

USGC's Global Co-Product Marketing

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**U.S. GRAINS
COUNCIL**



Developing Markets
Enabling Trade
Improving Lives



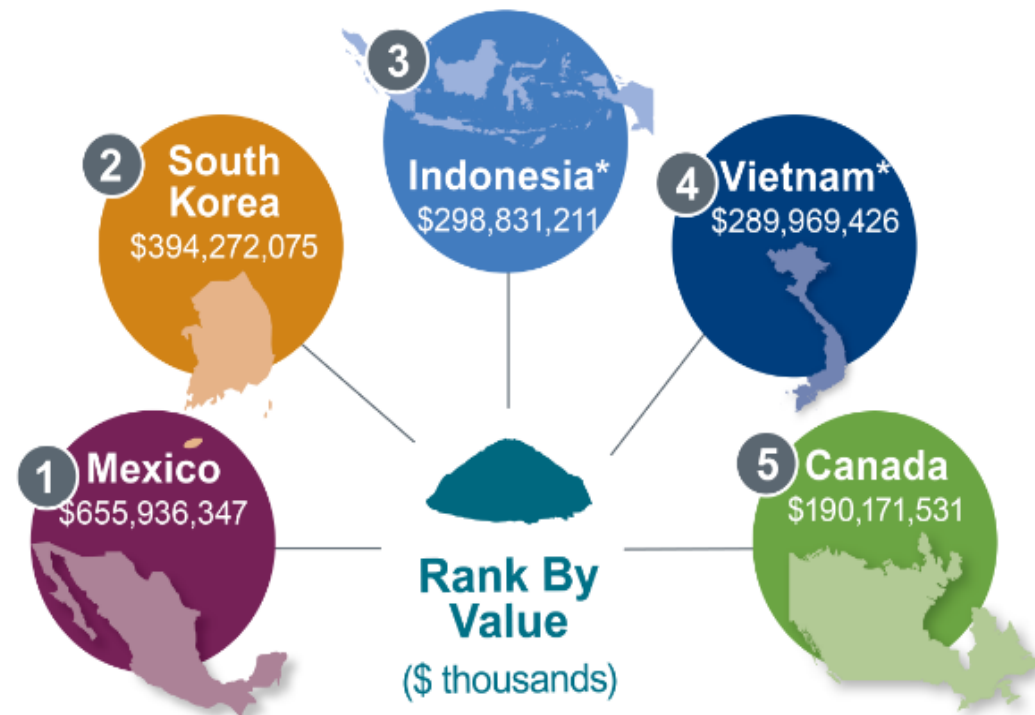
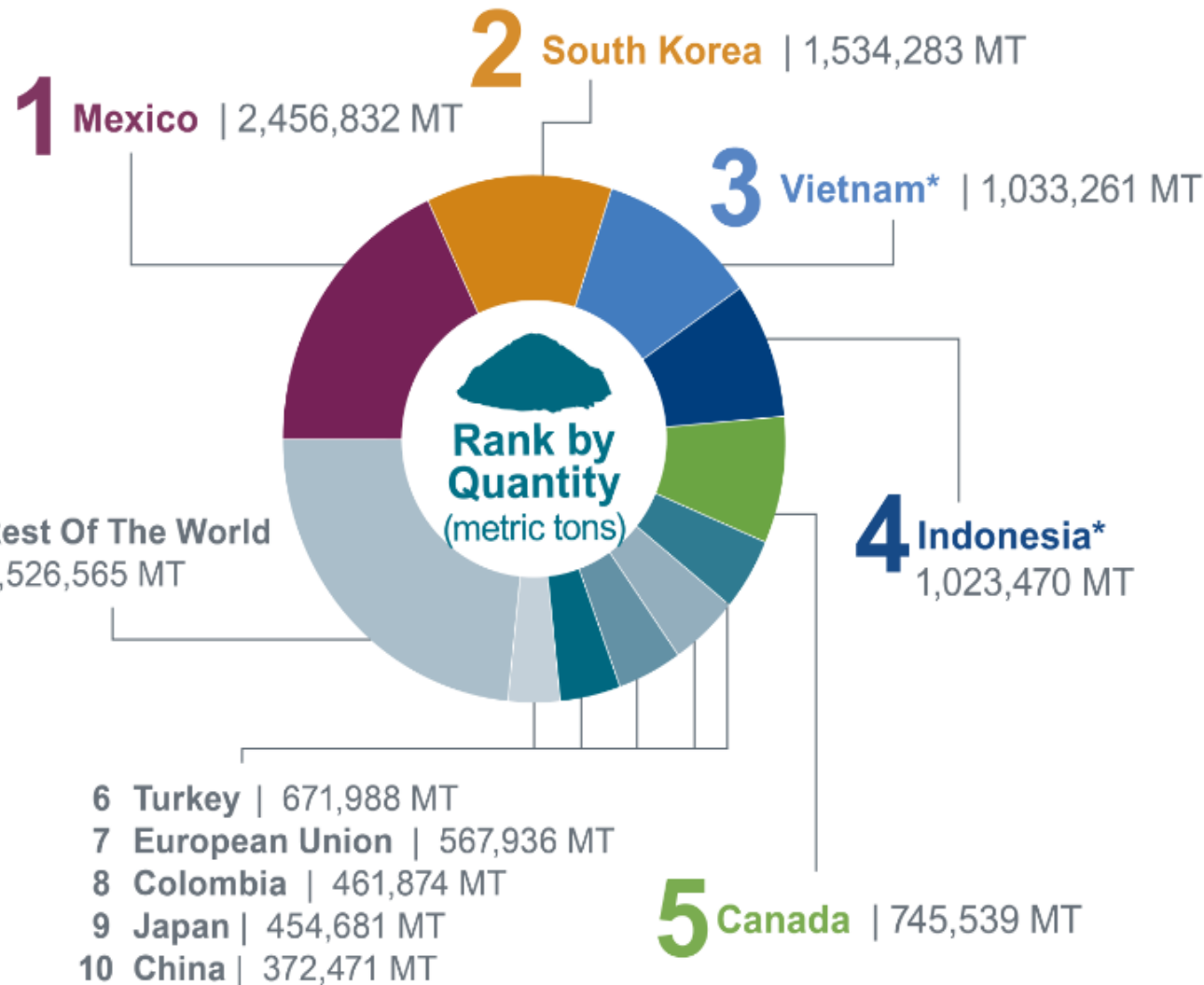
A global network of professionals building worldwide demand and developing markets for U.S. grains and ethanol.



