

Investing in a Better Future through Public Agricultural Research

Worldwide and in the United States, investments in <u>public agricultural research</u> have slowed since 1980.

- As in the case of other global public goods, the full costs of reduced funding of public agricultural research could take many years to become fully apparent.
- The effects will last for decades and might be difficult to reverse.

Given that the biological <u>processes of agriculture</u> are sensitive, local public agricultural research administrators and their scientists are positioned to recognize and respond to local research needs and new problems relative to distant federal research administrators.

- A misconception exists among managers of federal research funds that they can pick winners.
- The production function for scientific discoveries contains a large amount of uncertainty, which undermines externally directed funding.
- It is more efficient for local research administrators than distant federal administrators to contract with university scientists to undertake agricultural research.



Although the <u>private sector invests</u> in large amounts of R&D (research and development), that sector focuses primarily on areas that have significant profit opportunities.

- Farms are too small and certain crops are too minor to bear the cost of R&D.
- Private agribusiness firms cannot recoup enough benefits to cover the costs of innovations.
- Farmers and consumers need transparent, objective information so they can make good decisions.
- Private firms have limited interest in on-site training of new scientists for the future.

Evidence is mounting that <u>a new era has begun</u>, with substantially lower rates of productivity and rising real farm commodity prices.

- The private sector has been rapidly increasing its investments in private R&D for agriculture.
- Taken at face value, the problem is that world demand for food will be much larger and limited new land is available.
- Increased investments in agricultural R&D to raise the stock of agricultural research capital will be needed worldwide.

Experts to Contact for More Information:

Wallace Huffman (whuffman@iastate.edu); George Norton (gnorton@vt.edu); Luther Tweeten (tweeten.1@osu.edu)