AG FUTURE LEADERS DELEGATION TO CHINA

MY GOAL FOR THIS TRIP?

I wanted to learn about the soybean industry in China and how it compares to the soybean industry in the United States. I also wanted to learn about the relations between the United States and China through the agriculture industry.

Overall I wanted to experience China, learn about China, and create lasting memories!

THANK YOU TO...

USSEC®
U.S. SOYBEAN EXPORT COUNCIL

UNITED STATES HEARTLAND
CHINA ASSOCIATION

...FOR MAKING THIS TRIP POSSIBLE!

Henan Modern Agricultural Experimental Demonstration Base

Wheat Experiment Fields
- verification fields
- yield comparison
- singling out seeds
- fertilizer vs. no fertilizer

Horticulture Area
- flowers, vegetables, peony's
- watermelon research

Peony's
- national flower of China
- stems used in medicine

Tissue Culturing
- use seedling for research
- artificial sunlight and ac
- inject virus into bottles for testing

Greenhouses
- start plants in greenhouse then move to fields
- tube seedling, the original source of the seeds
- aimed to solve problems in cities

Medicinal Plants
- development of traditional Chinsese medical herbs
- 46 varieties of herbs
- 2 year old research bank

Henan University of Technology

Museum of Grains

- Henan is the “breadbasket” of China
- North China: wheat, high protein focused
- South China: rice

SIC Training Course

- Protein and Amino Acid Nutrition
- Learn alongside students

North to South Water Diversion Project

Started in 2014

- 100 million people supported

Goal?

- divert water from the south river bank to the north bank
- 7,000 meters with 2 tunnels

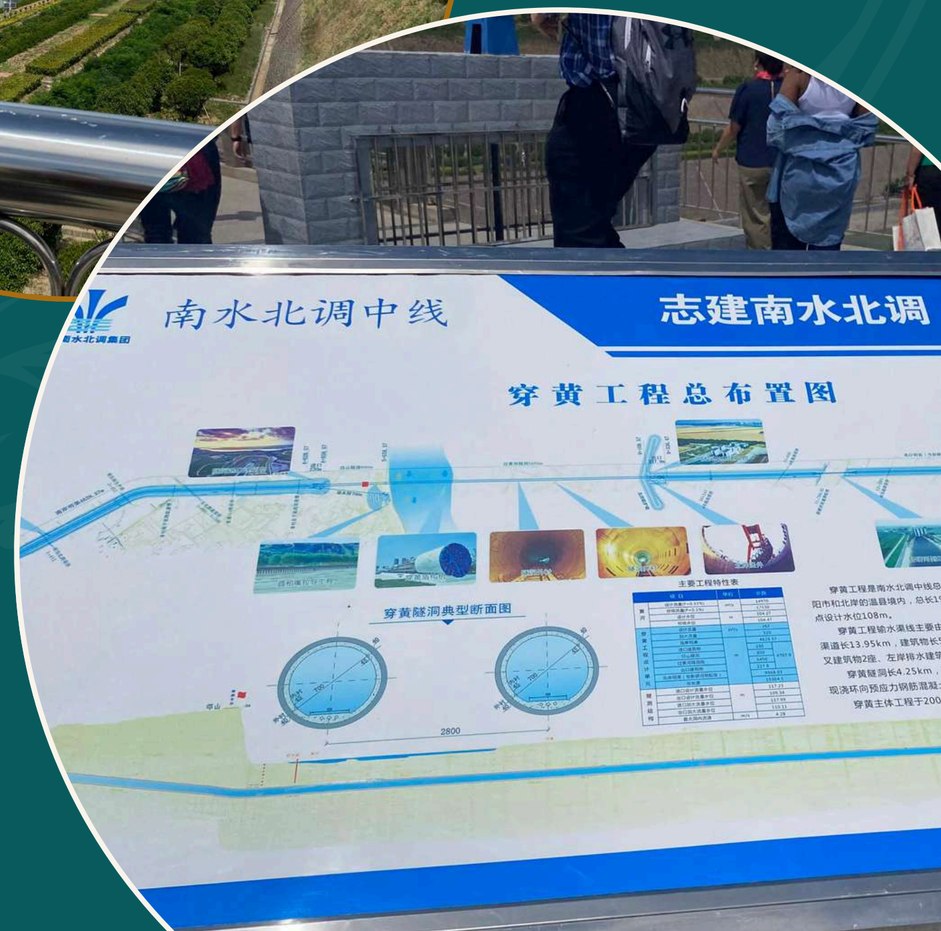
Runs under the Yellow River

Tunnels

- 4,250 meters
- 9 meters wide

Building the tunnels

- machines from Germany
- ½ digging, ½ refilling earth



MUYUAN RESEARCH AND DEVELOPMENT

Hog Reasearch and production company

- 11 provinces
- respecting the natural law and caring for people

Facilites:

- 417 acres
- Feed produced on site
- 21 vertical farms
- slaughterhouse on site
- farmland to grow crops for feed
- water disposal area
- waste made into fertilizer
- dormitories to avoid cross contamination

Innovations:

- needle free injection
- patrol machine
- coughing monitor
- AI monitors

Data

- 2.1 million points of data
- connected to the IoT

Slaughtering

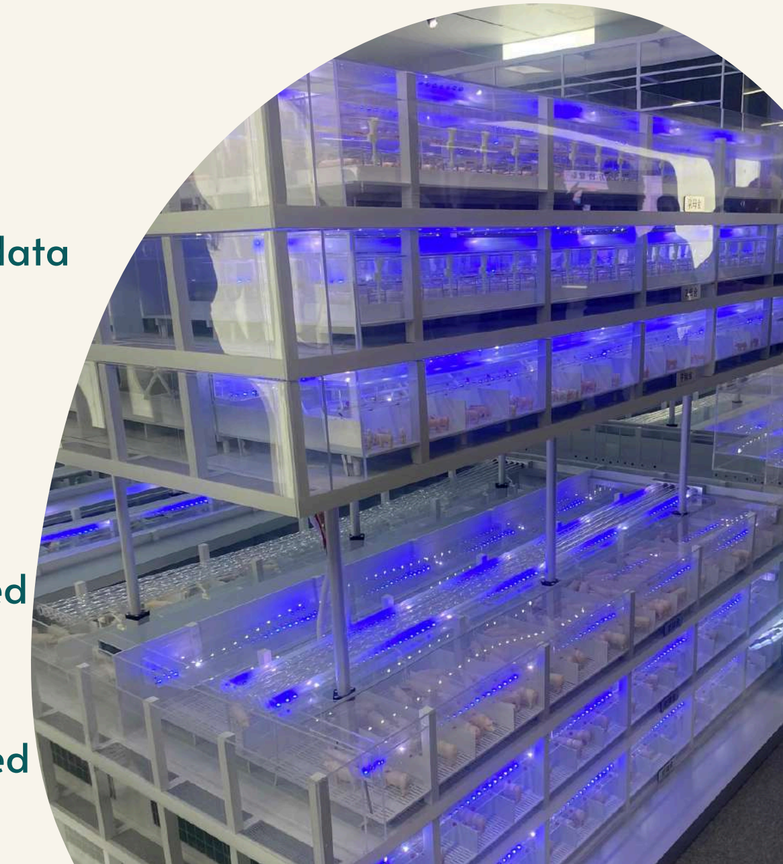
- 20% in house
- 80% sold to others

2024

- 25 million tons of feed

Overall

- 90 million produced
- 29 million slaughtered



North China University of Water Resources and Electric Power

Water Culture Museum

- largest irrigation project is over 2,000 years old
- “Belly of the Chicken”

Founded in 1951

Dedicated to water information and conservation

“Engage with the world with an open heart”

Experienced cultural performances

Shuanghui/Smithfield Facility

Butchering, Processing, Packaging of Pork

- 2,000 staff on site
- 2 million pigs a year
- started production in 2011
- 100-ton capacity

USA

- some pork ships from US and is processed here

The facility is so clean that...

- after meat goes through the line, it is immediately packaged
- it does not have to go through further disinfection

USDA and Commodity Group Meeting

FAS, AFIS, FSIS, U.S. Soy, U.S. Grains Council, USMEF, USAPEEC

During this meeting...

- learned about each organization
- gained information on tasks in China and reasons they are there
- asked questions about agriculture
- created relationships with the organizations and business people we talked to

CP Layer and Crocodile Farm

Laying Hens

- 3 million chickens
- 2.4 million eggs per day
- 18 chicken houses
- 120 acre facility
- Laying shifts to prevent overload of eggs
- 9 hours of lights out time

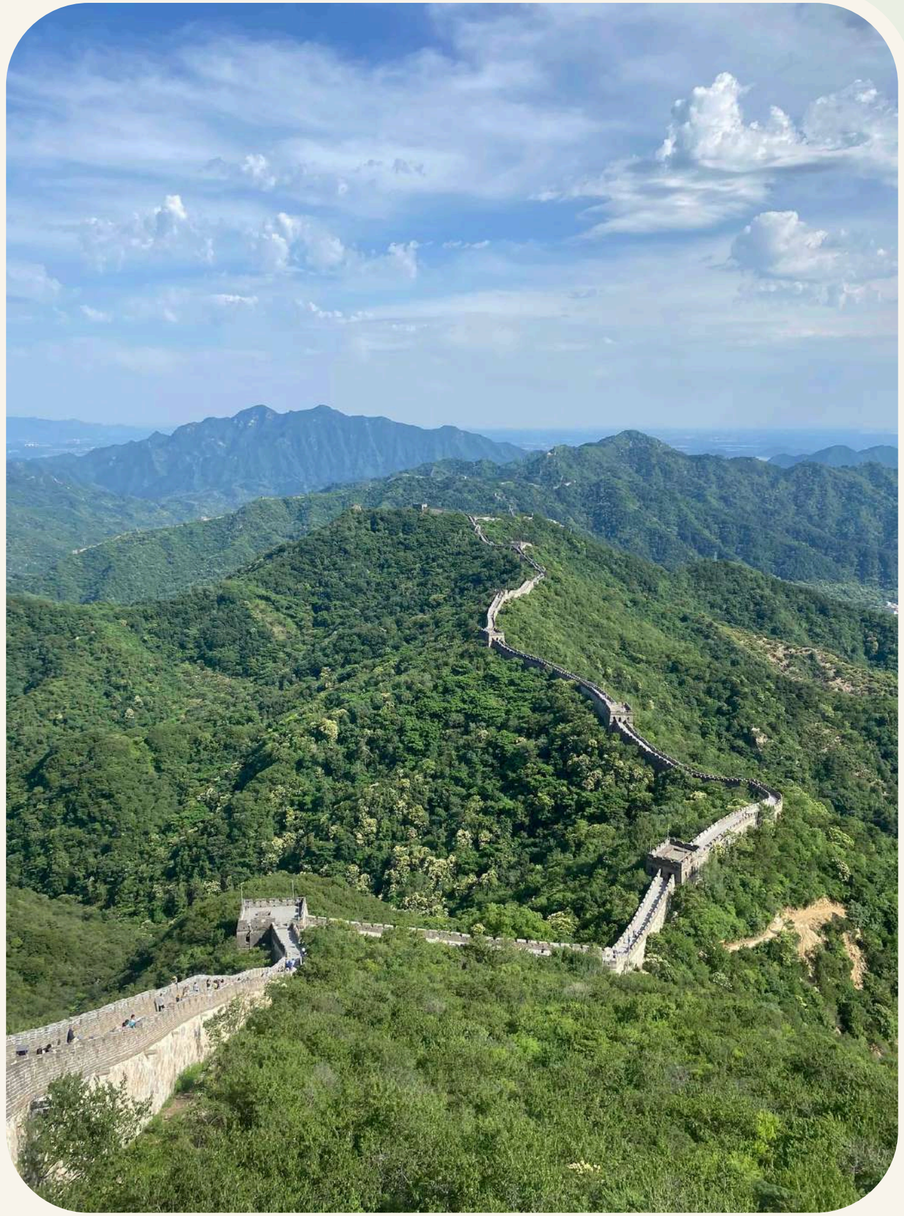
Crocodiles

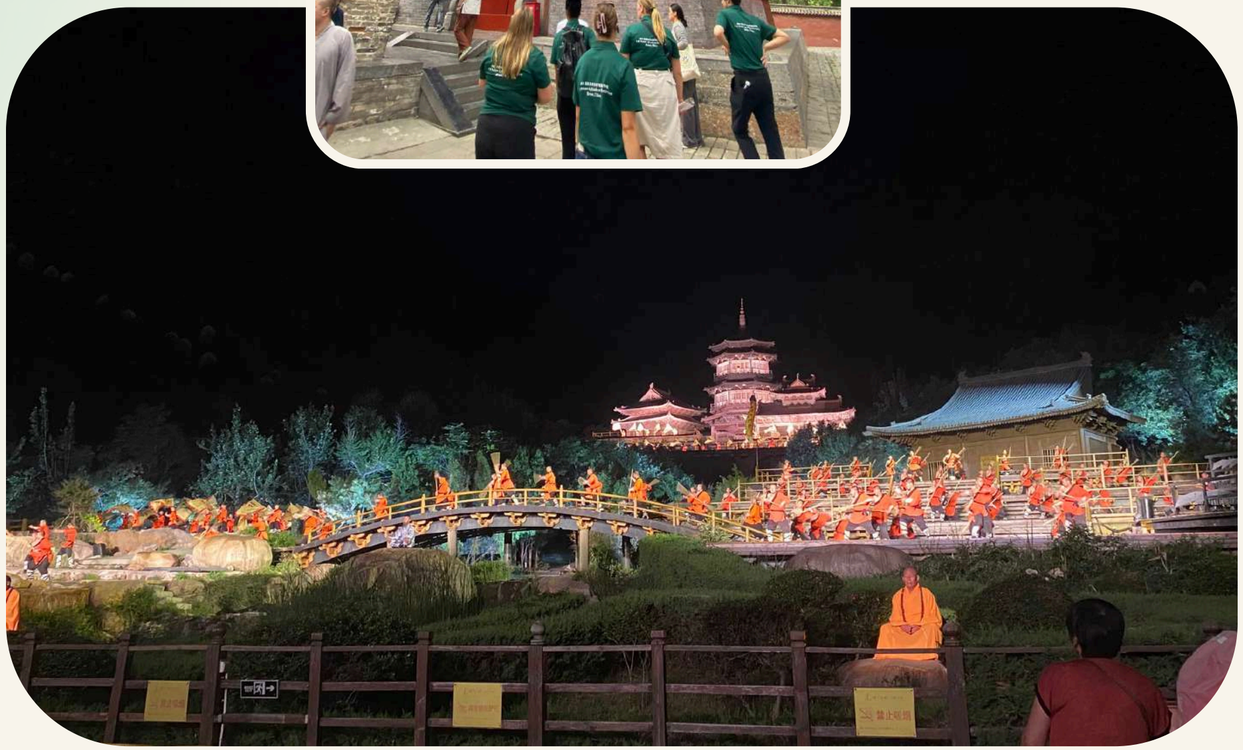
- July-August
- 70-80 days to hatch
- Can live up to 150 years
- fed hens that are not producing

FUN TIMES!

Food, Friends, and Culture


经典美味
畅爽带劲





THANK YOU!

The Other Side of the Trade: A Reflection on The Importance of Trade Delegations

Communism, censorship, health hazards, and economic threats—that's all you tend to hear from Western outlets when China makes the news. Yet after six days of visiting crop research facilities, major pork processing corporations, sharing the lunch-table with locals, and shopping at a "communist" supermarket I saw a far more complex nation than the headlines suggest. Being part of the Future Agriculture Leaders of America Delegation through the U.S.-China Heartland Association, and supported by commodity groups, I was able to see first-hand the kind of country that is simultaneously our most powerful adversary and most important trade partner. The understanding of China I gained from this experience is one that could only be gained through a first-hand experience of the country. This report will explore why American engagement with China, particularly through agricultural delegations, is essential.

Thinking back to my first day in China, the disconnect between media portrayals and reality was immediate and very noticeable. In the People's Republic of China, ruled without question by the Chinese Communist Party, I saw streets lined with American corporate offices and billboards advertising American products. It wasn't subtle. Apple, J.P. Morgan, Walmart, these are incredibly recognizable American brands. While the CCP maintains tight control over information, the reality in person reveals a level of economic entanglement that most Americans never see. The narrative of strict ideological separation doesn't hold up when you're surrounded by brands from the very system China supposedly opposes. It became clear that China doesn't just tolerate U.S. business, in some cases (especially in agriculture) it depends on it, just as we depend on them for agricultural trade, manufacturing, and supply chain stability.

Early into my time there I learned another aspect of their culture, one that again shows simply being present provides a whole new perspective, it was their diet. From the first night on, it was clear there would always be a new dish that has vastly different demand than in the United States, what we consider agricultural byproducts. In the U.S., certain cuts of meat or animal parts, like ears, feet, and organs, are often discarded or used for low-value purposes. But in China, these same items are delicacies, commanding high demand and market value.

What we treat as waste, they treat as opportunity. To me, this revealed how cultural preferences shape supply chains and export strategies. For American producers, that means potential profit in what we've long overlooked. For policymakers, it shows the importance of understanding foreign consumer behavior before writing off a trade relationship. It's not just about what we grow, but about who values what we grow, and how. This resourceful nature would be a constant in Chinese agriculture and cuisine throughout the week.

Beyond simply exporting what American consumers see as low-value, we can also benefit by taking a lesson from China's resourcefulness. Their approach challenges us to rethink how we use our own agricultural outputs. Take safflower for example, used in America for oil production, but in China for medicinal purposes like a natural aspirin. My takeaway from visiting places like the Henan Modern Agricultural Experimental Demonstration Base was simple, there could be untapped value in our fields if we learn to see it.

Learning what drives the markets, production practices, and consumer preferences of China is vital to building a strong, mutually beneficial trade relationship. But just as important is having a relationship with the people on the other side of that trade. Given recent headlines, it would be easy to villainize anything bearing the Chinese name—after all, they're portrayed as

adversaries. But sitting across the table from them is different, face-to-face conversations restore humanity, break stereotypes, and can even begin friendships.

While the Chinese government may take an oppositional stance toward the U.S., the people we met were overwhelmingly friendly, hospitable, and curious. Whether it was a casual conversation over a meal or observing daily life in a supermarket, it was clear that China is not just its leadership—it's its people.

Finally, one of the most unexpectedly impactful moments of the delegation came from a simple experience, browsing a supermarket. By this point in the trip, it was clear to me that any remnants of communist business practices had long been replaced by a form of heavily regulated (often more covertly) capitalism. But walking through a well-stocked, modern, and affordable store in Zhengzhou, Henan, challenged many assumptions about the economy of China. The selection was broader than most stores I've seen in the U.S., and the prices were shockingly low. A 250mL Red Bull energy drink, for example, cost ¥6—about $0.85 USD—compared to $2.38 back home. While it's important to acknowledge that average household incomes in China are lower, the purchasing power relative to local costs was clearly well-balanced. This experience reinforced the overall lesson from the delegation, you cannot fully understand a place through headlines and others' opinions, you must see it for yourself. When you do see for yourself, you realize the world is far more complex, and connected, than you might believe.

This delegation made clear that the U.S.–China agricultural relationship is complex, deeply intertwined, and best understood through direct exposure. Site visits, face-to-face

conversations, and firsthand observations provided insights that no secondhand report ever could. If we're going to lead in global agriculture, we can't afford to trade in ignorance. We need real relationships, open eyes, and a willingness to learn. Because sometimes the most strategic thing we can do isn't to win a (trade) war—it's to show up, listen, and take notes.

Agriculture Education in China and how it compares to the United States.

Allison Offerdahl

Learning Objective Deliverable

U.S. Heartland China Association

6/23/25

This learning objective examines agriculture education in China and how it compares to agriculture education in the United States. My name is Allison Offerdahl and I am an agriculture education student at the University of Minnesota - Crookston. Advocating for agriculture is a huge part of my future career and while I was in China, I wanted to learn more about how the Chinese educate their young people about agriculture. My main goal was to bring back ideas about how I could implement some of their teachings inside of my classroom and gain a different perspective on how to educate young people. I also wanted to educate and learn more about a major U.S. trade partner so I could better educate my students.

Higher Education in Agriculture - China

A good chunk of our time in China was spent in the Henan Province. The Henan Province is like the bread and butter of China, similar to the Midwest of the United States. A lot of farming and agriculture take place alongside the Yellow River which cuts right through this province. The group delegation was able to tour two different college campuses: Henan University of Technology and North China University of Water Resources and Electric Power (NCWU).