Marketing Tools

- In Country Technical Training
- Trade Barrier Resolution
- Networking
- Trade Missions

TOP U.S. EXPORT CUSTOMERS IN MARKETING YEAR 2023/2024



6	Turkey	\$185,753,942	9	Japan	\$124,802,945
7	European Union	\$154,522,866	10	China	\$90,850,311
8	Colombia	\$151,486,129		Rest Of The World	\$681,954,710

Source: USDA Foreign Agricultural Service's Global Agriculture Trading System report for marketing year September 1, 2023 to August 31, 2024.

*DDGS is sold based on contract and at varying rates, therefore top rankings for tonnage do not align with rankings for value.

Canada Market Snapshot 2024

Country Overview:

Population / Growth	Urban % / Growth	GDP / Growth (PPP)	GDP per Capita (PPP)
40 million / 0.85 %	81.7% / 0.95%	\$1.84 trillion / 1.6%	\$49,031

- Canada resembles the U.S. in its market-oriented economic system, pattern of production, and high living standards.
- The livestock sector in Canada is large and well-developed. Around 2.26 MMT of pork were produced in Canada in 2022 and approximately 1.36 MMT of pork were exported that year.
- In 2022, Canada produced around 1.38 MMT of beef and exported almost 597 TMT that year. The United States accounted for 77.5% of Canadian beef exports.

