



5/1/2026

# White Paper - Summary

## Re-Introduction of a Grain Sorghum Futures Contract by the CME Group



### GUY H. ALLEN

SENIOR ECONOMIST – INTERNATIONAL GRAINS PROGRAM  
DEPARTMENT OF GRAIN & FOOD SCIENCE, KANSAS STATE UNIVERSITY

### DANIEL M. O'BRIEN

PROFESSOR – EXTENSION & APPLIED RESEARCH  
DEPARTMENT OF AGRICULTURAL ECONOMICS, KANSAS STATE UNIVERSITY

### Suggested Citation

Allen, Guy H., Department of Grain Science, and Daniel M. O'Brien, Department of Agricultural Economics, Kansas State University; "**White Paper Re - Introduction of a Grain Sorghum Futures Contract by the CME Group.**" May 2026

<https://agmanager.info/grain-marketing/publications/re-introduction-grain-sorghum-futures-contract-cme-group-full-paper>

<https://agmanager.info/grain-marketing/publications/re-introduction-grain-sorghum-futures-contract-cme-group-executive>

Any use of the original material in this paper for educational and academic purposes must be attributed to the authors and subject to their permission.

# Executive Summary

This white paper considers whether the CME Group should reintroduce a physically deliverable Grain Sorghum Futures contract.

The intent of this white paper was to provide a body of information to support informed consideration and discussion on the topic.

## Background and Key Drivers

This paper was initiated with a concern that the current U.S. grain sorghum market, without an effective grain sorghum futures contract, is lacking effective price discovery, along with a forward pricing curve and appropriate price-risk management tools.

At present, grain sorghum is largely priced and cross-hedged against CME Corn futures. While corn futures have price transparency and deep liquidity, and are familiar to the grain sorghum industry, and while grain sorghum is a substitutable input for feed and ethanol usage, corn market fundamentals differ sufficiently from grain sorghum that corn futures present challenges as a satisfactory cross-hedge. While corn futures may be used to offset broad coarse grains complex directional price moves and trends, corn does not adequately capture grain sorghum's unique and predominantly Western Corn Belt-focused set of crop production risks and rail-based delivery economics.

Grain sorghum production is concentrated in the Western Grain Belt of the United States, where regional crop moisture constraints, drought, and crop acreage competition can impact grain sorghum production, which are inconsistent with the broader central and eastern U.S. Corn Belt. Additionally, commercial movement of grain in the western corn belt is more dependent on rail transportation, as compared to barge transportation in the east, making western supply chains more disposed to shuttle capacity, car availability, and western rail export lanes, rather than on the Mississippi River System and Illinois Waterway Delivery System (IWDS) in the central and eastern corn belt. This is highlighted by the CME corn futures price being anchored in a delivery mechanism based on the IWDSA Illinois Waterway Delivery System in the eastern corn belt.

Additionally, export demand and trade in grain sorghum differs significantly from corn. Trade exposure for U.S. grain sorghum is frequently concentrated with Chinese imports, where U.S.-China trade and tariff policy, and geopolitical trade shifts, can significantly differentiate grain sorghum's market value. As a result, a significant portion of sorghum's market price risk remains outside of the corn-based cross-hedge.

The principal argument against the reintroduction of CME Sorghum futures is that any new contract could fall back into the same "liquidity trap" that undermined earlier sorghum futures contract introduction efforts. A contract can be economically justified and can still fail if it does not attract enough two-sided participation by the trade to provide reliable pricing, manageable bid-offer spreads, and confidence that commercial hedges can be entered into and exited from without undue cost.

The weakness of the current system of cross-hedging grain sorghum price risk in corn futures is therefore not that it lacks liquidity, as is now offered by corn futures. Rather, sorghum lacks a sufficient market "fit" with corn, resulting in unacceptable basis volatility – a result of the "sorghum – corn" spread.

Additionally, the present corn market does not provide the grain sorghum sector with adequate "price risk" management, along with a clearly defined forward price curve built on grain sorghum's own supply-demand fundamentals. Instead, it provides a corn market-based forward price curve with adjustments for sorghum market factors that are frequently unstable, locally variable, and influenced by sorghum-specific risks that are not directly represented in the broader U.S. corn futures market trade.

