PEANUT POST

AUG 2026

108 VOLUME

SOUTH AFRICA

PEANUT MARKET OUTLOOK





Global Markets P6



Bird Feed P16



Peanut Science P18

Peanut Wizard | Current Crops | Shelled Facts | Peanut Voice | Sustainability

MARKET HIGHLIGHTS

SUPPLY

CHINA

Chinese exporters have reduced prices by approximately USD 50–150/MT for blanched peanuts in response to weak domestic and export demand. The market continues to carry substantial inventories from the 2025 crop, placing additional pressure on pricing. Planting for the 2026 crop appears broadly in line with last year, with only marginal changes in acreage across producing regions.

The key variable for the new crop remains weather, particularly rainfall during the current La Niña season. While rainfall has been generally adequate so far, weather-related uncertainties remain. Given the large carry-forward stocks, there is a possibility that 2026 production may not match 2025 levels, a pattern often observed when high inventories coincide with adverse weather risks. Developments during August will be critical in determining China's production outlook and the broader demand-supply balance in the global peanut market.

ARGENTINA & BRAZIL

Suppliers in Argentina and Brazil continue to adopt a cautious and selective selling approach, carefully managing inventories amid quality concerns and uncertain market sentiment. A significant proportion of available stocks consists of off-grade material, particularly G2 crushing grades and splits. In Brazil, aflatoxin levels remain a key concern, with reported levels ranging from 20–200 ppb across the last two crops. Argentina, meanwhile, has harvested a smaller crop this season, with additional quality challenges arising from insect damage and higher mould incidence.

In the peanut oil market, Argentina has been offering crude peanut oil between USD 1,500–1,650/MT CFR Qingdao, depending on whether the product is from old or new crop crushings. Brazilian new-crop oil has traded around USD 1,650–1,700/MT CFR Qingdao. While sellers in both origins have become increasingly reluctant to offer large volumes, this tightening reflects market sentiment rather than a meaningful improvement in demand. Whether these firmer price indications are sustainable will depend on actual buying interest in the months ahead.

INDIA

Supplies from India for export markets outside Indonesia remain significantly constrained. Limited raw material availability, strong domestic buying, weather-related quality challenges, and rising freight costs have made it increasingly difficult for exporters to produce FAQ-grade peanuts at competitive prices. These conditions are expected to persist through September.

Some relief may emerge from October onwards if the government releases its stocks ahead of the arrival of the new crop in October and November. However, until such releases materialise, prices are expected to remain firm. In the peanut oil segment, 2 FFA crude peanut oil prices rose from around USD 1,550/MT in July to USD 1,650–1,700/MT, driven by limited availability of suitable raw material and the government's decision not to release stocks at lower prices. The resulting shortage has forced several crushing units to reduce or suspend operations, tightening supplies for both the confectionery and peanut oil sectors and creating continued challenges for Indian exporters serving international markets.

DEMAND



CHINA

Demand from China remains largely subdued, with buyers showing little appetite for building significant inventory positions. Only sporadic inquiries and limited transactions have been observed, with peanut oil trading around USD 1,550–1,625/MT CFR Qingdao for forward shipments, while crushing-quality peanuts have seen indications in the range of USD 650–800/MT CFR Qingdao. Market sentiment remains cautious and is expected to stay uncertain through August, with greater clarity on buying trends likely only towards the end of the month.

Demand for both peanuts and peanut oil from Senegal has also remained weak. Despite Senegal continuing to benefit from zero import duty on peanut and peanut oil exports into China, buying interest has been lacklustre, reflecting the generally cautious stance of Chinese importers.



INDONESIA

Indonesia remains closed to peanut imports from all origins, with the import quota framework yet to be announced. While the Ministry of Agriculture and Ministry of Commerce have collected documentation from importers and interested parties, further clarity on quota allocation and the application process is unlikely before the end of September. In the meantime, the market is relying entirely on domestic supplies.

Local FAQ peanut prices have increased sharply from around USD1880/MT to approximately USD2320/MT, with market expectations that prices could potentially reach USD2770/MT if import restrictions continue. Although local stocks remain relatively ample and traders are holding back sales, fresh domestic crop arrivals are gradually entering the market. With seasonal demand expected to strengthen over the next two months, the Indonesian market is likely to remain firm, with further upward pressure on prices.



EUROPE

Demand across the EU, including the bird feed segment, has yet to fully adjust to current market fundamentals. Bird feed buyers continue to target price levels of USD 850–950/MT, depending on grade, with sourcing primarily focused on Argentina and Brazil, although Brazilian supplies continue to carry some aflatoxin-related quality risks.

Demand from the human consumption segment for both raw and blanched peanuts remains subdued, with buying interest generally around USD 1,450–1,550/MT for jumbo raw kernels and approximately USD 1,650/MT for blanched kernels. Overall demand is expected to remain relatively soft in the near term, despite expectations among Latin American producers that prices will strengthen later in the year. Any meaningful price recovery is unlikely to be driven by the European market alone.



INDIA

Domestic peanut demand in India remains exceptionally strong, with 50/60 Spanish FAQ trading at around USD 1,800–2,000/MT ex-works. Demand continues to be supported by tight supply conditions, the upcoming festive season, and the onset of the peak consumption period, which is expected to continue through January 2027.

Monsoon rainfall has generally been satisfactory despite deficits in a few regions, and crop development appears broadly stable. However, market availability remains limited as supplies are tight and procurement of lower-priced in-shell peanuts from government-held stocks has been minimal. As a result, the domestic market continues to trade at elevated price levels with strong underlying demand.