Supply/Demand Basics:

- #8 export market destination for U.S. corn, importing over 651 TMT in MY 2022/2023.
- #5 export destination market for U.S. DDGS, importing 663 TMT in MY 2022/2023.
- #1 export destination import market for U.S. ethanol, importing 603 million gallons in MY 2022/2023.

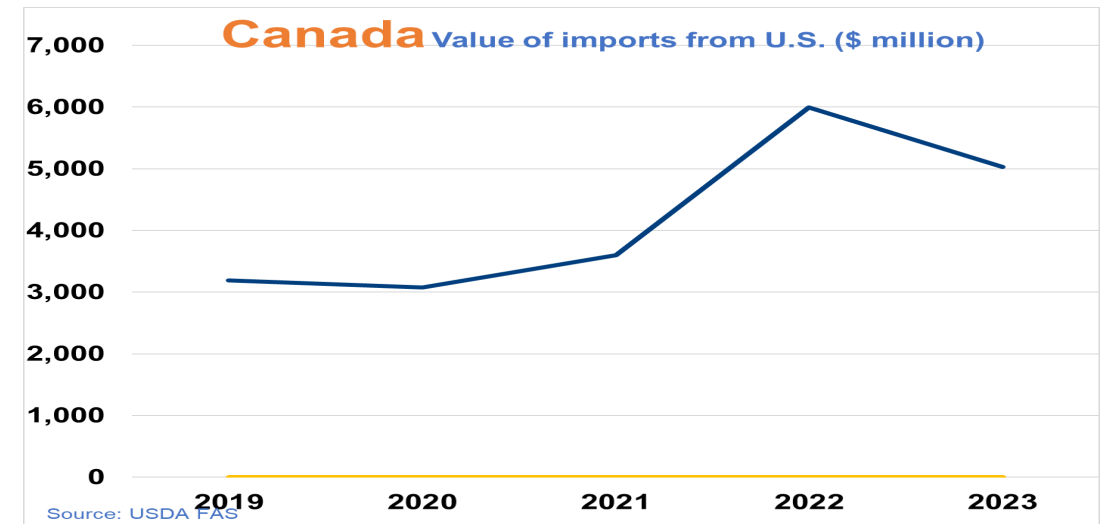
Commodity	2021/2022 Total Imports	2021/2022 Imports from U.S.	2022/2023 Total Imports	2022/2023 Imports from U.S.	U.S. Market Share 2022/2023	Market Assessment
Barley	142 TMT	228 TMT	86.2 TMT	48.4 TMT	56%	Large barley producer. Existing cross border trade.
Corn	3.66 MMT	3.6 MMT	651 TMT	651 TMT	100%	Opportunistic buyer.
Sorghum	6.9 TMT	6.9 TMT	9.2 TMT	5.1 TMT	55%	Opportunistic buyer.
Ethanol	466 Mil Gal	466 Mil Gal	603 Mil Gal	603 Mil Gal	100%	Largest import market.
DDGS	1.08 MMT	1.08 MMT	663.8 TMT	663.8 TMT	100%	Opportunistic buyer.

Trade and Market Share Overview

- In 2022, Canada remained a top export market for U.S. agricultural exports, totaling \$28.3 billion, accounting for nearly 15% of total U.S. agricultural exports.
- In 2022, the United States imported just over \$37 billion worth of agricultural products from Canada.
- Canada is a top market for U.S. ethanol. It is the #4 export market for U.S. feed grains in all forms with a value of \$6.3 billion.

Policy Overview:

- The first dispute settlement panel under the USMCA was brought against Canada, which was found guilty of violating the agreement by reserving most of its dairy tariff-rate quota for the exclusive use of Canadian processors. This decision sets the stage for regulation of the trade agreement.





