased at local markets, and seed supplied by humanitarian organizations.<sup>36</sup>

#### Limited Fertilizer Availability

Since 2011, farmers' use of fertilizers has diminished significantly due to low availability and high prices. In 2019, governorate-cased agricultural Directorates estimated that only between 40 and 50 percent of farmers applied fertilizer. However, based on interviews of farmers, this figure may be an over-estimation, and farmers who do apply fertilizer do so in small amounts. Furthermore, several countries have imposed international sanctions on Syria, which include trade restrictions of fertilizers as their chemical components can also be used to create explosives. During the height of conflict, fertilizer compounds were sourced domestically from a factory in Homs as nitrogenous fertilizers could not be imported privately into the country; however, the factory was attacked and damaged by anti-Government forces in 2016. Repairs were carried out in 2017, followed by a closure in 2018 for further rehabilitation with support from Russia. The factory was due to reopen by 2019 to improve supply for the 2019/2020 agricultural season. Additionally, distribution of urea, a compound used in fertilizer, is reportedly restricted to areas loyal to the Government, which omits Al-Hasakeh and Deir-ez-Zor governorates and eastern Aleppo.<sup>37</sup>

#### Destruction of Productive Assets and Agricultural Infrastructure

Years of conflict have resulted in a significant shortage of functioning farm machinery, though the situation improved somewhat in 2019 as the Government increased imports of machinery and spare parts. Many mechanical workshops reopened, allowing for the rehabilitation of old combine harvesters. In areas where combine harvesters are unavailable, farmers engage in manual harvesting activities which are costlier, time-consuming, and wasteful as mature standing crops are susceptible to damage.<sup>38</sup> In 2017, damage to agricultural infrastructure and assets was estimated at USD 3.2 billion, almost half of the total damage to the agricultural sector, and 60 percent of households reported significant damage to infrastructure, primarily in Al-Hasakeh, Aleppo, and Ar-Raqqa.<sup>39</sup>



#### Damage to Irrigation Systems

In the years prior to conflict, approximately 1.5 million hectares of agricultural land constituting 33 percent of total farmland and 65 percent of total cereal production was irrigated, particularly in the northern governorates of Al-Hasakeh, Aleppo, and Ar-Raqqa, as well as Deir-ez-Zor along the Euphrates.<sup>40</sup> However, the onset of conflict in 2011 resulted in the destruction of irrigation systems, electricity outages, and fuel cost increases which together vastly reduced the use of irrigation for agriculture. By 2014, it is estimated that 35 percent of all water treatment plants had been damaged or destroyed by bombardments, and by 2015, irrigated land had shrunk by 47 percent, and water reservoirs diminished 49 percent. In recent years, efforts have been made to rectify irrigation structures, though illegal drilling is likely to have diminished groundwater availability. Additionally, unregulated and overuse of groundwater has increased its salinity in Deir-ez-Zor, Al-Hasakeh, and some coastal governorates. It is also likely that irrigation water supply has been polluted by oil and noxious chemicals in areas such as Deir-ez-Zor and Ar-Raqqa where ISIS used environmentally destructive methods to refine crude oil.<sup>41</sup>

#### Destruction of Storage Infrastructure

In the height of conflict, warehouses and grain storing siloes were often targeted by opposition groups. Wheat storage capacity was estimated to have decreased by 87 percent compared to pre-conflict levels, and 80 percent of wheat stocks were stored in open spaces and vulnerable to weather damage. Also, several of the grain-collection centres where the Government purchased grain at preferential prices were damaged, destroyed, or occupied by armed forces during the conflict. In 2018, improved security increased the number of operable centres to 25, about a quarter of pre-conflict levels.<sup>42</sup>

Additionally, a large share of perishable goods such as fruits and vegetables are wasted. The Government's operational cold storage has reduced 90 percent compared to the pre-conflict level. Furthermore, rent to the available cold storage facilities has increased compared to pre-conflict levels due in part to high fuel prices as well as susceptibility of available storage facilities to electricity outages.<sup>43</sup>

