AGRICULTURE IN SYRIA'S CIVIL WAR

The civil war that began in 2011 has had a profound impact on Syrian civil life. 400,000 Syrians have been killed, more than 5.6 million Syrians have left the country and another 6 million are displaced internally. IDPs (Internally Displaced People) are often more vulnerable than refugees, sometimes being displaced several times, and often remain in conflict zones.

The seven-year-old civil war still has many active front lines, keeping communities in unstable situations with rotating administration. While ISIS maintained agricultural production in areas that it controlled, and territory the Assad regime controls can sustain agricultural production, in other areas such as Idlib province, the government has very little civil control and farmers face high oil prices, unstable markets and difficulty accessing things like fertilizer and animal feed, the supply of which the regime tightly controls. Food insecurity is a prominent source of conflict in the Arab world and an effective reconstruction effort in Syria requires special care and attention to such biological factors.

This project will consider some of the most important dynamics in assessing the state of Syria’s agricultural production, using the limited spatial and region-specific data that is available. The displacement of people is likely to have a profound effect on the demographics of those communities which are most affected. A larger radius was used for the proximity of Kurdish territory to “at risk” towns, because the limited spatial and region-specific data available does not allow for a more precise location.

Methodology

The challenge in collecting spatial data on Syria is the tremendous lack of specificity in most of the data that is available regarding the country since 2011. As an active conflict area, data collection is more dangerous and assessing the effect of the war on agriculture is less pressing than providing essential services to people in need. Nonetheless, agricultural production is crucial to providing stability in the country for the long term, and organizations with more resources like the FAO are doing more comprehensive and exhaustive work than the scope of this project.

To assess the farmland that is at risk in Syria, this project utilizes data collected from liveuamap.com, which tracks the territory controlled by various actors in Syria on an ongoing basis. Data from May 5, 2018 was collected and coded, by hand, to a polygon vector file of the populated places in Syria, each given a town name which was cross-referenced with LiveUAMap’s website.

A shapefile for land use was obtained from mapcruzin.com. The study was limited to plots coded as any variation of “farm”, “farmland”, “orchard”, etc. Any of these agricultural plots within 1 km of an “at-risk” town were coded as a farmland.

“At-risk” towns were defined by selecting regime controlled towns by their proximity to rebel and ISIS-held areas (a radius of 10 km was used), Kurdish areas by their proximity to ISIS (10 km) and their proximity to the invading Turkish army (20 km). A larger radius was used for the proximity of Kurdish territory to Turkish territory because the Turkish army has expressed its intention to continue operations east to “clear” rebel held areas. This part of the project admittedly required some discretion on the part of the author. Also included in the “at-risk” locations were any territories under rebel or ISIS control, as these territories are likely to be bombed by airstrikes and blocked until they are under regime or Kurdish (and de facto US) control.

The total land area of these “at-risk” plots was then compared with the total agricultural land per Syrian administrative governorate, and presented as a proportion of “at-risk” agricultural land as a proportion of total agricultural land, by governorate.

Analysis

The data show that provinces in the south-east along the Euphrates river have an especially high proportion of agricultural workers, and produced the largest proportion of internally displaced people in 2017. In rebuilding those communities, special attention must be paid to ensuring that the land is safe to farm and that these communities are provided with adequate water and fertilizer, as they have historically been very reliant on farming near the river.

The Euphrates river has been a natural front line and buffer zone in the conflict for years and adjacent communities are sometimes subject to spurts of violent clashes between forces there. This is, however, where most of the people live in these regions as well, putting many lives and livelihoods at risk.

In the west of the country, much more farmland is at risk than in the east. This is likely because much of western Syria is held by anti-Assad rebels and/or the Islamic State, and farmland takes up a much greater proportion of the land cover in the west of the country. Much of this farmland is also likely going to continue to be squandered until a political solution is obtained and actualized or the regime controls the entirety of the western provinces. Until such a time, provinces like Idlib are likely going to continue to suffer from a lack of access to agriculture.