At the Henan University of Technology we visited the China Grain Museum and attended a training course about proteins put on by the

U.S.-China Soy Value Chain Innovation Center. Henan University of Technology (HAUT) is located in Zhengzhou, which is the capital city of the Henan province. HAUT was built with its original focus on engineering but has now expanded to other disciplines such as science, economics, management, literature, agronomy, medicine, law, and art. This university is often recognized as “the university where grain and food leadership arises.” We learned about the history of grain production in China, how it has developed over the years, and about the importance of proteins inside of animal diets, and how protein requirements are determined for a commercially important aquaculture species. This college was dedicated to creating better technology to improve not only agriculture but their economy as well.

At the North China University of Water Resources and Electric Power, we walked through their water culture center. Throughout this tour we learned the importance of water conservancy and how it played a role in the rise and fall of ancient agricultural civilization in China. Many different rulers throughout China’s history valued construction and production of infrastructure that helped meet the high demands of water for agricultural production. This University was founded in 1951 and is committed to water conservancy. “Water stands the very reason that NCWU has emerged, survived and thrived, along with People’s Republic of China’s development of water resources and electric power.” -

North China University of Water Resources and Electric Power This college educates students on the importance of water conservancy and allows them to explore, create, and innovate designs that contribute to regional economic and social development of the country. One of the big projects in China that NCWU assisted with was the Water Diversion Project. This project sought out to divert water resources from the Southern part of the country to the Northern part of the country. Experts in China realized that China's water supply was diminishing in the Northern part of the country and that if they wanted to continue to supply resources to their citizens they had to do something. The water diversion project began in 2002 under the rule of Mao Zedong and was completed in 2014. It diverts water from the Yangtze River's tributaries to different parts of China. This remarkable engineering project includes a gravity-fed canal that covers over 1,200 kilometers and it naturally moves water without machines. Because of the dedication of many agriculturalists and naturalists China is now able to divert water to parts of the country that were lacking.

Secondary Agriculture Education - United States

Agriculture education in the United States was developed around three main components of a three circle model: classroom instruction, leadership development, and

supervised agricultural experiences. The classroom instruction comes straight from agriculture education teachers. Throughout their education in grades 5 through 12 students can be exposed to a wide variety of areas such as natural resources, animal science, ag mechanics, and more. Students in an agriculture education class often get hands-on experiences in different careers as well as learning many professional developmental skills. Many students in agriculture education programs get the opportunity to join FFA, which is an intracurricular student organization for those interested to explore leadership and agriculture on a higher level. The final component of agriculture education in the United States is based around supervised agricultural experiences. This part of the three circle model can be integrated in many different ways inside of the classroom. A supervised agricultural experience (SAE) is a student-led, teacher supervised, work-based learning experience that results in the student learning by doing and gaining real-world experience in their career related path. These are the basic components of agricultural education in the United States.

Comparison of Agriculture Education between U.S. and China When I first got to China, I wasn't sure how I wanted to tackle my learning objective. While on the trip we traveled with students currently enrolled in college in China. I started by asking them

what sort of agriculture education they received before they attended college. The answer that I got was not what I was expecting. Many answers were similar and went something like this, “I didn’t receive the education you are talking about when I was in high school. What I learned about agriculture I learned from my family.” Upon further investigation, I realized that many primary schools in China don’t have agricultural education like we have in the United States. A lot of what students learn while in high school was learned watching their families do it. Someone did mention that it is more common for high schools to have some sort of agriculture education in rural areas, whether that be some sort of plant science, animal science, etc. One source from the Henan province mentioned that a local school owned a chunk of land that they farmed. Students would go out there and plant seeds and conduct experiments. They would then sell the crops they produce to locals. They even hired workers that would tend to crops when students were unable. This was the first time I heard about an agricultural education program similar to what I see in Minnesota. For example, the agricultural education program that I am interning for this summer has a greenhouse and a garden. They grow their own tomatoes, peppers, cucumbers, squash, cabbage, and broccoli. Once they harvest they then sell it back to the school. The school uses a lot of what they buy from the garden for their school lunches.

What I noticed driving through many parts of China, mainly the Henan province, is that

in front of almost every house there were little gardens. They utilized every space that they could to grow crops. So even though many students aren't getting the formal agricultural education that we see in the United States they are still gaining hands-on experience at home. Due to modernization, the agricultural education system is rapidly evolving because agriculture creates many jobs for people, especially in rural areas.

Looking at the curriculum for agricultural education, whether it be in higher education or lower, China focuses more on technology innovation, shifting focus on current environmental pressures, and the use of artificial intelligence. Chinese agriculture has some advanced technology. For example, when the delegation toured the Muyuan group, they showed us models of the technology they used that transformed the pork industry in China.

The Muyuan group just last year became the largest pork producer in China with 71.6 million hogs produced in 2024. This company integrates feed processing, pig breeding, hog farming, slaughtering, and meat processing in over 300 subsidiaries. They explained that they created AI sensors that monitored their hogs. These sensors could do many different things like take the temperatures of pigs, keep track of pigs that had coughs, monitor sleep cycles, and more. They said that their AI technology is up to 90%

accurate and has helped them prevent disease on several occasions.

In the United States they have a heavy focus on biotechnology, sustainable farming, precision ag, and career readiness. The United States too uses AI to help complete tasks. Precision agriculture in the United States has been pushed heavily. It uses technologies such as GPS or automation to make farming more efficient on the land they have. For example, it can be used to collect nutrient data about a field, which can tell the farmer that they need to add more fertilizer here or vice versa.These technologies make farming more efficient and profitable.

Career readiness and exploration is another important part of agriculture education in the United States. Students while in high school get to explore a variety of careers such as welding, horticulture, forestry, construction, and more. They gain a sense of what they enjoy and can develop their skills further. In many of my future ag classes, I plan on incorporating career readiness skills such as resume, interviews, and communication skills. These are important so students can start building their toolbox and get ready to head into the workforce. In China, they learn a lot of these skills as well. Throughout their education they are able to take classes such as morality and social, morality and life, and traditional culture. Through these they learn similar life skills

In conclusion, my experience in China gave me a deeper understanding how agricultural education differs across cultures, yet also have much in common. While I initially expected formal agricultural education instruction similar to what we see in the United States, I soon realized that knowledge is often passed down through

generations, especially in rural areas. However, I encountered signs that China's agricultural education system is evolving and many schools and colleges are beginning to implement hands-on programs and high-tech innovations. Both China and the United States are investing in agricultural technology, such as AI or precision agriculture, to both meet both economic demands and environmental challenges. They are both still very unique, with the U.S. emphasizing career readiness and formal instruction and with China using deeply rooted cultural practices and a strong push toward modernization.

This trip has opened my eyes up to a whole new world of agriculture. There are many different ways to approach issues and it was very interesting to see how China approaches their issues related to agriculture.

While in China, we talked a lot about bridging the gap between the U.S. and China through agriculture. I believe that it starts with us. Going back to the United States and educating others on what we experienced and learned. As an educator, I will directly be working with many future ag leaders and I am excited to show them what I learned and start bridging that gap on a small scale. If we all do our part we can start bridging the gap one student at a time.

Ultimately, what stood out to me most is that agricultural education, no matter where it takes place, is about more than just farming, it's about preparing students with practical skills, environmental awareness, and the ability to adapt to a

changing world. Whether it is a greenhouse in Minnesota or a classroom in Henan, the goal remains the same, to grow the next generation of informed, capable, and innovative agricultural leaders.

Culture and Trade Shape US-China Relations Beyond the Deficit

Carly E. Moore

United States Heartland China Association

June 25, 2025

Culture and Trade Shape US-China Relations Beyond the Deficit

For many Americans, the name "China" evokes feelings of fear and distaste. This negative connotation is a product of years of unhealthy relations, perpetual political turmoil, and the spread of misinformation. This research paper will delve into the profound differences in culture between the United States and China, examining their approaches to society, communication, and their differing priorities before illustrating how these fundamental differences have a direct influence on their relationship. Subsequently, it will then shift to a specific and significant economic example of this strain: the U.S. agricultural trade deficit. It will explore the causes and the broader implications of this deficit. Ultimately, this paper argues that the persistent trade deficit between the U.S. and China is not merely an economic phenomenon, but a complex outcome deeply rooted in fundamental cultural disparities, and will conclude by discussing the important role of cultural exchanges as a potential tool in mitigating these issues.

The United States and China

Chinese Culture

Chinese culture is known for being collectivist. Collectivists prioritize the needs of the group over their own individual desires. They place a high value on being one with one and other, unity is of the utmost importance. An important term in Chinese business is “guanxi”. Guanxi refers to the cultivation of strong, mutually beneficial relationships that are fundamentally built on trust and reciprocity. These relationships are instrumental when doing business in China. Guanxi can be derived from an early historical lack of legal framework to guide business transactions that placed a large emphasis on trust between both parties.

China is considered a high-context culture meaning that a major part of their communication relies on non-verbal cues. This means conversations are often indirect and depend on the situation as well as body language and even tone of voice.

American Culture

In contrast, the United States is largely regarded as an individualistic culture. Individualism emphasizes independence, self-reliance, and the pursuit of individual goals. There is a strong focus on individual success, with less inherent expectation for unity or service to the community. While this can sometimes be perceived externally as selfishness, it is a core distinction that comes from differing societal values.

As opposed to the high-context culture of China, the U.S. is generally regarded as a low-context society. Conversations are implicit, direct, and to the point. There is less of an emphasis on non-verbal cues.

Priorities are also an area that the U.S. and China have little common ground in. The priorities of the average businessman in America and China would differ greatly. In the U.S. business world great emphasis is placed on efficiency, a separation of personal and work life, and directness. Whereas China prioritizes politeness, saving face, and a long term relationship. These differences, just as many others, are rooted in each country's cultural differences.

The Cultural Disconnect in Trade

These significant cultural differences dictate everything in the business world from consumer habits to international commerce. As Cherry (2024) notes,“These pervasive cultural differences can influence many aspects of society, from the way people shop, dress, and learn to how they conduct business” (para. 5). The fundamental disconnect between the U.S. and China, particularly evident in their trade relations, is deeply rooted in a difference of priorities.

The first disconnect is experienced by the obvious, the language barrier. Some words do not translate and if they do they may lose their true meaning. Sometimes this is just a minor issue but other times this difference has been known to be weaponized or at least taken advantage of. One example of the language barrier being taken advantage of took place in April of 2001 after the Hainan Island Incident. According to author Julie Gyaw (2014), “the U.S. got its plane and crew back, and could say that it was merely expressing regret over the fact that the incident happened at all, without actually taking blame for it. On the other side, China was able to interpret the “sorry” as an actual apology, claiming the U.S. conceded that it was in the wrong all along. Both sides managed to save face” (para. 6). In this case there was a mutual benefit of saving face, but this little “loophole” could potentially be used in a negative way just as easily.

The next disconnect takes place when actually doing business and this is when high context and low context communication cultures clash. In a high-context culture like China, the meaning of communication is derived from non-verbal cues, a shared history, and a broader social context. In China, discussions (specifically in the business world) are often indirect, and rely on subtle signals, metaphors, with an emphasis on bonding and creating a relationship with one another. This contrasts with the low-context approach of the United States, where communication is explicit, direct, and very clear. Americans have a tendency to prioritize getting straight to the point, outlining terms in precise language, and heavy reliance on written contracts rather than banking on an implicit understanding. For instance, a Chinese negotiator may be silent as a polite way to consider a proposal or to signal discomfort, whereas an American might understand it as agreement or disinterest. Similarly, an American's direct challenge or blunt statement about a problem could accidentally cause a Chinese colleague to "lose face," leading to strained relations. These fundamental differences in how information is conveyed and interpreted

can lead to misunderstandings, frustration, and perceived evasiveness from both sides, which significantly complicates trade negotiations and business partnerships.

Next, a difference in priorities. Perhaps the most pervasive of all the differences, these fundamentally different goals influence everything from economic policy to international diplomacy. While American culture often prioritizes individual liberty, short-term gains, and market efficiency, Chinese culture tends to emphasize collective stability, long-term strategic growth, and national harmony. These distinct values often lead to contrasting approaches in trade negotiations, economic development, and most obviously: leadership, making true alignment a challenge.

A real world example of all of these fundamental misunderstandings and a resulting disconnect come together in the first U.S. China trade war. As Byers (2019) discussed, “While liberal economics has tried very hard to penetrate the foundations of Chinese society, the Communist government still has a unique way of doing business. President Trump’s approach to the trade war fundamentally opposes these Chinese norms, where “losing face” is a very real risk and one that is not to be taken lightly” (para. 5). While this observation from 2019 predates the current disputes, the underlying cultural principles that it highlights still remain quite relevant.

The president of China, Jinping and the president of the U.S., Trump have very different priorities when it comes to trade, and the economy as a whole. Jinping is attempting to strengthen the Chinese Communist Party (CCP) and increase the collective wealth and stability of the nation, which in turn is intended to benefit its citizens. Trump, however, is focused on lowering the U.S.’s debt and simultaneously increasing national security and independence. Jinping's goals are more about the people of the country whereas Trump’s are more about the monetary side of economics. Both are acceptable focuses, but the disconnect stems from the

difference in priorities while still being mutually dependent on each other for food security.

Failing Economies. It could be argued that both the U.S. and China have failing economies for entirely different reasons. On the other hand, it could also be argued that they each have two of the greatest (certainly the largest) economies in the world, at this time.

The U.S. is well known for having a massive national debt that is increasing exponentially every second. Said debt currently sits at almost $37 trillion USD. Along with their extreme debt the U.S. is also experiencing a trade deficit, most notably of $32 billion USD in their agriculture sector. According to the American Farm Bureau Federation (AFBF) “This is the fourth time in six years the U.S. has faced an agricultural trade deficit. Prior to fiscal year 2019, the U.S. had not experienced an agricultural trade deficit since at least 1967, and possibly not in its entire history” (para. 8). While it is important to note that a trade deficit is not an inherently bad thing Resnick (2024) states, “However, the expanding trade deficit reflects some serious challenges imposed on U.S. agriculture, including lower commodity prices, stress in domestic specialty crop production, and less competitive access to many traditional U.S. export markets, among other factors” (para. 14). So, essentially the state of the U.S. economy and what an ag trade deficit means is open to interpretation, but for agriculturists specifically, it is not good.

China is said to have a failing economy at this time with their economic growth rate slowing from seven or eight percent to below five percent. The cause of China’s current economic problems, according to Lachman (2024), “is the highly unbalanced economic model that it has pursued over the past 30 years. Not only did China excessively rely on investment in general and on housing investment in particular to drive economic growth. It also became overly dependent on exports and on a steady supply of cheap labor from its agricultural sector” (para.

3). On the other hand, China has made remarkable headway towards alleviating poverty, hunger, and homelessness.

The Trade Deficit

The U.S. agriculture trade deficit, a relatively recent and concerning development, exemplifies how cultural disconnects can impact even the most basic exchanges of goods. The key drivers of the U.S. trade deficit with China are China's export oriented trade model and comparative advantage, and U.S. investment imbalance. From a cultural standpoint, China's collectivist culture and the state's heavy role in its economy directly influence both agricultural policy and trade. Beijing's priority is often the collective welfare of the nation, which includes ensuring food security and maintaining social stability through policies that could potentially involve strategic purchasing, subsidies for domestic producers, or import regulations that can appear as non-tariff barriers to American producers. When American agricultural negotiators, operating from an individualistic, low-context culture, push for immediate access to Chinese markets or adhere too closely to contractual terms, they can clash with their Chinese counterparts that prioritize long-term relationships, nationwide goals, and subtle understandings (guanxi).

Furthermore, the difference in priorities of national leadership, as seen with Jinping's focus on collective wealth and stability and Trump's (and prior administrations') emphasis on debt reduction and national security, tend to manifest as trade disputes that end up hurting U.S. agriculture. When trade tensions escalate, as in the first U.S.-China trade war, agricultural products are the first to be used as leverage. China's ability to source commodities such as soybeans or pork from Brazil or Argentina as quick substitutes for the U.S. demonstrates its flexibility, which is driven by national interest. U.S. farmers, operating independently and typically unsubsidized, are left to bear the brunt of economic turmoil between two countries with

such large buying and exporting power. The "saving face" dynamic can also play a role; if a trade negotiation results in a perceived loss of face for China, retaliatory actions, including those impacting agricultural imports, are a culturally understandable response.

What the Experts are Saying. An expert from the United States Department of Agriculture (USDA)s Foreign Agricultural Service (FAS), Eric Mullis commented on the current ag trade deficit being experienced by the U.S. and he concurs with the theory that China and bilateral trade between the U.S. and China have contributed to the deficit. Mullis emphasized that while tariffs imposed by the Trump administration have had major implications on the debt, the reasons behind said tariffs have been much larger contributors. The largest reason motivating President Trump to impose such high tariffs is an attempt to hold China accountable for their use of non-tariff trade barriers in an effort to level the playing field. Some of these trade barriers include China's refusal to honor standards regarding poultry and Highly Pathogenic Avian Influenza (HPAI), standards on permissible amounts of pesticide residue on crops, and the obvious: China's higher tariffs on the U.S. prior to President Trump taking office.

The Benefit of Cultural Exchanges

Many of these tensions are a direct result of ignorance and prejudice on both sides and many of the issues that result from the tension could easily be curbed through programs that embark on culturally enriching trips abroad. Specifically exchanges between the U.S. and China. The opportunity to experience another country's approach to agriculture first hand through tours and lectures provides invaluable information. Networking on a continent on the other side of the result presents a unique chance to build deep, meaningful bonds that will last much longer than superficial ones made hastily. Lastly, of course the opportunity to meet with experts in the field

of agriculture from both the U.S. and China and ask them specific questions regarding the industry.

Ethnocentrism is a pervasive issue across all cultures. The best way to overcome ethnocentrism is to actively seek an understanding of other cultures. This can not be accomplished without leaving one's home country. There are, of course, less direct ways but none are as effective as first experience. Ethnocentrism is partially a result of a lack of empathy for others, especially those that are of a different culture. Traveling abroad helps to build a level of empathy that can not be taught nor supplemented in one's native land. Spending time in a foreign country where one does not speak the native tongue or have a thorough understanding of customs helps that person to develop empathy for foreigners that are guests in their home country. “Walk a mile in someone’s shoes” is a popular idiom used to describe empathy. It is impossible to walk a mile in a Chinese citizen's shoes without leaving one's American couch. This goes both ways and applies to both parties. Everyone stands to benefit from more empathy towards tourists.

Conclusion

The relationship between the United States and China extends far beyond their trade relationship. From their differences in culture- a high-context, collectivist China and a low-context, individualist America- to their historical disconnects, differences in priorities in politics (both socially and economically). These differences are the driving factors and key motivators in the trade deficit currently being experienced by The U.S. These great nations are similarly different and when they disagree or experience geopolitical and or economic turmoil the whole world suffers as the first U.S.-China trade war proved. This paper argued that the persistent trade deficit between the U.S. and China is not just an economic phenomenon, but

instead a complex outcome rooted in fundamental cultural disparities. The pathway to mutual understanding and global stability in trade remains largely unpaved. Yet, as this paper has illuminated, it is through the cultivation of empathy, fostered by cultural exchanges, that the foundational bricks can be laid. Only then can both Americans and Chinese people, transcending prejudices, historical differences, and cultural disparities, embark together upon a new, shared road. A road that leads to opportunity, stability, and a future of collaboration rather than conflict.

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Garrett Grothmann

USHCA Learning Objective Project

China's Food Systems and the Role of Education in Strengthening Them

When it comes to the task of feeding a population of over 1.4 billion people across a vast and varied landscape, the Chinese people can rest easy knowing the food systems in place are some of the most complex and strategic on the planet. Behind this seemingly impossible task lies not only robust government oversight through the Ministry of Agricultural and Rural Affairs (MOA) but also a continuously growing effort from educational systems that play a pivotal role in sustaining agricultural productivity, rural development, and an increase in food security for the people. Ranging from elementary-level initiatives to hyper-focused, specialized universities, China strikes an interesting balance in implementing both traditional and innovative ways when it comes to tackling potential issues that could arise when it comes to feeding the population. However, concern is starting to fester in rural areas that may struggle with a lack of access to modern agricultural practices and face the mass exodus of young people moving to the bustling urban environments of China.

The first in line to face these concerns is the previously mentioned MOA. Similar to the USDA that we are familiar with in the United States, the MOA is tasked with overseeing China's agricultural policy, including safety standards, environmental sustainability, and food production. The MOA operates as the central authority coordinating research institutions, food safety regulations, and setting priorities straight for national food production. The MOA is also responsible for initiating modern agricultural policies, which nowadays have a heavy emphasis

on education, science, and technology as tools to continue improving yields and sustainability practices.

An important association under the MOA is the National Agriculture Technology Extension Service Center (NATESC). Similar to the United States cooperative extension agencies, NATESC aims to offer extension services to introduce agricultural technology, promote sustainability practices, and provide training and advice to farmers. Again, like the United States, China's extension agencies work in partnership with local universities, specifically agricultural universities. These schools not only conduct research but also train extension agents and help to facilitate outreach in provinces that may lack these educational opportunities.

