

## The Future of Agriculture Requires Better Broadband

The lack of broadband in rural America has increasingly impacted our nation's food supply and the communities that farmers call home. Currently, [29%](#) of U.S. farms do not have access to the internet. This means that nearly one-third of U.S. farms are unable to take advantage of precision farming technology that relies on broadband to help increase production, improve distribution, and reduce costs. These technologies are even more critical as [climate change](#) is expected to negatively impact agriculture production in America. Meanwhile, households in farming communities face many of the same challenges as unserved populations in urban areas who are unable to work and learn from home. Congress must prioritize policies that promote broadband access in order to help U.S. farmers.

### Broadband Enables Precision Agriculture

[Precision agriculture](#) is enabled by digital tools connected to the internet and modern data analytics. These tools lead to scientific breakthroughs and technological advancements that improve agricultural productivity, efficiency, and sustainability.

- Studies have shown a direct relationship between precision farming and [increased](#) farm profits.
- Precision agriculture decreases food insecurity, with 7.5% fewer people at risk of hunger in developing countries.
- It can also increase food safety -- as it takes only two seconds to [trace food](#) products' journey using new [technologies](#) enabled by broadband such as [blockchain](#)-enabled records.
- Finally, precision agriculture promotes sustainability, by using 40% less fuel, decreasing water use by 20-50%, and reducing chemical application up to 80%.

### Broadband Increases Business Efficiency for American Farmers

Broadband allows farmers to fully adopt the age old saying 'work smarter, not harder' by dramatically improving business efficiency for the American farmer in a number of ways:

- **Automation.** Broadband access allows agriculture businesses to feed information into the internet of things and automate activities. For example, at the 2019 International agBOT competition, Purdue's senior capstone students unveiled a vehicle that could autonomously travel corn fields, identify over 100 species of plants, and deliver fertilizer or tailored herbicides accordingly.
- **Labor.** By increasing access to technology, broadband helps provide support for human labor, decreasing errors and increasing the speed of planting, harvesting, and tending to crops.
- **Market Access.** Farmers have access to the global marketplace online. Cattlemen use online cattle auctions to cut the cost of attending live auctions while expanding their customer reach. MarketMaker, the largest online database for buyers, farmers, processors, restaurants, etc., allows businesses within the food industry to meet new customers and locate quality products.

### Broadband Improves the Quality of Life of Farm Families

Broadband enables farm families to learn online, apply for government benefits, and connect with loved ones across the globe. It also enables farm families to access top quality medical care without driving for long distances. One reason this is important is because the CDC reported that rural areas have the [highest suicide rates](#) of any geographical area from 2001-2015. Residents in distress are able to find mental health support that may not be available locally, and find support in [online communities](#). They can also virtually access specialists and other telemedicine services.