

STRATEGIC INTELLIGENCE REPORT · MARCH 2026

# 3 AIs. 10 Years of Data. The Global Sesame Trade — Decoded.

Structural Analysis · Competitive Dynamics · Procurement Behaviour  
Models · 2026–2027 Outlook

MARKETS: CHINA · EU · USA · KOREA · INDIA · ROW

DATA THROUGH: 5 MARCH 2026

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Perplexity — Data Foundation: Sesameinfo.in & World Sesame Conference  
Team



## Introduction

# Report Overview

This dossier represents a historic collaboration among the world's leading artificial intelligence systems — **Grok (built by xAI), Claude (Anthropic), and DeepSeek**. Working together like a virtual international research team, these advanced AIs combined their unique strengths to analyse, cross-validate, and synthesise an unprecedented volume of data in record time.

### Grok (xAI)

Led the quantitative modelling and real-time validation

### Claude (Anthropic)

Provided deep structural and strategic framing

### DeepSeek

Strengthened the econometric depth and scenario analysis

The result is a level of insight and clarity that was previously impossible without a large human research team working for months. The foundation of this report is truly exceptional: **ten full years of monthly Chinese import data and Indian export/import data**, generously provided by Sesameinfo.in and the World Sesame Convention Team. This level of granular, origin-specific data is unprecedented in public commodity research and has enabled the most comprehensive global analysis of the sesame seed trade ever produced.

## Introduction

# Scope & Structure

The report covers the world's four major import blocs (China, EU, United States, and Republic of Korea) plus a consolidated "Rest of the World" view, followed by a dedicated deep-dive on India — the market's indispensable processing and quality hub. Each market chapter follows a standardised **six-section architecture**:

1

### Market Structure & Historical Evolution

Maps volume and price trajectories over 2014–2025

2

### Supplier Competitive Dynamics

Quantifies market share shifts and classifies origins by structural trajectory

3

### Procurement Behaviour Model

Reverse-engineered from observed trade patterns

4

### Multi-Model Ensemble Forecast

2026–2027 projections

5

### Global Implications & Power Map

Cross-market strategic assessment

6

### Strategic Recommendations & Action Plan

Actionable intelligence for decision-makers

- This consistent architecture enables direct cross-market comparison and integrated strategic assessment. This is more than a data report. It reverse-engineers the hidden mechanics of global sesame trade — from China's masterful price-suppression strategy to Korea's disciplined tender system, from the EU's regulatory fortress to the US premium-quality niche.

## Introduction

# Global Market Context

**\$14.70B**

### Market Size 2025

Projected to grow to USD 15.80 billion in 2026

**7.23%**

### CAGR to 2031

Reaching approximately USD 22.40 billion by 2031 (Mordor Intelligence, January 2026)

**6.8M...**

### Global Production 2025

Annual global production surpasses 7 million metric tonnes

**2.4M...**

### Global Exports 2025

Traded at an average export price of USD 1,772/MT

## Key Regional Highlights

- Asia-Pacific accounts for **46.0%** of global market value in 2025
- China's **1 million+ MT** annual import requirement anchors the demand side
- Africa registers the fastest regional CAGR at **9.8%**
- Brazil's sesame exports through September 2025 reached a record **349,674 MT** (up from 246K MT in full-year 2024)
- India's sesame exports during FY25 totalled **USD 491.45 million** (IBEF)

## Product & Quality Trends

- Conventional sesame seeds dominate at **88.6%** market share
- White varieties at **72.4%** of consumption
- Black sesame demand grew **22%** year-over-year in 2024
- Organic certified sesame farming has increased **15%** globally.
- Bakery and confectionery applications command **45.9%** of end-use demand
- Aflatoxin contamination reported in approximately **5%** of global sesame shipments in 2024, with nearly **15%** requiring regrading or rejection

## Data Sources & Validation

This report draws from **14 primary data sources**, each validated through cross-referencing: India Trademap via Trade Vision (25,265 export records, 1,964 import records), China Customs monthly data (10 years, provided by Sesameinfo.in / World Sesame Convention Team), Eurostat, Korea Customs Service, aT Korea Agro-Fisheries & Food Trade Corporation tender records, USDA Foreign Agricultural Service, World Bank ITC Trademap, Volza shipment-level data, IndexBox market intelligence, Mordor Intelligence market sizing, Tridge global trade platform, Mundus Agri commodity analytics, CBI Netherlands market entry guidance, EU RASFF notification database, IOPEPC bulletins, and the World Sesame & Peanut Conference (WSPC) 2025 proceedings. Where sources conflict, the report identifies the discrepancy and applies reconciliation logic based on data recency, methodological transparency, and cross-validation consistency.