This present set of circumstances weakens price discovery and hedging performance for sorghum markets.

## **Proposed Solution and Contract Features**

The reintroduced CME grain sorghum futures would provide the opportunity to improve the price discovery processes, hedging effectiveness, and basis clarity for physical cash grain sorghum markets.

An underlying Kansas-based delivery system in the Western Corn Belt is fundamental to the present proposal. By mirroring the revised CME Kansas Hard Red Winter Wheat delivery framework that is rooted in a Western Corn Belt rail-based grain transportation system, a reintroduced grain sorghum futures contract delivery system would more closely match the flow of U.S. grain sorghum to primary export markets at the Texas Gulf, Center Gulf, and Mexico, with the possibility of extending into the Pacific Northwest when economics justify this movement.

Current plans proposed by the CME Group for grain sorghum futures are to be based on U.S. No. 2 Grain Sorghum, use the standard 5,000-bushel contract size, contract months aligned with corn futures, and physical delivery through shipping certificates cleared via CME Clearing. The proposal is also cautious about the inclusion of No. 3 Grain Sorghum as deliverable. Note that final details are still pending final CME and regulatory approval.

To help address this concern, at least initially, the CME Sorghum futures contract would be quoted as a differential to corn, rather than solely as a flat-price grain sorghum futures instrument, with the aim to leverage the liquidity of the existing corn futures into grain sorghum futures without leaving sorghum subordinate to corn as a pricing proxy. Other approaches are also being considered by the CME to address the concern of contract liquidity.

## **Anticipated Impacts**

With the successful reintroduction of a CME Grain Sorghum Futures Contract, grain sorghum producers and end users alike would have a more robust forward pricing mechanism and set of risk management tools. Country elevators and terminal merchandisers would have a more effective hedging mechanism that is better suited to managing the risks across the cash markets in which they currently operate. Exporters and importers of grain sorghum would benefit from improved supply chain planning, along with more effective means to manage risk tied to freight, destination values, and China-driven demand shocks. Lenders of trade finance would have a more reliable basis for valuing sorghum inventories and marketing positions.

## **Conclusion**

A re-established CME Grain Sorghum Futures Contract, modeled on recent changes to Kansas HRW Wheat Futures, offers significant benefits to the sector.

A reestablished CME Grain Sorghum futures contract will succeed only if it provides the trade with a price determination mechanism that is commercially more effective than the present proxy cross-hedging system provided via corn futures. If successful, the grain trade would gain a grain sorghum market with increased price transparency, improved price discovery, an improved hedging mechanism with reduced basis volatility, and reduced market asymmetry.

Readers are encouraged to further review the comments in Section VII. Initial Conclusions, Findings, and Recommendations.

The intent of this white paper is to provide a body of information to support an informed discussion and consideration of the topic. Ongoing feedback from industry stakeholders is encouraged to continually refine the proposal and if adopted, to ensure its long-term viability.

## A. Conclusions and Findings

References below are to the location in the complete document.

See Table Content for complete document at the end of this summary.

### 1. Findings on Underlying Delivery Process

The architecture of the underlying delivery process is the cornerstone for any derivative or futures contract. It alone can determine the success or failure of a contract.

It has been assumed here that recent changes in the Kansas HRW Contract have successively addressed the underlying delivery issues involving loadout, transportation, and other related issues, and it would be suggested that the industry has moved a good way toward eliminating several of the underlying issues with the previous delivery process that plagued the Sorghum Futures Contract in the past.

“Mirroring” the longtime and well-established Kansas HRW Wheat Contract will provide confidence and notably increase the initial familiarity and understanding of a newly introduced CME grain sorghum derivative and futures contract, significantly increasing its acceptance and likelihood of success. In addition, the approach of “mirroring” the existing template of the CME Kansas HRW Wheat Futures contract in re-designing a CME Sorghum Futures contract would more readily allow for easier regulatory approval.

As such, it is suggested that this effort should be quickly adopted by the trade, leading to success.

### 2. Findings on Price Risk - Futures

The lack of a dedicated derivatives or futures contract for grain sorghum results in several problems for farmers, end users, and the market, which are primarily centered on increased price risk and reduced risk management efficiency.

With a directly related derivative and sorghum futures market, participants would be able to lock in futures prices for a future date, thereby enabling hedging and managing price risks.

