America's Crop for America's Future | June 2026

Introduction

Corn and the farmers who grow it have been a part of all of America's 250 years. From feeding a growing nation to foundational contributions to the early U.S. economy, corn helped make agriculture and rural America the backbone of the country, evolving from a survival staple to a powerhouse commodity.

Over the last two and a half centuries, corn farmers have driven opportunities for our nation. Today, they continue to meet the demands of a modern world through advanced innovations and efficiency gains that position the industry to deliver transformative potential for society. However, these same gains have enabled production to outpace demand growth, reinforcing the need for new structural sources of utilization.

Earlier this year, the National Corn Growers Association warned of the risks to the future of corn farming, and more broadly, American agriculture. Those risks remain and, in some cases, have grown even greater due to shocks to global supply chains.

Changing the outlook for corn farmers for the next 250 years requires a new approach. Today's corn industry was built on the foundational demand segments of poultry and livestock feed and domestic ethanol use. These markets remain an important foundation from which to build upon, though corn farmers will need new, diverse market opportunities to successfully counter ongoing productivity gains. **Driving new sources of demand is the top priority of the National Corn Growers Association.**

Specifically, NCGA sees opportunities for growth in three new sectors:

Efforts to drive corn demand in the maritime, sustainable aviation fuel and biobased products industries does not detract from or diminish existing sources of corn demand; rather, it reflects an imperative to expand and diversify markets for a U.S. corn crop that is projected to continue growing, thanks to ongoing advancements in genetics, management practices and equipment innovations. NCGA will continue to pursue policies and market development strategies for on-road biofuels, livestock feed and trade, for example. The passing of year-round E15 remains a top legislative priority for our organization. Yet, NCGA also recognizes that long-term success for corn farmers requires a strategy that explores and develops long-term future corn demand beyond today's most immediate priorities.

A future for corn farmers and a stronger rural America is possible. It will require an approach that combines the efforts of NCGA and state corn associations with industry partners, new customers and policy makers, and an openness to the surprising solutions corn provides. With the right opportunities, corn farmers have much more to give their country and the world – and their crop can be a powerhouse in new and unexpected ways for the next 250 years.

Future Demand for America's Crop

American corn farmers grew a record 17 billion bushels of corn in 2025, exceeding all projected expectations for continued productivity growth. Even if yields in 2026 and beyond are closer to trendline projections, the combination of long-term innovation in technology and inputs, together with ongoing improvements in on-farm management, positions corn farmers to continue achieving strong yield gains, while also continuing to improve across a wide set of the sustainability metrics. Because corn is grown across 90+ million acres annually, even adverse weather events that impact one growing area can often be offset by the sheer size and productivity of the overall crop. **In short, U.S. corn farmers will continue to produce a crop in increasing quantities, more efficiently and on fewer acres. The challenge opposite these impressive productivity gains is the development of markets to match the incredible size of current and future crops.**

With this near-term challenge in mind, NCGA has its sights set on opportunities in both existing and new demand sectors. The following report details the opportunities in each of these sectors, as well as the solutions required for corn farmers to access these markets.

MARINE FUEL

Corn-based ethanol can power global trade by replacing a portion of the petroleum-based fuels in maritime vessels.

POTENTIAL:	Secure at least 10% of the global maritime fuel market for U.S. corn ethanol by positioning ethanol as a scalable, low-carbon, domestically-produced marine fuel solution that supports American agriculture, energy dominance and global decarbonization goals.
MARKET OUTLOOK:	3 billion bushels would fuel 10% of global maritime needs.

The maritime sector represents one of the largest untapped opportunities for corn-based ethanol demand growth. With shipping accounting for roughly 3% of global greenhouse gas emissions and the International Maritime Organization (IMO) advancing decarbonization targets, ethanol can serve as an affordable, scalable and commercially available liquid fuel option for marine engines and dual-fuel applications.

