Stimulus Through Farm Conservation Programs

BREAKTHROUGH INSTITUTE

Summary

- Rural areas are especially vulnerable to the COVID-19-induced economic crisis, and will likely have the hardest time bouncing back. By investing in agriculture conservation and efficiency, the federal government has an opportunity to immediately relieve economic hardship and stimulate rural and semi-rural economies while making US farmers more productive and internationally competitive.

- Funding for federal working land conservation programs — such as the Conservation Stewardship Program (CSP) or the Environmental Quality Incentives Program (EQIP) — has fallen since 2018. These two programs provide critical resources to address agricultural pollution and environmental impacts, while simultaneously providing income support for agricultural producers. Currently, only about a quarter of CSP and EQIP applications can be approved due to funding constraints. Without support, many agricultural producers cannot afford to adopt conservation practices, purchase more efficient equipment, or reduce their environmental impacts.

- Increasing the funding of USDA NRCS conservation programs — doubling EQIP and maintaining CSP funding through 2023 — and creating a one-time farm machinery rebate system would provide short term stimulus to rural and manufacturing communities, improve the long-term economic viability of agricultural producers, and reduce the environmental and climate impacts of agriculture, domestically. In total, these proposals amount to an immediate investment of $4.35 billion and subsequent investments totaling $2.0 billion from 2021 to 2023, with the potential to create 98,000 jobs.

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Rural areas in the United States are particularly vulnerable to the economic fallout of the COVID-19 pandemic. As a result of the pandemic, farmers face low prices, shrinking export markets, and labor shortages, placing rural and semi-rural communities in dire straits.[1] For example, the price for US corn is down over 15%, while hog prices are down more than 30% since the beginning of the year.[2]

As part of ongoing efforts to support economic recovery, the US federal government has an opportunity to fund infrastructure and conservation projects that can supply much needed jobs to rural America and help improve the environmental and economic sustainability of American agriculture. One such opportunity is to increase funding for agriculture conservation programs on working lands — namely, the Conservation Stewardship Program (CSP) and the Environmental Quality Incentives Program (EQIP) — and fund efficiency improvements to agricultural machinery. Expanded funding to working land conservation programs and incentivizing the purchase of high tech, efficient equipment would provide short term economic stimulus, improve agricultural efficiency, and reduce environmental and climatic impacts of US agriculture.

EXPAND EQIP

***Total Spend**: $1.75 billion*
***Job Creation**: 25,000 jobs*

To stimulate economic recovery in rural areas, create jobs in manufacturing, and improve the environmental impact of US agriculture, the US federal government can double funding for EQIP for FY2020 to a total of $3.5 billion. EQIP is currently funded at $1.75 billion for fiscal year 2020, but is authorized for increased funding throughout the duration of the 2018 Farm Bill.[3]

As of 2015, EQIP funding only allowed for the acceptance of a quarter of applicants.[4] Even with the increased EQIP funding stemming from the 2018 Farm Bill, acceptance rates will remain low, leaving many farmers and producers without the financial ability to adopt cost-saving, efficient, and environmentally-beneficial practices. Doubling funding would increase acceptance rates and fulfillment of already-existing producers' plans to improve conservation and efficiency practices on working lands. Subsequently, many practices supported by EQIP — such as cover cropping — enhance agricultural productivity and improve profitability for farmers, making EQIP both environmentally and economically beneficial for US agriculture.

An increase of $1.75 billion in funding for EQIP would result in the creation of roughly 25,000 jobs, mainly in on-field agricultural work, installation of conservation practices, and reforestation, but also in manufacturing and supply-chain work for agricultural equipment and products related to EQIP-funded practices.[5]

REBATE SYSTEM FOR AGRICULTURAL EFFICIENCY

***Total Spend**: $2.6 billion*
***Job Creation**: 49,000 jobs*

Increasing technological advances in agriculture have not been well diffused across the country. As of 2013, only about half of producers of major crops used GPS guidance systems, while only around a fifth used variable-rate input applicators.[6] Often, the main barrier toward the adoption of more efficient agricultural systems is cost.