USGC Steam Flaking & DDGS Mission

Southern Alberta, Canada

Takeaways:

- Producers are curious about the impact on quality and consistency of DDGS that changes in ethanol production technologies will bring
- Western Canadian producers have limited knowledge of corn fermented protein and high protein DDGS as there has not been much exposure to these ingredients and they may require demonstration in wheat and barley based diets
- Between 1.2 and 2 million tonnes of US corn were committed to Alberta over the feeding season
- This increased DDGS incorporation

Texas Steamflaking Mission

Texas Panhandle, June 2024

Objectives:

The purpose of the trip was to solidify Canadian end user knowledge and understanding of the finer details around steam flakers and their operational parameters. A feasibility study conducted by USGC Canada consultants (BeefSmart), highlighted the investment opportunity of bringing steam flakers to Canada. This trip allowed users to see firsthand what they look like, how they work, and their key operating parameters, focusing less on the science and more on the art of steam flaking. The trip connected feedlot owners, managers, and other industry professionals with an investment opportunity that will likely increase the presence of corn in Canadian feedlot rations.

Outcome:

Attendees gained confidence in the feasibility and value of investing in steam flaking mills. The insight and knowledge acquired will aid in making informed decisions and potentially integrating this practice into Canadian feedlot operations. The tour provided a comprehensive view of steam flakers in action, contributing significantly to Beefsmart's feasibility study and due diligence efforts to de-risk the investment opportunity.

Corn will continue to be a key feed ingredient in Alberta, and with the potential to steam flake it, we can enhance its value and economic viability for feedlot rations in the region.

Mexico 2024

Country Overview:

Population / Growth	Urban % / Growth	GDP / Growth (PPP)	GDP per Capita (PPP)
127.5 million / 0.6%	81% / 1%	\$1.4 trillion / 3.1%	\$11,091

- U.S. Mexico & Canada committed to a more collaborative and competitive North America in their trilateral January 2023 meeting. Together the three nations generate 1/3 of the global GDP.
- Immigration remains a critical sticking point throughout 2023, culminating in an unprecedented closure of 2 railways at Eagle Pass and El Paso, points that account for 45% of bilateral trade.
- As of 2022, The U.S. requested dispute settlement consultations under USMCA due to the undoing of 2013 energy liberation reforms and allowed State monopolies: Pemex and CFE to regain control.

Supply/Demand Basics:

- Feed industry growth is the main demand driver for grains and co-products.
- #1 importer of U.S. corn (white and yellow 16.2 MMT).
- #1 DDGS market with imports of 2.2 MMT. #1 importer of U.S. barley and barley malt with imports of 253 TMT.
- U.S. sorghum imports decreased, from 361.5 TMT to 198.4 TMT.

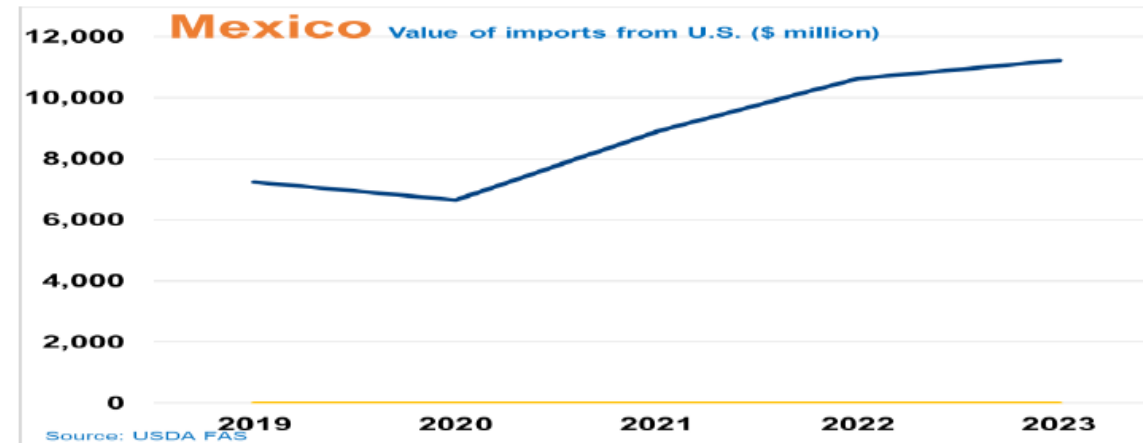
Commodity	2021/22 Total Imports	2021/22 Imports from U.S.	2022/23 Total Imports	2022/23 Imports from U.S.	U.S. Market Share 2022/2023	Market Assessment
Barley	450 TMT	0	458 TMT	0 MT	0	Australia and France taking the barley market share
Malt	647 TMT	339 TMT	631 TMT	289 TMT	46%	
Corn	17.2MMT	16.8 MMT	17.4MMT	16.2 MMT	89.8%	#1 importer of U.S. corn. Political issues.
Sorghum	361.5 TMT	361.5 TMT	198.4 TMT	198.4 TMT	100	Important buyer.
Ethanol	75.7 Mil Gal	72.8 Mil Gal	57.1 Mil Gal	53.0 Mil Gal	93%	Impacted by politics
DDGS	2.3 MMT	2.3 MMT	2.2 MMT	2.2 MMT	100	Growth opportunity.