Ethanol has been tested in ship engines designed for methanol as a decarbonization solution. Early vessel testing by major ship operators shows that 50/50 ethanol/methanol blends can operate effectively in a methanol engine. Recent tests show similar results from 100% ethanol operation. One original equipment manufacturer has recently announced the production of an ethanol-powered engine.

BARRIERS TO MARKET:

The barriers to access the maritime market are largely summarized into two categories: environmental accounting and narratives related corn production, and a U.S. regulatory and policy strategy still in development.

Environmental Accounting and Narratives

Current global carbon accounting frameworks frequently overstate emissions associated with U.S. corn ethanol through outdated or flawed indirect land use change assumptions. At the same time, foreign governments and foreign ethanol industry competitors continue to heavily influence international lifecycle analysis modeling and sustainability narratives within maritime and international climate discussions.

Additionally, international maritime and NGO critics continue to frame crop-based marine fuels as a threat to global food security, despite U.S. corn supply consistently outpacing food, feed and fuel demand.

MARINE FUEL

U.S. Regulatory and Policy Strategy

The U.S. government is in the process of aligning its energy dominance, export market development and foreign policy objectives in its formal engagement with the IMO. It is imperative that the U.S. accelerate development of a coordinated, proactive federal strategy that enables American ethanol to compete in this promising emerging global market. Asserting a clear U.S. negotiating position at the IMO would create needed certainty for shipbuilders, engine manufacturers, fuel suppliers and investors to turn to ethanol and would allow American corn farmers to capture new demand.

SOLUTIONS:
Environmental Accounting and Narratives

American corn growers are proud of their improvements in corn production efficiency, reduced fertilizer intensity, conservation practices, yield gains and carbon sequestration. They need a science-based carbon accounting framework that recognizes these gains. For this reason, NCGA continues to advocate for the adoption of GREET (Greenhouse gases, Regulated Emissions, and Energy use in Technologies)-style modeling and transparent lifecycle methodologies within international maritime policy discussions.

Additionally, NCGA is pursuing additional market research to better understand likely adoption timelines, vessel classes best suited for ethanol, price competitiveness, infrastructure gaps and more.

Finally, NCGA continues to communicate the value of corn-based ethanol in fuel systems around the globe and rebut claims that corn-based fuels will reduce global food supply.

U.S Regulatory and Policy Strategy

Engagement at the International Maritime Organization: The IMO Net-Zero Framework and future carbon intensity standards will heavily influence fuel adoption pathways. U.S. agriculture, ethanol producers and rural stakeholders currently have limited direct engagement in IMO negotiations. The U.S. government should advocate for:

- A technology-neutral fuel standard;
- Lifecycle-based accounting; and,
- Recognition of crop-based renewable fuels.

U.S. Government Engagement: Led by the U.S. Department of Agriculture, there should be concerted coordination around international advocacy for U.S. ethanol exports across agencies such as the Department of Energy, the Environmental Protection Agency, U.S. Trade Representative, and the State Department.

U.S. embassies and trade officials should proactively engage foreign governments, ports, and shipping alliances regarding ethanol marine fuel opportunities, and USDA export promotion and market development programs should include marine fuel market development.

AVIATION FUELS

Corn-based ethanol can be the foundational feedstock for Sustainable Aviation Fuel.

POTENTIAL:	**Secure at least 10% of the emerging global sustainable aviation fuel market through Ethanol-to-Jet technologies.**
MARKET OUTLOOK:	**1.7 billion bushels would fuel 10% of global aviation needs.**

As the aviation sector increasingly prioritizes greenhouse gas emission reduction, airlines, fuel producers, commercial customers and governments are rapidly searching for scalable, commercially viable low-carbon fuel solutions. Ethanol presents one of the most immediate and abundant domestic feedstocks capable of supporting large-scale SAF production while strengthening American energy security and creating substantial new demand for U.S. corn growers.

BARRIERS TO MARKET:

Barriers to the SAF market are similar to those barriers impeding maritime market access, namely the environmental accounting and narratives related to corn production, as well as a domestic regulatory environment that is still in development, and a need for more aggressive U.S. government engagement in global regulatory bodies.