Another entity at the front of these efforts is the Henan Research and Development Base for Modern Agriculture. Serving as a key research hub for the country, this facility functions as a demonstration site and a research facility, housing cutting-edge greenhouses, seed testing labs, and a plethora of test plots and community gardens. It was abundantly clear that this facility not only has a major focus on academic research, but also a focus on bridging the gap between agricultural science and traditional and practical application for their many rural communities. This facility is directly facing the challenge that comes with a lack of educational resources in these farming communities.

A poignant uphill battle that China's farming communities are facing is the ongoing migration of young people from rural areas, heading off to more urban areas for better opportunities and more modern lifestyles. The term for it is "brain drain." As the rural farming methods appear less flashy and far less technologically advanced, younger generations tend to be drawn away towards a more urban lifestyle. Small picture, this is directly diminishing the immediate labor force needed to tend these fields. Big picture, the more ambitious young people

who would likely bring on innovative practices are leaving, potentially causing an issue when it comes to the long-term sustainability of the rural food production in the country. In response to this, China has begun integrating agriculture education at a very young age. Elementary students across the various provinces participate in agritourism and hands-on learning projects to introduce them to basic farming techniques. Hopefully, these early practices will spark an interest and respect for agricultural labor, in turn leading to students eventually considering careers in agriculture.

Outside of the field, we were treated to a couple of tours of local agribusinesses such as Smithfield and Beijing CP Egg Industry. These facilities provided us with firsthand insight into China's industrial food processing. Smithfield, which many Americans are likely familiar with, was purchased by the world's largest producer of pork, the WH Group. They've adopted a number of practices that, again, we in the United States would be familiar with. Smithfield plays a valuable role in China's meat supply chain and stands apart from the rest due to its integration of more global food systems. On the other hand, Beijing CP Egg Products showed off the industrial scale that Chinese food producers can pull off, managing hundreds of thousands of hens and producing a wide variety of processed egg products. Unexpectedly, just adjacent to this massive egg facility was a slightly smaller alligator farm. Not only did this farm serve as a disposal site for hens from the egg facility, but it also served as its own food source for the local populous. Paired with their use of leftover chicken manure on local crops, operations like this are a reflection of the progress and adaptability China has adopted with its biodiversity and cycling of resources.

Adjacent to, yet ultimately aiding, local food systems is the advanced plethora of water systems China has implemented throughout. Many regions in China face seasonal droughts and

unusual weather events. The motto “live and die with the dam,” adopted by the North China University of Water Resources and Electrical Power, reflects the cultural and practical emphasis the Chinese people place on water management. On the surface, a symbolic phrase, but when you really start to dig into it, it really emphasizes the relationship rural Chinese communities have with water access, specifically those where agriculture remains the primary source of livelihood.

Educational institutions like NCWU serve as critical training hubs for the country’s newest generation of water engineers and environmental scientists. Integrating aspects of civil engineering, agronomy, and policy, all with the major goal of sustaining and improving agricultural output in the face of resource scarcity. Students generally graduate to go on and work with national or local governments, helping to manage irrigation projects, dam construction, water purification, and disaster mitigation efforts.

Through their educational efforts, one of China’s most ambitious national infrastructure projects was finished: the South-North Water Transfer Project. This massive, decade-long effort aims to divert water from the healthy Yangtze River in the south to the drier northern regions. With various other routes already planned out, this project represents an interesting engineering challenge, as well as an agricultural necessity. The success of this project will likely directly impact the current face of agriculture in northern China as we know it, where grain production will rely on this water. These changes in water availability will need to be monitored by local university facilities.

In a nutshell, China’s food systems currently sit at an intersection of traditional methods, industrial modernization, and reform in education. From the MOA’s policy leadership to early childhood education and university extension services, the country is gradually building an

educational ecosystem designed specifically to cater to the food production required to support its vast population. However, bridging the gap between knowledge and practice in rural areas remains a pressing challenge, one that will need to be addressed quickly as the population continues to grow. Things like addressing education issues in rural communities and incentivizing young people to return to agriculture will be key in sustaining China's food systems in the coming years.

US-China Protein Trade

In the late afternoon on April 28th, I received a call from Jaky Childers the recruitment director in the UGA CAES office. In quick fashion, Jaky asked me if there was any possibility, I would like visit China with other students from across the country who also study agriculture adjacent majors. She explained that the US Soybean Export Council was willing to sponsor a handful of students to attend the delegation, but if I wanted to go, she needed to know within the next two days. I have always had an interest in Asia especially the intricacies of agricultural trade with the US, but with only a month before the trip and my summer classes this looked more like a dream then reality. On top of that, I am from Georgia a state with very minimal soybean production, so my knowledge of that industry was fairly rudimentary. Luckily, a day later I found out I would be applying for my Chinese visa and beginning my studies of the inside and out of the agricultural trade between the United States and China, which as an agricultural economics major really sparked my interest.

Understanding China's demand for agricultural products, and who the PRC choses to do business with helped me to first understand the status of our current relationship. Our meeting in Beijing with the USDA FAS, USSEC, US Grain Export Council, and other agricultural trade groups laid the groundwork for my findings. The US Meat Export Federation explained that China's pork production is self-sufficient. This isn't only a factor of their large population that has gained more buying power in the recent century, but a goal of private industry and government personal. The PRC looks at domestic food production as a national security issue, with minimal future reliance on foreign partners the Chinese won't have to stress over trade tensions to feed their large population. Meaning long term, there is a chance that the US won't have widescale markets availably if Chinese domestic supply is meeting growing demand, which

only time will tell. Nonetheless the PRC and Hong Kong are importing around 475,00 tons of US pork a year. Our stop at Shuanghui (WH Foods) offered more intimate details on Chinese pork demand. Executives within the company explained that 60% of protein consumed in China is pork, and the average Chinese consumer eats around 50-60 kilograms of pork annually. The National Pork Producers Council says that in 2024 alone, 25% of total pork sales are exported products with over half of exports being markets in the PRC and Hong Kong. Even with domestic production sufficiency, US producers still have wide access to the Chinese marketplace. Meat cuts such as Hog feet are considered inferior to American consumers, yet in contrast the Chinese find these of greater value than ham in some instances. These cases are entirely due to cuisine that require long low-heat cooking measures that aren't as common in the US. With pork as the highest demanded protein in China, domestic production is on pace with consumer needs however US exports continue to supplement in largescale fashion.

As Consul General Christopher Green explained, Chinese consumers have seen an increase in buying power in recent history. The International Monetary Fund shows that the Chinese GDP Per Capita in Q1 of 2025 was around $13,690, which was an around a 28% increase from 2023. With that being said, more consumers have the financial wherewithal to purchase other proteins such as beef. China currently imports close to 180,000 tons of US beef per year, and is the second largest chilled beef importer from the US as explained by the Meat Export Federation. The federation believed there is some indication that those numbers could rise in the future if not for possible tariffs. Domestic production in China is currently well below demand, leading to a long-term shortage. However, there appears to be an increasing demand for grain fed beef. This could be a potential avenue for US sellers, despite cattle inventory at a

current low. As for now, Chinese beef demand is on the rise, yet it appears it will not overtake pork consumption in years to come.

The largest agricultural trade disagreement we have seen between China and US has delt with High Pathogenic Avian Influenza. Edward Xie with the USA Poultry and Egg Export Council mentioned that in 2022 alone the US exported $1.1 billion in poultry products to China. Unfortunately, with numerous breakouts of HPAI cases in the US in recent years, that relationship has become rocky. Though the United States has an “HPAI Free States” trade policy with China, the PRC has not honored that agreement on some accounts. China has had periods of backlisting US poultry companies even in the instances where no HPAI cases occurred on their watch. On top of that, USDA has a “cull-all” policy for birds that were or could’ve been affected by an outbreak. These markets are very important for US poultry producers because 80-90% are chicken paws. Though they are sold at a premium in Asian markets, they are worth pennies on the dollar in US domestic sales. As the majority of paws will end up in pet food. Xie explained that it appears talks are started to appear more positive. In the first quarter of 2025, the US saw $125 million worth of paws sold in Chinese markets. Some US producers are still combatting strict barriers to entry by backdooring through Vietnamese middleman. Nonetheless, with several months without a US outbreak future exports should see an increase.

The relationship between US firms and Chinese Protein buyers has been one of great importance for the United States. Time will tell if this relationship continues to be navigable, though I believe it will strengthen. The PRC strives for a stable food supply that they believe should be majority domestic production. However, US pork producers still see avenues to keep they’re supply readily available to Chinese consumers. As for beef, there could be a bright future for US exporters. As open markets have put more cash in the pockets of Chinese buyers, beef

products are being looked at as more and more affordable. On top that, Chinese domestic supply serves as a deficit to current demands. The largest trade question still surrounds Poultry exports into China. We must work hand and hand with Chinese counterparts to ensure that our poultry products are safe for consumption, and keep accountability if they aren't honoring current agreements. After traveling to China to gain a better understanding of the foreign aspects of an industry which I am so deeply proud of, I can say that I have hope for the future. Fostering strong relationships with the world's largest economy will keep American Agriculture strong. I am beyond thankful for this opportunity and I can certainly say this has broaden my horizons.

Food Insecurity in China: Told from the Prospective of a College Student

by Kira Smith

As a student coming from the United States interested in food security, going to China has been an interesting experience. My objective going into this trip was to evaluate the problems and solutions China has for food insecurity. I used the definition of the World Food Summit, in 1996, as my template:

> "Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life."

China cares a lot about its food security and many businesses we visited had this endeavor as well. Throughout the trip I saw many areas in which the U.S. and China have similar problems in food security. This includes transportation, knowledge, and costs. China had several solutions to these problems which I found innovative and affective.

The South to North Water Diversion Project was a fascinating way to bring water from the aquifers in Southern China to the countryside and cities in the North (Figure 1). China cares about making sure everyone gets fresh water for both drinking and growing of crops and livestock. Northern China lacks enough water for the populations which is why the Water Diversion Project was started. This project has taken much time, but it was all worth it to help the transportation of water throughout China. They have University specifically dedicated to training young minds to research and study China's water resources (Figure 2). This is not the only subject of study that China offered.

We got to see Henan Modern Agricultural Research and Development Base. China strives to increase their knowledge and research in plants. They have crops, flowers, animals, and herbal research happening on a massive scale. They can study different seeds and splice them to get more hardy plants. Then mass produce this plant to the various farmers in the Henan province (Figure 3). China cares about increasing the knowledge of their farmers and we were able to sit in on a presentation that was being done at an agricultural conference. The lecture was about trying to increase the amount of meat that comes from fish by increasing the correct protein in fish food (Figure 4). They have many of these lectures for farmers and students to increase the knowledge of the population. They bring in people from all over the world to help share knowledge and this professor was from the United States. Lack of knowledge is a big issue with food insecurity and China is doing what they can to inform producers.

Many of these producers are doing what they can to keep the price of products low. Mixue group is a company where a big part of their company morals is to keep prices low for the customers. They pride themselves on having cheap ice cream and drinks. They try to locally source all their products, building up their surrounding economy. Another company that considers food security is the Muyuan Group. They are the biggest pork producers in China.

They can mass produce pork at such a rate that allows them to keep the price of pork low. The company uses advanced technology to help provide excellent care for the pigs. They make sure all the pork that is produced is highly nutritious and the pork is food safe especially in their butchering process. This is not the only pork company that works to keep prices low, Zhengzhou Shaunghui Food Company is the second largest pork producer in China. They mainly are responsible for the butchering and processing of the pork rather than raising pigs. They import a lot of frozen whole hogs from other countries such as New Zealand and United States. They also care about keeping the price of pork low for those who are food insecure. They provide a variety of pork products that do not require refrigeration, making them more shelf stable (Figure 5). They have many food safety procedures set in place with both machines and humans to make sure that all the food produced is safe (Figure 6). These three companies we saw were always improving and trying to make food insecurity better for future generations.

When it comes to the future of food insecurity in China there are some common problems which arise. There is always an on-going issue with food availability in rural and urban areas because of the massive population making sure everyone can access food is becoming increasingly hard. Other issues are environmental concerns and lack of education in food safety, nutrition, and food quality. There is a constant issue with ensuring farmers income in times of low production (Zhou, 2010). This is where trade with other countries needs to improve for China. The nation of China is massive and constantly growing so they are not able to be self-sufficient in all areas of production. There is constant growth in meat and fish consumption, so the market needs to adapt production to fit the needs of the citizens (Ghose, 2014). This is another avenue that must be thought about for the future of food insecurity in China.

Throughout my entire trip I saw how China had made food security for its people a priority. Not only did I see companies working together but there was also so much knowledge being shared. It was eye-opening to see another country's way of dealing with a common issue that is faced all over the world. This experience has only encouraged my belief that we need to work together on the very serious issue of food insecurity. I hope that in the coming years we can see how helpful it would be to work with China and other countries to achieve this goal.

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Figure 1: This is a part of the South-to-North Water Diversion Project. This was taken at the start of the Yellow River Crossing Project which is where the water goes underneath the Yellow River. It controls how much water is coming into the diversion project and if the water is too much, taking and giving water to the Yellow River.

Figure 2: This is a picture is of the different water sources in China such as rivers and the South-to-North Water Diversion Project. Red- is the border of China; blue- is the different waterways. It was taken at the Water Culture Center on the campus of North China University of Water Resources and Electric Power.

Figure 3: This is a model of the property owned by the Henan Modern Agricultural Research and Development Base.

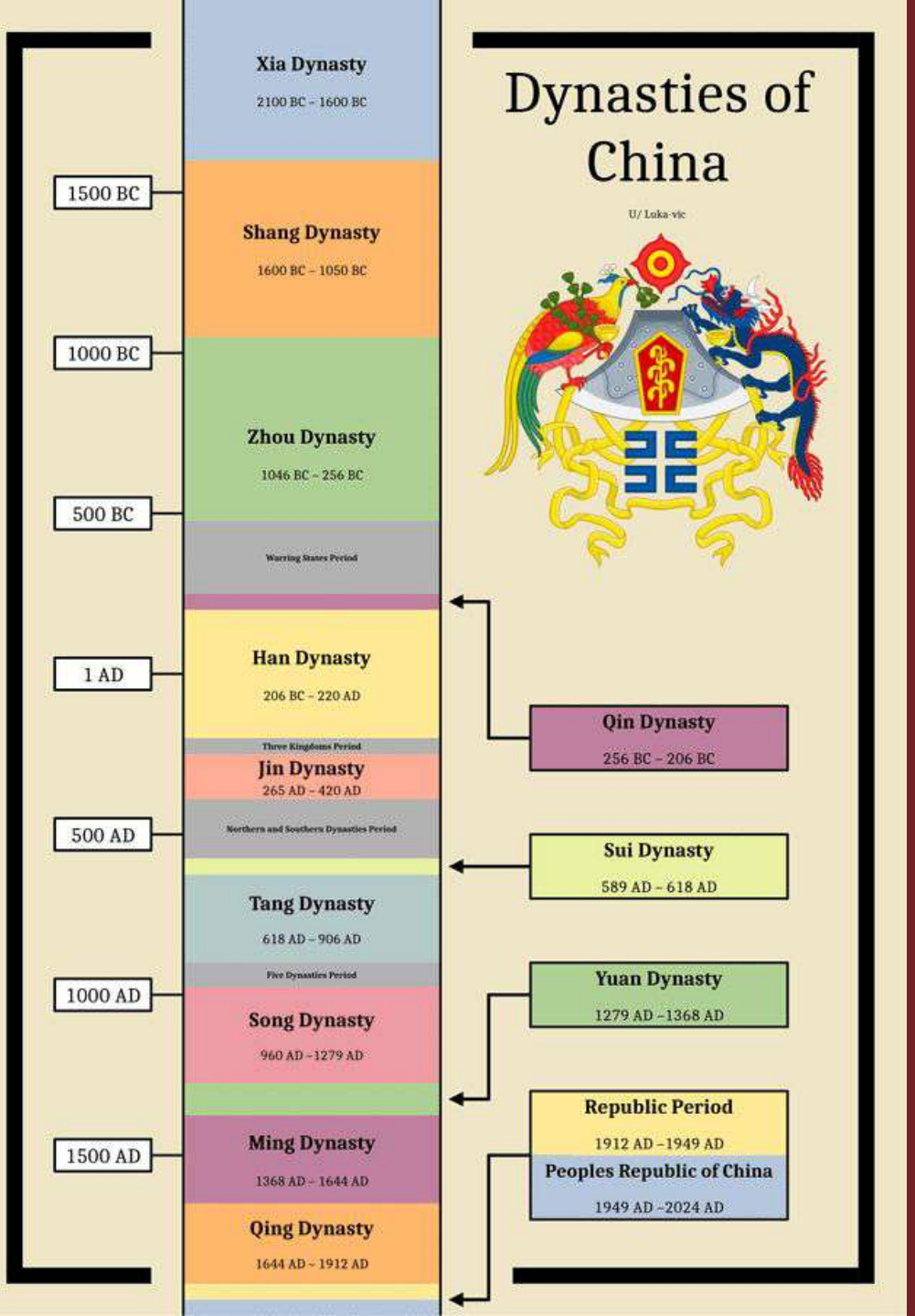
Figure 4: This is the title slide of the presentation we listened to. The training course was at the Henan University of Technology.

Figure 5: This is an example of a self-stable pork product from Zhengzhou Shaunghui Food Company. It is pre-cooked and does not need to be refrigerated.

Figure 6: This is a production line from Zhengzhou Shaunghui Food Company. They are processing the self-stable products from Figure 5.

HOW CULTURE INFLUENCES CHINESE AGRICULTURE

Madelyn DeShane
Missouri State University



CHINA AT A GLANCE

- China has nearly 5,000 years of history and culture
- China has around 171.62 million hectares of farmland
- Approximately 40% of China's workforce is engaged in farming on some level

THE COMPOSITION OF WHEAT

- Within the Chinese diet, many different types of wheat-based products are consumed, from noodles to breads to dumplings
- While at the Henan Agricultural Research Base, we saw where they were growing different types of wheat and researching different aspects of the wheat
- One of those was wheat starch/gluten (澄面)
- This is important because different levels and types of gluten are more suited for different types of products
- With the number and variety of gluten containing products consumed in the Chinese diet, this is an important aspect for the researchers to consider

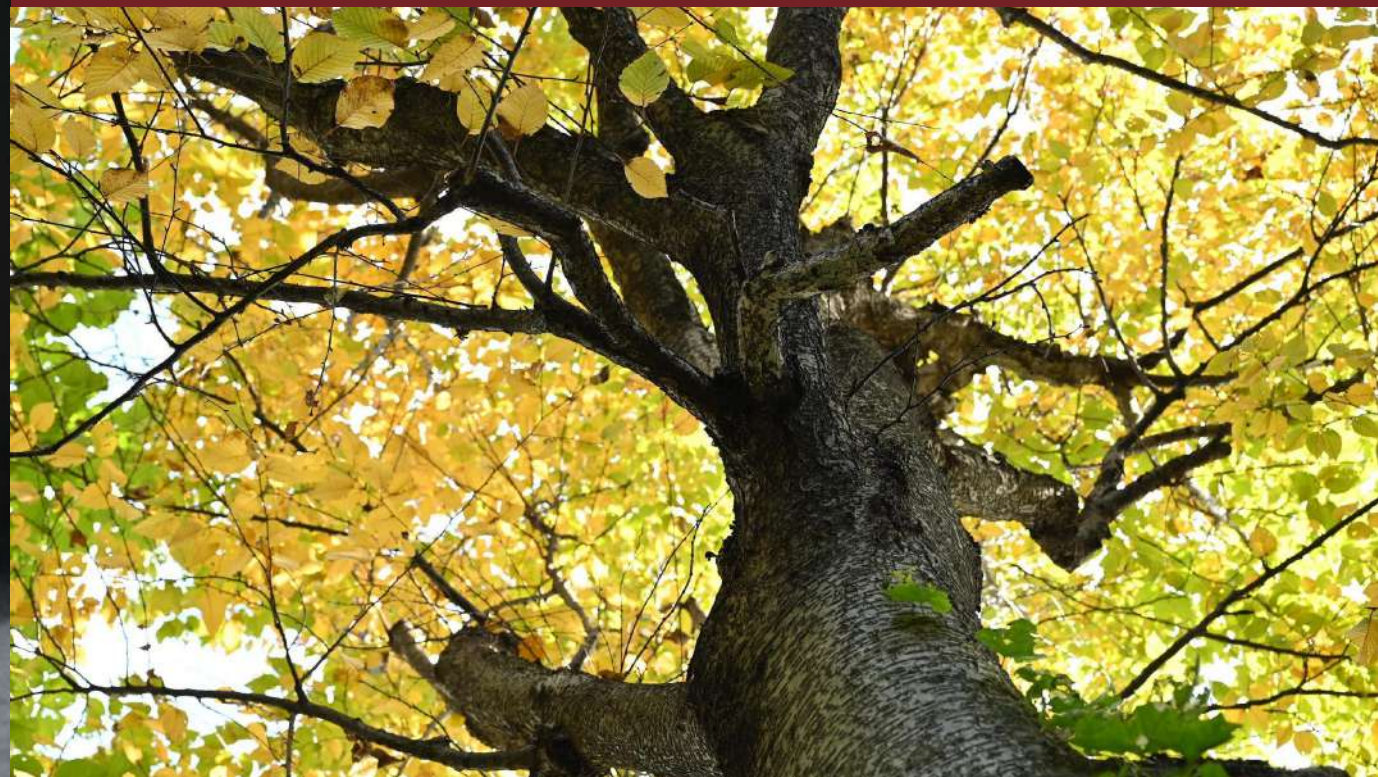
THE KING OF FLOWERS: PEONIES

- In Chinese culture the peony (牡丹), is known as the king of flowers and has rich cultural and historical significance
- At the Henan Agricultural Base, they were doing research on the life cycle and growth rates of peonies because of its importance to their culture
  - It is a flower often seen in traditional art, written about in traditional poetry, and used as a motif to decorate the clothes of royalty in the past
  - There is even a two-month long festival held in the city of Luoyang where people can go and admire this “king of flowers”
  - In addition, the stem (牡丹皮) is used in traditional Chinese medicine to improve blood flow, relieve pain, and soothe the liver