SOUTH AFRICA

PEANUT MARKET OUTLOOK & SUPPLY ANALYSIS

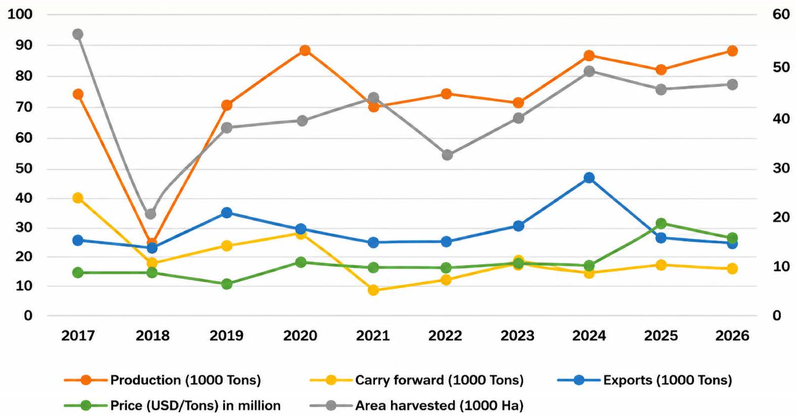


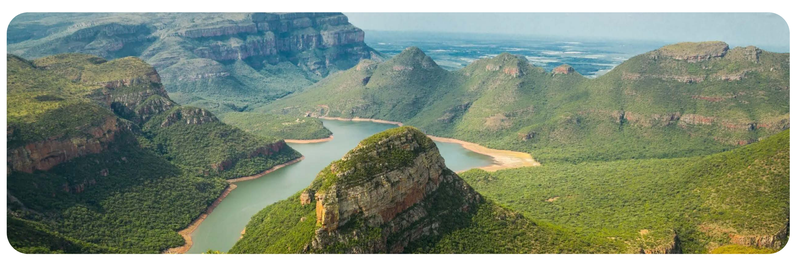
South Africa's peanut market is driven largely by peanut butter—a versatile, affordable source of plant-based protein.

Runner peanuts offer the consistency needed for high-volume production and blending, while flavourful Spanish varieties are ideal for premium products. Processors also prioritise traceability, grading and rigorous food-safety controls, particularly aflatoxin testing.

With a median age of about 28, a population exceeding 63 million and growing demand for convenient, nutritious foods, South Africa offers solid long-term potential for the peanut butter category.

PEANUT BALANCE SHEET – SOUTH AFRICA

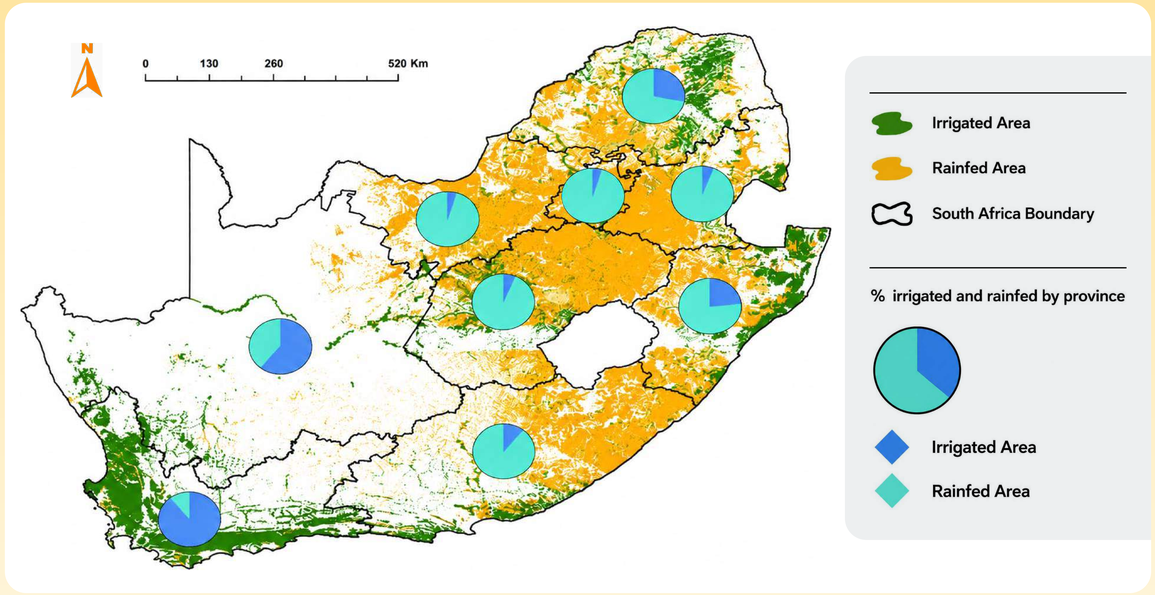




South Africa faces severe water stress and ranks among the world's 30 driest countries. Its average annual rainfall is only 450 - 465 mm - around 40% below the global average of 850 - 860 mm. With approximately 90% of peanut acreage rain - fed and only 10% irrigated, production remains highly exposed to rainfall variability and drought.

South Africa's leading export markets are Mozambique, Zimbabwe and Belgium, collectively accounting for 21% of its peanut and peanut-product exports.