The lack of recognition of ongoing productivity and efficiency gains in life-cycle modeling presents a barrier for corn growers to access the SAF market just as it does in the maritime market. The conversation on food and fuel similarly plays a role here.

Though policy developments have continued to extend and improve incentives to develop the SAF market and use of corn ethanol as a feedstock, outstanding regulatory actions continue to impede farmer access to the SAF market. Clear, workable standards regarding which conservation and regenerative agriculture practices qualify under SAF carbon accounting systems will provide farmers with much needed clarity and will spur further investment and innovation in the SAF market.

SOLUTIONS:

Environmental Accounting and Narratives

Federal SAF implementation guidance must properly account for improvements in corn production efficiencies found on corn farms today. For this reason, NCGA continues to advocate for the adoption of GREET-style modeling and transparent lifecycle methodologies within SAF policy discussions. The Department of Treasury, USDA, DOE and EPA alignment is necessary to establish consistent and practical carbon accounting standards.

AVIATION FUELS

U.S. Regulatory and Policy Strategy

Favorable SAF Investment Policies: Strong long-term policy incentives will be essential for scaling commercial ethanol-to-jet production capacity. While the Clean Fuel Production Tax Credit (45Z) is a step in the right direction, additional policies will be needed to drive large-scale investment specifically in ethanol-to-jet production.

For the 45Z tax credit, NCGA and biofuel stakeholders have emphasized the need for practical implementation timelines, flexibility for producers, regionally appropriate conservation standards and science-based verification systems. Existing USDA conservation programs should be recognized as eligible climate-smart practices. Treasury guidance should avoid creating unrealistic compliance burdens that discourage farmer participation.

Beyond 45Z, NCGA is encouraging additional policies that will encourage investment in ethanol-to-jet production, including policy and market-based incentives to lower the cost of finished fuel, encouraging airline uptake.

Engagement in ICAO: The International Civil Aviation Organization (ICAO) and Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) frameworks will heavily influence future SAF eligibility and international carbon accounting standards. U.S. agriculture and ethanol stakeholders currently have limited direct influence in ICAO negotiations. NCGA is calling for stronger engagement from USDA, DOE, EPA, the Federal Aviation Administration and the State Department to ensure U.S. interests are represented and competing on a level playing field with foreign agriculture and energy interests.

European Union SAF Mandates: The EU SAF Mandate will increasingly affect international air travel, especially for intra-EU flights and departures from the region. Currently, food and feed crops as defined by RED III are ineligible to be counted as SAF, which serves as a ban for U.S. crop-based (first generation) biofuels under the EU SAF Mandate. European sustainability requirements and carbon accounting methodologies will continue to restrict market access for U.S. ethanol as a feedstock for SAF if regulatory systems are not adjusted or aligned. NCGA is working with U.S. policymakers to engage proactively with international partners to avoid discriminatory treatment of American ethanol feedstocks.

BIOBASED PRODUCTS

Corn-based biomanufacturing has significant potential to replace fossil-derived chemicals and materials and aid in the transition to a more renewable, plant-based economy.

POTENTIAL:	Capture a 10% share of the global biochemical and biobased product market using corn-based feedstocks.
MARKET OUTLOOK:	6.6 billion bushels would replace the petroleum in 10% of the world's plastics.

BARRIERS TO MARKET:

Despite ongoing consumer interest in renewable and sustainable materials, biobased products face the barriers of higher production costs, a lack of infrastructure to scale production, an uneven regulatory playing field and a slower brand adoption timeline.

Petroleum-based products have the advantage of years of developing economies of scale and benefit from the political landscape.

This often means that new biobased products face the "Valley of Death," the capital-intensive phase between proof of concept and full commercial production, that often leads to many obstacles for start-up production.

SOLUTIONS:

Societal demand for and interest in renewable alternatives to petroleum is expected to continue increasing. Corn can offer a domestically produced, plant-based solution that diversifies the feedstock for consumer goods beyond petroleum while reducing carbon footprints and water use. Corn-based products can diversify supply chains, drive domestic economic development, and reduce reliance on products potentially at risk to global supply shocks.

