

Former Ambassador Kip Tom Testimony to the US House of
Representatives Committee on Agriculture-March 20, 2024

Honorable Chairman Thompson, Ranking Member Scott, and Distinguished Members of the House Committee on Agriculture. As a lifelong farmer and the former Ambassador to the Rome Based UN Food and Agriculture Organizations, I would like to share my perspective with you today on the threat of China to America's Food and Agriculture systems.

Americans need to understand that our national security is dependent upon our food security; Americans cannot take our food systems for granted.

After experiencing multiple famines in the last century, Xi Jinping and the Chinese Communist Party recognize the importance of food in relation to their position of power in the world. To meet their goals, they are strategically growing their agriculture production domestically and globally at the expense of the United States.

There are many threats by the Chinese. I will highlight just a few:

First, cybersecurity threats to US agriculture are diverse and can have significant impacts on the industry. Some of the key concerns include:

Intellectual Property Theft: The Chinese have targeted proprietary farming data, such as crop yield data, seeding or fertility algorithms, breeding information, and biotechnology research which will lead to a loss of competitive advantage for the US. I have seen this firsthand in the seed production industry in which we are involved. Several Chinese nationals were stealing proprietary seeds from production fields and shipping them back to China. The Chinese nationals were caught and convicted, but how many were not caught? According to the American Seed Trade Association, it takes 5-15 years to develop a new seed variety at a cost of over U\$S100 million. It is also estimated that the annual value of agriculture seed production in the US is over \$11 billion annually.

Data-Driven Attacks: Precision agriculture relies heavily on data. As an example, farms like ours produce over a terabyte of data annually that is exclusive to our farm and is a major driver to our sustainability and productivity. We are at extreme risk of the theft or attack of this data which could alter or disrupt our systems and lead to incorrect farming decisions and likely harm yields. There have

been numerous attempts by the Chinese to steal this data but fortunately they have been caught and convicted. Again, how many were not caught?

Infrastructure Attacks: Critical infrastructure from the electrical grid to supply chain logistics and broadband could be targeted disrupting food supply chains.

Ransomware: Farming operations could be halted by ransomware attacks, demanding payments to restore access to essential digital systems. We all can remember the ransomware attack on JBS several years ago which disrupted the entire supply chain from livestock production operations to the consumer. The \$11 million Ransome was paid but the cost to JBS and the agriculture supply chains was many multiples greater.

Espionage: Spans all the prior mentioned risk and undermines the agriculture sector competitiveness.

Although the US government is aware of these threats, we need to strengthen protection for America's food supply and economic advantages. This includes identifying vulnerabilities and improving the protective measures of government and private entities against cyber threats.

Next, portions of our supply chain have been offshored, including several critical building blocks for our food systems such as crop protection products and crop nutrients. These are the basic elements that nourish crops and protect them from weeds, insects, and diseases.

A recent USDA Supply Chain Report indicates that 70% of the crop protection products are produced by the Chinese. Imagine if they shut off our supply? The economic impact of not using crop protection products in the US would be significant. Without crop protection products, crop yields would decrease, requiring more land to maintain current production levels. This would lead to higher consumer prices, and food insecurity in the US and around the world. This would be a national security threat to the US and our allies.

Additionally, the cost associated with adjusting production practices and the potential loss of access to export markets will have a direct impact on US agriculture and the broader US economy.

Therefore, the absence of crop protection products would have a complex and far-reaching impact. The answer: We need to allow for reasonable regulations to prevail to allow the US to bring this manufacturing capacity back home while supporting those that are

already manufacturing these critical products to feed Americans and the world.

As we look to crop nutrients, nearly 40% of the world's phosphate and 28% of the world's nitrogen is produced by China, and their market continues to grow globally. In the meantime, our US regulators and policy makers impose even greater burdens on our own manufacturers, forcing an offshoring to our advisories such as China. Again, what if China shuts off our access to these critical inputs?

In summary, whether the impact is from cybersecurity threats, or from minimized access to crop nutrients or crop protection products, the Chinese are strategically attempting to build their dominance in the world over food systems. These moves are coming at the expense of American innovation but are amplified by our burdensome regulatory environment.

We need a national agriculture strategy to eliminate these threats by China to our food systems.

It is time for the United States of America to put our long-term security over our short-term prosperity.