*[Ref: Section V. Potential Impacts and Concerns: A. Price Risk 1. Impacts on Futures on page 71]*

### 3. Findings on Price Risk - Basis

Currently, grain sorghum is frequently priced off corn futures. This creates a "basis risk" that many market participants cannot hedge effectively. With a dedicated derivatives and futures market for grain sorghum, commercial hedgers would be able to establish a more effective hedged position with more well-defined basis parameters, with reduced cross-commodity risk exposure, and reduced basis volatility and risks. This would enable significantly better risk management practices for all participants across the supply chain.

*[Ref: Section V. Potential Impacts and Concerns: A. Price Risk 1. Impacts on Futures on page 72]*

### 4. Findings on Price Discovery and Price Transparency

Without question, the reintroduction of a derivatives and futures contract for grain sorghum would provide the opportunity for more **efficient price discovery** and significantly improve **price transparency**.

*[Ref: Section V. Potential Impacts and Concerns: B. Efficient Price Discovery and Transparency on page 73]*

## **5. Findings on Market Information and Asymmetry**

For grain sorghum, market information flow is limited, less formal, and relegated to regional cash markets, potentially leading to information asymmetry between market participants, including producers, end users, exporters, importers, and other supply chain operators.

An established derivatives and futures market for grain sorghum would create a platform for the timely collection and distribution of relevant market information.

*[Ref: Section V. Potential Impacts and Concerns: C. Access to Information and Market Asymmetry: 1. Market Information on page 76]*

Currently, sorghum pricing is often opaque and fragmented, leaving individual producers with limited bargaining power.

The introduction of a new grain sorghum futures contract would address market asymmetry—where one party (typically large buyers or elevators) has better information than another (producers)—by creating a public, centralized platform for price discovery.

*[Ref: Section V. Potential Impacts and Concerns: C. Access to Information and Market Asymmetry: 2. Information Asymmetry on page 76]*

## **6. Generating Sufficient Market Liquidity**

This is a key strategic point for reintroducing grain sorghum derivatives and futures contracts.

A new market's success will hinge on achieving sufficient liquidity, establishing sufficient price discovery relative to underlying physical cash markets, and successfully navigating existing trade policies and geopolitical factors.

*[Ref: Section V. Potential Impacts and Concerns: D. Potential Market Liquidity and Activity: on page 80]*

Key to help establish sufficient liquidity is the unique approach of trading a “sorghum – corn” spread, leveraging the liquidity of corn into grain sorghum.

*[Ref: Section V. Potential Impacts and Concerns: D. Potential Market Liquidity and Activity: 3. Other Possible Efforts Supporting Market Liquidity and Activity on page 84]*

Note that this unique approach is likely to require significant changes to many cash trading companies' back office and accounting systems.

In addition, this change will require some additional educational efforts and training by the CME or the private sector to sufficiently evolve the industry to adopt this unique approach.

To help in developing liquidity and encourage broad participation across the trade, the developed trading platform should have the capacity to easily execute and trade all three types of trade orders:

- i. "Inter-Commodity Spreads" to Corn, (possibly HRW Wheat) Orders
- ii. "Intra-Commodity Calendar Spreads" Orders
- iii. "Absolute" or "Flat Price" Buy / Sell Orders

*[Ref: Section IV. Currently Proposed Contract Terms and Delivery: B. Order Placement – page 44]*

It is important to be under no delusion that the volume traded in a CME Grain Sorghum Futures Contract would reach the levels of corn, soybeans, or wheat. As such, what will be the measure of success for reintroducing grain sorghum derivatives and futures contracts?

*[Ref: Section V. Potential Impacts and Concerns: K. Measuring Success of a Derivatives and Futures Market on page 107]*

## **7. Findings on Volatility**

In essence, while general market volatility factors like weather and global supply/demand will persist, it is widely accepted in agricultural economics that a dedicated, viable futures contract would be a valuable tool for managing risk and would ultimately reduce the price volatility experienced by participants in the physical cash market.

Research and empirical data indicate that physical cash markets often exhibit reduced volatility when a related futures market exists, primarily due to enhanced price discovery and the availability of "risk-shifting" mechanisms. However, this relationship is non-linear and depends heavily on the "strength" of the coupling between the two markets.