Addressing these barriers will require an approach that combines supportive policies that expand infrastructure and incentivize scaled production and adoption of plant-based feedstocks, along with a market-driven strategy to build awareness and adoption of corn as a surprising solution to practical replacement of petroleum in everyday products.

BIOBASED PRODUCTS

U.S. Regulatory and Policy Strategy

Favorable Investment Policies: Strong policy incentives that expand and enhance production and investment tax credits for biochemicals are critical to accessing this market. Existing proposed federal legislation would provide these incentives, including:

- The Biobased Materials Investment and Production Act (H.R. 8137), which encourages the conversion of U.S. grown agricultural feedstocks into renewable chemicals and materials;
- The Biomanufacturing and Jobs Act, which strengthens USDA's BioPreferred Program (9002), which promotes the use of American-made biobased products as sustainable alternatives to conventional, petroleum-derived materials such as plastic.
- The Ag BIO Act, which strengthens USDA's Biorefinery, Renewable Chemical, and Biobased Product Manufacturing Assistance (9003) Program by updating the loan guarantee provisions to better support infrastructure development for biofuels, renewable chemicals, and biobased products.

Promoting Domestic Demand Through Expanded Federal Procurement Programs: USDA's BioPreferred Program is a voluntary certification program that promotes federal procurement of biobased products, sending strong market signals to grow America's bioeconomy and meet the needs of consumers.

- NCGA encourages Congress to support consistent, long-term funding to USDA's BioPreferred Program so biobased products can continue using the BioPreferred label and drive innovation for American grown feedstocks.
- Without long-term dedicated funding, USDA's ability to maintain the BioPreferred Program is uncertain. This risks shutting the door on innovation and stalling the growth of the biobased sector at a time when our global competitors are ramping up investments in ag biomanufacturing.

Additional Policy Strategies: In addition to the strategies outlined above, NCGA is advocating for the following to support increased uptake of biobased materials:

- Enhanced USDA ability to assist in the scale-up effort and leverage lab facilities, particularly the USDA Peoria, New Orleans, and Albany labs and researchers;
- Fair, science-based regulation of natural biogenic carbon emissions from the Environmental Protection Agency; and,
- Increased public-private investments, tax-advantaged financing structures, and loan guarantees from USDA and DOE.

BIOBASED PRODUCTS

Market Development Strategies

In addition to the policy outcomes pursued listed above, NCGA is also working to develop market demand for corn-based products by highlighting the environmental, economic and national security benefits of switching to biobased materials and chemicals. This includes a wide range of industry outreach tactics to encourage adoption of corn as the plant-based solution in the supply chain and connecting members of the value chain with venture capital to derisk investment.

Innovation Support: NCGA hosts an open innovation contest called the Consider Corn Challenge, which encourages start-up companies to use corn in their products. Winners of the challenge receive funding from NCGA to continue their development and overcome valley of death hurdles. NCGA and state corn partners take the innovation contest a step further in the development process by investing in the commercialization of these technologies via the Radicle Corn Challenge.

Research: NCGA has and continues to invest in research to better understand opportunities to support growth in the biobased economy and what hurdles exist to increase corn utilization. This includes research to hone in on specific molecules that hold the best opportunity for a corn replacement, industry surveys to identify areas NCGA can assist technologies overcoming the Valley of Death and quantifying the economic and environmental benefits of corn-based products.

ON-ROAD FUELS

On-road ethanol use continues to be a foundational source of demand for U.S. corn.

POTENTIAL:

Expand ethanol blending via advocacy on legislative rulemakings and regulations pertaining to the Renewable Fuel Standard, Clean Air Act, tailpipe emissions standards and fuel economy standards.