To further stimulate the economy while improving the competitiveness, efficiency, and environmental impact of US agriculture, Congress can authorize and fund, at approximately $2.6 billion, a farm equipment rebate program that would incentivize and partially fund the purchase of high-tech and efficient agricultural equipment that other conservation programs would not otherwise fund or incentivize. This could mirror existing programs in Texas and California aimed at increasing the efficiency of farm fleets, by offering payments to producers upgrading their equipment.[7,8] These programs have received positive reviews from both farmers and environmentalists, especially for their impact on air quality in agricultural areas.[9,10] The funding level is based on an expanded version of California's Funding Agricultural Replacement Measures for Emissions Reductions (FARMER) program, which, in 2020, funded $65 million for agricultural equipment purchases across the state's farms, which make up only 2.7% of total farm acreage in the United States.[11,12]

The rebate program should require that the equipment being upgraded be in-use at the time of the

upgrade, and provide greater funding for greater efficiency improvements. This one-time funding could be authorized to NRCS and utilize their existing systems for applications and other processes. The rebate program would cover the cost of equipment like tractors, combines, variable rate applicators, and other large, high-cost equipment for which EQIP normally would not provide funding or cost-sharing. EQIP and other conservation programs tend not to fund or incentivize high-tech adoptions mainly due to cost constraints and existing classification of "conservation" practices. Because of this, rebates distributed by the program would not count toward or be limited by the $250,000 payment cap that EQIP abides by for existing funding programs. Instead of using the same cost-sharing breakdown as EQIP, the rebate program can employ a system that provides greater cost-shares for larger efficiency improvements. For example, a fertilizer spreader upgrade that would cut application rates by half would receive a substantially larger rebate than an upgrade that would only cut fertilizer input by a fifth.

A federally funded rebate program could cover great lengths in bringing technological advantages to smaller, family farmers who would otherwise be unable to invest in precision agriculture equipment. In fact, this kind of rebate would disproportionately benefit smaller, disadvantaged farmers, many of whom were already in financial distress prior to the COVID-19 outbreak. An influx of financial support for equipment purchases would provide long-term economic and efficiency benefits that would make those smaller producers both financially and environmentally sustainable.

A $2.6 billion efficiency rebate program would create roughly 49,000 jobs, many of which would be in equipment manufacturing and agricultural supply chains.[13,14] On top of the immediate economic benefits, funding the purchase of higher-efficiency equipment would help farmers grow more crops using less inputs, potentially increasing incomes while lowering costs, making small farmers more resilient to economic, environmental, or other shocks.[15]

MAINTAIN CSP FUNDING THROUGH 2023

***Total Spend**: $2.0 billion*
***Job Creation**: 24,000 jobs*

To further stimulate agricultural economies while supporting the continued use and adoption of environmentally beneficial practices, Congress can maintain CSP funding at the FY2020 level of $2.2 billion until the next Farm Bill is passed in 2023, which would cost $2 billion in total over the next 3 years. Along with EQIP, CSP is the major working-land conservation program funded through the USDA. While both CSP and EQIP fund conservation practices, their work is complementary. EQIP's main directive is to fund the installation of environmentally beneficial practices, while CSP promotes and funds the maintenance and continuation of conservation practices over 5 to 10 year contracts.

The 2018 Farm Bill cut long-term funding for CSP, even though CSP could already accept only a small portion of applications due to existing funding constraints — the contract acceptance rate was 27% as of 2015.[16] Maintaining 2020 funding levels through 2023 would allow for the continuation of extant contracts while accepting new applicants who would otherwise have been denied.

Maintaining CSP funding at 2020 levels would add around 24,000 jobs between 2021 and 2023.[17] Like EQIP, CSP funding would help create jobs in on-field agricultural work, conservation practices, and reforestation, as well as indirect jobs in agricultural supply chains and equipment manufacturing.

CROSS-CUTTING ECONOMIC AND ENVIRONMENTAL BENEFITS

Conservation and efficiency are particularly important for environmental impacts. The conservation practices that EQIP and CSP fund — such as cover cropping, nutrient management systems, pasture restoration projects, and forest stand recovery — can reduce agriculture-related pollution and help mitigate climate impacts by reducing emissions and sequestering carbon.[18] Widespread adoption of cover cropping, for example, could sequester around 100 MMT CO_2e/year, or almost a fifth of total emissions from US agriculture.[19]

At the same time, precision agriculture techniques and higher efficiency equipment could reduce agricultural runoff, increase yields, and limit land-use change.[20] Widespread adoption of precision agricul-

ture technologies could reduce emissions by around 30 MMT CO2e/year, or almost a quarter of all emissions related to fertilizer application.[21]

Finally, conservation practices have also been shown to improve productivity and resilience, which could help farmers deal with unstable weather conditions, including issues related to flooding or drought.[22]

Expanding EQIP, establishing a rebate system for the adoption of more efficient technologies, and maintaining funding for CSP would go a long way towards stimulating rural and manufacturing economies and improving the long term environmental sustainability of US agriculture.

ENDNOTES

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