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FROM GULF PORTS TO BRAZILIAN BUYERS: A DECISION FRAMEWORK FOR ASSESSING THE EXPORT FEASIBILITY OF TEXAS AGRICULTURAL PRODUCTS IN BRAZIL - PHYTOSANITARY RULES, LANDED-COST MODELING, QUALITY STANDARDS AND A FIVE-GATE GO/NO-GO PROCESS FOR TEXAS PRODUCERS, COOPERATIVES AND CONSULTANTS[1]

DOS PORTOS DO GOLFO AOS COMPRADORES BRASILEIROS: UMA ESTRUTURA DE DECISÃO PARA AVALIAR A VIABILIDADE DE EXPORTAÇÃO DE PRODUTOS AGRÍCOLAS DO TEXAS PARA O BRASIL – NORMAS FITOSSANITÁRIAS, MODELAGEM DE CUSTOS DE ENTREGA, PADRÕES DE QUALIDADE E UM PROCESSO DE DECISÃO EM CINCO ETAPAS PARA PRODUTORES, COOPERATIVAS E CONSULTORES DO TEXAS

DESDE LOS PUERTOS DEL GOLFO HASTA LOS COMPRADORES BRASILEÑOS: UN MARCO DE DECISIÓN PARA EVALUAR LA VIABILIDAD DE LA EXPORTACIÓN DE PRODUCTOS AGRÍCOLAS DE TEXAS A BRASIL — NORMAS FITOSANITARIAS, MODELADO DE COSTOS EN DESTINO, ESTÁNDARES DE CALIDAD Y UN PROCESO DE CINCO ETAPAS DE DECISIÓN (APROBACIÓN/RECHAZO) PARA PRODUCTORES, COOPERATIVAS Y CONSULTORES DE TEXAS

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ABSTRACT

Brazil is both one of the world's largest agricultural exporters and a structural importer of wheat, genetics, specialty foods and other agricultural products, which makes it a difficult but not closed market for Texas suppliers. This white paper proposes a five-gate decision framework for assessing the export feasibility of Texas agricultural products in Brazil: product–market matching, regulatory mapping, logistics and landed-cost modeling, quality and traceability, and a commercial go/pilot/no-go decision. Each gate asks a single question, specifies the evidence required and is ordered from the least to the most costly analysis, so that weak opportunities are eliminated early and strong ones are documented well enough to justify investment. The framework is applied in a preliminary, qualitative way to six product groups — cotton, grain sorghum and corn, hard red winter wheat, pecans, beef and cattle genetics, and ethanol and co-products — using public information available through mid-2026, and is illustrated with a landed-cost model and a break-even premium calculation. The assessment indicates that bulk cotton and feed grains are feasible only episodically, that

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wheat is the most structurally favorable bulk commodity, and that cattle genetics and specialty products show the strongest fit with Texas strengths. Sanitary and phytosanitary access emerges as the decisive first filter. The paper closes with recommendations for producers, cooperatives, consultants and public agencies, and with a standard feasibility memo template.

Keywords: Export Feasibility. Texas Agriculture. Brazil. Sanitary and Phytosanitary Measures. Market Access. Landed Cost. Agricultural Trade. Cattle Genetics. Decision Framework.

RESUMO

O Brasil é, simultaneamente, um dos maiores exportadores agrícolas do mundo e um importador estrutural de trigo, material genético, alimentos especiais e outros produtos agrícolas; isso torna o mercado brasileiro um desafio para os fornecedores do Texas, embora não seja um mercado fechado. Este documento propõe uma estrutura de decisão composta por cinco etapas para avaliar a viabilidade de exportação de produtos agrícolas do Texas para o Brasil: compatibilidade entre produto e mercado, mapeamento regulatório, modelagem logística e de custos de entrega (custo no destino), qualidade e rastreabilidade, e uma decisão comercial final (avançar, realizar projeto-piloto ou desistir). Cada etapa aborda uma questão específica e exige a apresentação de evidências determinadas; a sequência segue uma ordem crescente de custo de análise, permitindo descartar precocemente oportunidades menos promissoras, enquanto as mais sólidas são documentadas de forma a justificar o investimento. A metodologia é aplicada, de maneira preliminar e qualitativa, a seis grupos de produtos — algodão, sorgo granífero e milho, trigo de inverno (hard red winter wheat), nozes-pecã, carne bovina e material genético bovino, além de etanol e coprodutos —, utilizando informações públicas disponíveis até meados de 2026. O estudo inclui, ainda, um modelo de custo no destino e o cálculo de um prêmio de equilíbrio (break-even). A avaliação indica que a exportação de algodão e grãos forrageiros a granel é viável apenas de forma episódica; que o trigo é a commodity a granel mais favorável do ponto de vista estrutural; e que o material genético bovino e os produtos especiais apresentam a maior sinergia com as competências do Texas. O acesso sob a ótica das medidas sanitárias e fitossanitárias revela-se o primeiro filtro decisivo. O documento encerra com recomendações para produtores, cooperativas, consultores e órgãos públicos, apresentando também um modelo padrão de memorando de viabilidade.