Also of significance would be the separation of volatility in the drivers of grain sorghum prices, versus the drivers of corn volatility arising from a less correlated cross-hedge.

Basis Risk and Volatility for grain sorghum traded against a grain sorghum futures contract would be significantly reduced and trade in a narrower and more clearly definable range.

*[Ref: Section V. Potential Impacts and Concerns: E. Potential Impact on Market Volatility: 2. Reduced Market Volatility on page 86]*

## **8. Findings on Hedging**

This white paper suggests that the Basis Risk and Volatility would be significantly reduced for grain sorghum directly hedged in a grain sorghum futures contract. More to the point, the sorghum basis trading range would trade in a much narrower range and be significantly more clearly definable against DVE calculations.

Currently, without a direct sorghum futures contract, producers and buyers must "cross-hedge" using corn futures, which creates a greater "basis risk" (the difference between the local cash price and the futures price) than would exist with a direct sorghum contract.

Without a dedicated futures contract, cross-hedging grain sorghum in an alternative commodity, most commonly corn futures, presents several challenges, primarily involving increased basis risk, difficulty in determining an accurate hedge ratio, and other logistical/cost factors.

*[Ref: Section V. Potential Impacts and Concerns: F. Efficient Hedging Mechanism on page 88]*

## 9. Findings on Alternative to Cross-Hedging

While cross-hedging in corn is currently necessary without a dedicated sorghum contract, the practice is problematic because it introduces the risk that the hedge will fail to provide the intended price protection due to the imperfect correlation between the two commodities, the unique market drivers of grain sorghum, as well as the absence of the possibility of “convergence” between grain sorghum and corn.

There are several major challenges in “cross-hedging” agricultural commodities when a direct hedge in the same commodity is not available. Cross-hedging grain sorghum using corn futures (or, on some occasions, wheat) can be problematic primarily because the two commodities, while reasonable substitutes, do not have a perfect price correlation.

In regard to cross-hedging, the core issue is the increased basis risk, along with the lack of convergence through the underlying delivery process. This implies the cross-hedge has definable protection against the specific price movements.

*[Ref: Section V. Potential Impacts and Concerns: F. Efficient Hedging Mechanism: 2. Why Hedging Grain Sorghum in Corn Can Be Problematic on page 89]*

## 10. Findings on Convergence

*The primary problem in regard to cross-hedging is the increased basis risk, along with the lack of convergence through the underlying delivery process.*

In summary, while cross-hedging in corn is currently necessary without a dedicated sorghum contract, the practice is problematic because it introduces the risk that the hedge will fail to provide the intended price protection due to the imperfect correlation between the two commodities, the unique market drivers of grain sorghum, as well as the absence of the possibility of “convergence” between grain sorghum and corn.

*[Ref: Section V. Potential Impacts and Concerns: F. Efficient Hedging Mechanism: 2. Why Hedging Grain Sorghum in Corn Can Be Problematic: a. Convergence and Delivery Economics Do Not Apply on page 89]*

## 11. Findings on Warehousing and Storage

It would be likely that spreads and carries reflected in a CME “Kansas-based” Grain Sorghum derivatives and futures contract could seasonally be significantly different from spreads and carries reflected in the CME IWDS Corn derivative and futures contracts.

Regardless of whether the CME Group elects to apply a “Flat” or “Variable” Storage Rate, the pricing dynamics reflected in a Kansas-based grain sorghum derivatives and futures contract will better reflect the underlying fundamentals for the supply of grain sorghum versus available warehousing space, which can seasonally be very different than those reflected in corn derivatives and futures.

*[Ref: Section V. Potential Impacts and Concerns: G. Likely Impacts on the Merchandising of Warehousing and Storage on page 96]*

## **12. Findings on Banking and Securing Finance**

In essence, while futures and derivatives markets do not directly provide loans, they facilitate the financing process by allowing companies to manage the underlying risks that lenders are concerned about, thereby making them more reliable and financeable entities.

*[Ref: Section V. Potential Impacts and Concerns: H. Challenges in Banking and Securing Finance on page 99]*

## **13. Findings on the Terminal and Country Elevator**

The introduction of a new grain sorghum futures contract would offer U.S. country elevators significantly better tools for risk management, operational efficiency, and customer service. It is through these services that are provided through their origination efforts that grain sorghum producers will access the benefits of reestablished grain sorghum derivatives and futures contracts.

