

Reduced public spending for agricultural research: A case of being penny wise and pound foolish

For more than a century the US has been a dominant force in world agricultural markets. Much of that influence can be attributed to 1) a large land base amenable to a wide variety of agricultural systems resulting into a significant level of production beyond domestic needs, 2) a set of commodity markets that provide price transparency for sellers and purchasers of agricultural livestock and commodities, and 3) significant public spending on agricultural research and development (R&D).

As we think about the 2023 Farm Bill, the last item comes into sharp focus. While much of the public discussion of farm bill funding is generally focused on nutrition and agricultural support programs, a June 6, 2022 article in “Amber Waves” (a publication of USDA’s Economic Research Service), turned our thoughts toward the funding of agricultural R&D programs.

In that article, “Investment in U.S. Public Agricultural Research and Development Has Fallen by a Third Over Past Two Decades, Lags Major Trade Competitors,” Kelly P. Nelson and Keith Fuglie point out that “spending on public agricultural R&D from 1900 to 2011 generated, on average, \$20 in benefits to the U.S. economy for every \$1 of spending” (<https://tinyurl.com/ypw6mmcm>).

Despite that US public agricultural R&D spending in 2019 (in constant 2019 dollars adjusted by a R&D price index) was only 68 percent of what it was at the peak in 2002. This is “roughly where it was in 1970.”

We understand the budgetary constraints that Congress has imposed on itself. It is also clear that commodity and nutrition programs garner more vocal support than agricultural R&D programs. But in reducing public agricultural R&D spending it seems to us that we are being penny wise and pound foolish, leaving the US agricultural sector at a disadvantage compared to other major agricultural economies.

A graph in the Nelson/Fuglie article shows that while public agricultural R&D investment in the US has declined, it has increased in the European Union, China, India, and Brazil.

In the bid to bring the federal budget under control we have turned our back on funding an activity that would return \$20 to the economy for every dollar spent. The taxes on that extra spending would likely pay for itself and then some.

In addition to increasing public agricultural research spending, we would argue that we need to change the way the funding is allocated. In the past, a significant portion of the agricultural R&D funding not used to cover research conducted by agencies of the USDA (intramural funding) was allocated “through “capacity grants” to State and territorial institutions on a formula basis and requires States to match the Federal grant.”

In the past three decades, we have seen a shift to the use of competitive grants. The competitive grants target an issue and call for proposals which are then winnowed down to determine which ones are funded. The idea behind this is that these competitive grants allow the USDA to direct the funding to the “best proposals” thus using limited dollars more efficiently.

While we agree that there is a role for competitive grants, we think that increasing the level of capacity grants would allow researchers to spend less time writing grant proposals, most

of which do not get funded, and more time identifying and tackling the kinds of problems that are faced by farmers and ranchers in their respective states and territories. It would allow researchers to tackle the same issue in different ways in different states and compare their results.

An increase in capacity grants would also free the administrators of Land Grant institutions from their dependence on corporate funding where the benefit of the research primarily accrues to the donor. With the increased consolidation that is taking place in farm input industries, an increase in public funding could help balance out the economic advantage these corporations have over the average farmer.

Overall, we think that it is in the interest of the US agricultural sector for the agricultural R&D portion of the farm bill to be excluded from the current budgetary constraints where research has to compete with everything else. Funding ought to be based on what it takes for the US to meet the challenges (climate change, water availability, zoonotic diseases that can wipe out whole flocks and herds, among others) being faced by US agricultural producers.

Policy Pennings Column 1131

Originally published in MidAmerica Farmer Grower, Vol. 37, No. 377, June 24, 2022

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