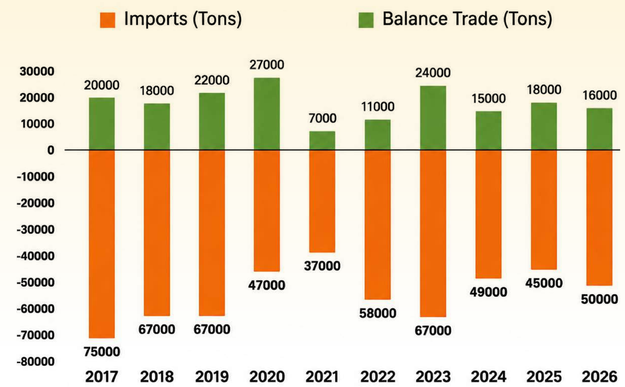
Given unpredictable rainfall, domestic demand and persistent farming challenges, South Africa must rely heavily on imports. Peanut imports reached 45,000 tonnes in 2025, representing approximately 36% of total annual consumption.



BALANCE OF TRADE

Declining carry-forward stocks, steadily rising imports and increasing production indicate growing pressure on South Africa's peanut balance sheet as it seeks to meet midstream and downstream demand from both domestic and export markets. To evaluate the annual supply balance, a Balance of Trade dataset was calculated as: Annual Production + Previous Year's Carry-Forward Stock + Imports - Exports - Annual Domestic Consumption

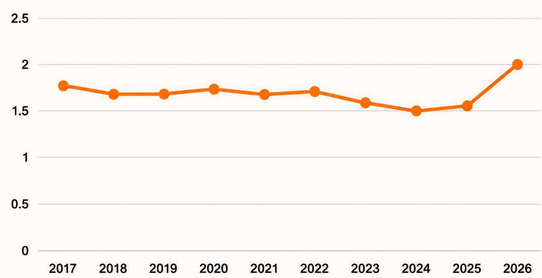
The trade balance is calculated as annual production plus opening stocks, less exports and average annual consumption. The widening supply gap - growing at a CAGR of 1.30% —highlights the market's increasing reliance on imports.



PER CAPITA CONSUMPTION

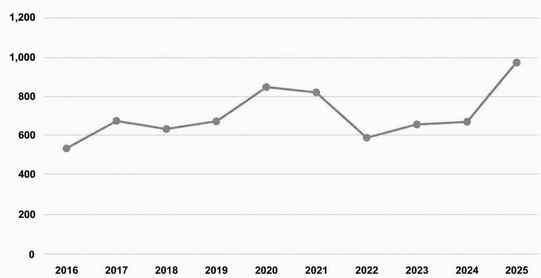
SOUTH AFRICA

Per capita peanut consumption is growing at a CAGR of 1.37%, driven primarily by demand for peanut butter, followed by Roasted & Salted Peanuts and Confectionery Products.



EXPORT VOLUME TREND

South Africa's primary peanut export product is Inshell Peanuts, which accounts for approximately 50.1% of total exports. These products rely largely on indigenous Natal peanut varieties.



The country entered the export market in 1972, with exports peaking at 101,000 tonnes in 2002. Peanut imports commenced in 1978 and reached a historic high of 82,000 tonnes in 2015.

Global Markets



ARGENTINA

Argentina's peanut sector continues to face increasing quantity and quality losses, alongside a significant shortage of Jumbo 38/42 grades. Yields vary sharply, ranging from 1,700–2,200 kg/ha in some regions to more than 6,500 kg/ha in others. Field pathogens are causing continued deterioration in farmers' stock quality. Only around 80% of the planted area has been harvested, leaving approximately 80,000 hectares unharvested after more than four months. Harvested kernels contain 13–15% moisture and show rottenness, internal and external mold, staining, sprouting, frost damage, immaturity, and discoloration. Artificial drying is delaying logistics, while increasingly difficult and time-consuming processing is raising rejection rates. A larger share of rejected kernels is therefore expected to be diverted to the crushing industry.

BRAZIL

The Brazilian peanut market remains slow, with limited liquidity. Growers continue to hold their stocks and are not under pressure to sell at current price levels, while buyers remain comfortable, resulting in subdued trading activity. In-shell peanut prices to growers are currently around R$75–R$80 per 25 kg bag. Attention is now shifting to the next crop. Based on field assessments, Brazil's planted area is expected to decline by approximately 30%, with the potential for a larger reduction. The final extent of the decline will largely depend on two key factors: credit availability and seed demand. Credit conditions remain tight, as the economic slowdown and elevated debt levels across the sector are limiting growers' planting capacity. Seed movement is also being closely monitored, as market seed sales provide an early indication of the area likely to be planted. Weather has emerged as another major concern. The developing El Niño during the 2026 planting window could pose additional risks to the next crop, increasing caution across the sector. Looking ahead, declining planted areas in both Brazil and Argentina may result in a smaller South American peanut supply.

USA

U.S. shellers are concerned about declining peanut planting area, despite strengthening demand. USDA projects higher peanut consumption in MY 2026/27, supported partly by the growing popularity of high-protein diets, as peanuts remain an affordable protein source. With lower production, higher domestic consumption, and increased exports compared with MY 2025/26, U.S. peanut ending stocks are forecast to decline to 2.0 billion pounds, tightening the overall supply outlook.



PEANUT SPOTLIGHT

INDIA

Favourable rainfall across Gujarat has supported robust peanut sowing progress, with planting largely completed in major producing regions and advancing in Kutch following improved precipitation. Gujarat has covered 16.48 lakh hectares (86.05% of normal acreage), while Rajasthan has reached 10 lakh hectares (125% of normal), reflecting above-normal planting.

Market arrivals have nearly concluded, with Rajkot and Gondal receiving only around 1,000 bags daily. Remaining inventories are concentrated with NAFED and a limited number of private stockists, while the Pathwada season has ended. Shelling activity continues to cater to steady domestic demand, whereas export purchases remain restricted to immediate shipment requirements. Edible oil and oilseed markets opened steady, with overall sentiment remaining stable.