Currently, elevators manage sorghum using corn futures (cross-hedging), which often leads to inaccurate pricing and greater financial risks. More efficient and reliable hedging opportunities created by a new grain sorghum futures contract will allow country elevators to more effectively protect their profit margins and manage returns to storage on physical inventories.

*[Ref: Section VI. Initial Comments and Concerns: B. Terminal and Country Elevators Perspective on page 119]*

## **14. Findings on the Large Commercial Traders**

**Participation in the market by large commercial traders is key to establishing success.**

Their activities need to include the willingness to purchase/sell physical cash grain sorghum on a basis relative to a related grain sorghum futures contract. This will allow the smaller cash trade participant (i.e., grower, country elevator, end user, exporter/importer, etc. to more effectively execute a hedge position in futures against their physical cash market activities.

Most firms already engage in these types of activities (for commodities such as corn, soybeans, and wheat). As such, utilizing newly introduced grain sorghum derivatives and futures contracts is an easy addition to their suite of tools to better manage price risks.

*[Ref: Section VI. Initial Comments and Concerns: D. Large Commercial Trade Perspective on page 123]*

## **15. Findings on the Domestic End User Perspective**

International and domestic end users alike face the risk of rising input costs and protecting their anticipated margin. A futures contract allows the possibility to mitigate this risk.

U.S. domestic end users, such as livestock feeders, ethanol producers, and food processors, would see an advantage in utilizing a new grain sorghum futures contract primarily for price risk management (hedging) and to gain greater price transparency and supply chain certainty.

Most of these companies already utilize derivatives and futures markets (such as corn, soybeans, and wheat) to manage their existing price risks. As such, utilizing newly introduced grain sorghum derivatives and futures contracts is an easy addition to their suite of tools to better manage price risks and improve their operating margins.

The reintroduction of grain sorghum derivatives and futures contracts will reinforce the value of grain sorghum and its potential inclusion by both international and U.S. domestic end users alike.

*[Ref: Section VI. Initial Comments and Concerns: C. Domestic End User Perspective on page 114121]*

*The lack of a dedicated futures contract leaves sorghum producers and the wider supply chain with fewer formal tools to manage risk, relying instead on less efficient methods such as cross-hedging with corn futures, forward contracts with buyers based on corn futures, or crop insurance. – Guy H. Allen*

## **16. Findings on Grower and Farm Gate Perspective**

The current conclusion of this white paper is that the U.S. grain sorghum producer would be a significant beneficiary from the reintroduction of a grain sorghum futures contract. Even though the vast majority of grain sorghum producers would not directly engage the CME derivatives and futures market, they would significantly benefit from more efficient, accurate, and transparent price discovery, as well as the reduced string of supply chain costs it would provide.

They would also benefit from the increased forward pricing opportunities that provide improved forward pricing signals, along with the variety of risk management tools and contract types that are likely to be made available through their local country elevator or marketing advisor. This would support a more predictable income stream to cover production and input costs.

As the ability to appropriately manage risks and secure profitable production margins improves, more grain producers should be willing to increase acres and grow sorghum.

*[Ref: Section VI. Initial Comments and Concerns: A. Farm Gate / Grower Perspective and Issues on page 114]*

## **17. Findings on USDA Farm Programs**

Changes to how the USDA determines prices for farm programs often require legislative action through the Farm Bill or formal administrative rulemaking processes, such as publishing proposed changes in the Federal Register. Integrating a new pricing mechanism is not a simple administrative decision and would require substantial time, public comment periods, and potential political negotiation.

If this is deemed to be the case, the situation lies outside of the purview of this white paper and squarely in the area of political advocacy by growers.

*[Ref: Section V. Potential Impacts and Concerns: I. Potential Impact on USDA Farm Programs on page 101]*

*[Ref: Section VI. Initial Comments and Concerns: A. Farm Gate / Grower Perspective and Issues: 4. Potential Impact on USDA Government Programs on page 116]*

## **18. Findings on Natural Resources – Land and Water Use**

The introduction of derivative and futures markets for grain sorghum will provide an added benefit for land use and conservation by creating financial incentives for sustainable practices, pricing environmental impacts (like carbon), managing climate-related risks for businesses, and funding

conservation through mechanisms like carbon credits, which allow landowners to earn revenue for protecting or restoring ecosystems, shifting focus from purely extractive use to valuing natural services.