Trade and Market Share Overview:

- U.S. market share for corn is **89.8%**
- Due to the imposition of a 50% tariff for exports in January 2023, Mexico only exported 74 TMT of white corn, mainly to the United States (22 TMT), Honduras (14 TMT), El Salvador (14 TMT) and Guatemala (9 TMT).
- The world's **5th** largest compound feed industry running at **88.8%** percent capacity and expanding at **3.6%** annually.

Policy Overview:

- US – Mexico – Canada (USMCA) ratified and into action on July 1, 2020.
- The dispute settlement consultations are ongoing 17 months later. The U.S. so far has decided against requesting the establishment of a dispute settlement panel to deal with the matter
- The Energy Commission (CRE) delays the opportunity for ethanol imports due to a court ruling prohibiting blending outside 3 major cities. The rest of the country is capped at 5.8%.
- On December 31, 2020, Lopez Obrador signed a decree eliminating the use of glyphosate and GE corn for human consumption by 2024.
- On February 13, 2023, Mexico published a modified decree abrogating the 2020 decree and narrowing its focus on biotech corn use in tortilla production destined for human consumption
- On August 17, 2023 USTR requested a dispute settlement panel challenging the measures concerning biotech corn,



Mexico Co Product Strategy

- Focus on CFP Promotion
 - Aqua, Petfood for immediate access
 - Continued promotion in swine and poultry
- Continued efforts in traditional DDGS inclusion in cattle feed
 - SE Markets, addressing logistics issues
- Sustainability Promotion
- General focus on trade disputes and logistics issues

Expanding Engagement in Europe, Middle East and Africa

TOP programs/ activities



- Kickoff E10 Pilot program in Nigeria
- Ethanol Policy Engagement in U.K. /Europe
U.S. Ethanol exports 370 Mil Gal in MY 24 versus 230 Mil Gal in MY23
- **Turkey Aquaculture Trials (DDGS & CFP)**
Kickoff “Aqua Training program” with Aydin University
Turkey: 6th largest destination of U.S. DDGS exports in MY 2024 with 672 TMT
- Starch Conference and Trials: ADM Morocco, => Vertex Spain
- **Buyers & Sellers’ Conferences in SSA : U.S. Corn and DDGS promotion**
Tunisian FTC and the Moroccan PTC (engagement and networking)
- Capacity Building and Feed & Poultry Industries’ development in East Africa (AKEFEMA, PAT, AFMA,....)