Palavras-chave: Viabilidade de Exportação. Agricultura do Texas. Brasil. Medidas Sanitárias e Fitossanitárias. Acesso ao Mercado. Custo no Destino. Comércio Agrícola. Material Genético Bovino. Estrutura de Decisão.

RESUMEN

Brasil es, al mismo tiempo, uno de los mayores exportadores agrícolas del mundo y un importador estructural de trigo, material genético, alimentos especializados y otros productos agrícolas; esto convierte al mercado brasileño en un entorno complejo, aunque no inaccesible, para los proveedores de Texas. El presente documento propone un marco de toma de decisiones estructurado en cinco etapas para evaluar la viabilidad de exportar productos agrícolas de Texas a Brasil: correspondencia entre producto y mercado, mapeo

normativo, modelado logístico y de costos de entrega (costos en destino), análisis de calidad y trazabilidad, y una decisión final sobre la viabilidad comercial (avanzar, realizar una prueba piloto o descartar). Cada etapa plantea una pregunta clave y especifica la evidencia necesaria; además, el proceso está organizado de menor a mayor costo de análisis, lo que permite descartar pronto las oportunidades débiles y documentar suficientemente las sólidas para justificar la inversión. Este marco se aplica de manera preliminar y cualitativa a seis grupos de productos —algodón, sorgo granífero y maíz, trigo rojo duro de invierno, nueces pecanas, carne bovina y material genético bovino, así como etanol y sus coproductos—, utilizando información pública disponible hasta mediados de 2026. Asimismo, se ilustra mediante un modelo de costos en destino y el cálculo de una prima de equilibrio. La evaluación indica que la exportación de algodón a granel y granos forrajeros solo es viable de forma esporádica; que el trigo es el producto a granel estructuralmente más favorable; y que el material genético bovino y los productos especializados son los que mejor se alinean con las fortalezas de Texas. El acceso en materia sanitaria y fitosanitaria se perfila como el primer filtro decisivo. El documento concluye con recomendaciones para productores, cooperativas, consultores y organismos públicos, e incluye un modelo estándar de memorando de viabilidad.

Palabras clave: Viabilidad de Exportación. Agricultura de Texas. Brasil. Medidas Sanitarias y Fitosanitarias. Acceso al Mercado. Costos en Destino. Comercio Agrícola. Material Genético Bovino. Marco de Toma de Decisiones.

EXECUTIVE SUMMARY

Brazil is simultaneously one of the world's largest agricultural exporters and a large, diversified importer of food, feed, fiber and agricultural inputs. For Texas producers, this creates a market that is difficult to enter in head-to-head bulk commodities but that offers real, recurring openings in specific products, specific seasons and specific quality niches. Most mid-size Texas operations, cooperatives and processors do not have the tools to tell these situations apart. They either dismiss Brazil as "a competitor, not a customer" or pursue an opportunity without first confirming that market access is legally open, that the landed price is competitive and that buyer specifications can be met.

This white paper proposes a five-gate decision framework — product–market matching, regulatory mapping, logistics and landed-cost modeling, quality and traceability, and a commercial go/pilot/no-go decision — designed so that weak opportunities are eliminated early and cheaply, and strong ones are documented well enough to justify investment. The framework is applied to six Texas product groups: cotton; grain sorghum and corn; hard red winter wheat; pecans; beef and cattle genetics; and ethanol and its co-products.

Key findings at a glance

- **Bulk cotton and grains are rarely feasible** as routine exports: Brazil is a leading exporter of both, and landed costs from the Gulf are competitive only in years of Brazilian supply shortfall or for specific quality grades.
- **Wheat is the most structurally favorable bulk commodity**, because Brazil is a large and persistent wheat importer; competitiveness depends on Mercosur preferences, tariff-rate quotas and exchange rates.
- **Cattle genetics and specialty products show the strongest fit** with Texas strengths, because they compete on quality and traceability rather than price alone.
- **Sanitary and phytosanitary (SPS) access is the decisive first filter.** If no certificate model has been negotiated between USDA and Brazil's Ministry of Agriculture and Livestock (MAPA), no shipment is possible, regardless of price.
- **A standardized feasibility memo of eight to twelve pages** — prepared before any commercial commitment — is the single most cost-effective tool for reducing rejection risk and wasted effort.

1 WHY BRAZIL, AND WHY NOW?

For most of the past two decades, Texas agriculture has viewed Brazil primarily as a competitor. Brazil overtook the United States as the world's largest soybean exporter, has become a leading exporter of corn and beef, and in recent seasons has rivaled or surpassed the United States as the largest exporter of cotton. In global markets for these commodities, Brazilian and Texan producers sell to the same buyers in China, Southeast Asia and the Middle East.

This competitive relationship is real, but it is incomplete. Brazil is also a country of more than 200 million consumers, a large animal-protein industry that consumes enormous volumes of feed, a growing food-processing sector and a domestic textile industry. Its production is concentrated in the Center-West and South, while much of its population and

processing capacity is located in the Southeast and Northeast, often thousands of kilometers from the main producing regions. Brazil's internal logistics — long truck hauls over highways, limited rail and congested ports — mean that for some coastal buyers in the Northeast, imported product can at times be competitive with domestic supply from Mato Grosso or Goiás.

