

PROJECT AGRICULTURE

Chairperson: Fernando Arriola

Goals for Advancing Agriculture Trade and Innovation in Arizona, Canada, and Mexico

The **Canada Arizona Business Council (CABC)** recognizes that agriculture is a vital sector driving the economic success of Arizona, and its interdependent trade relationships with **Canada** and **Mexico** are fundamental to this growth. As global markets evolve, agricultural practices are transforming through the integration of advanced technologies, sustainable farming techniques, and collaborative cross-border efforts. Below are the **key goals** for advancing Arizona's agricultural future, strengthening its trade relationships, and embracing the technological shift in farming practices.

1. Strengthen Agricultural Trade and Cross-Border Relationships

Goal: Enhance trade relationships between Arizona, Canada, and Mexico to ensure long-term growth in the agricultural sector, increase trade volume, and navigate regulatory challenges effectively.

- **Action Steps:**

- Advocate for the **maintenance and expansion of favorable trade agreements**, such as **USMCA**, that eliminate tariffs, streamline customs processes, and support agricultural exports, particularly to **Canada** and **Mexico**.
- **Expand access** to agricultural markets in Canada and Mexico by exploring new export opportunities for Arizona's key agricultural products, including fruits, vegetables, nuts, seeds, and livestock.
- Establish regular forums for cross-border collaboration among agricultural stakeholders, including **farmers, trade associations, and government bodies** in Arizona, Canada, and Mexico to discuss regulatory changes, logistics, and best practices.
- Enhance cooperation between **agricultural research institutions** in Arizona, Canada, and Mexico to develop region-specific strategies for pest management, disease control, and sustainable farming practices.

Outcome: Boost bilateral agricultural trade, increase exports to key markets (Canada and Mexico), and foster smoother, more efficient trade routes and regulations that support Arizona's agriculture.

2. Foster Agricultural Innovation and Technology Adoption

Goal: Position Arizona as a leader in agricultural innovation by embracing advanced technologies that increase efficiency, sustainability, and productivity while minimizing environmental impact.

- **Action Steps:**

- Accelerate the adoption of **precision agriculture technologies**, such as **drones**, **soil sensors**, **satellite imaging**, and **data analytics** to optimize planting, irrigation, harvesting, and distribution.
- Expand the use of **blockchain** for tracking food supply chains, ensuring greater transparency, traceability, and quality control from farm to market.
- Promote the development of **robotic harvesters** and **automated machinery** to reduce labor costs and improve harvesting efficiency.
- Collaborate with **technology providers** and **startups** to integrate **AI** and **machine learning** in farming equipment, enabling real-time decision-making and predictive analytics for yield optimization.

Outcome: Lead in the transformation of agriculture through the widespread use of **smart farming technologies**, enhancing Arizona's agricultural productivity, reducing resource consumption, and promoting environmental sustainability.

3. Improve Workforce Development and Labor Policies

Goal: Ensure Arizona's agricultural workforce adapts to the transition from manual labor to technologically advanced farming practices by fostering the development of skilled workers in agricultural technology and management.

- **Action Steps:**

- Develop **training programs** and certifications in agricultural technology, including **robotics**, **AI management**, **data analysis**, and **precision agriculture** to prepare the workforce for future demands.
- Collaborate with **community colleges**, **universities**, and **trade schools** to offer educational pathways in **agricultural technology**, **sustainability**, and **water management** to create a skilled workforce ready for the new frontier of farming.
- Advocate for **labor policies** that ensure a reliable flow of seasonal workers, particularly from **Mexico**, to meet labor needs for high-demand periods such as harvesting.
- Partner with agricultural companies to create **apprenticeships** and **internships** for students and workers transitioning to new roles in ag-tech, equipment management, and sustainable farming practices.

Outcome: Build a **future-ready workforce** that meets the needs of modern agriculture and embraces technological advancements while maintaining a reliable labor force for key farming activities.

4. Promote Sustainable Farming Practices and Resource Efficiency

Goal: Encourage sustainable farming practices that conserve water, enhance soil health, and reduce environmental impacts, ensuring the long-term viability of Arizona's agricultural sector.