In South India, limited new-crop arrivals are reported from Andhra Pradesh and Telangana under predominantly cloudy weather. Domestic demand from Hyderabad and Bengaluru continues to absorb most volumes, while export interest remains selective. Tamil Nadu's old crop season is drawing to a close, with new arrivals commencing from Alangudi. In Karnataka, arrivals remain largely for the domestic market, although below-normal rainfall is expected to limit the upcoming crop to average quality despite sowing progress.



OTHERS

Indonesia TThe Indonesian peanut market remains firm, with most importers holding sales or maintaining offer levels at USD 2210/MT and above. Actual transaction prices and traded volumes remain unclear, while underlying consumption demand is limited, with current buying driven primarily by stock-building.

China Chinese origins remain well supplied. China 50/60 is offered at around USD 2210/MT on credit for 50 kg jute or PP bags, although some transactions are reportedly concluded at USD 2100–2160/MT. China 70/90 is quoted near USD 2160/MT, with additional Black China cargo available at USD 2050–2100/MT. TJ 80/90 prices range from USD2100–2210/kg, while Andhra White 80/90 is offered at USD 2320/MT. African 80/90 is available at USD 1550–1770/MT, while demand-quality 140/160 OBE quotations remain firm despite limited visibility on concluded trades.

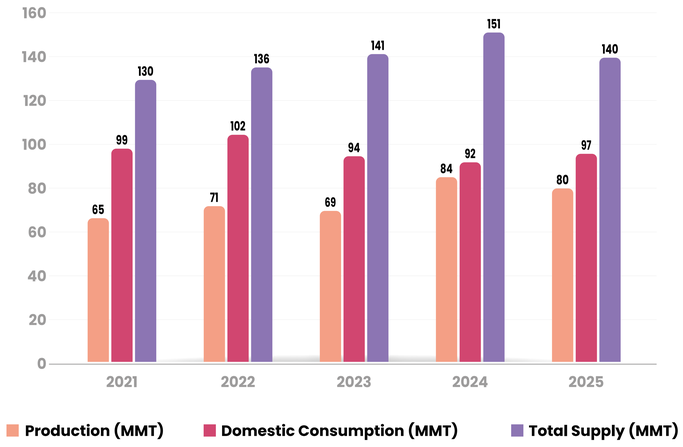
South Africa South Africa's official peanut crop estimate remains unchanged at approximately 57,000 metric tons of kernels. Harvesting has progressed under generally favorable conditions, with 85–90% of the crop already harvested. However, rainfall during the harvest period has adversely affected both kernel quality and yields in several producing regions. Consequently, industry participants increasingly expect final production to be around 53,000 metric tons, below the official estimate. The wet harvesting conditions have also heightened concerns over aflatoxin contamination, which may impact overall crop quality and marketability. Given the anticipated production shortfall, South Africa is expected to rely on peanut imports to meet domestic demand. A more accurate assessment of the final crop size, quality, and supply situation is expected by the end of July 2026, following the completion of harvesting and post-harvest evaluations.

CHINA

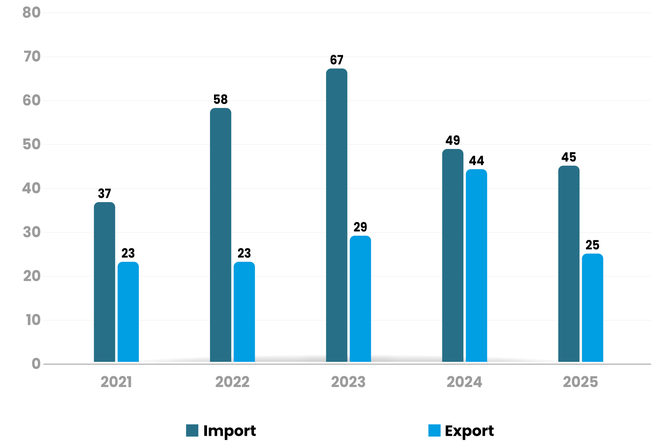
China's domestic peanut market is stabilizing, though prices remain divergent. In the Northeast, holders of premium-quality peanuts are maintaining firm quotes, while sellers of average and lower-quality stocks are discounting to reduce risk and improve cash flow, resulting in quality- and storage-cost-driven price fluctuations. Supply and demand remain at a standstill as the market awaits clearer signals from the new season. Trading is sluggish, while slower downstream sales and weak retail demand continue to weigh on sentiment. The delayed arrival of the new crop is supporting old-crop prices. Declining open-air stocks and cold-storage holding costs are limiting downside pressure, while lower-quality inventories are expected to be cleared gradually. Looking ahead, favorable weather and a smooth harvest could lead new-crop prices to open lower and weaken, limiting old-crop recovery. However, weather-related harvest delays may support both old- and new-crop prices, while high old-crop inventories remain a key downside risk.