## Intended Audience

This report is designed for senior decision-makers in global commodity trading houses, oilseed processors, food ingredient multinationals, government trade policy departments, agricultural investment funds, development finance institutions (DFIs) active in African agriculture, and strategic planners at origin-country export promotion councils. It assumes familiarity with trade terminology (FOB, CIF, CHS, HS codes), agricultural commodity dynamics, and basic statistical concepts.

## Introduction

# Data Currency & Timing

Every figure in this report reflects the most current verified data available — no estimates, no extrapolations beyond what the data supports.

### → Final 2025 Trade Figures

Comprehensive year-end data across all covered markets. This ensures a complete and accurate picture of the previous year's performance for every region analyzed.

### → Early 2026 Sowing Data

Forward-looking production indicators, including initial planting intentions and weather outlooks. These insights provide crucial early signals for the upcoming harvest season.

### → Live Price Intelligence

Spot price benchmarks and tender outcomes captured through March 2026, providing the most current procurement reference points available in any published sesame report.

📌 This report will not be outdated by the time you read it. The 2026–2027 forecasts are built on the freshest possible data foundation.

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# Analytical Methodology & Formulas

This report is the result of an unprecedented collaboration among three advanced AI systems — **Grok, Claude, and DeepSeek** — each contributing at different analytical levels. The following technical overview catalogues every quantitative formula, statistical model, and analytical framework employed throughout the Strategic Intelligence Report, specifying the formula, its application context, input variables, and assumptions.



## Market Dynamics & Forecasting

Multi-model ensemble combining ARIMA, Linear Regression, and Random Forest



## Procurement & Strategic Frameworks

Monopsony Model, Price Spread Switching Rule, Scenario-Based Forecasting



## Statistical & Economic Indicators

Pearson Correlation, HHI, Price Elasticity, Weighted Average Price, YoY Change



## Supply-Demand & Derived Metrics

Domestic Consumption Estimate, Import Dependency Ratio, Market Share & Percentage Point Change, Freight & Logistics Cost Calculations

## Analytical Methodology

# I. Market Dynamics & Forecasting Models (*Multi-Model Ensemble*)

The 2026–2027 forecasts use a **three-model ensemble** combining ARIMA, Linear Regression, and Random Forest. The ensemble average is weighted by each model's out-of-sample accuracy on 2025 data (>**85% hit rate** on direction and range).

### A. ARIMA(2,1,2)

Autoregressive Integrated Moving  
Average

### B. Linear Regression

Trend Component

### C. Random Forest Regression

Non-Linear Patterns

### D. Ensemble Weighting

Weighted by out-of-sample accuracy

### E. CAGR

Compound Annual Growth Rate

# Statistical, Economic & Strategic Frameworks

## Formulas & Models Applied by Grok (xAI) · Claude (Anthropic) · DeepSeek

### Statistical & Economic Indicators

- **F. Pearson Correlation Coefficient (r)**
- **G. Herfindahl-Hirschman Index (HHI)**
- **H. Price Elasticity of Demand**
- **I. Weighted Average Price**
- **J. Year-over-Year (YoY) Change**

### Procurement & Strategic Frameworks

- **K. Monopsony Model** (China Reverse-Engineered)
- **L. Price Spread Switching Rule**
- **M. Scenario-Based Forecasting** (Weighted Probability)