- **Action Steps:**

- Promote **regenerative agriculture** practices, such as **cover cropping**, **crop rotation**, and **no-till farming**, to improve soil health, biodiversity, and long-term productivity.
- Encourage the adoption of **water-efficient irrigation systems**, including **drip irrigation** and **smart irrigation** systems, to optimize water use in Arizona's arid climate.
- Advocate for **climate-smart agriculture** that integrates climate data, weather forecasting, and technology to improve crop resilience to extreme weather events and droughts.
- Work with **agriculture experts** to expand the use of **sustainable pest management** strategies, minimizing chemical use and promoting natural pest control methods.

Outcome: Promote a **sustainable agricultural ecosystem** in Arizona that conserves natural resources, protects the environment, and supports future agricultural productivity.

5. Enhance Regional Collaboration on Agricultural Research

Goal: Strengthen agricultural research collaborations between Arizona, Canada, and Mexico to drive innovation in crop management, pest control, water use efficiency, and climate resilience.

- **Action Steps:**

- Establish **joint research initiatives** among universities and agricultural institutions in Arizona, Canada, and Mexico focused on areas such as **soil health**, **crop improvement**, **water management**, and **sustainable farming practices**.
- Secure **research funding** from government agencies, private investors, and international organizations to support innovative agricultural technologies and practices in all three regions.
- Share **best practices** and **technological innovations** through cross-border seminars, conferences, and workshops that bring together farmers, researchers, and policymakers from Canada, Mexico, and Arizona.
- Collaborate on **climate change research**, particularly focused on **water scarcity**, **crop resilience**, and **adaptation strategies** for Arizona's unique agricultural challenges.

Outcome: Foster **cutting-edge agricultural research** that accelerates the development of sustainable farming technologies and practices across the region, helping Arizona remain competitive in the global agricultural marketplace.

6. Ensure Food Security and Resilience to Climate Challenges

Goal: Enhance food security in Arizona and North America by strengthening agricultural systems, improving trade resilience, and increasing the region's ability to adapt to climate-related challenges.

- **Action Steps:**

- Advocate for the creation of **regional food security strategies** that address the growing risks of climate change, including **droughts**, **extreme temperatures**, and **unpredictable weather** patterns in Arizona.
- Develop **climate-resilient crops** and technologies that enable Arizona's agriculture to adapt to changing weather conditions and mitigate risks to food production.

- Invest in **regional food hubs** and **local food networks** to reduce reliance on global food supply chains, ensuring that Arizona's agricultural products are distributed effectively within the state and across North America.
- Strengthen Arizona's **emergency response systems** to address food shortages, crop failures, or supply chain disruptions due to climate change or other global events.

Outcome: Build a **resilient, sustainable agricultural system** that ensures food security in Arizona and North America while addressing the impacts of climate change on production systems.

7. Increase Public Awareness and Advocacy for Agricultural Innovation

Goal: Raise awareness about the evolving agricultural landscape, promoting public and private support for innovation, sustainability, and cross-border collaboration in agriculture.

- **Action Steps:**

- Launch a **public awareness campaign** to educate the Arizona community about the importance of **agricultural innovation, sustainable farming**, and the role of cross-border collaboration with Canada and Mexico.
- Collaborate with industry leaders, farmers, and tech providers to showcase successful examples of **agricultural technology adoption** and **sustainable practices** that have led to increased efficiency and productivity.
- Organize **agriculture innovation expos** and **workshops** in Arizona that highlight the latest trends in ag-tech, sustainable farming, and cross-border agricultural collaborations.
- Support **advocacy efforts** at the state and national level to secure funding and policy support for agricultural innovation and climate adaptation.

Outcome: Increase **public and governmental support** for innovative agricultural practices, fostering a culture of **collaboration, sustainability**, and **technological advancement** in Arizona's agriculture sector.

Conclusion

Arizona's agricultural sector stands at a critical juncture, with evolving technologies, changing labor needs, and a rapidly shifting climate landscape. The **CABC's agricultural initiative** provides a roadmap for embracing the **new frontier of farming**, strengthening cross-border trade, and leveraging innovation to improve the state's agricultural productivity and sustainability. By **collaborating with Canada and Mexico**, Arizona can foster resilience, ensure food security, and lead the way in **sustainable, high-tech agriculture** for future generations.