SOUTH AFRICA PEANUT DEMAND & SUPPLY

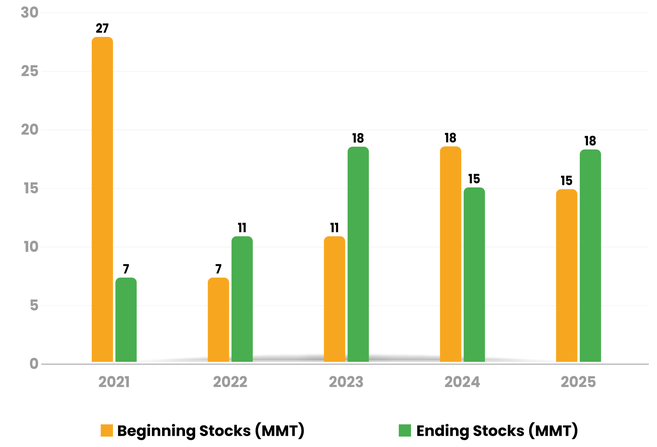
South Africa Production, Domestic Consumption & Total Supply (In MMT)



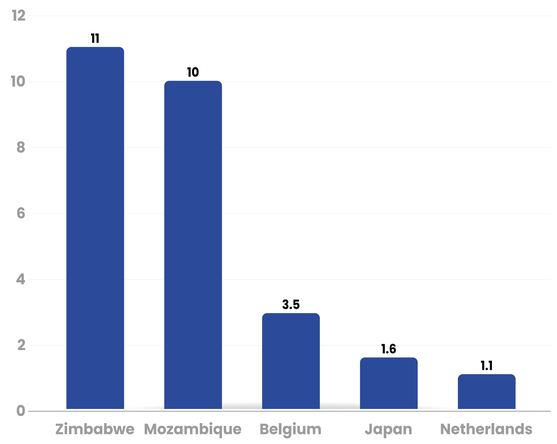
South Africa Trade (In MMT)



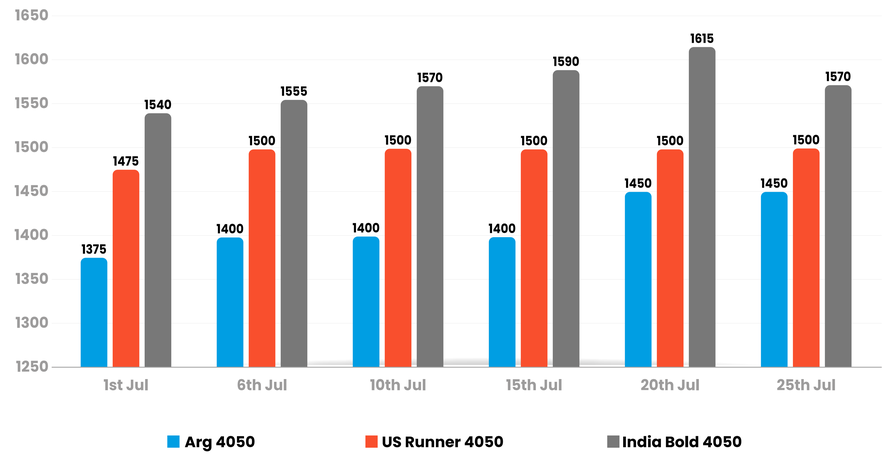
South Africa Stock Variations (In MMT)



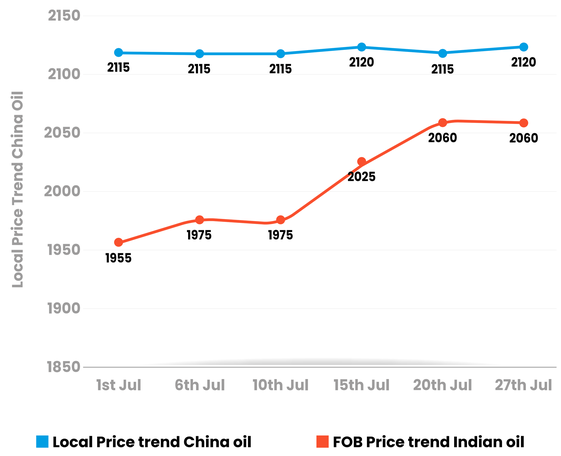
Top Countries Importing from South Africa



CIF EMP (European Main Port) PRICE COMPARISON in USD



Peanut oil price trends: China Local Vs FOB India in USD



Current Crops

ARG 40/50 - $1450

ARG

Argentina

Quality varies significantly across regions, with declining kernel quality and a shortage of Jumbo 38/42 grades.

Brazil

The next crop area is projected to decline by approximately 30%, with the potential for a further reduction.

BRA

BRA 40/50 - $1410

CHI 41/51 - $1400 (FOB)

CHI

China

The new crop is currently in the growing stage, the recent typhoons have caused only limited damage to the crop.

India

New-crop moisture levels range from 8–10% across South India.

IND

IND 40/50 - $1590

RSA 60/70 - $NA

RSA

South Africa

Harvest is 85–90% complete, with final production expected to fall below the official estimate.

USA

USA

USA 40/50 - $1500

TNZ 60/70 - $1590

TNZ

Tanzania

Peanut Voice



“With 28 years of experience in the peanut industry, Wessel Higgs brings extensive expertise in peanut processing, marketing, international trade, and supply-chain management. His long-standing industry involvement provides valuable insight into the evolving opportunities and challenges shaping South Africa’s peanut sector.”

Wessel Higgs
CEO
Triotrade Pty Ltd

What are the biggest opportunities you currently see in peanut production in the next five years in South Africa?

There is great opportunity in the seed development market, South Africa is continous looking for new varieties that give good yields in challenging weather enviroments.

Further more is there great potential in the informal consumer markets that is very price sensitive.

There is also opportunity for value added products in the retail space but needs to be at affordable pricing.



The Amazing Story of Peanut Butter Powder

Turn peanuts into superfood powder? Yes! This 100% natural wonder is created by roasting and then hitting peanuts with 400-600 bar of pressure, imagine the weight of several elephants stacked on a tiny spot, or pressures that create industrial diamonds from carbon! It defats the nuts naturally, locking in rich taste. Result: 70-85% less fat, but double the protein concentration, ideal for muscle-building snacks and meals without extra calories.