牡丹家易近俗殆難下筆如近世工徒塗紅抹綠雖千花萬蘂總一形勢
都無神明惟北宋徐熙父子趙昌王友之倫創意既新變態斯備其賦色
極妍氣韻極厚蓋能不守陳規全師造化故稱傳神觀南田此本妍

THE PURSUIT OF金黄色

- In Chinese culture, a very sought out color is that of 金黄色, a very specific golden yellow color, due to its associate with wealth and good fortune
- The Chinese Catalpa (楸), known as the “king of trees”, has been specially selected and planted due to the fact that its leaves are this golden yellow color in the fall
- Nanmu (楠木) is a type of wood used for various woodworking purposes and the is highly valued for its 金黄色 color



FINAL THOUGHTS

- *Overall, the historical and traditional aspects of Chinese culture, do have a significant influence on their agricultural practices and research, much more than one would originally think*

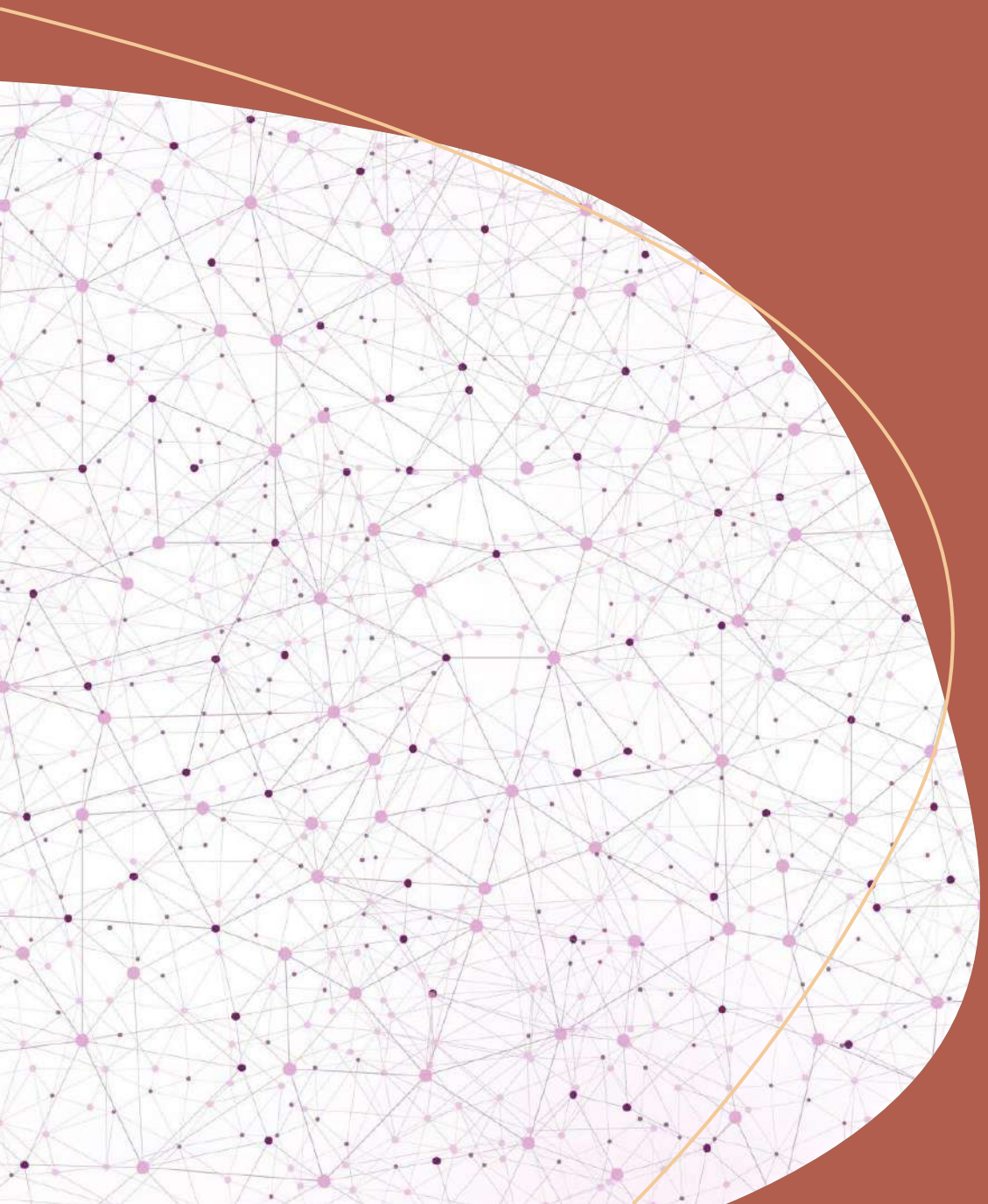
THANK YOU

Madelyn DeShane

Missouri State University

Darr College of Agriculture

Animal Science



Bridging the Gap, China and the U.S. Economy

Lorelei Jarrett

Dickinson State University

Background

- My name is Lorelei Jarrett
- I am from a small town in south central Montana where my family ranches.
- I attend Dickinson State.
- I intend to finish my undergrad in the Spring of 2026.

Learning Objective

Learn how to effectively make trade and foreign relations a personal issue rather than a geographical issue. Use this perspective to find ways to aid in the U.S. and China having a successful trade relationship.

Learning Opportunities

This Trip Included:

2 University Visits

North to South Water Project

Visit with American ag representatives based in China.

Henan Modern Agricultural Experimental Demonstration Base

Muyan Pork Producers

Learning Opportunities Cont.

Mixue BingCheng Group

Shaolin Temple

Shaolin Zen Music Ritual

Water Culture Museum

Cultural Perfomances

CP Crocodile and Chicken Farm

Great Wall of China

Important Questions

What separates people and economics?

What causes tension between people of different cultures and geography?

How can future leaders aid in the success of U.S. foreign relations relating to economics and agriculture?

Basic Parallels Between Cultures

- Shaking Hands.
- Using food to build relationships.
- Drive for innovation.
- Pride in culture.

Cultural Knowledge Gained

- From this experience I was able to learn about and emersed myself in the Chinese culture. From their ways of thinking to the activities that they enjoy. I learned that the Chinese take pride in hosting, especially meals. As well as their value of tradition and drive for innovation. Many of these are in common with the United States, and could easily be used to build relationships of respect and understanding.

Economics and Marketing in China

The Chinese economy is largely based on co-operation between firms, smaller firms, and producers. An example being the Mixue Group, who focuses on working with domestic, if not local producers.

Products must be marketed toward the Chinese consumer. This may be different cuts of meat, or different feeding methods than the U.S. prefers.

Skills Needed for Change

Open-mindedness.

Willingness to learn about other cultures.

Understanding of international marketing.

Flexibility.

Effective communication.

Personalizing the Economy

How do we shift the mindset of the economy being above the average person?

All people effect the economy and international trade.

There are many parallels between firms and households.

Creating analogies for the economy that are seen within the household can help economic understanding.

How to Incorporate Foreign Relations to Economic Learning

Researching the U.S.'S largest trading partners from a cultural rather than monetary standpoint.

Finding similarities and differences in culture with these partners.

Identifying similar goals, economical and social.

Research the historical relationship between the U.S. And its trade partners.

Personal Experiences I will Utilize in my Future in Agriculture

- Visiting Chinese firms.
- Interacting with U.S. Citizens from China and who work in China.
- Interaction with Chinese agricultural students.
- Cultural experiences shared with us on our delegation.

Personal Perspectives I will Utilize in my Future in Agriculture

Most agricultural leaders no matter where they are from, are like minded.

Shared experiences create understanding and build relationships.

Language barriers and cultural differences can easily be overcome with the right skills and mindset.

Conclusion

Co-operation and trade with China should be built on trust and understanding.

Understanding each other and economics makes reaching common goals attainable.

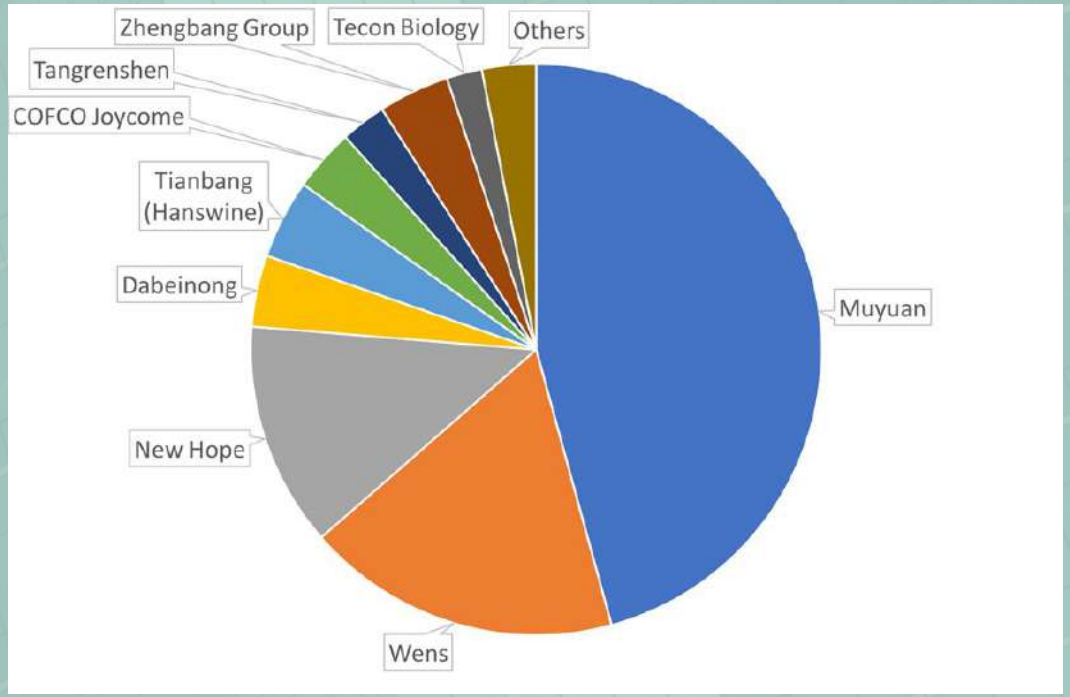
Building personal relationships internationally gives valuable perspective and creates well rounded leaders.

June 2025

Antitrust and Competition in China

A reflection on USHCA Student Agriculture Leaders Delegation Trip to China

Mariama Mwilambwe



Overview of the pig production market in China (2023)

Source: https://www.pig333.com/guide333/companies/tonisity_2/posts/13685

Basics of Antitrust in China

- Anti Monopoly Law (AML) of 2008
  - Fundamental to Chinese antitrust regime
  - Provides regulatory framework for antitrust enforcement
- AML 2022 Amendment
  - Use of data, algorithms, technology, capital advantages, platform rules
  - “Safe harbours” for vertical monopoly agreements
  - Significant increases in penalties

Antitrust Enforcement in China

- Implementing provisions of AML
  - Prohibit monopolies
    - Horizontal & vertical (RPMs)
  - Prevent abuse - market dominance
  - Refine merger controls
  - Combat admin monopoly
    - Curious implications for government
- Public enforcement
  - State Council Anti-Monopoly Commission -> State Administration for Market Regulation
- Provincial administration: local AMRs
- Private enforcement
  - Intellectual property courts -> intermediate people's courts (designated by Supreme People's Court)

January 6, 2025

Muyuan's smart pig farm in Henan, China, estimated to produce more than one million pigs last year

The Neixiang Muyuan Meat Industry Complex, Muyuan Group's largest and most technologically advanced smart pig farm, is estimated to produce over 1.7 million pigs in 2024, Yuan Hebin, deputy general manager of the Henan-based Chinese pig farming giant, told China Daily on December 30.

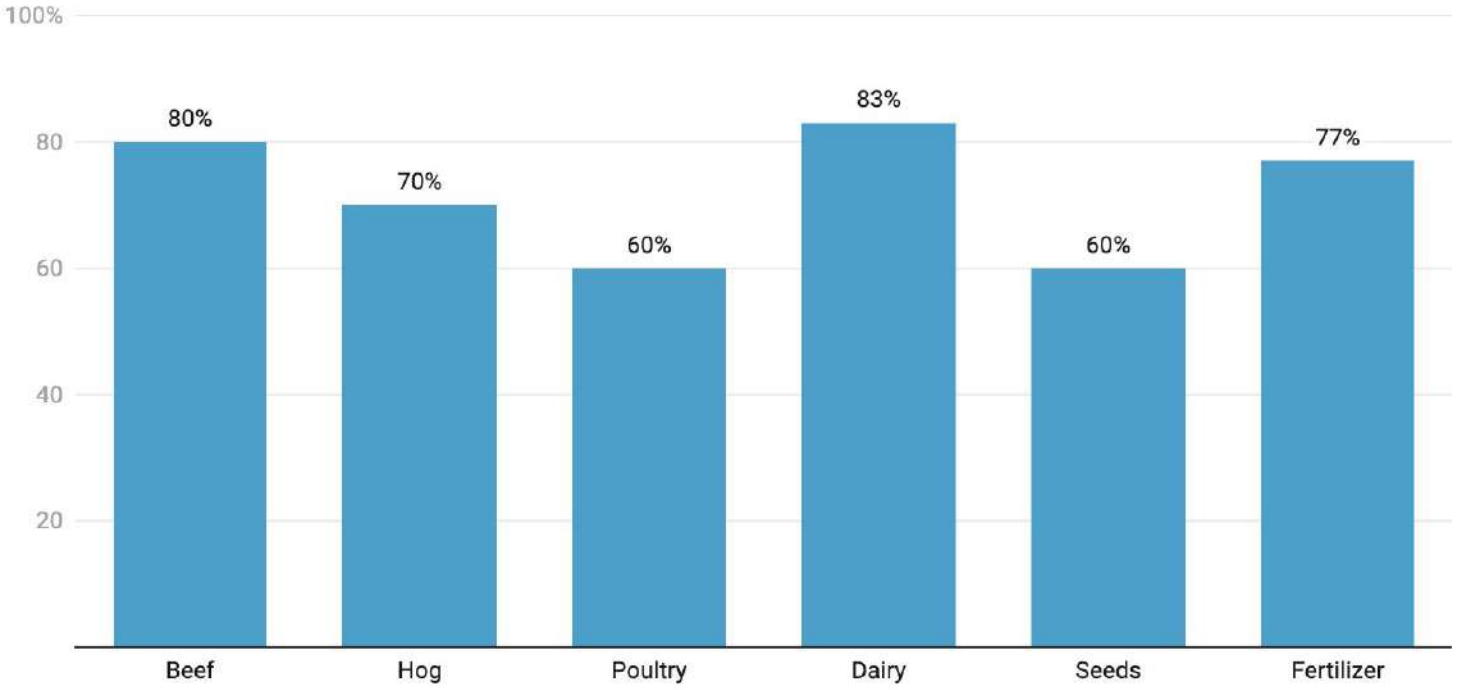
Located in Neixiang county, Henan province, the roughly 187-hectare facility, which integrates feed processing, pig farming and slaughtering, has 21 six-story buildings, each capable of producing 100,000 pigs per year, Yuan said.

"Compared to traditional single-story hog houses, this facility increases land utilisation rate by 4.3 times," he added.

Student Delegation Visiting HQ of Munyuan – China's largest pork producer

Concentration in Agriculture

Share held by the four largest companies in each industry



Concentration in the Agriculture Sector (USA)

U.S. Major Antitrust Laws

- The Sherman Act
  - Prohibits unreasonable restraint of trade
- The Clayton Act - prohibits certain M&A - superseded by HSRA
- Federal Trade Commission Act
  - Bans unfair and anti-competitive practices
- Pre-merger requirements
  - Hart-Scott-Rodino Act
  - Deals over 126.4 million trigger review by FTC (DOJ shares jurisdiction for review)
- Agriculture
  - Capper-Volstead Act (further carve out for vertical and horizontal integration through the co-op system)

Reflections

Public opinion surrounding significant industry consolidation between China and the USA truly vary. Constant growth and innovation as a survival necessity has become a hallmark of Chinese business practice, while Americans publically, historically, and even symbolically prioritize small businesses (and their role in society – while dealing with the realities of monopolies). Under Lina Khan, former Chairperson of the FTC, antitrust enforcement saw a resurgence and re-envisioning. It will be interesting to see if China's AML continues to be refined to push for stricter enforcement (especially mechanisms for private enforcement) – and how this will impact the agriculture sector, where we see increasing levels of consolidation.

Sources

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Bridging the Gap: An Eye-Opening Experience in U.S.-China Agricultural Relations

By Morgan Barba

You don't fully understand U.S.–China agricultural trade until you've stood on a Chinese research farm surrounded by drought-tolerant wheat, soy-based livestock feed, and researchers eager to talk shop.

As part of a student delegation sponsored by the U.S. Soybean Export Council (USSEC), I had the chance to travel to China and see firsthand how vital our relationship is—especially regarding soybeans. One quote from our trip stuck with me:

"One eyewitness is better than ten hearsayers."

—Li Yabin, Vice-President of the North China University of Water Resources and Electric Power

And it's true. You can read all the trade stats you want, but being there—seeing how U.S. soy supports their pork production, fuels innovation, and opens doors to future partnerships—brings it all home.

As China's basic needs for feeding its citizens are largely met, the country has shifted its focus to higher education, technological innovations, and furthering its agricultural capabilities. This includes advances in genetically modifying grain and specialty crops, areas where China is becoming increasingly competitive. While pursuing innovation in agriculture, China continues to dominate global pork production—an area where the U.S. and China share significant trade interactions. Through this exchange, I saw firsthand how vital the U.S.-China trade relationship is for agriculture in both nations.

One of the most memorable visits during the trip was to the Henan Modern Agricultural Experimental Demonstration Base. This center focuses on developing drought-resistant wheat varieties and the selective breeding of medicinal herbs and flowers bred for recreational purposes. It was fascinating to see how Chinese researchers combine traditional knowledge with modern scientific techniques to address environmental challenges and economic demands.

The trip also included a tour of the Museum of Grains and Water Culture, where we gained insight into the rich history of these vital resources in China. The Chinese place a high value on minimizing food waste and maximizing water use for diverse purposes such as energy generation and transportation. These aspects of their agricultural practices underscore the importance of resource efficiency and sustainability.

China’s pork production, led by companies like the Muyan Group and Smithfield Inc., is a global success story. These companies have integrated cutting-edge technology and artificial intelligence to enhance their production systems. During a visit to their facilities, we observed the strategic diet plans for livestock, mainly consisting of soybean meal, and how they have used technology to maintain cleaner processing plants, reduce bacterial exposure, and improve the quality of meat produced.

Another exciting stop was at Mixue Group, a rapidly expanding ice cream, coffee, smoothie, and boba company. Mixue plans to enter the U.S. market next year, with its first store in New York. The innovative marketing tactics and product versatility showcased by Mixue highlight the exciting potential for international businesses, especially within the food sector.

Our meetings with industry organizations such as the U.S. Soybean Export Council (USSEC), U.S. Grains Council (USGC), U.S. Meat Export Federation (USMEF), U.S. Poultry and Egg Export Council (USAPEEC), and Cargill were invaluable. These sessions gave us a deeper understanding of global agricultural trade dynamics, especially the challenges each of these organizations faces concerning international regulations and market fluctuations. This knowledge is crucial for students like us who aspire to contribute to agricultural advocacy and policy in the future.