Brazil is also a structural importer of several agricultural products. It imports large volumes of wheat each year, mostly from Argentina under Mercosur preferences, and imports malt, dairy products, fresh and dried fruits, nuts, olive oil, fish and other items. Its livestock sector imports genetics, and its ethanol and feed sectors import from the United States in some years. In years of drought or frost in key producing regions, Brazil has also imported corn, including from the United States.

WHY NOW?

Three developments make a structured feasibility approach more important in 2026 than in previous years. First, trade-policy volatility between the United States and Brazil increased significantly in 2025–2026, with changes in tariffs and trade investigations on both sides; any opportunity must be assessed against current, verified rules rather than historical assumptions. Second, currency movements in the Brazilian real have been large, changing the competitiveness of imports within a single season. Third, Brazilian buyers increasingly require traceability and sustainability documentation, which favors suppliers who can demonstrate consistent records.

2 THE TEXAS SUPPLY SIDE

Texas is the largest agricultural state in the United States by number of farms and land in farms, and it leads the nation in cattle and cotton production. Its agriculture is diverse: grain sorghum, corn, wheat, rice, pecans, citrus, vegetables, hay, cattle, poultry and dairy. For export purposes, Texas offers three important advantages.

Table 1

Texas strengths relevant to exporting to Brazil

Strength	Description	Relevance to Brazil
Gulf port infrastructure	Port Houston, Port of Corpus Christi, Galveston, Freeport and Beaumont handle bulk, break-bulk and container cargo with direct or transshipment services to Santos, Paranaguá, Rio Grande and Northeast ports	Shorter sailing distance to Brazilian Northeast ports than from many competing origins
Cattle genetics	Texas is the historical center of Brahman and other heat-tolerant breed development and of large commercial seedstock operations	Brazil's herd is dominated by zebu (*Bos indicus*) cattle; demand exists for complementary genetics
Diverse specialty products	Pecans, grain sorghum for specific uses, specialty rice, organic and identity-preserved grains	Niche demand in Brazilian food processing and retail segments
Commercial documentation culture	Established use of contracts, crop insurance, USDA grading and certification services	Supports traceability and quality claims required by sophisticated buyers

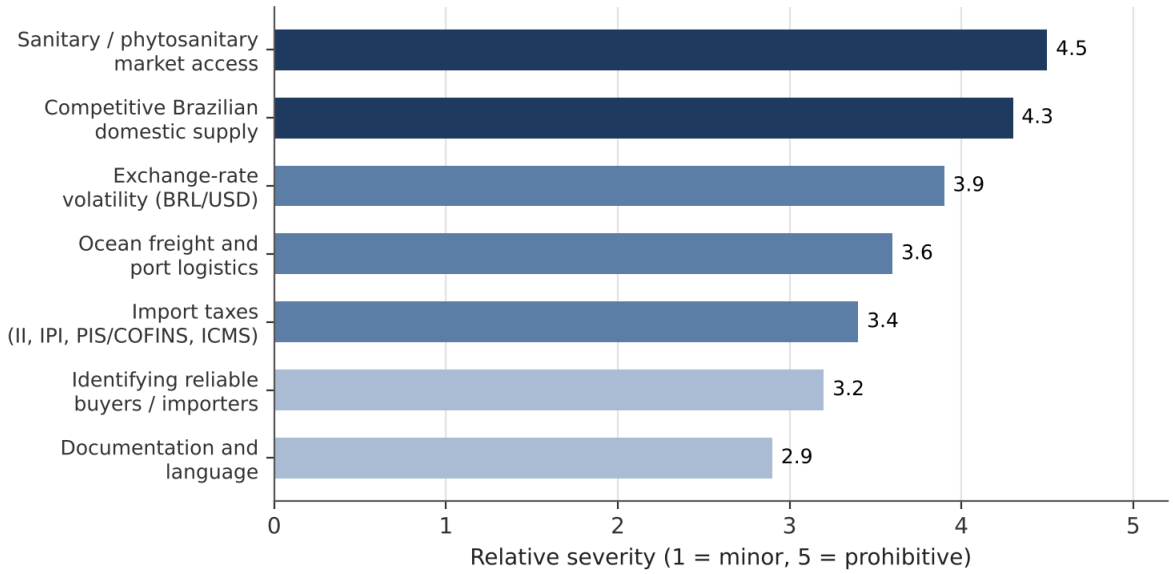
These strengths are unevenly distributed across farm sizes. Large merchants and integrated firms already manage export logistics. Mid-size producers, family operations and small cooperatives typically sell through local elevators, gins or auction markets and do not see the export price directly. For them, the question is not only whether Brazil is a viable destination but whether they should participate directly, through a cooperative or consolidator, or not at all.