The market is exploding at ~7.6% CAGR, showing huge demand for smart nutrition. Economically, it boosts peanut farmers and offers affordable, planet-friendly protein with minimal environmental impact.

SAFEGUARDING ORGANIC PEANUTS:

HOW MUSTARD BYPRODUCTS DRIVE QUALITY AND PROFIT AS BIO-FUMIGANT?



In Peanut industry, preventing post-harvest infestation and mycotoxin contamination is paramount. For decades, the industry relied heavily on synthetic chemical fumigants to protect stored raw materials. However, as global consumer demand rapidly shifts toward clean-label and certified organic products, processors face a major technical challenge: how to maintain pristine kernel quality without using prohibited synthetic chemicals.

THE MOST PROMISING SOLUTION

LIES IN AN INNOVATIVE, WASTE-TO-VALUE PROCESS: BIO-FUMIGATION USING DEFATTED MUSTARD MEAL.

When mustard seeds are pressed for oil, the remaining byproduct, defatted mustard meal, is naturally rich in glucosinolates. Under controlled storage conditions, these compounds can be enzymatically activated to release isothiocyanates (ITCs). These biogenic gases act as potent natural fumigants. They aggressively disrupt the cellular functions of storage insects and completely inhibit the germination of Aspergillus spores, which are responsible for aflatoxin development.

From a quality science perspective, mustard bio-fumigation is exceptional. It protects the delicate lipid and protein matrices of the peanut from rancidity and pest damage without leaving chemical residues that would compromise a clean label.

FINANCIALLY,

THE TRANSITION TO BIOLOGICAL STORAGE CONTROLS IS HIGHLY LUCRATIVE.

The global organic peanut segment is currently the fastest-growing category in the industry, significantly outpacing the conventional peanut market's standard 2% to 5% Compound Annual Growth Rate (CAGR).

Because of this soaring demand, organic peanuts consistently command a

30% to 50%

price premium over conventional equivalents.

By utilizing mustard-derived ITCs, processors can **drastically reduce post-harvest kernel loss** while strictly adhering to **organic certification standards**. Bio-fumigation transforms a low-value agricultural byproduct into a high-value quality assurance tool. For the peanut industry, adopting this natural biocontrol is a scientifically rigorous strategy to capture high-margin organic premiums and ensure superior shelf-life stability.

Source Reference: A comprehensive insight into peanut storage: patterns of quality changes, pathways of quality deterioration, and storage strategies | ScienceDirect www.sciencedirect.com/science/article/pii/S259015752500820X

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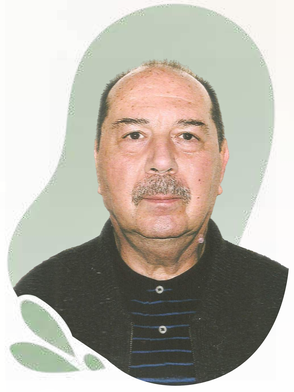
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NATURE'S FERTILIZER FACTORY

How Peanut Plants Naturally Create Their Own Nitrogen



Beneath every peanut plant lies a living nitrogen factory.

What if one hectare of peanuts could naturally generate the nitrogen equivalent of

448 KG

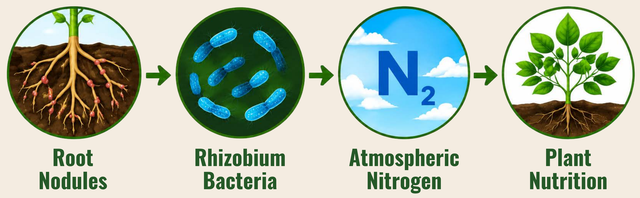
OF COMMERCIAL UREA

without a fertilizer factory?

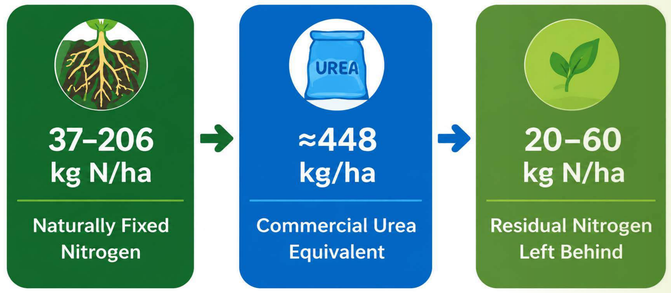


It is one of nature's most remarkable biological systems, but it's one of nature's most efficient biological systems.

Beneath every peanut plant, specialized root nodules house Rhizobium bacteria that capture atmospheric nitrogen and convert it into plant-available nutrients.



This natural partnership, known as Biological Nitrogen Fixation (BNF), allows peanut plants to produce much of the nitrogen they need instead of depending entirely on synthetic fertilizers.

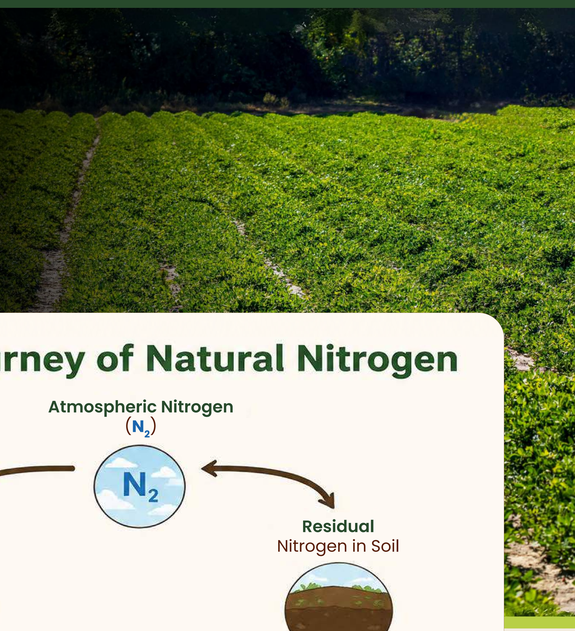


Under favourable growing conditions, peanut crops can naturally fix 37–206 kg of nitrogen per hectare. At the upper end of this range, that's equivalent to nearly 448 kg of commercial urea—a powerful example of nature replacing an energy-intensive industrial process.