#### Economic Downturn, Currency Depreciation, and Increased Cost of Production

The Syrian economy, already declining as a result of the conflict, suffered repercussions from Lebanon's economic and financial crisis. Many Syrians previously kept their U.S. dollar deposits in Lebanese banks with high interest rates.<sup>44</sup> In October 2019, Lebanese banks imposed capital controls blocking depositors' access to their deposits.<sup>45</sup> As a result, Syrian traders began purchasing the U.S. dollar on the parallel market in Syria, putting upward pressure on the exchange rate and triggering rapid devaluation of the Syrian Pound. The Economist Intelligence Unit estimated a price inflation in 2020 of nearly 100 percent. In June 2020, the official fixed exchange rate was raised from SYP 704/US dollar to SYP 1,256/US dollar to entice the use of official channels.<sup>46</sup> On the parallel market, in September 2019, USD 1 was traded for SYP 600, while in mid-December 2020 it was sold for SYP 2,700. The rapid devaluation brought industrial production to a stand-still as industrialists were unable to purchase inputs, with a consequent increase in unemployment rates.<sup>47</sup> Additionally, international sanctions have increased costs of energy, inputs, and other goods which have reduced the availability and increased prices of agricultural inputs such as seed, fertilizers, pesticides, and livestock vaccinations. For instance, between 2018 and 2019, the cost of harvesting one donum of wheat, equivalent to one-tenth hectare, increased 100 percent.<sup>48</sup>

Also, as of 2019, fuel production in Syria had dropped 94 percent since the onset of conflict. In response, the Government began rationing the use of petrol, which has significantly increased fuel prices. As of 2019, essential gas fields remained inaccessible as they were outside of Government control. As a result, 70 percent of the country's gas needs were imported, but international sanctions limited imports. Gas price increases were a result of both limited market availability and distribution as well as a decrease in consumer purchasing power due to the depreciation of national currency. Higher diesel prices consequently increased the cost of utilizing farm machinery, in turn increasing the cost of production as most cereal farmers prepare seedbeds mechanically, and combine harvesters are used when available.<sup>49</sup> As of December 2020, subsidized fuel for general use, available through smart fuel cards, sold for SYP 250/litre of "type 90" and SYP 575/litre of "type 95." On the open market, the average fuel price in October was SYP 700/litre, well below the SYP 1,000/litre registered the month before.<sup>50</sup>



#### High Transportation Costs and Limited Processing and Marketing Opportunities

Marketing of agricultural products in Syria is affected by several constraints that could disincentivize production of certain commodities. While products such as wheat, tobacco, and cotton are regulated and transported by public services, other food commodities are left to private actors to store, process, and transport. Years of conflict have damaged and destroyed many processing factories, which reduced the incentives to produce crops that require processing. Increased fuel costs also keep production and transportation costs high.<sup>51</sup>

Additionally, conflict and the economic crisis has hindered purchasing power of private traders' and consumers. As household purchasing power has declined, traders buy and sell fewer goods to avoid loss, and farmers experience high levels of food waste, particularly of perishable fruit and vegetables. With increased production costs, many growers claim to be producing at a financial loss as there is not adequate demand to sell their products. Instead, much of the unsold material in wholesale markets is often used as livestock fodder.<sup>52</sup>

#### Decrease in Livestock numbers and Pastureland Productivity

Prior to the onset of conflict, livestock constituted between 35 to 40 percent of Syria's total agricultural production, engaging 20 percent of the rural labour force, and 35 percent of rural households raised livestock that provided their primary source of food and income. In the first three years of conflict, the Syrian Ministry of Agriculture and Agrarian Reform estimated that the number of sheep, goats, cattle, and poultry decreased an average of approximately 43 percent as the veterinary sector nearly collapsed, and several livestock areas were under the control of rebel groups and ISIS who may have pressured selling, smuggling, and premature slaughtering of animals.<sup>53</sup> The loss of animals was particularly high in Al-Hasakeh, Deir-ez-Zor, Lattakia, Quneitra, and Rural Damascus.<sup>54</sup>

Part of the decline in livestock numbers could also be explained by previous exaggerations of high numbers by breeders, particularly during drought years so that they could purchase more feed at subsidized prices from the General Organisation for Feed. Overall numbers of livestock appeared to have increased slightly or stabilized in 2016 and 2017, though the number of sheep and goats decreased again slightly in 2018. However, the estimates may reflect some inaccuracy due to limited information sources, such as lack of official livestock registrations and IDP movements between governorates. Albeit stabilized, 2019 livestock numbers remained below preconflict levels.<sup>55</sup>

In Syria, the Badia is a stretch of semi-arid land covering 55 percent of the country's total land area and constituting 86 percent of the total grassland and natural pasture area. Prior to the start of conflict, the Syrian Government made investments to regenerate the long-term productivity of pasturelands, including a network of wells across the Badia rangelands to tap underground water. However, in the height of conflict, 90 percent of the Badia rangelands were out of control of the Government, forcing the majority of breeders to relocate. The impacts of conflict and consecutive dry years significantly decreased the accessibility of pasture fields; however, an estimated 40 percent of farmers have reportedly returned to their previous rangelands following recent security improvements. In 2019, the Badia benefited from favourable rainfall, but access remained constrained due to the ongoing threat of landmines and UXOs. In 2019, the Government was performing de-mining operations in parts of the Badia.<sup>56</sup>