MY 2024 U.S. Exports into the region

CFP 21 TMT

CGM 36 TMT

Sorghum 280TMT

CGF 486 TMT

Ethanol 435 Mil Gal

DDGS 2.1 MMT

Corn 2.2 MMT

TOP 5 Products / Sales

- Ethanol to Europe: 370 Mil Gal
- Corn shipment to Europe 1.2 MMT
- DDGS to Turkey (6th destination)
- Egypt come back(DDGS,CFP,CGM)
- > CGF Shipment to Ireland and Israel

**Final data for MY 2024*

U.S. Grains Council, EMEA Regional Engagement

Regional Challenges

- Conflict in the Middle East and Suez Canal flows
- DDGS High Vomitoxin Level, Brazilian competition and Market Share Threat
- U.S. corn price competitiveness and perception (High BCFM level)
- GMO corn and co-products barriers in Kenya left on November 7, 2024

India

Country Overview:

Population / Growth	Urban % / Growth	GDP / Growth (PPP)	GDP per Capita (PPP)
1.436 billion / 0.81%	36.3% / 2.4%	\$13.119 trillion / 7.2%	\$9,891

- US-India trade policy remains unsettled without the restoration of GSP. This will be a focus for India in 2024 after the April/May 2024 national elections.
- Focus on biofuels remains and investments focus on making biofuels from grains, 131 new projects are coming online, which would need 9 MMT of grains, which India does not have.
- India founded the Global Biofuels Alliance with the U.S., Brazil, and seven other nations.

Supply/Demand Basics:

- India exported 3.3 MMT of corn in MY 2022/2023.
- Corn supplies, which were expected to hit a shortfall by 2026 due to the ethanol blending program will likely be realized in 2024, as more corn is diverted to ethanol to ensure stable sugar prices.
- Poultry feed demand has been growing by 7 to 8% over the past few years, and 20 MMT of corn went to poultry feed in 2023.
- 153 TMT imports of barley in MY 2023/2024 for malt to fulfill the demand for malt beverages and beer.
- The industrial chemical sector is expected to grow by 10% per year and move to green chemicals soon, pending feedstock availability.

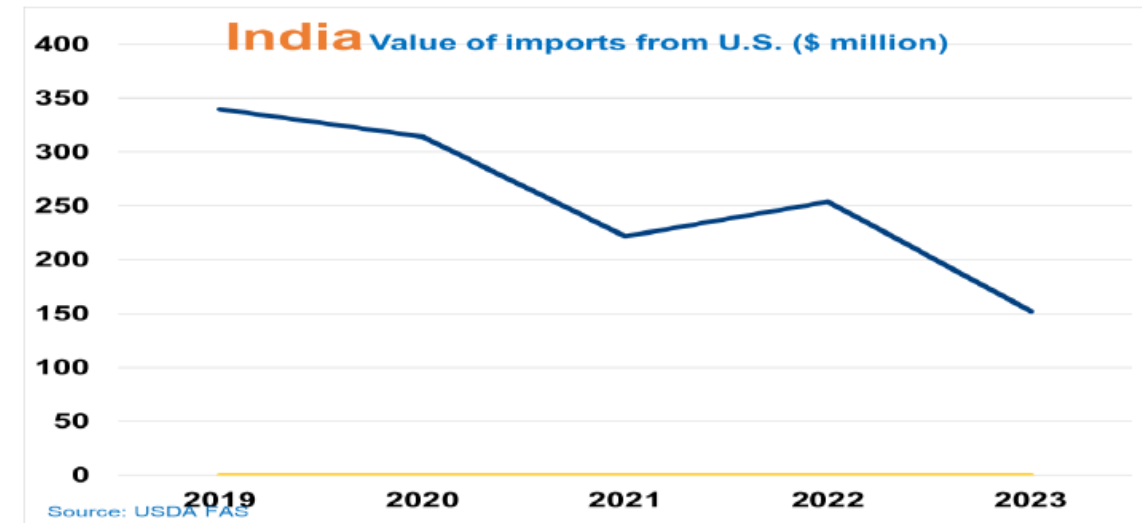
	2021/2022 Total Imports	2021/2022 Imports from U.S.	2022/2023 Total Imports	2022/2023 Imports from U.S.	U.S. Market Share 2022/2023	Market Assessment <small>(Data: Indian Customs and USDA GATS unless otherwise noted)</small>
Barley	153 TMT	57 MT	70 TMT	0	0%	SPS issues limit access.
Corn	0	0	0	0	0%	GM restrictions prevent U.S. corn imports.
Sorghum	0	0.2 MT	24 MT	0	0%	50% import duty limits market opportunity.
Ethanol	94.4 Mil Gal	92.3 Mil Gal	50.8 Mil Gal	42.7 Mil Gal	84%	Fifth largest importer of U.S. ethanol. Does not allow imported ethanol for fuel use. <small>(Data: TDM)</small>
Co-products	9.8 TMT	1.6 TMT	7.6 TMT	261 MT	0%	Significant opportunity but GM barriers exist.