The meals we shared during our travels were another highlight of the trip. The food quality was exceptional, and trying new dishes, such as fish bladder, was a joy while bonding with our hosts. The shared pride in Chinese culinary traditions made these meals more enjoyable and provided deeper connections with the local culture.

No trip to China would be complete without experiencing its rich cultural heritage, which we did during visits to the Shaolin Temple and the Great Wall of China. These historic sites are vital to Chinese culture and serve as symbols of national pride. The upkeep of these sites reflects the reverence the Chinese people have for their history and traditions.

One of the most impactful aspects of the trip was the hospitality we experienced. Every person we met was eager to ensure we felt welcome and cared for. The mutual respect between U.S. and Chinese participants created a positive and collaborative atmosphere, greatly enhancing our learning experience.

As student delegates, we saw firsthand that building trust between nations doesn’t happen in headlines—it happens in shared meals, handshakes, and honest conversations. Even in the face of political tensions, mutual respect and a common goal—feeding the world—can bridge divides.

This experience reaffirmed the critical role of direct exchange in agriculture. From soybeans feeding China's pork industry to collaborative innovation in sustainable practices, the future of U.S.–China relations will be shaped not only by policy but by people willing to show up, listen, and learn.

And for me, that starts with telling this story.

Photo Captions:

Photo 1: Research wheat field at the Henan Modern Agricultural Experimental Demonstration Base

Photo 2: Start of the South-to-North Water Diversion Project through the Yellow River

Photo 3: Mixue group headquarters. Their brand mascot is the Snow King, pictured above.

Photo 4: The Great Wall of China from the 20th watch tower.

Mya Blake

Tennessee State University

Junior

Research Question:

How are Chinese agricultural innovation centers using technology to improve crop sustainability and food security?

Global Innovation in Agriculture: China's Technological Approach to Food Security and Crop Sustainability

China is one of the world's most populous nations, responsible for feeding over 1.4 billion people. As such, ensuring long-term food security and sustainable agriculture has become a top priority for the country. During my one-week trip to China as a delegate of the USHCA Future Ag Leaders Program, I had the opportunity to explore several agricultural innovation centers that are using advanced technology to meet these challenges head-on. This essay examines how these centers are leveraging digital agriculture, automation, biotechnology, and environmental engineering to improve crop productivity and strengthen national food systems.

One of the most impactful visits during the trip was to the Henan Academy of Agricultural Sciences. This institution is at the forefront of research focused on soil health, crop genetics, and data-driven farming practices. Their mission is to enhance agricultural productivity without exhausting natural resources. Researchers there are conducting field trials on drought-resistant seeds, experimenting with bio-fertilizers, and using AI-driven software to analyze crop health from satellite images.

Chinese innovation centers prioritize precision agriculture as a key solution to improve sustainability. For example, the Henan Modern Agricultural Experimental Demonstration Base utilizes smart irrigation systems that adjust water distribution in real time based on soil moisture, weather patterns, and crop type. These systems reduce water waste and ensure crops receive exactly what they need to grow efficiently, even under climate-stressed conditions.

During our visit to the Zhengda Egg Industry Co., we witnessed advanced automation in poultry production. Though not directly crop-based, the facility demonstrated how technology can increase food supply efficiency and traceability. The same principles apply to crop farming. Automated monitoring, disease detection, and input control are used to reduce resource use and increase yields with minimal environmental impact.

Crop protection is another area where Chinese innovation centers have adopted advanced solutions. At multiple locations, we saw drones being used for pesticide application and crop

surveillance. These drones are equipped with sensors that identify pest hotspots, allowing targeted spraying rather than blanket coverage. This method not only protects beneficial insects but also reduces chemical runoff into soil and water systems.

Biotechnology also plays a central role in China's push for food security. Many of the institutions we visited are experimenting with genetically modified organisms (GMOs) to increase crop resistance to pests, heat, and drought. Although GMO use varies globally due to regulation, China's controlled research environment enables large-scale experimentation to determine safe and effective applications for domestic agriculture.

In addition to lab-based advancements, China has integrated data science and artificial intelligence into everyday farming. Through partnerships with national universities and local cooperatives, farmers are able to access mobile apps that provide weather updates, soil condition analyses, and planting recommendations. These tools improve decision-making and decrease dependency on traditional guesswork, resulting in higher productivity and sustainability.

Another major component of China's agricultural innovation is infrastructure investment. During our visit to the North China University of Water Resources, we learned about the South to North Water Diversion Project. This massive national effort redistributes freshwater from the Yangtze River basin to arid regions in the north. It is essential for maintaining irrigation in water-scarce crop-producing areas, particularly in the face of shifting rainfall patterns due to climate change.

Digital agriculture is further supported by the integration of blockchain technology for supply chain transparency. While still in early stages, several centers are piloting blockchain systems to track the movement of agricultural products from field to consumer. This improves food safety, reduces fraud, and helps manage inventory more efficiently during periods of high demand or shortage.

What stood out most to me was the way all of these technologies are interconnected. Each system, whether for irrigation, pest control, or genetics, feeds into a larger national framework for food stability. These systems are not used in isolation. Instead, they are part of a multi-layered approach to securing China's food supply through smart, sustainable practices.

Though China faces immense environmental and population pressures, its agricultural innovation centers are advancing at a rapid pace to meet them. By integrating technology with traditional practices, the country is building a model that other nations, including the United States, can study for inspiration. Their approach shows how science and policy can work together to address long-term food challenges.

From a global perspective, China's agricultural innovation is critical not just for domestic food security but for stabilizing global grain markets. As one of the largest importers and exporters of agricultural products, how China feeds its population affects food availability and

prices around the world. Their commitment to sustainability directly supports international food balance.

This experience also emphasized the importance of international collaboration in agriculture. During our USDA roundtable, I observed how organizations from both the U.S. and China are working together on research, trade agreements, and information exchange. It highlighted the role young professionals like myself can play in fostering cooperation for a more food-secure world.

In conclusion, Chinese agricultural innovation centers are making significant strides in improving food security and crop sustainability through a combination of smart irrigation, automation, biotechnology, data analytics, and large-scale infrastructure. These centers serve as a blueprint for nations seeking to modernize their agricultural systems while preserving environmental integrity. As a student of agriculture and a future leader in the field, witnessing these innovations firsthand has deeply shaped my understanding of global food systems and the solutions needed to secure them.

USHCA Agriculture Delegation Trip 2025

Nathan Unruh

Overview

Tour	Agricultural production, processing, and innovation sites in Beijing and the Henan province
Participate in	Exchanges with universities in Henan
Visit	Cultural sites in Beijing and the Henan province

Objective of the Trip

“To promote friendship and build trust between the next generation of agricultural leaders from the United States and China.”

Arrived in Beijing (June 2)

Zhengzhou (June 3)

~ Highspeed train ride to Zhengzhou, Henan province

~ Visited the Henan Research and Development Base for Modern Agriculture

~ Dinner banquet hosted by the director of the Foreign Affairs Office of the Henan Provincial Government, Mr. Liang Jieyi


河南现代农业研究开发基地
HENAN RESEARCH AND DEVELOPMENT BASE FOR MODERN AGRICULTURE

June 4

~ Visited Henan University of Technology

~ Toured the China Grain Museum

~ Participated in a training course at the university

~ Visited the South-to-North Water Diversion Project

~ Toured the Mixue Bingcheng Group flagship store

~ Visited the R&D center for the Muyuan Group

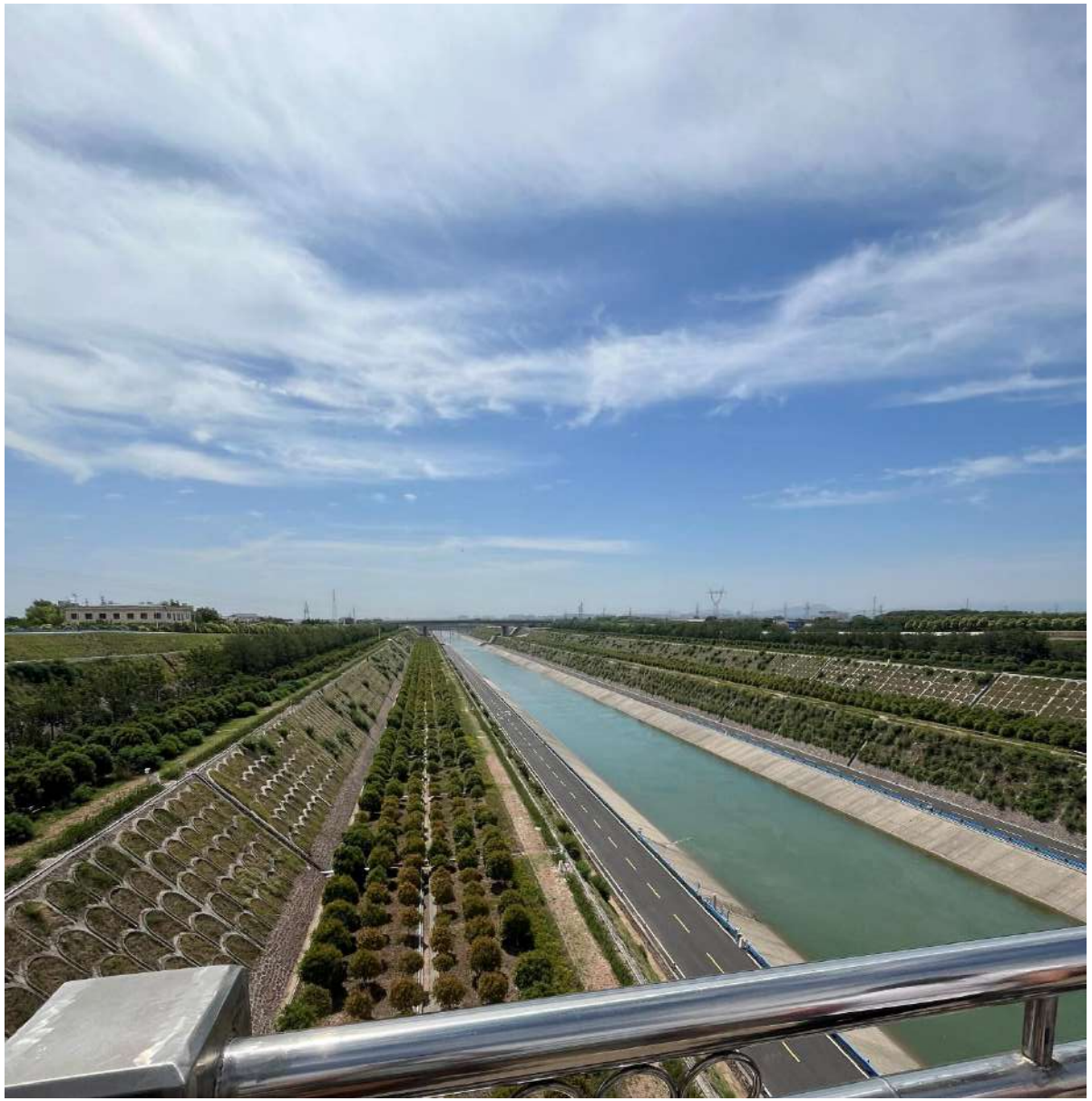
~ Dinner at Opera restaurant


天地精华
五谷的涵义
天地精华


豫电筑梦 爱永恒
河南工业大学机电工程学院河南校友会敬赠
二零二五年四月


蛋白质与氨基酸营养学
核心要素与前沿进展
Protein and Amino Acid
Nutrition: What is
Important, what is New?
Dominique P Bureau


滑倒
抛物

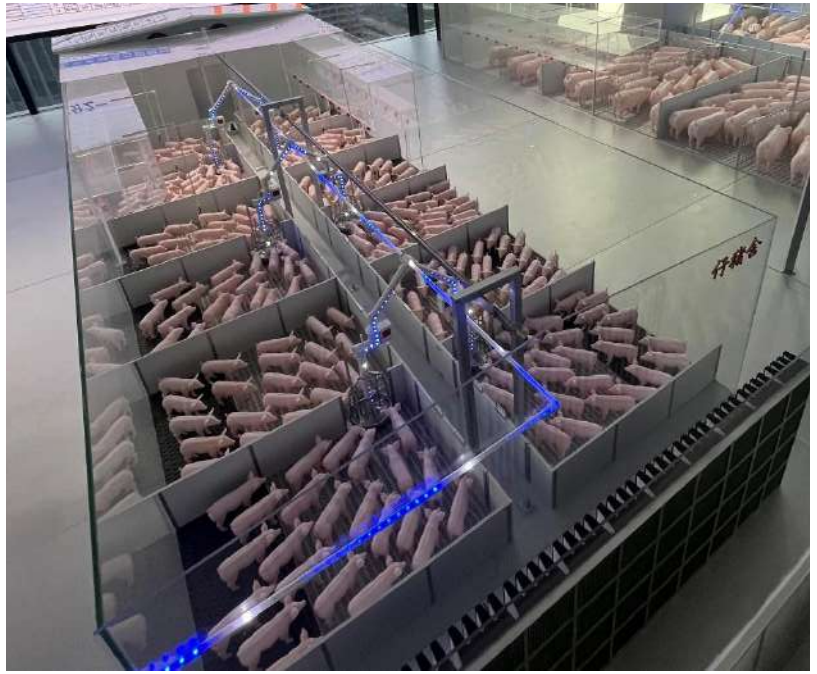



经营顾问指导获得
店外卖平台销售，定期举办小程序订餐及团购的营销活动，助力门店业绩增长
饿了么
蜜雪冰城
会员营销
2.7亿
8200万
美团


雪王咖啡


蜜雪冰城

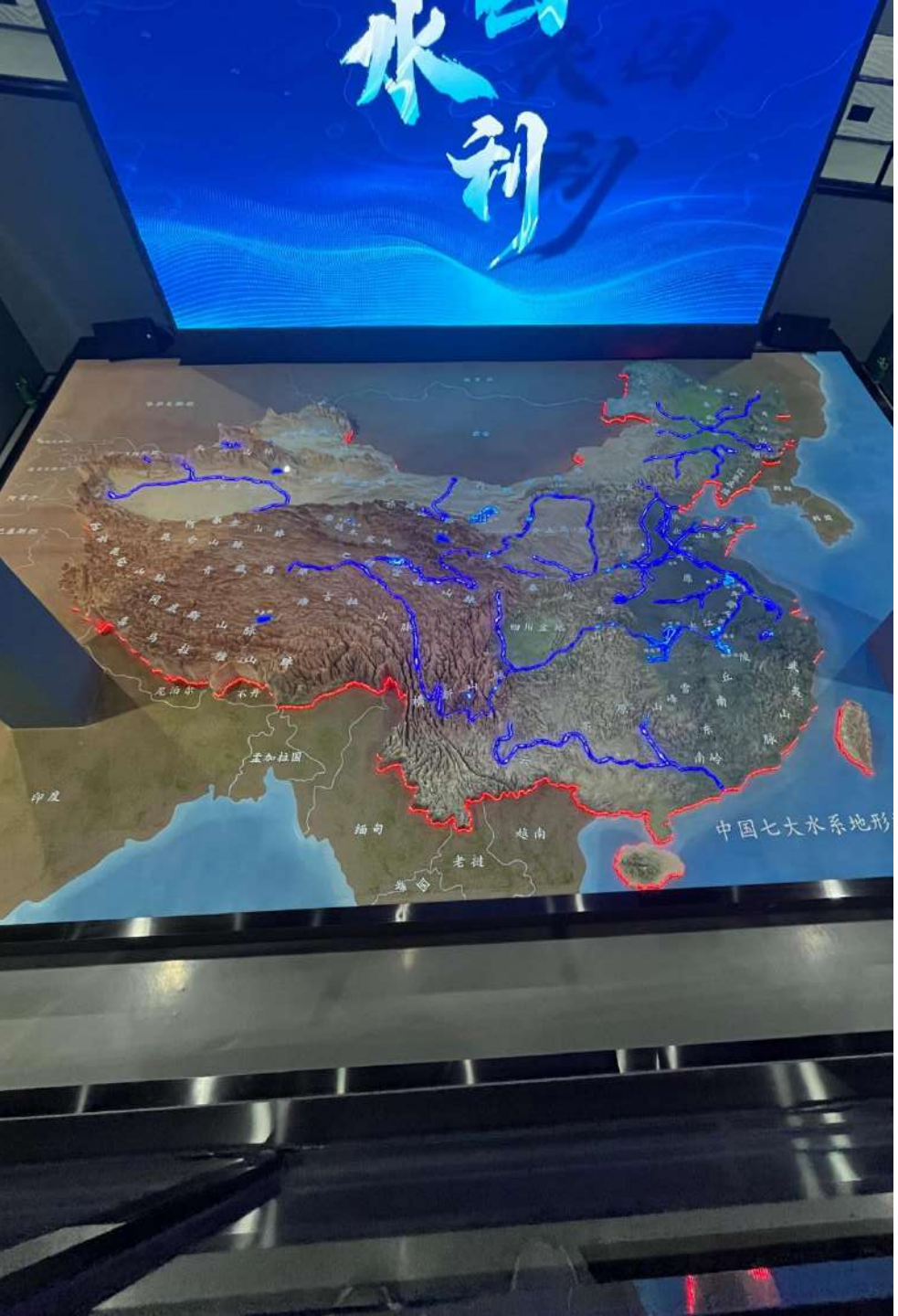

让每位奋斗者拥有一份甜蜜事业



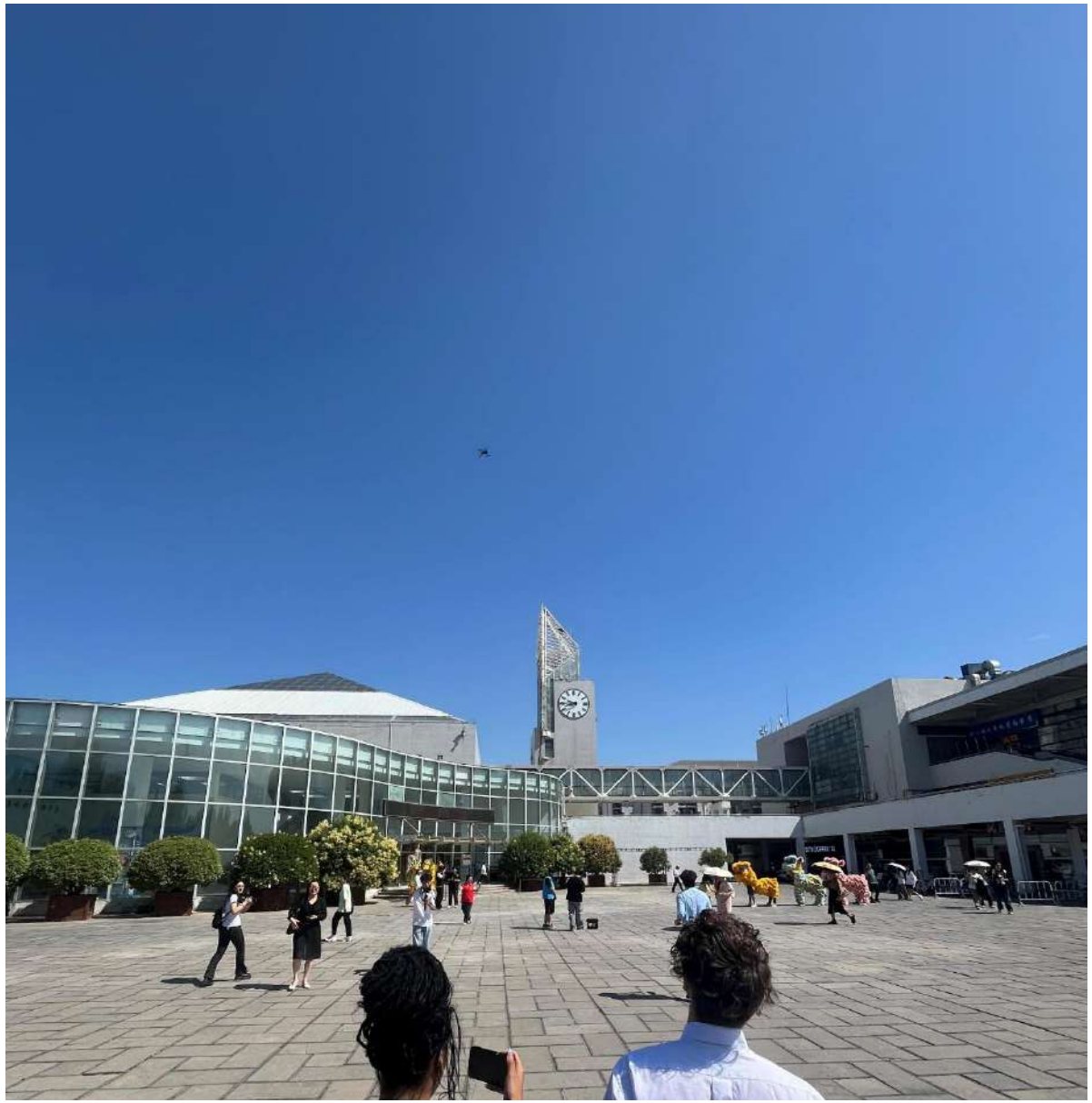

Global Pig Farming Market
About Muyuan
Technology-led Development
Social Responsibility
Future Vision & Talent Demand

