

New ASU center to help protect America's agriculture industry from foreign threats

Center for Agriculture and National Security dedicated to securing US food systems and strengthening national resilience

By Scott Bordow, ASU News
August 4, 2026

Story highlights

ASU opens Center for Agriculture and National Security

Center is dedicated to helping secure U.S. food systems

Expert says U.S. food systems are vulnerable to attacks

In 2022, Alicia Ellis and her husband leased a farm near Queen Creek, Arizona. For Ellis, the farm — and the physical labor required to tend to it — was a welcome change from [her day job](#) as director of the [Master of Arts in global security program](#) at Arizona State University.

“It was just something that grounded me and provided such a contrast to the very cerebral job that I had,” Ellis said.

Shortly after acquiring the farm, however, Russia’s invasion of Ukraine and the ensuing supply chain disruptions caused a fertilizer shortage and a price spike.

Ellis and her husband decided not to plant anything that season. But her brother-in-law, who farms 1,500 acres right down the road, had to plant because that's how he makes his living. As a result of the delays in fertilizer delivery, Ellis said, her brother-in-law's yield was down about 30%.

And that's when it hit Ellis: The agriculture supply in the United States is a national security issue.

Ellis knows national security: She served as a U.S. Air Force officer, deploying twice as an air battle manager in support of operations Enduring Freedom and Iraqi Freedom. She was later appointed a Presidential Management Fellow, serving at the U.S. Department of the Treasury's Office of Financial Research and the U.S. Department of State's Bureau of Conflict and Stabilization Operations.

"If (the fertilizer) shortage had happened in May, when the entire Midwest was planting, and we export that all over the world ... we would have been talking about a global food security crisis," Ellis said.

"No one talks about our food supply as a security issue because everyone is focused on chips and critical minerals and that kind of thing. But when I started digging into it, I also discovered that the whole thing was rooted in geopolitical positioning and strategy and competition. And that is my world."

The result of that digging: The formation of ASU's Center for Agriculture and National Security, of which Ellis is director. The center, which is part of ASU's [Future Security Initiative](#) and was approved by the Arizona Board of Regents in June, is dedicated to securing U.S. food systems and strengthening national resilience.

"Agriculture has become a national security issue," Ellis said. "That's kind of been a tagline for a long time, but I think people only understood it at a very surface level, like, 'Oh yeah, it's food. It's a security issue.'

"But we have not fully integrated that into a national security strategy. That's what we're trying to push towards. So I'd say that the mission (of the center) really is to help the United States better understand, anticipate and then respond to security challenges."

[Russ Howard](#), a professor of practice in the [School of Politics and Global Studies](#) and founding director of the Combating Terrorism Center at West Point, said food systems have long been vulnerable because there hasn't been an "agricultural 9/11."

"It's worse than just taking it for granted," Howard said. "We don't even have a concern. I'm not the world's best researcher, but I'm not bad, and I just couldn't really find any center of gravity for (agriculture) security."

Ellis said ASU is the ideal university to house the center because of its mission to help solve complex societal problems like agriculture security. ASU has an [online Master of Arts in global security program](#), and Ellis co-teaches a course in the School of Politics and Global Studies that explores the underlying links between conflict, security and systems of agricultural production. The center will offer a range of classes to undergraduate and graduate students.

"It's not a straightforward field that already exists, that's well defined and easy for a university to just jump into," she said. "But ASU is the place that is known for being on the cutting edge and just

figuring things out.

“This sits at the intersection of agriculture, supply chains, systems engineering, cybersecurity, economics and national security, and I think there are very few institutions that have that breadth of expertise under one roof. That’s why the center belongs here.”

Although it’s still in its infancy, the center already has partnered with the U.S. government on a tabletop exercise designed to test ways China could take advantage of vulnerabilities in the agriculture sector.

Agricultural experts, researchers and graduate students looked at the tactics China could use to disrupt the sector, including:

- Cutting off parts of the supply chain

- Announcing an export ban on specific chemicals that are primary active ingredients for crop protection

- Legal constraints that pitted farmers against agribusiness

- Intellectual property theft

“We weren’t looking at one single catastrophic attack,” Ellis said. “We looked at gradually how a series of smaller actions compounded over time could create significant consequences for the U.S. agriculture sector.”

That research led to an article in PRISM, a journal of national and international security affairs for the U.S. Department of Defense, examining those strategic vulnerabilities.

In addition to partnering with the government, the center is working with the Regenerative Grazing Open Air Lab, an initiative at the Naval Postgraduate School in Camp San Luis Obispo, California, to develop education and research activities that connect regenerative land management practices to national security outcomes.

Ellis said she also has had interest from Japan in participating in some of the center’s exercises, and a second tabletop exercise sponsored by a private company will look at how the depletion of aquifers in the California Central Valley impacts agribusinesses.

“We’re also developing a larger (exercise), zooming the lens out and looking from a global perspective at some of the hot spots in Africa and the Middle East where conflict is most likely to erupt as a result of water shortages and the impact on agriculture production,” Ellis said.

The heart of the center, Ellis said, is its fulfillment of President Michael Crow’s vision of ASU as a national service university.

“As (agriculture security) becomes increasingly important to national security and to societal and economic resilience, we have a really important role to play in generating knowledge, educating future leaders and working with government industry to develop solutions,” Ellis said.

This story originally appeared on [ASU News](#).

Main image



It wasn't until after leasing a farm (pictured above) in Queen Creek, Arizona, that ASU Professor of Practice Alicia Ellis realized the agriculture supply in the United States is a national security issue. Ellis is the director of the Master of Arts in global security program, and now, the new Center for Agriculture and National Security at ASU. Courtesy photo

Text image(s)



Ellis co-teaches a course in the School of Politics and Global Studies that explores the underlying links between conflict, security and systems of agricultural production. The new Center for Agriculture and National Security will offer a range of classes to undergraduate and graduate students. Courtesy photo