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In 2023, Arizona proudly exported \$556 million in agricultural products to Canada, contributing to a total bilateral trade valued at \$869 million. This impressive figure included \$134 million in fresh and chilled vegetables, underscoring Arizona's commitment to producing high-quality agricultural goods. In return, Canada contributed \$313 million in processed foods, highlighting the collaborative nature of our trade relationship. (Reference: [Agriculture and Agri-Food Canada](#))

Canada plays a crucial role by supplying potash and other essential fertilizers for agricultural operations in Arizona. This interdependent trade relationship highlights the importance of collaboration. The Canada Arizona Business Council (CABC) created this initiative to explore how the future of agriculture will transform the farming landscape, as well as its supply chains and distribution networks between Canada, Arizona, and Mexico.

Canada, Mexico and Arizona have a deep, respected, and reputable agricultural trade relationship, which should be duly noted in the community as Canada is the state's major export partner: Canada (33%), Mexico (22%), and China (13%); with key exports encompassing a wide range of products, including fruits, winter greens, nuts, seeds, wheat, hay, cotton, eggs, beef, and milk, reflecting the state's rich agricultural diversity and productivity. (Reference: [Agriculture and Agri-Food Canada](#))

Maintaining and strengthening trade relationships with Mexico and Canada is crucial for Arizona's agricultural sector and its future. Tariffs, trade agreements, and regulatory considerations can influence the flow of goods. Arizona can benefit from cross-border collaborative agricultural research, pest management initiatives, and shared technology as part of USMCA.

In 2022, Mexico exported \$43.4 billion in agricultural goods to the U.S. Similarly, the U.S. exported \$28.4 billion in agricultural goods into Mexico, representing 70% of Mexico's total food and agricultural imports. The Port of Nogales, AZ is one of the busiest land ports for trade in the U.S., handling a large portion of the U.S.-Mexico agricultural trade. Such partnerships can enhance productivity and resource management. (Reference: [International Trade Administration](#))

Additionally, seasonal labor, much of which comes from Mexico, is essential for Arizona's agriculture. A significant number of jobs in Arizona are linked to the state's

role in facilitating trade with Mexico, including those in transportation, logistics, food safety, border inspection, manufacturing, and retail distribution.

Ensuring that labor policies support an adequate workforce is vital for maintaining production levels as advanced technology shifts from labor to technology managers who are running the software, equipment, and harvesting from their offices, transitioning from physical labor to a new skill set of workforce. This initiative is a collaborative effort to unite farmers, businesses, educational/trade partners, and government officials during the current transition from historic agriculture practices to the new frontier. It addresses the new requirements in energy usage for advanced farming technology, the transition from physical laborers to technicians, water efficiency, and climate management.

Arizona and Canada are embracing new best practices in agricultural technologies, replacing outdated practices with advanced methods. Farmers are utilizing technology to improve every aspect of agriculture, including planting, growing, irrigation, monitoring, harvesting, preserving, packaging, tracking, and distribution. Precision tools such as blockchain for tracking, drones, robotic harvesters, soil sensors, satellite imaging, and data analytics are being employed to increase farming efficiency. This not only increases crop yields but also promotes sustainable farming by conserving water and reducing the use of chemicals. Practices like regenerative agriculture and cover cropping are also improving soil fertility and biodiversity. (References: Agriculture New Tech and [Agriculture Innovation](#))

Arizona, Canada, and Mexico have established a highly interdependent trade relationship in agriculture. The collaboration among farmers and new tech practices in all three regions is driving innovation that will create more efficiency while reducing these trade partners' reliance on global markets. This partnership strengthens independence in North America, enhancing resilience to climate challenges and ensuring food security for the region. The CABO aims to raise awareness among its members and communities by fostering conversations that promote the growth of agriculture and the industry's future, particularly in relation to advanced innovations. The organization focuses on the impact of these changes not only on the agriculture industry as a whole but also on their implications for Mexico, Canada, and Arizona.