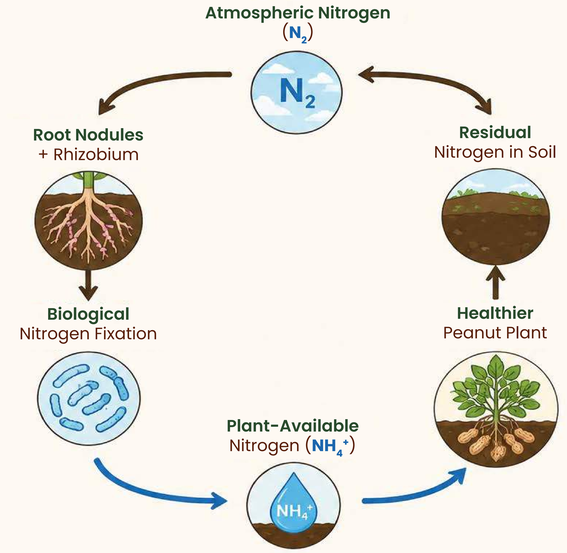
The sustainability benefits extend well beyond a single harvest.

After harvest, peanut fields can leave behind 20–60 kg of residual nitrogen per hectare, benefiting the next crop in rotation. This improves nutrient cycling, supports soil microorganisms, and helps maintain healthier, more productive soils over time.

Unlike manufactured nitrogen fertilizers that require high temperatures, pressure, and significant energy during production, biological nitrogen fixation is powered entirely by the natural relationship between peanut roots and beneficial soil bacteria.Every root nodule functions as a living nitrogen factory, continuously supplying nutrients throughout the growing season.



The Journey of Natural Nitrogen



Peanut Nitrogen by the Numbers

Key Sustainability Facts	Value
Nitrogen naturally fixed	37–206 kg N/ha
Commercial urea equivalent	≈448 kg/ha
Residual nitrogen for the next crop	20–60 kg N/ha
Crop nitrogen supplied through BNF*	Up to 70–100%

For generations, peanut plants have quietly demonstrated that some of agriculture's most effective innovations aren't built inside factories—they're created by nature itself. Hidden beneath the soil is a living partnership that strengthens soil fertility, supports resilient farming systems, and demonstrates that some of agriculture's most effective sustainability solutions are already built into nature.

Source: ICRISAT: Crop Rotation for Nitrogen Replacement, FAO Biological Nitrogen Fixation in Legumes

Did You Know?

Every peanut root nodule contains millions of Rhizobium bacteria working continuously throughout the growing season. Together, they perform a natural process that helps reduce dependence on manufactured nitrogen fertilizers while improving soil fertility for future crops.

THE PEANUT DIDN'T CHANGE. THE WORLD AROUND IT DID.

How El Niño Is Changing the Way Birds Find Food

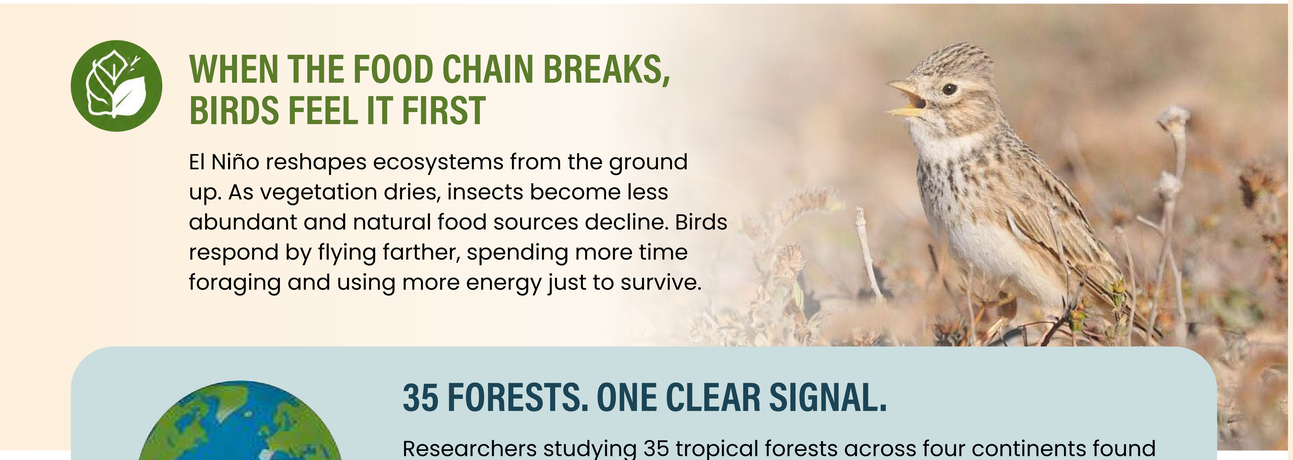


EVERY FLIGHT NOW COSTS MORE

A bird begins each day with one goal: find enough food before its energy runs out. During El Niño, that task becomes increasingly difficult. Hotter temperatures and prolonged dry conditions reduce insects, limit seed production and force birds to search farther for every meal. The peanut hasn't changed—but the world around it has.