June 5

- Visited to the North China University of Water Resources and Hydroelectric Power
  - Attended the university's welcome ceremony, representative speeches, and cultural performances
  - Lunch and communication with students
- Visited a grocery store
- Visited the Shaolin Temple
  - Martial arts performance
- Attended the Shaolin Zen Music Ritual

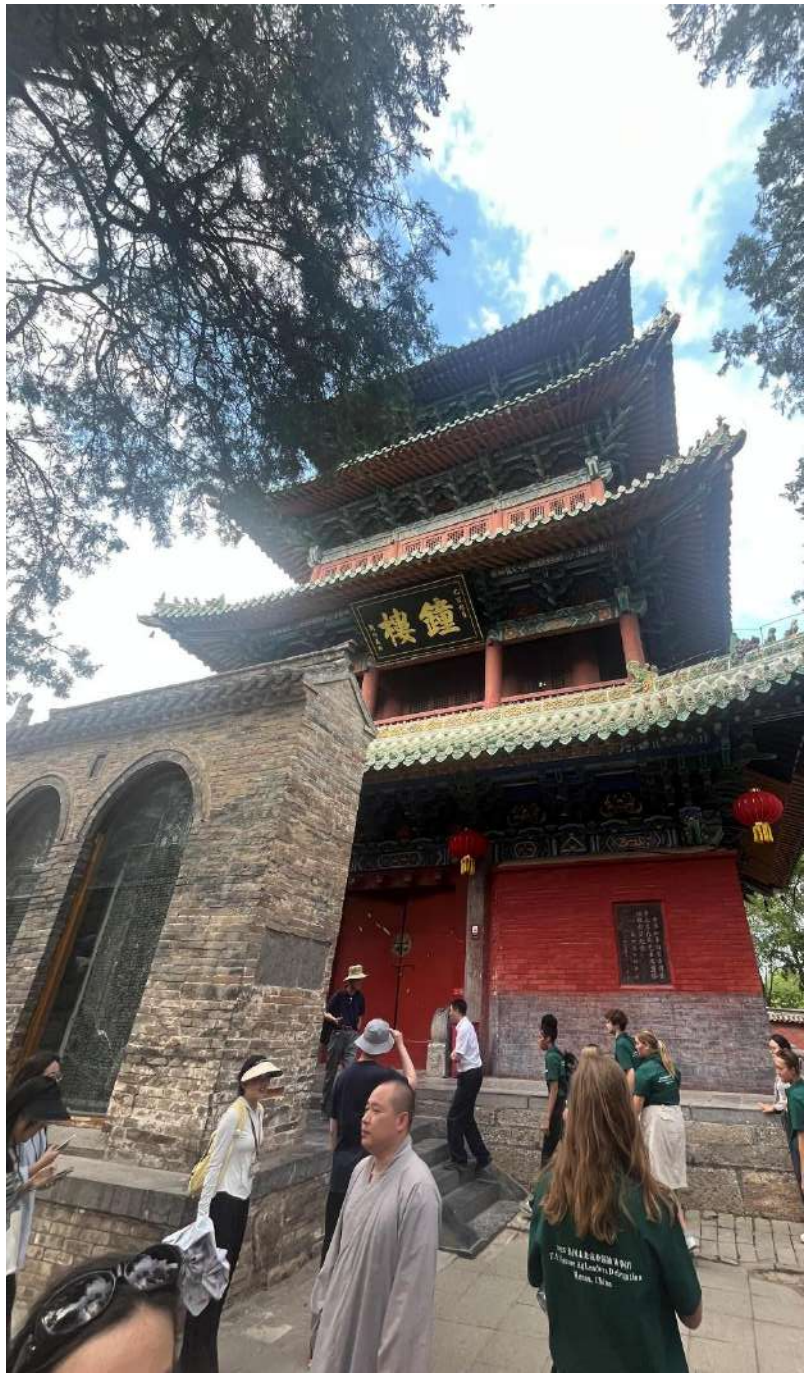

水利
中国七大水系地形

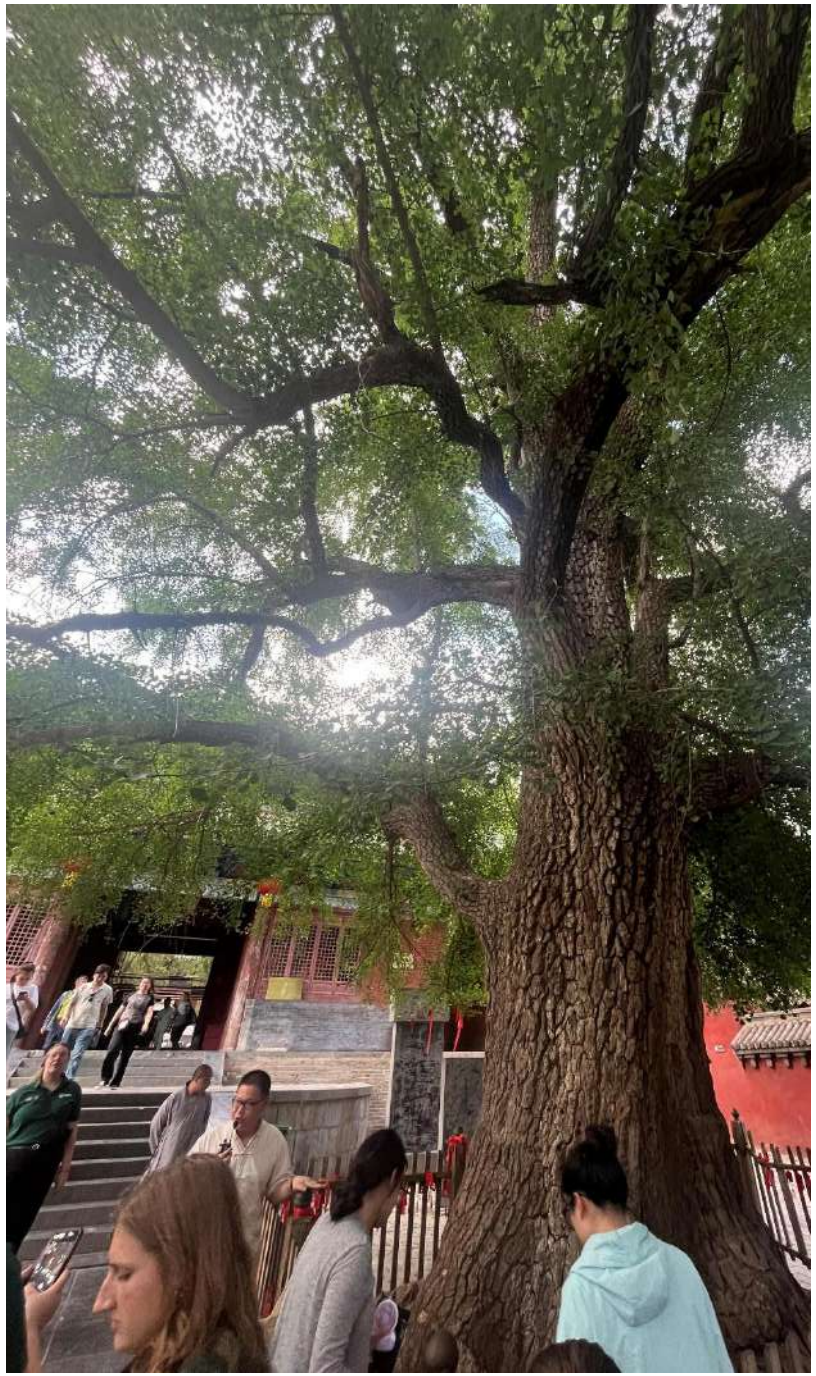

江河水患




鲜切牛排
免费加工
现选现煎 美味即享
Delicious


现切
当天
FRESH
FRUIT
FRESH 现烤
BAKED


鐘樓

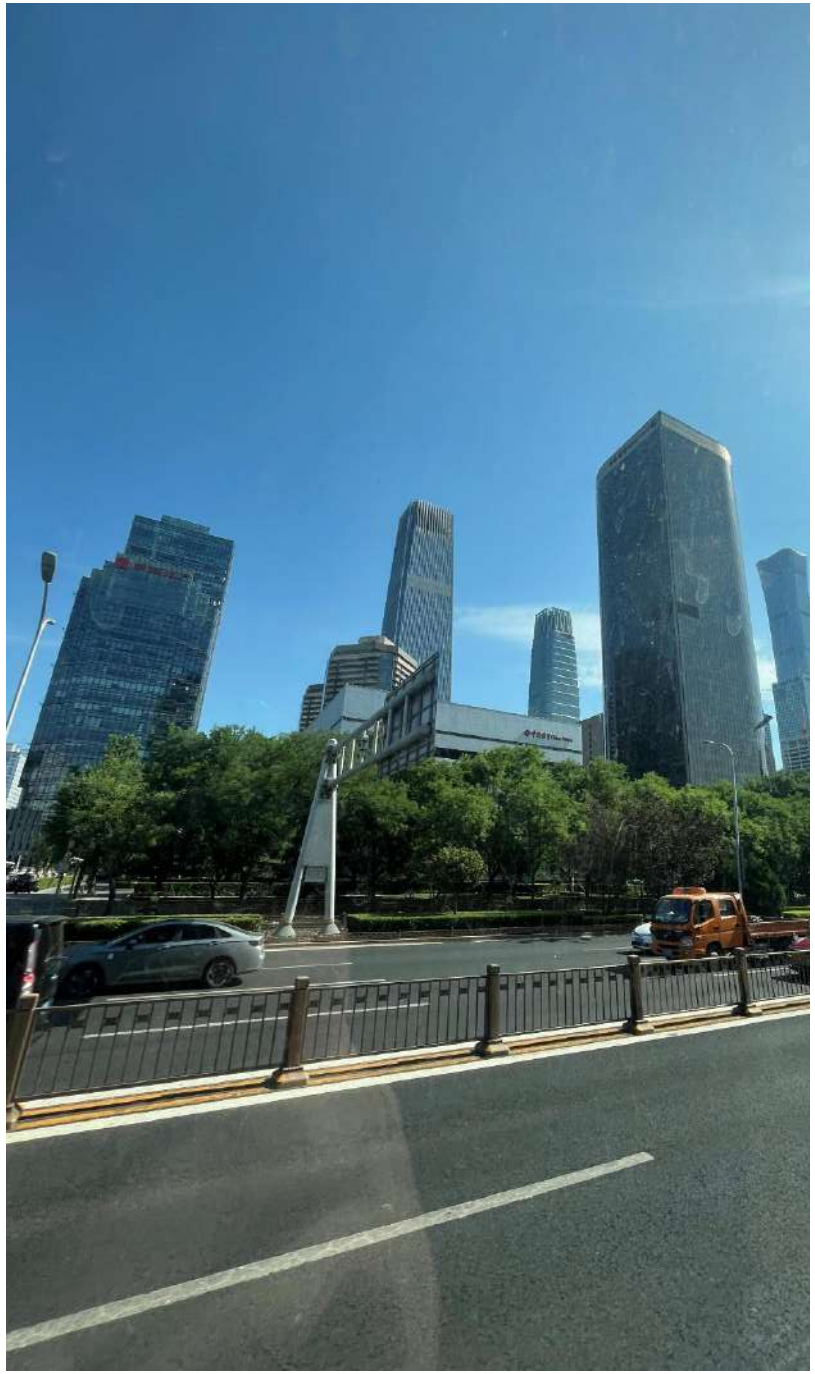



少林文化
人類遺產

June 6

- Visited Shuanghui, Smithfield pork processing facility
  - Toured facilities, meeting with director
- Highspeed train ride back to Beijing
- Met with USDA and Commodity group representatives
  - USDA, USSEC, USGC, USMEF, USAPEEC, USHCA

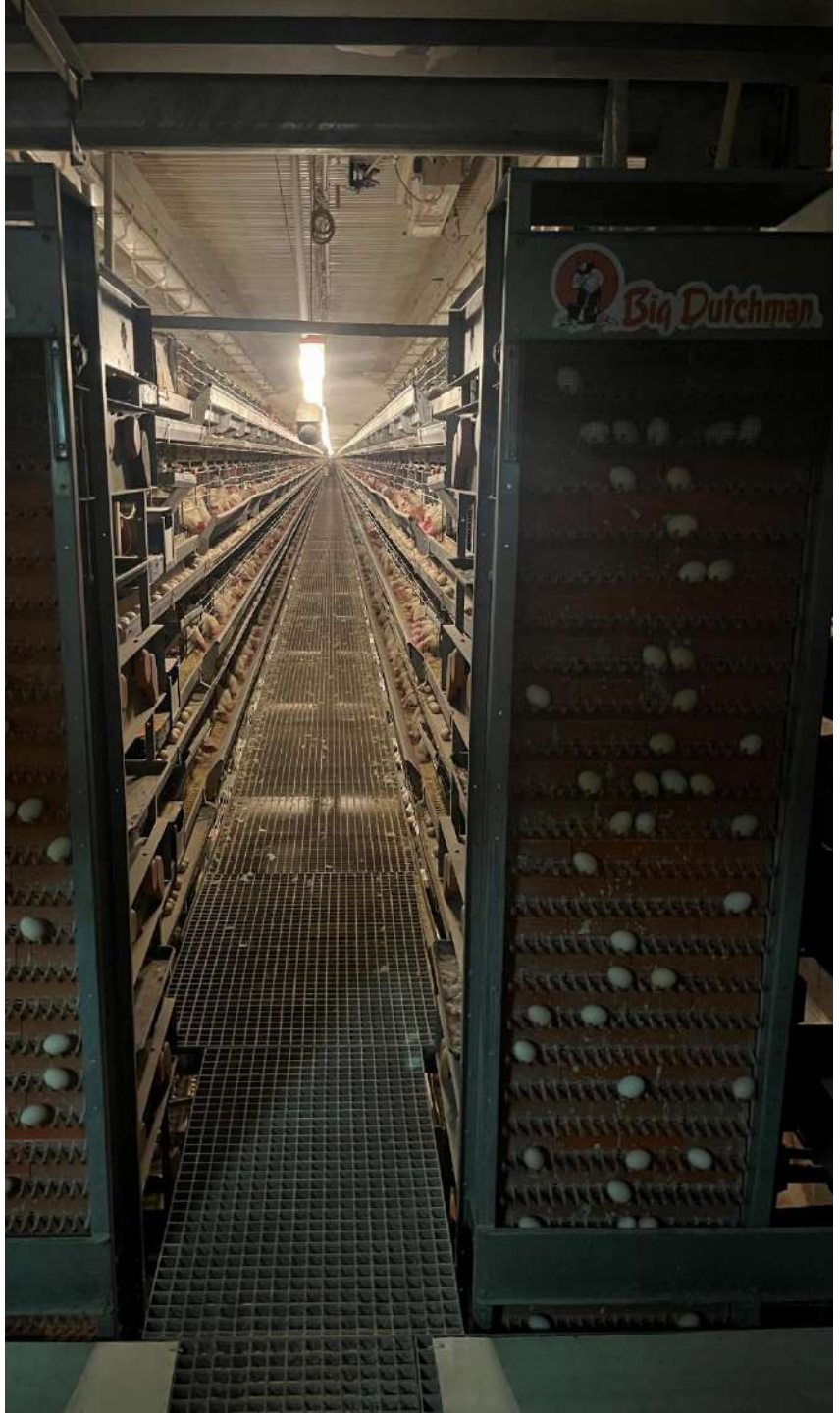

Smithfield

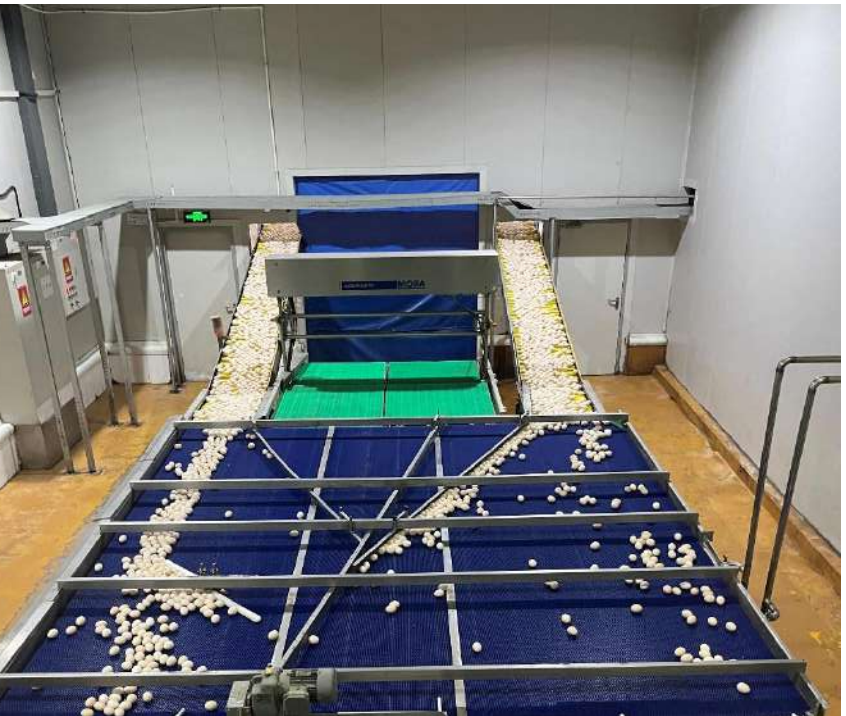



2025
U.S. Future Ag Leaders
Delegation Meeting

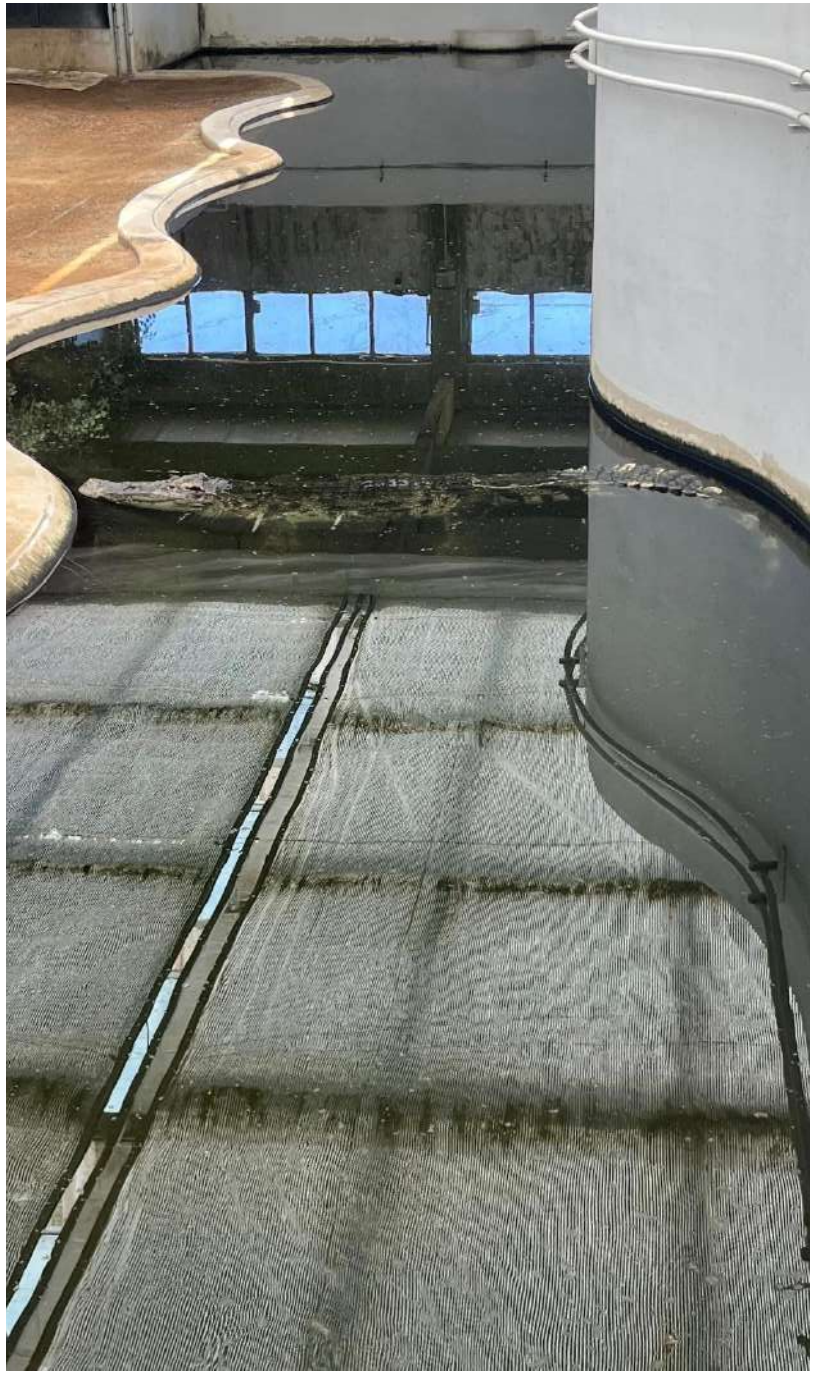
June 7

- Visited CP group facilities
  - Layer farm and crocodile farm
- Cultural tour of the Great Wall
- Peking Duck Dinner