BARRIERS TO MARKET:

The on-road gasoline market remains the single largest source of demand for U.S. corn ethanol, but the runway for growth within today's policy and product mix is narrowing. Light-duty gasoline consumption is projected to plateau and gradually decline over the next decade as fuel economy standards improve, electric vehicles capture a growing share of new sales and overall vehicle miles traveled flatten relative to fleet efficiency gains.

SOLUTIONS:

Within that maturing market, ethanol's path to expanded demand runs through three levers:

- Nationwide, year-round access to E15 to lift the baseline blend from 10% toward 15%. NCGA is actively advocating for this legislation to pass the Senate and be signed into law by the President;
- A high-octane, low-carbon fuel standard that gives OEMs and refiners a clear regulatory and economic signal to certify vehicles and supply mid-level ethanol blends; and,
- Renewed OEM production of flex-fuel vehicles (FFV) to unlock E85 and higher blends in existing infrastructure.

A durable Renewable Fuel Standard underpins all three. Without coordinated policy action across these levers, the on-road market will deliver flat-to-declining ethanol demand even as overall biofuel opportunities expand in marine and aviation.

TRADE

U.S. corn growers export corn in all forms to global destinations in increasing volumes.

POTENTIAL:	The United States remains the world's leading exporter of corn and increases its exports of corn, corn co-products, ethanol and corn-fed protein to destinations around the world.
MARKET OUTLOOK:	Increasing exports of corn and ethanol by 10 percent would represent an additional 400 million bushels of corn demand.

One third of corn farmers' income is driven by export opportunities. As U.S. farmers are expected to continue producing increasing amounts of corn, securing and expanding international market access is critical to the long-term success of corn farmers.

As global population and middle-class growth accelerate – particularly in Southeast Asia, India, and sub-Saharan Africa – NCGA emphasizes that new trade agreements and market development programs are critical to ensuring U.S. corn farmers remain competitive and can meet rising worldwide demand.

BARRIERS TO MARKET:

Global competitors to U.S. farmers seek to increase their market share at the expense of U.S. agriculture. The shifts in policy and approaches to securing new trade agreements from administration to administration create openings for U.S. competitors to expand their market access, and in some cases, advance incompatible food and agriculture policy and regulatory approaches.

If the U.S. does not uncover new opportunities for American exports, our competitors will, and in many cases, they already have. Without consistent, forward-leaning market access pressure from the U.S. government, global competitors will seize on opportunities to increase their market share and may erect barriers for U.S. farmers.

Additionally, unlocking demand opportunities in all ethanol categories – sustainable aviation fuel, maritime, and industrial uses included – requires the U.S. to engage with international standards setting bodies. U.S. competitors are actively participating in these international organizations and are influencing rules to be in their favor.

SOLUTIONS:

Renew the U.S.-Mexico-Canada Agreement

Durable free trade agreements, like USMCA, are the gold standard to lock in market access opportunities for future decades to come. Mexico is the number one export market for U.S. corn and Canada is the number one export market for ethanol; renewing the USMCA is of utmost importance. In addition to the market access provided by USMCA, critical technical and dispute settlement provisions exist in the agreement which allow non-tariff trade barriers to be addressed and resolved. The United States' victory in its challenge to Mexico's harmful decree banning biotech corn was evidence of the effectiveness of USMCA's dispute settlement and biotechnology

provisions. USMCA provides the ability to not only preserve our top markets, but continue to grow them, especially for the potential for increased ethanol access in Mexico.

Develop New Market Access Opportunities

NCGA is calling on current and future administrations to prioritize trade negotiations that include high volume opportunities, target tariff reduction and nontariff barriers like biotechnology regulations, and increase ethanol blending. Exploring opportunities of strategic benefit for U.S. corn growers include India, Vietnam and Southeast Asia broadly, in addition to the African continent.

The best way to solidify these gains is through durable free trade agreements. Congress's approval of trade promotion authority grants the administration the ability to negotiate these FTAs. While passing trade promotion authority has faced political challenges, at a minimum, any trade deal must be durable and strictly enforced so that countries making commitments will honor them. This is especially important as progress is made on streamlining biotechnology approvals and addressing maximum residue levels.