3 BARRIERS: WHAT ACTUALLY STOPS SHIPMENTS

Interviews, industry reports and practical experience indicate that the barriers facing Texas suppliers who consider Brazil can be ranked roughly by severity. Figure 1 presents an author synthesis.

Figure 1

Relative severity of barriers perceived by Texas producers and exporters considering sales to Brazil (author synthesis of trade, industry and advisory sources, 2020–2025; 1 = minor, 5 = prohibitive).



3.1 SANITARY AND PHYTOSANITARY MARKET ACCESS

The most decisive barrier is SPS access. Brazil, through MAPA's Secretariat of Agricultural Defense (SDA), regulates the entry of plants, plant products, animals and animal products to prevent the introduction of pests and diseases. For a plant product to enter Brazil from a given origin, phytosanitary import requirements must have been established, normally after a Pest Risk Analysis (Análise de Risco de Pragas, ARP). If no requirements exist for a product–origin combination, the product cannot be imported until the analysis is completed — a process that can take years. For animal products, the exporting establishment must usually be approved by Brazilian authorities and the shipment accompanied by a sanitary certificate whose model has been agreed between the two countries' veterinary services.

On the U.S. side, phytosanitary certificates are issued by USDA's Animal and Plant Health Inspection Service (APHIS), and export certification for meat by USDA's Food Safety and Inspection Service (FSIS). APHIS and FSIS export libraries summarize the requirements for each destination. These libraries are the first document a consultant should consult — they show quickly whether a product has a recognized pathway to Brazil.

3.2 COMPETITIVE DOMESTIC SUPPLY

The second barrier is economic rather than regulatory. Brazil's own production of cotton, corn, soybeans, beef and poultry is large, low-cost and growing. A Texas product will be competitive only when Brazilian supply is short, when the destination is far from Brazilian producing regions, or when the product offers a quality, specification or timing that domestic supply cannot.

3.3 EXCHANGE RATE, TAXES AND LOGISTICS

The Brazilian real has historically shown high volatility against the U.S. dollar. A depreciation of the real raises the local-currency cost of imports and can eliminate an opportunity within weeks. Import taxation in Brazil is layered: the import duty (Imposto de Importação, II) set by the Mercosur Common External Tariff (TEC), the federal tax on industrialized products (IPI) where applicable, federal social contributions on imports (PIS/COFINS-Importação), and the state value-added tax (ICMS), along with freight-related levies and port charges. Many of these are calculated in cascade on the customs value, so a small difference in duty can have a larger effect on the final landed cost. Logistics costs include ocean freight, insurance, port handling at origin and destination, customs brokerage and inland freight to the buyer.

3.4 BUYERS, DOCUMENTATION AND LANGUAGE

Finally, mid-size suppliers often lack relationships with Brazilian importers and are unfamiliar with Brazilian import procedures, which require the importer to be registered in the Integrated Foreign Trade System (Siscomex), and with commercial practice, contracts and documentation in Portuguese. These barriers are real but are the most easily addressed with professional support.

4 THE FIVE-GATE FEASIBILITY FRAMEWORK

The framework organizes the analysis as a sequence of gates. Each gate asks a single question and specifies the evidence needed to answer it. A "no" at any gate stops the analysis, saving the cost of the later gates. This order is deliberate: the cheapest and most decisive questions are asked first.

Figure 2

The five-gate export feasibility framework. Each gate is a go/no-go checkpoint, ordered from the least to the most costly analysis.



A 'no' at any gate ends the analysis early and cheaply — the main value of the sequence.

Gate 1 — Product–market matching

Question: Is there recurring Brazilian demand for this product that domestic supply or preferential suppliers do not fully meet?

Evidence sources include Brazil's import statistics (published by the Ministry of Development, Industry, Trade and Services through the Comex Stat system), USDA Foreign Agricultural Service (FAS) attaché reports from Brasília and São Paulo, the USDA Global Agricultural Trade System (GATS), and the OECD-FAO Agricultural Outlook. The analyst examines five years of import volumes, origins, seasonality and unit values, and identifies whether imports are structural (every year) or episodic (only in shortfall years).

Gate 1 output

A one-page market profile with: annual imports by origin (5 years), seasonality, average unit value, principal importing states, and a classification of demand as structural, episodic or niche.

Gate 2 — Regulatory mapping

Question: Is market access legally open for this product from the United States, and what documents are required?

The analyst checks APHIS and FSIS export libraries; MAPA's import requirements database; any CTNBio approvals required for genetically modified events (relevant for corn, cotton seed and some grains); ANVISA rules for food safety and maximum residue limits (MRLs) for pesticides and mycotoxins; and labeling requirements for retail products. Specific attention is paid to pesticide MRL differences: a product legally treated in Texas may exceed a Brazilian limit if Brazil has not established a tolerance for that active ingredient.