# **Impacts of Conflict on Food Security**

While food security levels in Syria have gradually stabilized over the past several years as a result of better security and market access, deepening economic crisis cancelled the gains. In addition, pockets of continuing conflict, particularly in Idleb in the northwest, are causing new and protracted displacements. IDPs, primarily concentrated in urban areas, are putting increased pressure on communities' already limited resources and provision of services.<sup>57</sup> As of November 2020, the WFP estimated 9.3 million Syrians are food insecure with 2.2 million at risk for food insecurity. These figures have increased dramatically from 7.9 million and 1.9 million respectively in 2019, primarily due to high food and fuel prices as well as stagnant salaries and loss of livelihoods as a result of the weak economy and COVID-19 related challenges.<sup>58</sup>

According to the joint FAO – WFP 2019 Crop and Food Security Assessment Mission to the Syrian Arab Republic, the primary causes of food insecurity include displacement resulting in loss of livelihoods, economic sanctions that result in increased costs of production and dependence on limited local market supply, insecurity that has hindered market access, loss of productive assets as a result of insecurity and displacement, limited income-

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generating opportunities as a result of increased costs of production and displacement, and inflation resulting in high food prices and decreased household purchasing power. Households with poor food consumption also have poor dietary diversity as their diets primarily depend on staples such as bread, potatoes, seasonal vegetables, and food assistance commodities.<sup>59</sup> Also, while food insecurity remains an issue, there are high levels of fruit and vegetable wastage, particularly on the farm level as a result of low consumer purchasing power, lack of export markets, shortage of domestic processing factories, and limited storage infrastructure.<sup>60</sup>

#### **Increased Displacements in 2020**

In the first three months of 2020, conflict escalated as the Syrian military re-established its offensive against armed opposition groups in Idleb governorate. The renewed conflict triggered close to one million new internal displacements from Idleb Governorate between December 2019 and March 2020 when a ceasefire was agreed upon and was deemed to be the largest volume of displacement since the outbreak of conflict in 2011. For more than half of those displaced, it was the second or third time they were forced to flee, and many moved to increasingly overcrowded areas northwest within Idleb and to Aleppo governorate and other sites already hosting hundreds of thousands of IDPs where services are overstrained. In March 2020, 70 percent of Idleb's population were IDPs, and 840,000 of the one million total people in the northwest remained displaced.<sup>61</sup> As of November 2020, an estimated 6.7 million Syrians were internally displaced.<sup>62</sup>

In 2019, displacements resulting from conflict were a main driver of food insecurity as most people lost their livelihoods and productive assets when they fled. The areas that were most susceptible to food insecurity were those where military operations were still ongoing.<sup>63</sup> Length of displacement influences food security as households that have been displaced less than one year are more susceptible to food insecurity than those displaced for longer periods. Displacement also poses a strain on limited food resources of the communities receiving IDPs.<sup>64</sup> Furthermore, violence and displacement often result in the loss of a household's primary provider as many male figures migrate in search of work or join an armed force. In turn, the provider responsibility shifts to women, and the food insecurity vulnerability of women-headed households is higher as Syrian women struggle to find job opportunities to sustain themselves and their families.<sup>65</sup>

#### Decreased Market Access, Supply, and Demand

The 2010 national census reported over half of Syrians living in urban areas, making markets essential for household food security. Following the onset of conflict, dependence on the markets increased as a result of displacement, low profitability of agriculture, and erratic weather patterns. In 2017, a national food security assessment found that 80 percent of Syrians depended on markets for their main food source. While conflict has hindered market access, particularly at its height in 2014 to 2016, increased security in recent years has greatly improved accessibility.<sup>66</sup>

Increased security has also benefitted the transport of farm produce as many roads that previously had roadblocks or levies imposed by arm groups were removed as of 2019. For instance, rebel and Government advances against ISIS from 2017 to 2019 improved security of trade routes, particularly within the key east-west and north-south supply route, which facilitated increased trade from surplus to deficit areas of the country. However, selling and transporting agricultural products within the country remains an issue due to high fuel prices, remaining insecurity, and lack of refrigeration trucks.<sup>67</sup>

There is also reduced market demand due to high unemployment rates and depreciation that has limited household purchasing power, which, combined with lack of export markets, can result in high fruit and vegetable wastage.<sup>68</sup> Additionally, as of 2019, it was reported that years of conflict decreased access to and the number of livestock markets as a result of insecurity of trade routes, market closures and destruction, decreased demand, relocation of traders to more secure areas, increased uncontrolled exports of live animals to neighbouring countries, and high Government taxes.<sup>69</sup>

