



Wei Zhang named GAP Initiative VT Faculty Research Fellow

April 23, 2021

CALS Global funds research on the impact of extreme weather events on productivity growth

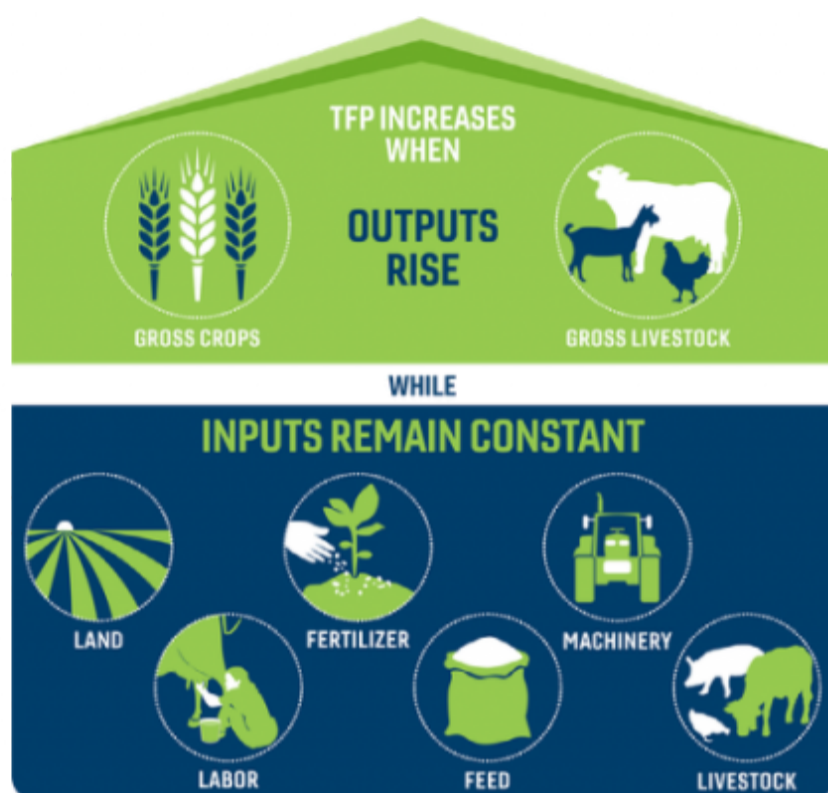
For the first time, [Virginia Tech CALS Global](#) is funding original research and analysis as part of the Global Agricultural Productivity Initiative (GAP Initiative).



The fellowship provides funding for research linking agricultural productivity, measured as Total Factor Productivity (TFP), and topics including sustainable agriculture systems, agricultural technologies and practices, food and nutrition security, and access to agronomic knowledge.

For 2021-2022, [Wei Zhang, assistant professor in agricultural and applied economics](#) has been awarded the fellowship for her proposal to research the dynamic relationship between extreme climate events and the resilience of agricultural systems, through the lens of TFP growth.

TOTAL FACTOR PRODUCTIVITY



2020 GAP Report®/Virginia Tech College of Agriculture and Life Sciences

Her research collaborator will be [Jean-Paul Chavas](#), professor of agricultural and applied economics at the University of Wisconsin-Madison.

In her proposal, Zhang wrote that in addition to changes in climate averages, we are learning that extreme climate events have substantial impacts on the productivity and sustainability of agricultural systems. Many regions in the world are experiencing changes in climate extremes, including the frequency and severity of droughts, cold spells, heat waves, and floods. When extreme climate events occur, many aspects of agricultural systems are influenced, with the potential for significant challenges to TFP growth.

The ultimate goal of Zhang and Chavas' research is to shed light on the design of government programs and potential private-public partnerships for climate adaptation and agricultural sustainability.

Their original research will be published in the 2022 Global Agricultural Productivity Report and featured on the GAP Report website. A preview of their research program will be included in the forthcoming *2021 GAP Report: The Case for Productivity*.

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