Table 2

Regulatory checklist by agency

Agency / system	Country	What to verify
APHIS (PCIT export library)	United States	Whether a phytosanitary certificate pathway exists; additional declarations; treatment requirements
FSIS export library	United States	Eligibility of meat and poultry products; required certificates; establishment eligibility
MAPA – SDA / Vigiagro	Brazil	Phytosanitary or zoosanitary import requirements; establishment approval; inspection at port of entry
ANVISA	Brazil	Food safety standards; MRLs; mycotoxin limits; labeling of processed foods
CTNBio	Brazil	Approval of genetically modified events contained in grain or seed
Receita Federal / Siscomex	Brazil	Importer registration; tariff classification (NCM); import duty and taxes

Gate 3 — Logistics and landed-cost modeling

Question: Can the product be delivered to the Brazilian buyer at a price competitive with domestic and alternative imported supply?

The analyst builds a landed-cost model from the U.S. farm gate or FOB price to the buyer's door, comparing it with the Brazilian domestic price at the same location (converted at the current exchange rate) and with the landed cost from competing origins. The model should use current quotes for freight and insurance, port charges, brokerage and inland freight, and the applicable duty and taxes. Section 6 presents a worked example.

Gate 4 — Quality and traceability

Question: Can the supplier consistently meet the buyer's commercial specifications and documentation requirements?

Official rules are the minimum. Brazilian buyers specify quality attributes (fiber length, strength and micronaire for cotton; moisture, foreign material and mycotoxin levels for grains; size and kernel percentage for pecans; genetic evaluation data for semen and embryos) and increasingly request traceability, sustainability information and evidence of compliance with environmental and labor standards. A supplier who cannot document consistent quality across shipments will face discounts or rejection.

Gate 5 — Commercial decision

Question: Given the evidence from Gates 1 to 4, should the supplier proceed with a commercial sale, a small pilot shipment, or no action?

The decision considers the minimum volume or price premium needed to justify the effort, the payment and currency risk, and the strategic value of the market as a complement to existing domestic channels. A pilot is often the right decision: a single container or small lot, sold under a letter of credit, tests documentation and buyer relationships with limited exposure.

5 COMMODITY ASSESSMENTS

The framework was applied in a preliminary way to six product groups. Scores in Table 3 are qualitative (●●● = favorable, ●● = mixed, ● = unfavorable) and represent the author's assessment based on public information available through mid-2026. They are intended to illustrate the use of the framework, not to replace a product-specific feasibility study.

Table 3

Preliminary feasibility scorecard for Texas products in Brazil

Product group	Gate 1: Demand	Gate 2: Access	Gate 3: Landed cost	Gate 4: Quality fit	Preliminary verdict
Cotton (lint)	●	●●	●	●●	No-go for commodity grades; niche only

Product group	Gate 1: Demand	Gate 2: Access	Gate 3: Landed cost	Gate 4: Quality fit	Preliminary verdict
Grain sorghum and corn	●● (episodic)	●●	● / ●●	●●	Opportunistic in Brazilian shortfall years
Hard red winter wheat	●●●	●●●	●●	●●●	Conditional go; monitor tariff and quotas
Pecans	●●	●●	●●	●●●	Pilot via processor/importer partnership
Beef and cattle genetics	● (beef) / ●●● (genetics)	●●	●● / ●●●	●●●	Genetics: go; beef: verify access first
Ethanol and co-products	●●	●●●	● / ●●	●●●	Highly sensitive to tariff policy

5.1 COTTON

Brazil has become one of the world's leading cotton exporters, with large, mechanized production in Mato Grosso and western Bahia. Its domestic textile industry is supplied overwhelmingly by local fiber. Texas, the largest U.S. cotton-producing state, competes with Brazil in Asian markets rather than supplying it. A Texas cotton export to Brazil would be feasible only for specific fiber qualities in short supply domestically, for spinners needing particular characteristics, or in years of Brazilian crop failure. The phytosanitary pathway for cotton lint must be confirmed, and quality classing by USDA's Agricultural Marketing Service (AMS) provides internationally recognized data that supports any niche sale. **Verdict: not a routine opportunity; analyze only in response to specific buyer requests**.

5.2 GRAIN SORGHUM AND CORN

Brazil is a major corn exporter and a growing sorghum producer, but its feed demand is concentrated in the South and Center-West, while poultry and pork producers in some Northeast and Southeast coastal states face long and costly inland freight from domestic surplus regions. In years when Brazil's second-crop (safrinha) corn is reduced by drought or frost, domestic prices rise, and imports — including from the United States — have occurred. Gate 2 is critical: corn and sorghum shipments may contain genetically modified events that

must be approved by CTNBio, and mycotoxin limits set by ANVISA (aflatoxins, fumonisins, deoxynivalenol and zearalenone) must be met. Bulk vessel shipments of 25,000–60,000 tonnes are typical, which means mid-size producers participate through exporters rather than directly. **Verdict: opportunistic; Texas producers benefit indirectly through stronger Gulf basis in Brazilian shortfall years**.