#### **Inflation and High Food Prices**

Food prices have increased significantly in Syria as years of conflict have constrained access to land and inputs, decreased local production, damaged productive assets and processing plants, and caused devaluation of national currency, in turn limiting agricultural production.<sup>70</sup> As demonstrated in Figure 7, the index of food consumer prices increased 800 percent between 2010 and 2016, decreasing household purchasing power considerably in local markets. This increase was particularly dramatic between 2013 and 2016 due to the

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disruption in trade routes, fewer traders, inflation, and devaluation of the Syrian Pound. After the national monthly average food price peak in late 2016, prices fell in 2017 due to reopening of trade routes and increased security.<sup>71</sup> Even so, 90 percent of households spent over half their income on food in 2017 compared to 25 percent of households prior to the crisis.<sup>72</sup>

Food prices have been steadily increasing again since mid-2018 (Figure 7) primarily due to higher fuel prices and currency depreciation as well as localized insecurity, continued lack of refrigeration trucks, etc.<sup>73</sup> For instance, in 2019, while perishable fruits and vegetables had ample availability at farm gate and farmers earn very little, price on the markets in the urban centers skyrocketed due to constrained access to urban markets resulting from lack of suitable transportation and high fuel costs. In June 2019, wholesale wheat grain prices in Syria's local markets were 60 percent higher than prices in the international markets.<sup>74</sup> The rapid devaluation of the Syrian pound in 2020 pushed the average price of the WFP reference food basket, the cost for a group of essential food commodities, up 107 percent between April 2019 and April 2020, and Syrians were resorting to debt and eating less in order to survive.<sup>75</sup> Between March and April 2020 alone, the cost of the basket increased 20 percent, likely as a result of stockpiling amidst the COVID-19 pandemic.<sup>76</sup>

Since 2010, prices have remained substantially higher overall compared to pre-crisis levels, and in August 2020, food prices were 22 times higher than the five-year pre-crisis average.<sup>77</sup> Limited household purchasing power as a result of higher food prices remains a primary driver of food insecurity. Also, prices of nutrient-dense foods have increased more than staple foods (Figure 7), contributing to food insecure households' poor dietary diversity and increasing the risk of malnutrition.<sup>78</sup>



Figure 7: Average food commodity prices per KG per category per year in Syrian Pounds (SYP). Source: "Syrian Arab Republic - Food Prices." OCHA Services. November 29, 2020. https://data.humdata.org/dataset/wfp-food-prices-for-syrian-arab-republic.

# **COVID-19 Compounds Hardships**

The impacts and risks of COVID-19 are often intensified for countries in conflict due to international sanctions, prevailing food insecurity, poor health infrastructures, and a decrease in remittances.<sup>79</sup> In Syria, the number of people infected with the virus has been increasing since the beginning of July 2020 and was followed by a sharp increase in positive cases since September, heightening concern for displaced people in the northern part of the country.<sup>80</sup> COVID-19 poses a significant risk of worsening the country's existing economic, political, and security crises. The pandemic has already exacerbated the challenging situation that the country has been facing amidst high unemployment rates, rapid currency devaluation, and the absence of an adequate social safety net system.<sup>81</sup> The virus is of particular concern in densely populated areas of Idleb and Al-Hol displacement camps

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in the northeast as there are fears that high concentrations of people will facilitate further transmission.<sup>82</sup>

Measures introduced to contain the spread of COVID-19 are also likely to impact agricultural production as farmers might experience reduced access to markets and availability of inputs, increasing already elevated input prices. Higher production costs and decreased purchasing power is likely to shrink farmers profits further. Livestock production has been particularly affected by control measures due to high feed prices and limited access to grazing lands. Also, food processors have been facing higher costs of materials, transportation, fuel, and labour and have had to raise the prices of final food products by an average of 20 percent.<sup>83</sup> Overall, fewer goods could be available in markets as control measures have reduced cross-border trade, and movement restrictions and curfews are likely to worsen food security and livelihoods significantly.<sup>84</sup>

# Conclusions

While agricultural production in Syria has substantially improved in recent years with improved security, the return of many IDPs to their places of origin, and better weather conditions from 2018 onward that promoted an increase in planted area and yields, substantial concern remains for regions where conflict is ongoing. Even in areas of improved security, years of conflict have impacted agricultural production potential and food access. Furthermore, the COVID-19 pandemic threatens to revert improved conditions as control measures and economic impacts are causing further difficulties in agricultural and livestock production, food processing, market supply and access, and increased food prices. Overall, localized insecurity and post-conflict economic issues aggravated by the COVID-19 pandemic remain significant drivers of production potential in Syria and are likely to impact the 2020/2021 agricultural season substantially.



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