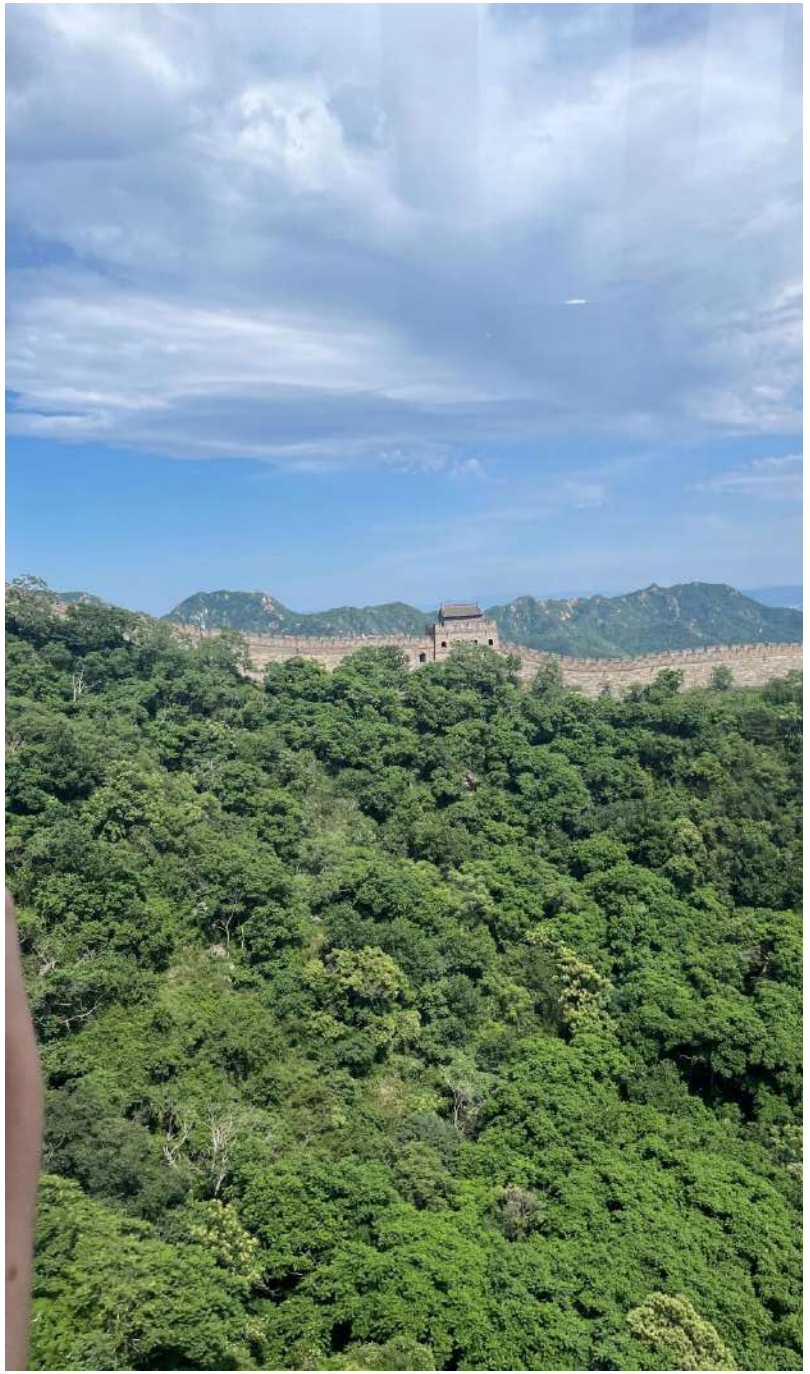

Big Dutchman

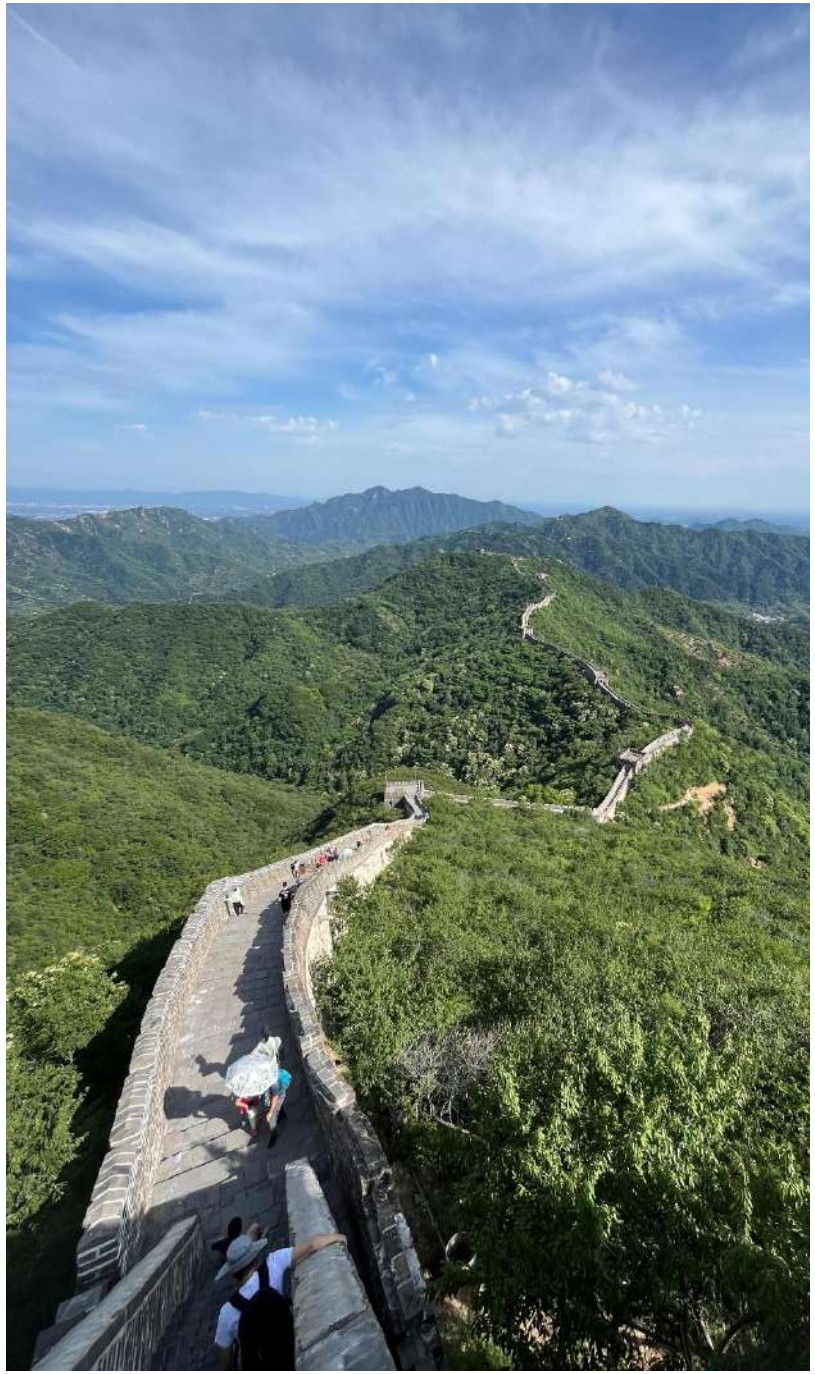


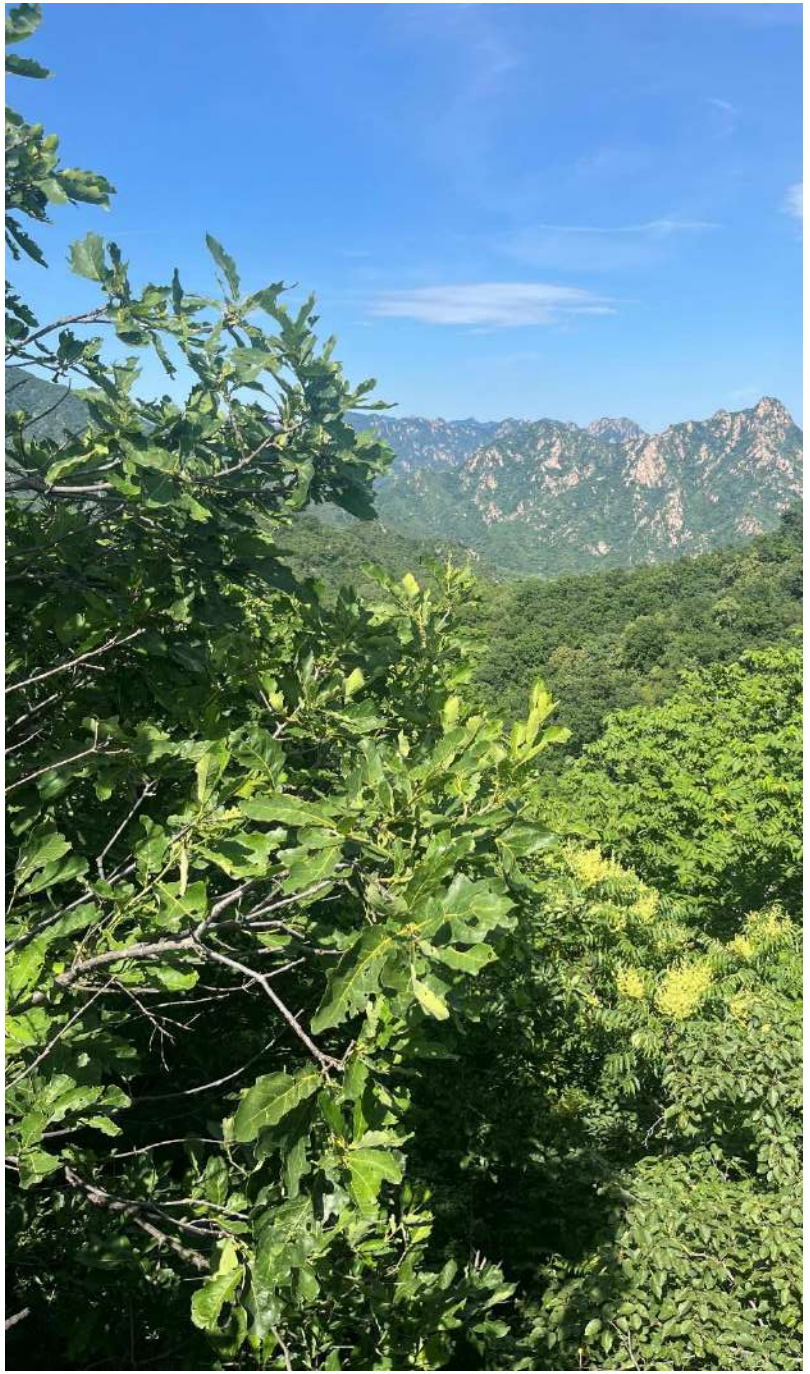

正大泰鳄养殖基地
Chia Tai Siamese Crocodile Breeding Base
——改变生活从这里开始




现代医学证明鳄鱼浑身都是药材，有“动物黄金”之称：鳄鱼肉、骨、甲、尾、掌、油、睫、心、肺、胃、肝、胰、肾等，除含有丰富的优质蛋白质和人体必须的氨基酸外，还有多种不饱和脂肪酸、维生素和微量矿物元素。鳄鱼皮是名贵的皮革原料，是鳄鱼商业价值的重要体现。

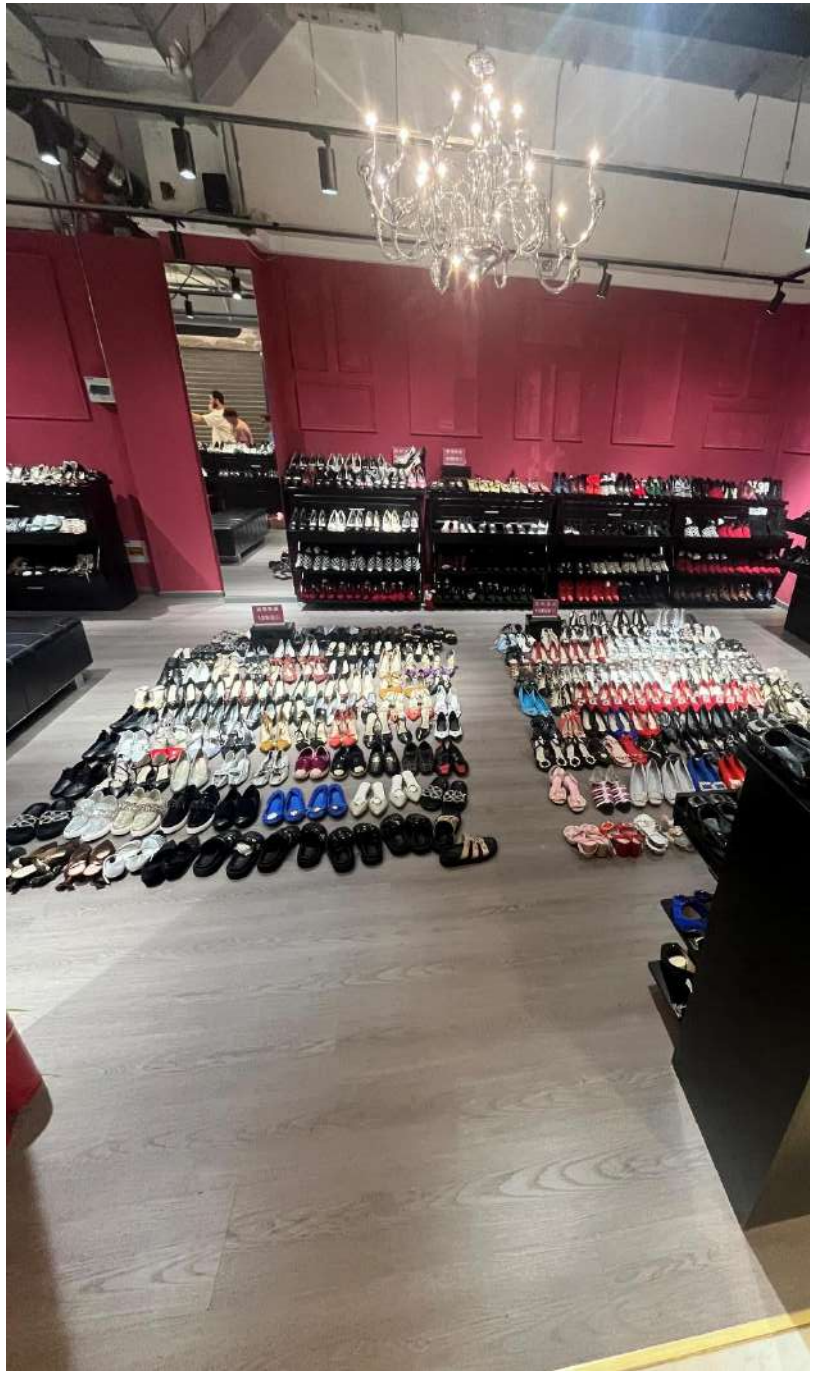






June 8-9

- Slept in!
- Shopping at Silk Street Mall
- International flight back to the U.S.



Departure from China

Personal Learning Objective #1

- Agriculture Education
  - Is it encouraged?
  - What does it look like?
  - Where and when is it taught?

Personal Learning Objective #2

- Regenerative Agriculture
  - Is it a priority?
  - What do those practices look like?

Future Ag Leaders Delegation to China

Nicole May

Tuskegee University

Food Science Major

June 1st-8th 2025

Learning Objective:

By observing a range of operations, I will develop an understanding of how China's agricultural innovation, food manufacturing systems, and supply chain contribute to the development of safe, high quality food products.




Agricultural Innovation in China: Henan Modern Agricultural Experimental Demonstration Base

How These Innovations Support Better Food Quality And Safety

The Henan Modern Agricultural Experimental Demonstration Base in Henan, China is a key facility in Henan province focused on agricultural research and development.

Here how they support for better food quality and safety:

- This place uses certain technologies to monitor crop growth and reduce pesticide and fertilizer overuse which leads to cleaner produce.
- Some crops grown at the base are monitored from seed to harvest, ensuring traceability.
- This place works with other agricultural researchers to test and plant high yield, disease resistant crop varieties. They also test and plant high quality ones and fertilize friendly ones as well.
- This facility does a lot with the tissue culture lab which is basically growing plants from small tissue samples under a sterile and controlled environment. How tissue labs support is they eliminate viruses that can infect crops, ensures genetic uniformity which results in consistent nutrient content, speeds up breeding, and more.

Fun Fact: Dandelion stem is used as a natural remedy to cure cold sores.

Food Manufacturing Systems:

Shuanghui (WH Group)

Food Manufacturing Systems: Mixue Bingcheng

How Food Product Development Is Approach, Processed, Or Kept Safe

Shuanghui:

Also known as WH Group, is a major meat and food processing company. They own part of Smithfield Foods.

- Offers a wide range of products: fresh pork, cooked meats, sausages, bacon, hot dogs, and convenience foods that come in different flavors and spice levels to cater to different Chinese taste.
- While doing slaughtering and meat processing, they have production lines to avoid contamination.
- The temperature environment can get pretty cold to prevent bacterial growth.
- Employees are trained in hygiene practices, wear protective clothing, and work in sanitized environments.

Mixue:

Is a popular Chinese franchise known for affordable iced drinks, milk tea, and ice cream.

- Regularly introduces new seasonal drinks, flavors, and product lines to attract consumers of all ages.
- Mixue develops unique ice cream varieties.
- Mixue has a food development lab (a R&D center) where scientist experiment with texture, flavor, sweetness, temperature, ingredients, and so much more.
- Products are processed in labs under hygienic conditions and final products are transported under the right temperatures.
- They customizes products to be able to expand to other global markets.

The Supply Chain: Muyuan Group

The Supply Chain: CP Egg/Crocodile Farm

How These Companies Use The Supply Chain Integration

Muyuan Group:

A large Chinese company specializing in the production and processing of pork.

- Muyuan controls the entire pork production chain (breeding, feed, farming, slaughtering, packaging, and delivery). Allowing and ensuring control over nutrition and safety.
- If there is a food safety concern, the company can instantly trace the affected batch and quickly recall the product because products are transported and delivered using Muyuans own logistic network.

CP Group:

A company that raises chicken for eggs and does crocodile farming so they are focused on sustainability and animal welfare.

- CP raises their own chickens using technology to monitor their health and production, as well as the egg quality. CP also raises their crocodiles.
- For the eggs, they are collected, washed, and inspected with machines. Then packaged in CP branded cartons for easy traceability and transported.
- The crocodile are mostly for leather production, meats, or extract. All animals are tested and once the processing is done the meat gets transported and everything else can get sent to other processing plants.

Both: They both use temperature controlled storage and transportation to protect their food products and keep them fresh for consumers. It's essential that the meats and eggs arrive safely, undamaged, and at the proper temperature.

Listening To Experts: Dominique Bureau, The USDA, and Others

What I Learned Overall

Dominique Bureau:

- The “real” nutrition is the amino acid in the protein.
- Omnivorous require lower protein level due to energy sparing.
- The partitioning of amino acids will depend on several factors like diet composition, species, life stage, environmental conditions and stressors.
- The more physically active, or more demanding your daily life is, the more protein your body needs to stay healthy and strong.
- Both protein and amino acids are essential for optimal growth, efficiency, and health.
- Protein is relatively easy to measure, especially compared to many other nutrients.

The USDA and others:

- Using technology advancements will increase the flavor of meats and the fat content which will make the meat juicer.
- AI is increasingly playing a key role in food safety inspections.
- If you have a passion for anything, go experience it yourself so you can have a better understanding of it.
- Even though at times China and the U.S. are competitors, they also depend on each other.
- Holding conversations and interacting with locals and students will give you a deeper appreciation for how traditions or their way of life, communication, and relationship building plays an important role in professional development.