5.3 HARD RED WINTER WHEAT

Wheat is the clearest structural import need: Brazil produces only part of its consumption and imports the balance each year, predominantly from Argentina, which enjoys duty-free access under Mercosur. Wheat from non-Mercosur origins faces the Common External Tariff unless it enters under a tariff-rate quota; Brazil opened a duty-free quota for non-Mercosur wheat in 2019, and the current status and volume of that quota must be verified at the time of analysis. Brazilian millers value specific baking qualities, and U.S. hard red winter wheat — grown extensively in the Texas Panhandle and Rolling Plains — has historically been purchased in years when Argentine supply or quality is limited. **Verdict: conditional go for organized sellers (cooperatives, consolidators); feasibility depends on quota availability, Argentine crop size and exchange rate**.

5.4 PECANS

Texas is a major pecan-producing state, and pecans grow in Brazil's southern state of Rio Grande do Sul, where a domestic industry has developed. Brazilian demand for nuts in confectionery, bakery and snack products is growing. Phytosanitary requirements for in-shell nuts are typically stricter than for shelled, processed kernels, and the pathway must be confirmed. The best entry model is usually a partnership between a Texas sheller and a Brazilian importer or food processor, using shelled kernels in consumer or industrial packs that meet ANVISA labeling rules. **Verdict: pilot through a processor partnership; small volumes, premium positioning**.

5.5 BEEF AND CATTLE GENETICS

Brazil is one of the world's largest beef exporters, and U.S. beef competes there only in high-value niches (specific cuts, grain-fed quality grades) for food service and premium

retail. Market access depends on the status of sanitary agreements and establishment approvals, which have changed over time and must be verified. Cattle genetics present a very different picture. Brazil's beef herd is built on zebu breeds such as Nelore, and Brazilian breeders and commercial operations use imported semen and embryos to improve carcass quality, fertility and specific traits. Texas seedstock producers with strong genetic evaluation data, including those working with Brahman, Angus and composite breeds adapted to heat, have a natural fit. Zoosanitary certificates for semen and embryos follow agreed models and collection-center approvals. **Verdict: genetics — go, through established genetics companies and collection centers; beef — verify access and focus on premium niches**.

5.6 ETHANOL AND CO-PRODUCTS

The United States and Brazil are the world's two largest ethanol producers, and bilateral ethanol trade has historically depended heavily on tariff policy. Brazil has applied, removed and reapplied import tariffs and quotas on ethanol over the past decade, and ethanol market access was cited among the issues in U.S. trade actions toward Brazil in 2025. Meanwhile, Brazil's own corn-ethanol industry has expanded rapidly, producing distillers' grains domestically. For Texas, ethanol exports to Brazil are primarily a matter for large producers and traders. **Verdict: highly policy-sensitive; monitor rather than pursue for mid-size suppliers**.

6 WORKED EXAMPLE: LANDED-COST MODEL

The following example illustrates Gate 3 using a hypothetical lot of cotton lint shipped from Houston to a spinning mill in the Brazilian Northeast. Values are illustrative and rounded; they are not price quotes. The purpose is to show the structure of the calculation and the sensitivity of the result.

Figure 3

Illustrative landed-cost build-up for one metric ton of cotton lint shipped from Houston to a spinning mill in Northeast Brazil (USD per metric ton; duty and fees illustrative).

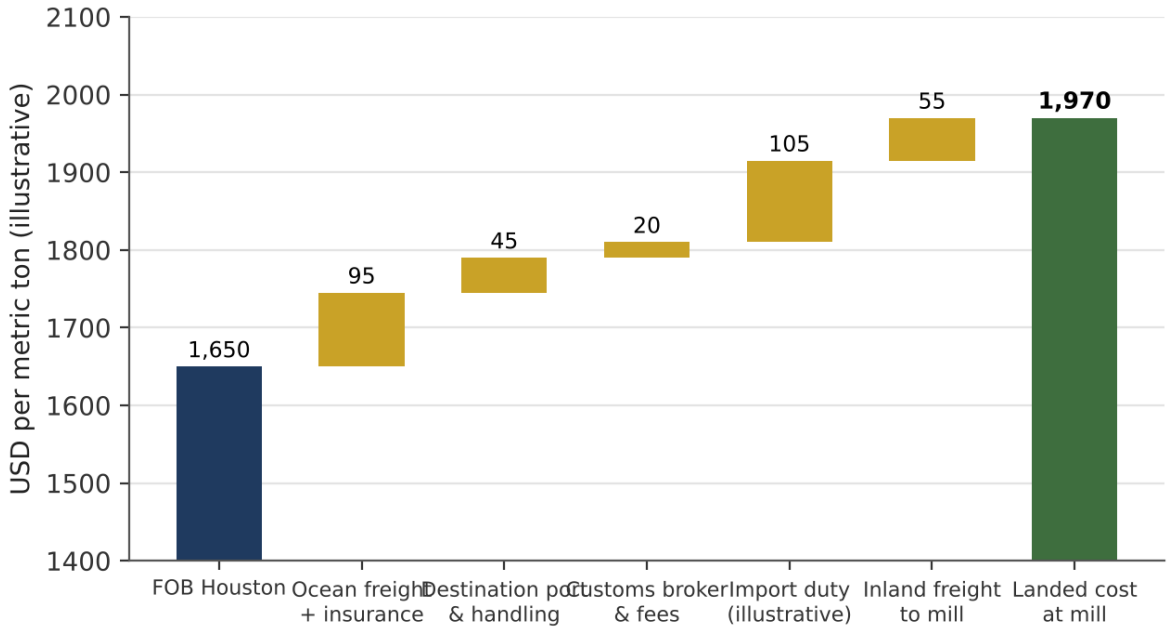


Table 4

Landed-cost model structure (illustrative values, USD per metric ton)