The introduction of these instruments will further enable markets to adopt "nature-based solutions," attracting investment by making ecological benefits financially quantifiable and tradable, helping to fund long-term stewardship like reforestation and biodiversity protection that otherwise would not be profitable.

*[Ref: Section V. Potential Impacts and Concerns: J. Considerations for Natural Resources – Land and Water Use on page 105]*

## **19. Findings on what success might look like...?**

Based on comparative crop size, if a re-introduced CME Grain Sorghum derivatives and futures contract reached a similar volume and open interest to CME Oats or CME Rough Rice, it would be deemed as successful.

*[Ref: Section V. Potential Impacts and Concerns: K. Measuring Success of a Derivatives and Futures Market on page 107]*

***It would be said: The introduction of new derivatives and futures contracts for grain sorghum has the potential to deliver significant opportunities to address many of the current challenges and problems facing the marketing of grain sorghum, with minimal possibilities of making the situation any worse. – Guy H. Allen***

## B. Initial Recommendations

### 1. Kanas-Based Delivery

*[Ref: Section VI.A.2. Kansas-Based Delivery System: on page 36]*

***The authors of this white paper agree with the CME Group that a Kansas-based delivery location that mirrors the current CME Kansas HRW Wheat Contract is preferable.***

*(The authors are making the assumption here that recent changes in the Kansas HRW Contract have successively addressed the underlying delivery issues involving loadout, transportation, and other related issues.)*

### 2. Order Placement Types

*[Ref: Section VI.B. Order Placement – page 44]*

The capacity to easily execute and trade all three types of trade orders is preferred and important to the success of the grain sorghum contract.

- iv. “Inter-Commodity Spreads” to Corn, (possibly HRW Wheat) Orders
- v. “Intra-Commodity Calendar Spreads” Orders
- vi. “Absolute” or “Flat Price” Buy / Sell Orders

***The authors of this white paper agree with the CME Group’s effort to enhance and leverage the volume and liquidity found in the closely related CME Corn Futures.***

***However, while the authors of this white paper agree with this approach of trading a sorghum – corn spread, which would leverage the liquidity of corn into grain sorghum, a more robustly designed platform should be established with the means to accept other order types so as to create maximum liquidity in a contract.***

The CME is currently suggesting that the sorghum futures be traded and expressed as an “inter-commodity spread” to the CME Corn Contract. This concept is strongly supported in an effort to leverage liquidity.

However, it is also suggested that the sorghum futures contract has the capacity to efficiently trade “Intra-Commodity Calendar Spreads” to facilitate the needs of commercial hedgers to effectively manage hedge placements in appropriate delivery months.

It is also suggested that expressing a grain sorghum futures contract in its absolute or “flat price” form, just as any of the other agricultural commodities, is important as well. This would be to the benefit of traders (such as producers, end users, processors, consumers, etc.), as well as traders relying on technical analysis to develop strategies that are based on “flat” price directional movements.

The capacity to easily execute and trade all three of these order types is preferred and important to the success of the grain sorghum contract.

### 3. Road Truck Load Out Option

*[Ref: Section V.A.3.b. Possible CME Road Load Out Procedures – page 42]*

*The authors of this white paper would support the implementation of a “Road Truck Load Out” option for deliveries against the Grain Sorghum Futures Contract.*

### 4. Grain Quality Specifications

*[Ref: Section IV.C.1. Grain Quality Specifications – page 50]*

*It would be recommended that the minimum acceptable grade for delivery against a new CME Grain Sorghum Future contract be USDA No. 2 Sorghum, or better, with a maximum 13.5% moisture.*

*It would be recommended NOT to allow delivery of USDA No. 3 Sorghum, as this is likely to cause underlying quality issues with deliverable stocks.*

### 5. Variable Storage Rate (VSR) vs Flat Storage Rate...?

*[Ref: Section V.F. Likely Impact on Warehousing and Storage Rates 2. Comparison of ECB vs WCB – on page 98]*

Regardless of whether the CME Group elects to apply a “Flat” or “Variable” Storage Rate, the pricing dynamics reflected in a Kansas-based grain sorghum derivatives and futures contract will better reflect the underlying fundamentals for the supply of grain sorghum versus available warehousing space, which can seasonally be very different than those reflected in corn derivatives and futures.