Trade and Market Share Overview:

- Usually a top-five ethanol market, India remains an importer of U.S. ethanol.
- In 2023, the national average blend rate was 11.72%, against the GOI target of 12%.
- GOI has advanced the E20 blend mandate to 2026, despite being unable to import fuel ethanol and a lack of feedstocks to achieve their goal. Without action, blending rates are expected to fall to under 10% in 2024.
- The government's announcement to use grains for ethanol production is pushing the starch and feed industries to look for imported corn.
- Sustainable aviation fuel mandates are at 1% by 2027 and will move up to 20-30% in the future.

Policy Overview:

- India does not allow the use of GM seeds in any crop, except cotton. Due to looming feedstock shortages, the feed, starch, and ethanol industries have been asking for a ban on exports of corn, lowering corn tariffs, and GM corn market access for both sowing and import.
- GM Mustard for planting has been allowed by GEAC and is pending a final nod from the court. GOI is keen that Mustard and other GM crops should see the light of day. CRISPR technology is not part of the GM law.



SEA – Threats

- Increased toxin prevalence over the last three years in containerized DDGS has increased mistrust in the commoditized DDGS U.S. supply chain. Increase testing scrutiny, rejections and new discount tables are being pursued to mitigate the risk. Customers are wanting desperately to be able to buy from the plants directly.
- Industry needs to partner with Farmers and seed companies to work toward a solution to the toxin problem.
- SA Competition
- Past Khapra Beetle detections in U.S. DDGS shipments in Thailand and Vietnam have lingering fumigation protocols in place which stagnate U.S. DDGs exports.

SEA – Opportunities

- Increasing DDGS use in Dairy and Beef production, a fast growing protein segment in Southeast Asia
- Promoting and increasing the use of DDGS in aqua species such as Tilapia, seabass and catfish
- Promoting and increasing the use of CFP in carnivorous aqua species such as Shrimp, Grouper, Seabass
- Poultry and Swine continue to lead demand with Aqua and Dairy being the new emerging demand sources.

Korea

- The Korean compound feed market is growing by 2-3% annually, and the demand for DDGS is also steadily increasing.
- 1,061 thousand tons were imported from January to September this year, showing a 23.4% increase compared to the same period last year, and it is expected to set a record of 1,300 thousand tons by the end of this year.
- In MY 2023/24, US DDGS exports to Korea amounted to 1,534 thousand tons, up 25% from 1,227 thousand tons in MY 22/23.
- In the 1st Q of 2024, about 3,000 tons of CFP (Corn Fermented Protein) containing more than 50% crude protein were imported and supplied as a substitute for soybean meal in the piglet feed and aquaculture feed markets, but it is expected to take some time for imports to expand.

Japan

- Japan has been importing more than 400,000 metric tons per year since 2012, is a price driven market.
- The Council Japan has been registering DDGS with MAFF as a feed ingredient. As the fat content lowered, the Council re-registered low fat DDGS as a new product.
- USGC has also begun registration of Corn Fermented Protein products with MAFF.
- The Council Japan plans to conduct its own CFP feeding trial on cattle that is required for the registration as a cattle feed. The Council also focus on CFP uses for pet food and aquaculture feed.

Thank you!

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