Cost element	Value	Notes for the analyst
FOB Houston price	1,650	Based on futures plus basis for the required quality; convert from cents per pound
Ocean freight and insurance	95	Container rates vary widely by season and route; obtain current quotes
Destination port and handling	45	Terminal handling, storage, inspection fees
Customs broker and fees	20	Broker, Siscomex and documentation
Import duty and taxes (illustrative)	105	Calculated on customs value; verify NCM code, TEC rate and applicable state ICMS treatment
Inland freight to mill	55	Truck from port to mill
Landed cost at mill	**1,970**	Compare with domestic price at the same mill converted at the current exchange rate

In this illustration, the Texas lot arrives at a landed cost of about USD 1,970 per ton. If Brazilian cotton of the same quality can be delivered to the same mill from western Bahia for

less — which is normally the case — the opportunity fails Gate 3. The analysis becomes positive only if (a) Brazilian domestic prices rise sharply because of a short crop, (b) the real appreciates, (c) the Texas lot offers a specific quality the mill cannot source locally and for which it pays a premium, or (d) duties are reduced. A break-even premium calculation — the premium the buyer would need to pay for the Texas lot to be competitive — is a simple, powerful way to present this result to the producer.

Break-even premium = Landed cost (Texas) − Delivered price of domestic substitute (same location, same quality)

7 QUALITY, TRACEABILITY AND DOCUMENTATION

Even when access is open and prices are competitive, shipments fail because of documentation errors, quality disputes or traceability gaps. Experience from agricultural inspection in Brazil shows that the most frequent problems at the port of entry are not exotic pests but avoidable administrative issues: inconsistent descriptions between invoice, packing list and certificate; missing additional declarations; incorrect wood-packaging treatment marks; and labels that do not meet local rules.

DOCUMENTATION PACKAGE FOR A TYPICAL PLANT-PRODUCT SHIPMENT

- Commercial invoice and packing list with identical product descriptions and quantities
- Bill of lading consistent with invoice and certificate
- Phytosanitary certificate issued by APHIS with any additional declarations required by MAPA
- Certificate of origin, where preferential treatment or verification is needed
- Quality certificates (e.g., USDA AMS classing data for cotton; official grain inspection certificates for grain)
- Laboratory analyses for mycotoxins, pesticide residues or moisture, as required by contract or regulation
- ISPM 15-compliant marks on any wood packaging material
- Portuguese-language labeling for retail products, compliant with ANVISA and consumer-protection rules

Beyond official documents, buyers increasingly ask for information about production practices, sustainability and traceability. Producers who already keep organized field records — application logs, seasonal summaries and certificates in a single repository — can provide this information quickly. This links export readiness directly to good farm-management practice.

8 MANAGING COMMERCIAL AND FINANCIAL RISK

Export transactions add financial risks that domestic sales do not carry. Four tools are particularly relevant for mid-size suppliers:

1. **Incoterms 2020.** Selling FOB or FCA Gulf port limits the seller's responsibility to delivery at origin, leaving freight, insurance and import formalities to the buyer. This is usually appropriate for first transactions.
2. **Secure payment terms.** Confirmed irrevocable letters of credit or documentary collections protect against non-payment. Open-account terms should be reserved for established relationships.
3. **Export credit support.** USDA's Export Credit Guarantee Program (GSM-102) and the Export-Import Bank of the United States offer credit guarantees and insurance that can make U.S. suppliers more competitive in markets where they are available; eligibility should be checked for the specific transaction.
4. **Currency and price risk.** Pricing in U.S. dollars shifts currency risk to the buyer but may reduce competitiveness; hedging tools for the underlying commodity (futures and options on CME) can be combined with fixed-price sales.

Assistance programs worth knowing

USDA's Foreign Agricultural Service provides market intelligence through its offices in Brazil and supports trade promotion through cooperator programs and the Market Access Program. The Texas Department of Agriculture offers export assistance services, and Southern U.S. Trade Association (SUSTA) programs support food and agricultural exporters in Southern states. The U.S. Commercial Service, part of the International Trade Administration, offers market research and partner-search services.

9 RECOMMENDATIONS

9.1 FOR PRODUCERS AND COOPERATIVES

1. Treat Brazil as a market to be evaluated product by product, not as a single competitor or opportunity.
2. Before contacting buyers, confirm Gate 2: if there is no regulatory pathway, stop.
3. Participate through cooperatives, consolidators or established exporters for bulk products; consider direct sales only for differentiated products.
4. Keep field and quality records that can support traceability claims; they also serve domestic buyers, lenders and insurers.
5. Use pilot shipments with secure payment terms before committing significant volumes.