## C. Invitation for Further Comment

The authors of this paper would welcome further comments, opinions, and perspectives arising on this matter and from review of the information presented in this White Paper.

Please send these to:

Guy H. Allen  
Senior Economist  
International Grains Program, Department of Grain Science  
Kansas State University  
Email: [guyhallen@k-state.edu](mailto:guyhallen@k-state.edu)  
Direct Telephone: +1 785 532 2868  
Mobile Telephone: +1 309 569 2969

Daniel M. O'Brien, M.S., Ph.D.  
Professor and Extension Agricultural Economist  
WKREC and Department of Agricultural Economics  
Kansas State University  
Email: [dobrien@k-state.edu](mailto:dobrien@k-state.edu)  
Direct Telephone: +1 785-462-6281  
Mobile Telephone: +1 785-443-2433

# Agricultural Commodity White Paper

## Re-introduction of a Grain Sorghum Futures Contract by the CME Group

Guy H. Allen, Senior Economist – International Grains Program,  
Department of Grain & Food Science, Kansas State University

Dr. Daniel M. O'Brien, Professor – Extension & Applied Research  
Department of Agricultural Economics, Kansas State University

1<sup>st</sup> May 2026

### Contents

#### Acknowledgements

#### Executive Summary

I.	Introduction	3
A.	Concept Narrative	3
B.	What is a White Paper...?	4
II.	Problem Statement	6
A.	Problem Statement	6
	Key Potential Impacts and Concerns Include:	6
B.	Underlying Fundamentals for Grain Sorghum are Sufficiently Different	8
C.	Why address this issue now and what has changed...?	19
D.	Statement of potential impact, and commercial viability with U.S. Sorghum Markets	20
E.	How a derivatives or futures market might “help” or “hurt” a physical market?	24
III.	Background	29
A.	Historical Context	29
B.	Changing Kansas City Rail Transportation Business Model	32
IV.	Currently Proposed Contract Terms and Delivery	36
A.	Delivery Market Location	36
B.	Order Placement	44
C.	Contract Specifications	50
D.	Delivery Execution for CME Grain Sorghum (per Kansas HRW Wheat)	55
E.	Current Proposed Timeline for Listing	69
V.	Potential Impact and Concerns	70
A.	Price Risk	70
B.	Efficient Price Discovery and Transparency	73
C.	Access to Information and Market Asymmetry	76
D.	Potential Market Liquidity and Activity	80
E.	Potential Impact on Market Volatility	85
F.	Efficient Hedging Mechanism (Decreased Basis Risk)	88
G.	Impact on Warehousing and Storage Rates	96
H.	Challenges in Banking and Securing Financing	99
I.	Potential Impact on USDA Farm Programs	101
J.	Consideration for Natural Resources – Land and Water Use	105
K.	Measuring Success of a Derivatives and Futures Market	107
VI.	Initial Comments and Concerns from the Trade	114
A.	Farm Gate / Grower Perspective and Issues	114
B.	Terminal and Country Elevator Perspective	119
C.	Domestic End User Perspective	121
D.	Large Commercial Trade Perspective	123
E.	Exporter / Importer Perspective	128

F. Proprietary Trade Perspective	131
G. Speculative Trade Perspective	132
<b>VII. Initial Conclusions, Findings, and Recommendations</b>	<b>134</b>
A. Conclusions and Findings	134
B. Initial Recommendations	141
C. Invitation for Further Comment	142
<b>Supplemental Information</b>	<b>143</b>
A. Fundamentals: Supply & Demand of Grain Sorghum	143
B. The Basics of Basis	152
C. Component Pricing	153
D. Convergence and Delivery Execution	155
E. Defining Full Financial Carry	160
F. Complexity & Systemic Risk and Fragility	161
G. Mississippi Waterway System	163
H. Efficient Market Hypothesis (EMH)	166
<b>References</b>	<b>167</b>
Acronyms	167
Definitions	168
Positionality Statement	181
End Notes	182