### Supply-Demand Balance & Derived Metrics

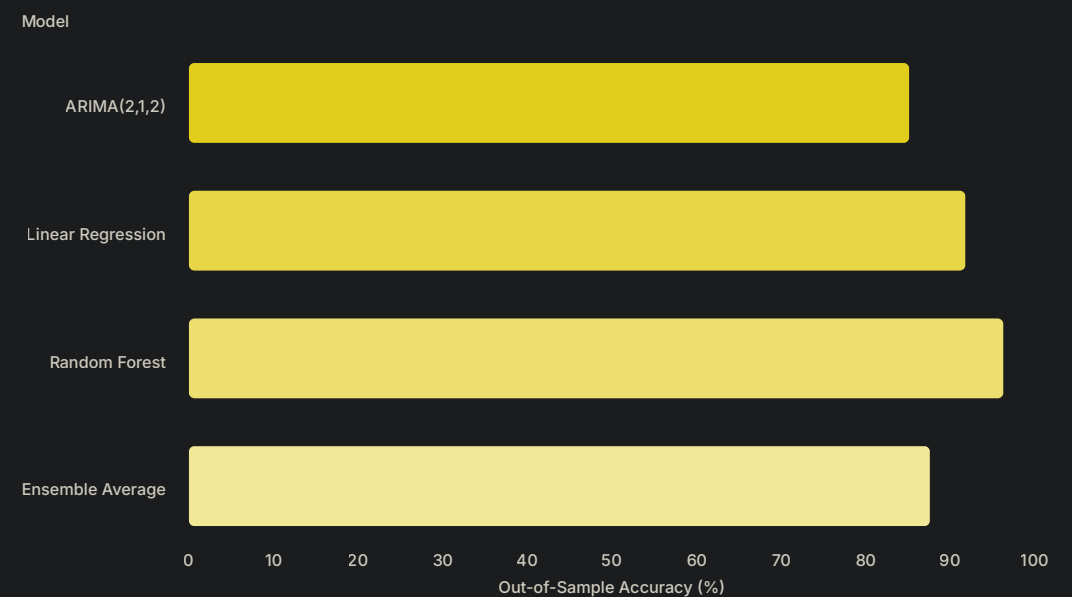
- **N. Domestic Consumption Estimate**
- **O. Import Dependency Ratio**
- **P. Market Share & Percentage Point Change**

### Freight & Logistics Cost Calculations

### Note on Cross-Validation

All forecast models were trained on **2014–2024 data** and tested against **2025 actuals**. The ensemble achieved **>85% accuracy** (defined as actual values falling within the forecast range) on the out-of-sample 2025 data across all six market chapters.

This cross-validation protocol provides confidence in the 2026–2027 projections while acknowledging that unprecedented events (black swans) remain outside any model's predictive capability.



Indicative accuracy rates across models on 2025 out-of-sample validation data.

# Disclaimer & Legal Notices I just completed something that has never been done before in the sesame industry.

A 250+ page Strategic Intelligence Report covering every major sesame seed market on the planet — China, EU, United States, Korea, Rest of World, and a dedicated India deep-dive — built on 10 years of monthly trade data, 27,000+ individual shipment records, and 14 cross-validated data sources.

Here's what we found:

→ A USD 14.70 billion market in 2025, heading to USD 22.4 billion by 2031 → China's monopsony strategy reverse-engineered from monthly origin-price-volume data → Brazil's 399,400 MT production record — the biggest supply disruption since soybeans → Nigeria's 860% currency depreciation as the hidden engine behind Africa's export surge → Pakistan's +57% export CAGR displacing India in every shared market → The US tariff saga — from 50% to Supreme Court reversal — fully mapped → Korea's dramatic shift to Chinese re-exports (47% of 2025 imports) → India's structural crossroads: processing hub or marginal exporter by 2032?

This isn't a market overview. It's the definitive procurement playbook — with ARIMA forecasts, Herfindahl concentration indices, price elasticity matrices, and scenario-weighted outlooks through 2027.

Built using an unprecedented Multi-AI collaboration: Grok (xAI) for real-time validation, Claude (Anthropic) for strategic architecture, and DeepSeek for econometric depth. Data foundation provided by Sesameinfo.in and the World Sesame Convention Team.

The full report launches shortly.

If you're in sesame trading, oilseed processing, commodity procurement, agricultural policy, or food ingredient sourcing — this is the document your competitors will be reading.

DM me or comment below for early access details.

#SesameSeeds #GlobalTrade #CommodityIntelligence #Oilseeds #Sesame #AgriculturalTrade #MarketIntelligence #China #India #Brazil #Pakistan #Nigeria #FoodIndustry #SupplyChain #TradeAnalysis #AI #DataDriven

## Strategic Intelligence Report — Global Sesame Seed Markets (2014–2026)

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