9.2 FOR CONSULTANTS

1. Standardize a feasibility memo template following the five gates (see Appendix A) so that analysis is comparable across products and clients.
2. Quantify results as a break-even premium or minimum volume, not only as a qualitative opinion.
3. Integrate export analysis with domestic market evaluation; the right answer is often to improve domestic marketing instead.
4. Maintain a current register of regulatory changes and tariff measures affecting U.S.–Brazil trade.

9.3 FOR PUBLIC AGENCIES AND TRADE ASSOCIATIONS

1. Support the completion of pending pest risk analyses and certificate negotiations for products where Texas has clear supply capacity.
2. Make APHIS, FSIS and MAPA requirements available in consolidated, plain-language form for mid-size exporters.
3. Fund training on export documentation for cooperatives and small processors.

THE BOTTOM LINE

For most mid-size Texas operations, Brazil is not a market for routine bulk sales — but it is a market with real openings in wheat, cattle genetics and specialty products, and with episodic openings in feed grains. A disciplined five-gate analysis, completed before any commercial commitment, protects producers from costly errors and positions them to act quickly when an opening appears.

10 CONCLUSION

Assessing export feasibility is less about finding a market than about eliminating the wrong ones quickly and documenting the right ones well. The five-gate framework presented in this paper — product–market matching, regulatory mapping, landed-cost modeling, quality and traceability, and a commercial decision — gives Texas producers and the consultants who advise them a systematic way to do this. Applied to Brazil, it shows that the most promising opportunities lie where Texas has genuine differentiation (cattle genetics, specialty products, wheat qualities) or where Brazilian supply is temporarily short. It also shows that the most decisive barriers are regulatory and economic rather than logistical, and that early regulatory alignment reduces the risk of rejection. Consultants who combine agronomic knowledge with trade documentation skills, and familiarity with both the U.S. and Brazilian systems, can help producers determine whether international sales complement their existing channels, strengthening overall commercial strategy and the competitiveness of Texas agriculture.

REFERENCES

Foreign Agricultural Service. (2023). *Brazil: Agricultural trade and policy updates* (GAIN reports). U.S. Department of Agriculture.

Foreign Agricultural Service. (2024). *Brazil: Grain and feed annual*. U.S. Department of Agriculture.

International Trade Administration. (2022). *Exporting agricultural products: Regulatory considerations*. U.S. Department of Commerce.

International Chamber of Commerce. (2019). *Incoterms® 2020*. ICC Publishing.

OECD & FAO. (2023). *OECD-FAO Agricultural Outlook 2023–2032*. OECD Publishing.

USDA Animal and Plant Health Inspection Service. (2024). *Phytosanitary Export Database (PExD) and PCIT export library*. U.S. Department of Agriculture.

USDA Food Safety and Inspection Service. (2024). *Export library: Brazil*. U.S. Department of Agriculture.

USDA Foreign Agricultural Service. (2022). *Global Agricultural Trade System (GATS) data*. U.S. Department of Agriculture.

World Trade Organization. (2021). *Sanitary and phytosanitary measures: Practical guides*. WTO.

Ministério da Agricultura e Pecuária. (2024). *Requisitos fitossanitários e zoossanitários para importação*. Government of Brazil.



Appendix A. Feasibility Memo Template

Table 5

Standard structure of a five-gate feasibility memo (8–12 pages)

Section	Title	Content
1	Summary and recommendation	One paragraph; go / pilot / no-go; break-even premium or minimum volume
2	Product definition	HS/NCM code, quality grade, packaging, volume available, season
3	Gate 1 — Market profile	Five-year import data by origin, seasonality, unit values, demand classification
4	Gate 2 — Regulatory map	APHIS/FSIS pathway, MAPA requirements, MRLs, GMO approvals, labeling; open issues
5	Gate 3 — Landed cost	Cost build-up, comparison with domestic and competing supply, sensitivity to exchange rate and freight
6	Gate 4 — Quality and traceability	Buyer specifications, testing plan, documentation package
7	Gate 5 — Commercial terms	Incoterm, payment terms, credit programs, pilot design
8	Risks and monitoring	Policy, currency, logistics and quality risks with indicators and review dates

Appendix B. Glossary

Table 6

Selected terms

Term	Meaning
ARP	*Análise de Risco de Pragas* — Pest Risk Analysis conducted by MAPA before setting import requirements for a new plant product or origin
CTNBio	Brazil's National Technical Commission on Biosafety, which approves genetically modified events
ICMS	State-level value-added tax on the circulation of goods in Brazil
MAPA	Brazil's Ministry of Agriculture and Livestock
MRL	Maximum residue limit for pesticides in food or feed
NCM	Mercosur Common Nomenclature, the tariff classification used in Brazil (based on the HS system)
PCIT	APHIS Phytosanitary Certificate Issuance and Tracking system
Siscomex	Brazil's Integrated Foreign Trade System, through which imports are registered and cleared
TEC	Mercosur Common External Tariff

Term	Meaning
Vigiagro	MAPA's international agricultural surveillance system at ports, airports and border posts