Engage in Global Organizations

Though often criticized for being bogged down by bureaucracy and a lack of meaningful progress, international organizations possess broad global influence, and many nations rely on their work to shape their domestic policies. Participation by the U.S. is crucial to ensure that other nations do not advance policies that disadvantage American corn growers. The U.S. should work with like-minded partners to combat efforts that do not adhere to science and are purely protectionist.

Improve Access to Inputs

Farmers need access to inputs to have successful yields. However, with the cost of inputs at unsustainable levels, policies should tackle availability and prices head on. While farmers source domestically where possible, imports are needed to fill gaps, particularly for phosphate. Duties on phosphate imports, applied through an antidumping and countervailing duty investigation, continue to reduce competition and reduce options for farmers. Any additional efforts that increase prices are especially challenging for farmers to incur during this economic environment.

Reduce Global Barriers

U.S. corn growers have long been opposed to Brazil's 18% tariff on ethanol, and other policies that hurt access for American farmers. Thus, the Section 301 investigation into Brazil's acts and policies regarding ethanol is warranted and we encourage an outcome that leads to this tariff elimination, as well as allowing for participation from U.S. ethanol producers in Brazil's domestic companies.

Additionally, China's delay of biotechnology approvals also delays farmers' access to innovation. The Section 301 investigation into China's implementation of the phase one agreement is an important step to hold China accountable for these unnecessary and costly delays. The U.S. must prioritize addressing biotechnology approvals so that farmers can access more options as challenges arise.

A Note on Food and Fuel

A counterargument frequently made against the use of corn in non-food markets, specifically for ethanol, is that using a crop like corn for fuel decreases the available food supply for the country and our global customers. Approximately 99% of the corn grown in the U.S. is field corn and not meant for direct human consumption. Approximately 40% of field corn produced in the U.S. is used to feed animal protein sources, such as beef, pork and poultry. Corn-fed protein has been and will continue to be an incredibly important demand segment for corn; however, even with increased protein consumption in diets around the world, demand for corn from the livestock sector is unlikely to increase significantly in the coming years.

Critically, the corn processed for ethanol is not simply lost to the food system. For every bushel of corn processed into ethanol, roughly one-third of it returns to the feed supply in the form of distillers dried grains with solubles (DDGS), a high-protein livestock feed that displaces other feed grains and effectively keeps that portion of the kernel circulating in the food chain.

Furthermore, American corn yields have more than doubled since the 1970s thanks to advances in seed genetics, precision agriculture, and improved farming practices, meaning U.S. farmers are producing dramatically more corn on fewer acres. This productivity growth has allowed the ethanol industry to expand without displacing food or feed production, and the U.S. has remained one of the world's largest corn exporters throughout the entire period of ethanol's growth. Far from creating scarcity, the ethanol market provides a stable, value-added demand source that supports rural economies, encourages continued investment in agricultural innovation, and gives farmers the financial security to keep producing the abundant food and feed supply Americans and global markets rely on.

Conclusion

Corn farmers are expected, on average, to experience their fourth consecutive year of losses in 2026. A continuation of this trend will cause irreparable harm to agriculture, rural America and, more broadly, America's ability to provide for itself for the next 250 years.

Increasing and building new demand for U.S. corn to match the impressive productivity of U.S. farmers is the only path forward for long-term viability of the industry. For this reason, this report is focused on the necessary and immediate imperative of expanding markets for corn. However, this does not mean that corn growers are also not focused on other critically important issues for our industry, including ongoing and continuous improvements in sustainable production and risk management policies. This work remains an integral part of NCGA's mission and ongoing efforts to improve and increase opportunities for corn growers.

Corn farmers can, and will, provide new, surprising solutions for this country if given the opportunity to do so. To seize this opportunity, NCGA is already hard at work to position corn as the right solution in the eyes of new industries and customers, and to foster a policy and regulatory environment that removes market access barriers and better supports market diversification.

Corn is **America's Crop**. With the right opportunities, it can be an integral part of **America's Future**.