Conclusion

By observing a range of operations across China's agricultural sector, I have developed a clear understanding of how the country's agricultural innovation, food manufacturing systems, and supply chains work together to produce safe, high-quality food products. Companies like Muyuan, Mixue, Shuanghui, and CP Group demonstrate how integration and advanced technology contribute to consistent food safety and food production.

Going on trips like this is beneficial and effective because it allows for firsthand learning, promotes mutual understanding between cultures, and gives a real world view of how global food systems operate. These experiences help students and professionals alike connect on another level. In a time when U.S. and China relations are both competitive and cooperative, agricultural exchange and understanding are critical. Observing China's approach helps build mutual respect, opens doors for collaboration in food safety, sustainability, and trade, and again strengthens our ability to work together on global food challenges.

THANK YOU!!!

Forever Grateful For This Experience!!

USHCA Trip Report

What is the best way to keep up positive relations between China and US, especially through young leaders?

My trip to China with the US Heartland China Association was an informational and impactful trip of a lifetime. I am incredibly fortunate to have the opportunities I did in this endeavor across the Pacific Ocean. The trip was nothing like I could have expected. I went in not knowing much of what to expect in the first place. China often has a bad rap in the American political and social environment. When I arrived, I was pleasantly surprised with not just the size of the cities, but how clean and well-kept the streets and buildings are. It was a beautiful landscape as we traveled about 700 miles into the Henan Province to explore agricultural research bases, Chinese universities, and water research projects.

I took away plenty from this trip, ranging from technological advancements in water resources and electric power, similarities and differences in Chinese meat production and American production, and basic cultural fundamentals of their people. The construction of the South to North Water Diversion Project was by far the coolest non-tourist related tour we had. This water diversion project connects the Yellow River to the Yangtze River in order to address China's uneven distribution of water resources. It is used for irrigation as well as supplying cities including Beijing in the northern provinces. We also toured the Shaunghui factory, getting the chance to see the similarities in production that we have in the U.S. It is a lot similar than you would think, which was something I was not expecting. The production was almost the exact same as a butchery we'd see here in America. It was great to see industrial tactics being used across the world for means of effective production. Finally, getting to explore the cultural norms of the country was something I was most looking forward to exploring and reporting about. We were fortunate enough to attend several shows and witness plenty of cultural dances and routines that were shocking in scale and talent. We attended a very interesting night show using live music and lighting design to tell the story of the elements and connection to nature.

Between both the United States and China, it is crucial for young leaders to get involved. Not just get involved, but also interact with each other and learn from one another. To keep prosperity between the two countries through agriculture and trade, it is imperative that we collaborate on new research methods, agriculture methods, and communication tactics.

Working on sustainable agriculture and bolstering the foreign goods market for agricultural commodities is crucial for the betterment of the economic world. Natural resources are completely at risk, and China is doing great things in order to create sustainable ways to maintain strong agriculture. This research and implementation will be beneficial to not just the countries' market, but the entire foreign market that works with China through trade.

In a world of growing tension in trade, fostering positive relationships in young leaders will be a huge benefit to the future markets and the future of research around the world. It is time that the world superpowers work together on saving the natural resources of the planet and work to keep agriculture strong so that the world can continue to eat.

Without this communication, the two countries will remain isolated in the world of agriculture and trade. We don't want trade wars in our future – we want prosperity and continued growth as the population of the world expands exponentially.

This trip provided me with great insight on discussion points that need to be brought up in the future (attached below) and I look forward to pursuing these interests in the future. This trip was just the starting point for this endeavor.

Attached below are my slides that will be presented to the Michigan Farm Bureau Board of Directors and Industry Leaders:

USHCA Young Leaders Delegation to China

- Sponsored by USSEC, selected as Michigan delegate
- Toured Chinese facilities and museums: NCWU Water Culture Museum, South to North Water Diversion Project, Henan Modern Agricultural Research Base, Grains Museum

MICHIGAN FARM BUREAU

Future Relationships

It is crucial to influence positive communication in agriculture between the two countries in an age of uncertainty in trade and peace deals around the world.

- Future discussions on how trade markets can impact the agricultural markets in both China and the United States

- Combatting natural resources depletion and promoting sustainable agriculture across the world using global research superpowers

- Using our differences to modernize and more effectively produce goods for the market

It is imperative to bring these discussions to light through working with Chinese counterparts.

United States Heartland China Association

I just had the amazing opportunity to travel to mainland China through the United States Heartland China Association. My university selected me for the experience, and I was thrilled. Being an agricultural student, I saw the trip as an opportunity to see how other countries use farming and technology to sustain their people and keep their economy going. What I gained in China surpassed all that I had expected it was enlightening and motivating.

Our trip had two big cities: Beijing and Zhengzhou. On Tuesday, June 3rd, we rode from Beijing to Zhengzhou on a bullet train. I had never experiance on a bullet train before, and that was an experience in itself. HOw fast the train traveled, comfort, and smoothness of the ride were absolutely impressive. It showed us just how advanced China's transport infrastructures are.

When we arrived in Zhengzhou, we visited the Henan Academy of Agricultural Sciences. We observed their structures and knew about their research in crops, soil, and technology. Science use in advancing agriculture was wonderful. Everything was so organized and efficient. It showed me how important it is to blend tradition with innovation to create strong agricultural systems.

On the next day, Wednesday, June 4th, we visited Henan University of Technology, with 39,000 full-time students. The size of the campus and variety of courses amazed me. Afterwards, we visited the South-to-North Water Diversion Project, which was one of the most magnificent sights I have ever seen. It controls floods and droughts by diverting water from southern China to northern China. As someone from west africa where flood control is such a big issue, this project really spoke to me. It showed me how engineering and planning can correct enormous problems.

We visited North China University of Water Resources and Electric Power on Thursday, June 5th. There was a welcome ceremony held by the university, and we got a chance to interact with students. We shared our cultures and experience, and that opened my eyes to how much we have in common. It was one of the highlights of the trip because I got a chance to learn from students like myself.

On the 6th of June, Friday, we visited Shuanghui, which is a big pig farm and meat processing plant. It was fascinating to visit as an interested observer who wants to learn about livestock. I learned about animal well-being, feed systems, and how safe meat is processed. The experience was fantastic where I learned a lot about the livestock industry.

We visited an egg farm that also had a crocodile farm on Saturday, June 7th. I had never experienced anything like it before! It was amazing to see how they managed to deal with two completely different kinds of animals. This exposed me to the extent to which farmers are resourceful and smart when running a business.

In total, the journey awakened me. I gained so much knowledge about agriculture, water consumption, and how different parts of the globe address issues. I also made amazing memories, experienced incredible people, and grew as a person and a professional. I'm so thankful to have been a part of this opportunity, and I will carry what I've learned with me into my future. I would not have exchanged it for anything in the world.

Earlier this month, I had the opportunity to travel to China with the United States China Heartland Association. Throughout this trip, 20+ students from across the United States were able to experience the culture, history, and agriculture industry of one of our largest trading partners. In this article, I will discuss some of my takeaways from the trip and how it will shape my view of U.S. and China relations. I would be remiss if I did not first mention a huge thank you to everyone at the United States China Heartland Association, USSEC, and ISA for selecting and guiding me through this experience.

My first takeaway is the dramatic shift you are seeing in the agriculture industry throughout China. Traditionally, Chinese agriculture and farming have relied heavily on small family plots of land to produce domestic food supplies. But as we see more and more of the population shift to living in the country's urban centers, we have seen a shift towards large-scale, corporate-style operations. We saw this heavily on our tour in the livestock sector, a laying hen operation of 3 million birds, and when we visited the Muyuan Foods to see their plans for large concentrated hog confinements. Much of the wheat harvest we saw was done on a small scale, but at the current urban/rural shift rate, you will see these small operations rented into large-scale tracts of land. Much of this is due to efficiency matters and is driven by health concerns. We recently saw the African Swine Fever destroy many Chinese hog herds. The thought is to shift traditional farming methods to more biosecure large operations to prevent this kind of disaster from happening again. These large operations will grow a lot of their feed, but we will see a slight increase in demand for U.S. soy products to accommodate these large operations.

The biggest question on everyone's mind going into this trip was what the trade talk would be like. I was surprised how receptive the representatives we talked to were to continue and expand trade with the U.S. The U.S. products on a quality basis can't be matched. At a sub-diplomatic level, our partners in China are very eager to do everything we can to continue to work together in the future. There is a lot of value in these types of interactions, especially with young Ag leaders, so we can continue working together moving forward. Once the pieces of the trade war are worked out, we will see continued trade relations. The biggest threat to trade for us is competing with other growing markets such as South America moving forward.

The final large part of the trip was the cultural experience. From a small town in Iowa to a large metropolis like Beijing was a change for me. The food differed significantly from Americanized Chinese food at home, emphasizing traditional cooking styles and dishes. One of my favorite parts was the emphasis on serving those around before yourself as a sign of respect. This was a pleasant surprise that I wasn't used to, leading to more genuine interaction among people. The meal was not just for nourishment but for community growth and to show appreciation to your guests.

Overall, I enjoyed this trip beyond what words can describe and I hope to continue to take advantage of opportunities like this one and keep in contact with all the new friends and colleagues I gained. I want to thank everyone who made this trip possible once again.

United States Heartland China Association Leaders Delegation Trip

June 1- June 8

Kailee Macy

Oklahoma State University

Summary

- I loved my trip to China and learned a tremendous amount about the culture and agriculture of the country.
- We visited many agricultural facilities and cultural sites.
- Each day of the trip was informative, educational, and had a varied agenda.

Day 1/2

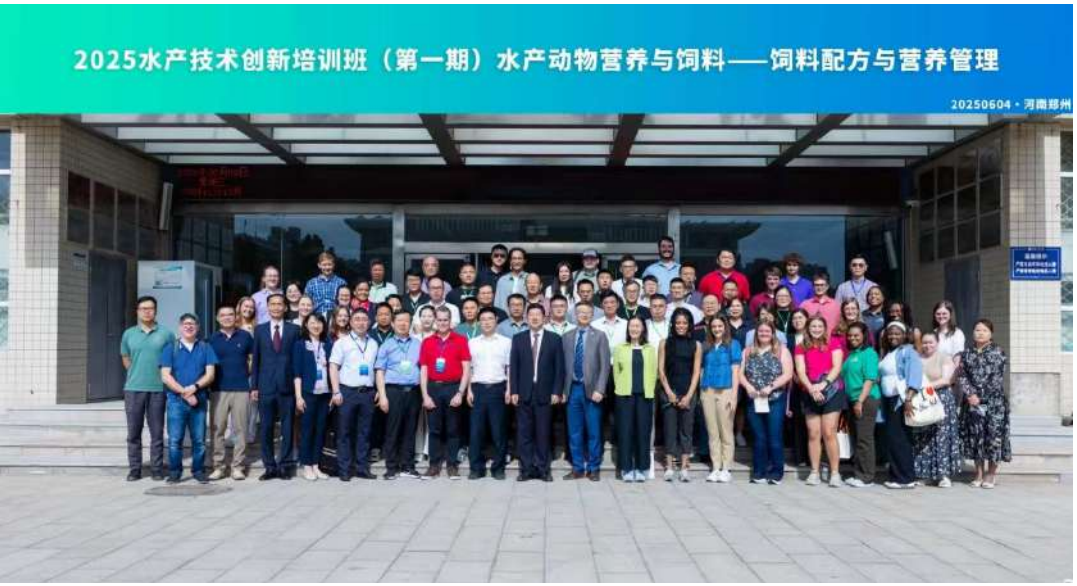
- Our group flew out on the 1st but did not land until the afternoon of the 2nd. We flew from San Francisco to Beijing. It was a fifteen hour time change.
- Upon landing we took a bus to the hotel which was located next to the train station we would be using the next morning.
- We went to dinner and had our first meal in China. I was amazed by the food that was presented to us and how it was served.






Day 3

- We had our first delicious hotel breakfast which I was very impressed by.
- Next we went to the train station to head to Zhengzhou in the Henan Province.
- Upon arriving in Zhengzhou we checked into our hotel and then went to the Henan Modern Agricultural Research and Development Base.
- This research facility was amazing and encompassed many different facets of agriculture.
- My favorite part of the station was seeing the Chinese Medicine portion where they were researching natural medicine they have been perfecting for thousands of years.
- For dinner that night we had a welcome banquet hosted by the Henan Provincial People's Association for Friendship with Foreign Countries.



Day 4

- Our group went to the Henan University of Technology.
- We were able to visit the China Grain Museum and attend a training course of the US-China Soy Value Chain Innovation Center.
- This course was based around fish nutrition in relation to soybeans.

Day 4

- After this we went to the Central Line of the South-to-North Water Diversion Project located on the Yellow River
- This water project has directly benefited 114 million people. It provides quality water to many civilians. It took nine years to complete and was an amazing project to see.
- In the afternoon we went to the Mixue Group. It is the world's largest franchise and is a drink company. It was interesting to see the size of their operation and hear about their plans for expansion to America.

Day 4

- Next we visited to the Muyuan Group which is a very large pig operation and saw the overview of the operation. This swine group has 140,000 staff and slaughtered 12.52 million head in 2024.
- That night we went to a very nice dinner where we saw a Chinese opera performance. I had never heard this before, and it was much higher pitch and not what I expected. It was beautiful to see and appreciate

Day 5

- We took a bus to the North China University of Water Resources and Electric Power. Here we saw the Water Culture Center which I thought was amazing. I enjoyed hearing about the passion and love for water as a natural resource.
- Growing up on an irrigated farm with water shortages and drought has instilled a deep passion for me in my appreciation for water as a natural resource. It was amazing to hear about how they care for their land.
- After this we saw dragon and lion dance performances and watched a cultural presentation put on by the University. The presenters asked for volunteers to try playing a Chinese instrument called Xun. They gave me the instrument to bring back to the United States.
- We then had a lunch at the university cafeteria. It was incredible to interact with other students who are our age in China.

Day 5

- Upon leaving the university we went to a Chinese Supermarket. It was interesting to compare what we saw there with what we have in the United States.
- I found the meats section to be particularly attention-grabbing and the variety they had compared to the United States.
- I also thought it was fascinating the lack of potatoes they had and that there were only yellow and red potatoes.

Day 5

- This afternoon we went to the Shaolin Temple and to the Shaolin Zen Music Ritual after that. In between we stopped for a delicious dinner.
- The Shaolin Temple was beautiful and full of architecture unlike anything I had ever seen. This is where Kung Fu originated and an important spot to Buddhism.
- The music show was beautiful and was in such a picturesque place. This was a day full of cultural immersion that was very important to me to learn and discover.

Day 6

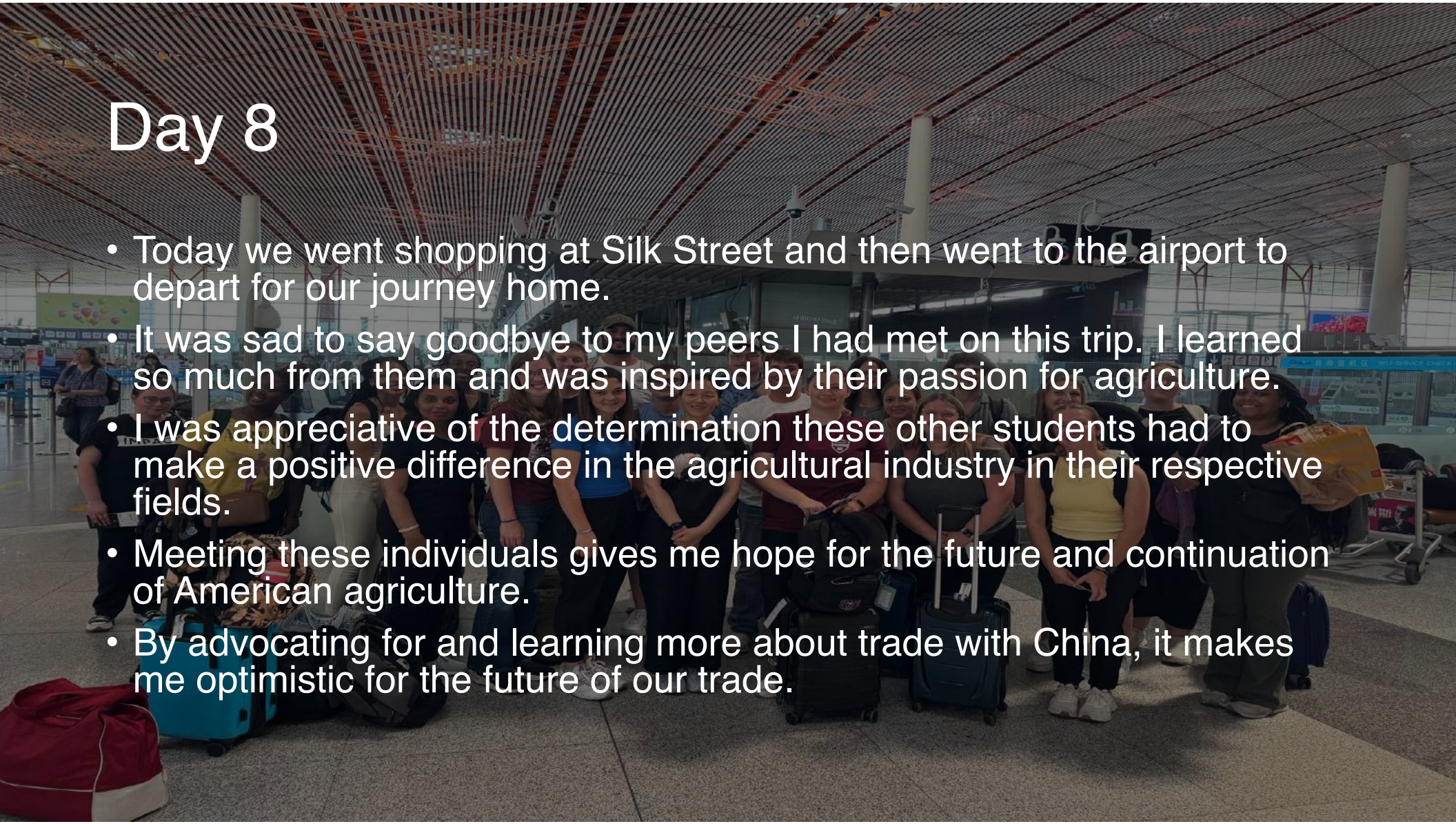
- This morning, we went to the Shuanghui Group and saw their slaughterhouse. It was interesting to see the scope of their operation and the difference between their products that get sent to the United States versus China.
- After this we took a train back to Beijing and had a meeting then dinner with USDA and Commodity Groups. This was an insightful experience and gave me a lot of perspective on the United States trade with China. I also learned more about what it is like to live in China as an American.

Day 7

- This morning, we went to the CP layer farm and crocodile farm. This was a very interesting experience to me. I had never been to operations like this before and gained a lot out of it in having a personal experience with these operations and not just through a screen.

Day 7

- Later that afternoon we went to the Great Wall of China and had our final dinner of Peking Duck.
- The Great Wall was one of the most beautiful places I have been to in my life. It was amazing to see it in real life and how large and steep it is.



Day 8

- Today we went shopping at Silk Street and then went to the airport to depart for our journey home.
- It was sad to say goodbye to my peers I had met on this trip. I learned so much from them and was inspired by their passion for agriculture.
- I was appreciative of the determination these other students had to make a positive difference in the agricultural industry in their respective fields.
- Meeting these individuals gives me hope for the future and continuation of American agriculture.
- By advocating for and learning more about trade with China, it makes me optimistic for the future of our trade.

Architecture

- I was fascinated by the architecture in China we saw throughout the entirety of our trip.
- The number of tall buildings in China was crazy to me. In the cities there were huge skyscrapers with unique architecture.
- All over the countryside were identically built apartment buildings.

Takeaways

- A famous Chinese proverb says that “One eyewitness is better than ten here-says.” I now have a direct experience with China and the experiences within it.
- This trip was truly life changing. I learned so much that significantly broadened my perspectives of both China and also of global agriculture. I grew a much deeper understanding of the quality of and importance of United States agricultural products to other countries and for our economy in trade. Getting to see the Shaolin Temple, Great Wall, and other cultural experiences changed my perspective of China and the people who live there. Now I want to share with others about how great China is and how kind the people are there.
- Throughout our visits I was amazed by the kindness and how welcoming everyone was that we met with.

Personal Growth

- The trip made me realize how deeply I care about animals and the cattle market. Cattle drives most agricultural markets in both animals and crops. I realized that there is a gap in my knowledge about the livestock aspect of agriculture and understanding the processes of it. I now want to double major in Animal Science and Agricultural Communications with a minor in Agronomy so that I can better understand a variety of agricultural processes and the reasons why producers are doing what they are.
- I also am very interested in agricultural policy and law and this trip made me further realize my passions for this and see law school as a potential option in my future.
- By understanding our relations with other countries it can help us to better our technology and trade relations.