WHEN THE FOOD CHAIN BREAKS, BIRDS FEEL IT FIRST

El Niño reshapes ecosystems from the ground up. As vegetation dries, insects become less abundant and natural food sources decline. Birds respond by flying farther, spending more time foraging and using more energy just to survive.



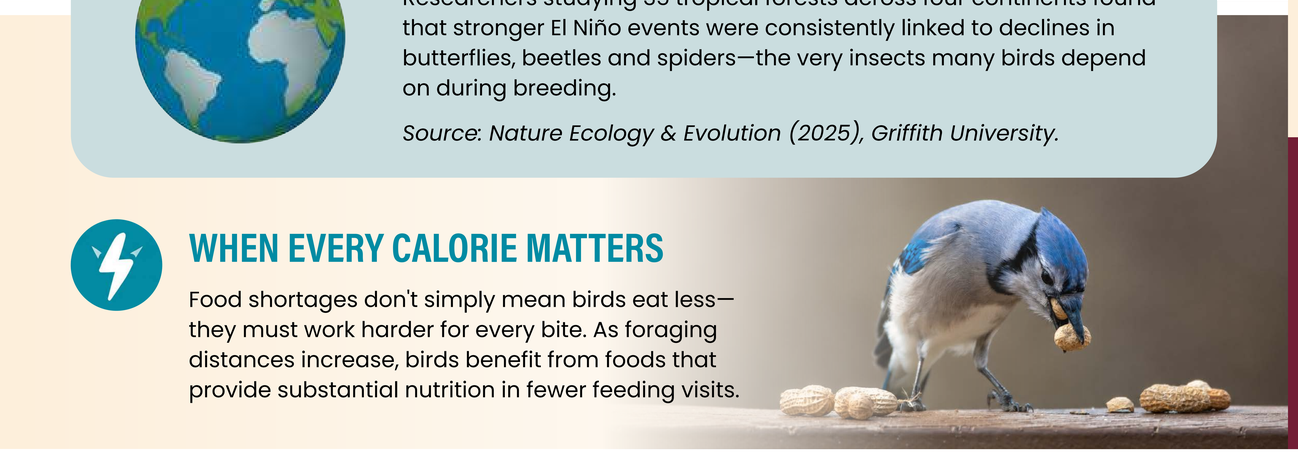
35 FORESTS. ONE CLEAR SIGNAL.

Researchers studying 35 tropical forests across four continents found that stronger El Niño events were consistently linked to declines in butterflies, beetles and spiders—the very insects many birds depend on during breeding.

Source: Nature Ecology & Evolution (2025), Griffith University.

WHEN EVERY CALORIE MATTERS

Food shortages don't simply mean birds eat less—they must work harder for every bite. As foraging distances increase, birds benefit from foods that provide substantial nutrition in fewer feeding visits.



WHEN THE FOOD CHAIN BREAKS, BIRDS FEEL IT FIRST

100 g of Peanuts Provides

- **≈49 g Healthy Fats** — A concentrated source of energy
- **≈26 g Protein** — Supports muscles and feather maintenance
- **Vitamin E, Niacin & Magnesium** — Essential nutrients involved in metabolism and overall health

Source: USDA FoodData Central.



THE EFFECTS ARE ALREADY VISIBLE

Long-term monitoring in Ecuador's Amazon rainforest found that nearly 50% of forest bird populations have declined since 2001, with insect-eating birds among the hardest hit. Scientists increasingly identify declining insect abundance as one of the major contributing factors.

Source: Cornell Lab of Ornithology.

Climate Change	What Birds Experience	Why Peanuts Matter
Higher temperatures	Faster energy loss	Rich in healthy fats for concentrated energy
Fewer insects	Reduced natural food	Provides supplemental nutrition
Lower seed production	Longer foraging trips	More energy in every feeding visit

THE TAKEAWAY:

El Niño doesn't tell birds what to eat—it changes what they can find. As climate extremes reshape nature's menu, every successful meal becomes more valuable. In a changing world, the peanut remains the same—but its role in supporting wild birds becomes more important than ever.



How AI CAN PREDICT A PEANUT'S FLAVOR

BEFORE IT'S EVEN GROWN

For peanut farmers and breeders, predicting which plant will produce the tastiest roasted peanut has always been an expensive waiting game.

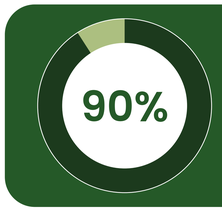
Traditionally, we can't test a peanut's flavor until we grow a large enough crop to feed a team of sensory panel. By the time breeders find out a new variety lacks that perfect roasted flavor, they have already invested years of time, money, and farmland into cultivating it.



But what if we could know how a peanut would taste when it was **just a seedling?**

A multidisciplinary team at the University of Georgia (UGA) is making that possible by combining chemical analysis with artificial intelligence. Instead of relying on human taste buds, the team is analyzing the chemical precursors inside raw peanuts, specifically the amino acids and sugars that eventually react during roasting to create that classic peanut aroma.

By feeding this chemical data into machine learning models, the researchers are teaching computers to predict roasted flavor profiles from incredibly small samples.



This high-tech method requires **90% less sample material** than human taste tests.



This breakthrough allows breeders to screen peanuts for flavor quality years earlier in the process. If a seedling lacks the chemical building blocks for a good roast, it can be dropped from the program immediately, saving immense resources.



1. **Early Flavor Screening**
2. **Select Strong Seedlings**
3. **Resource Conservation**
4. **Find Flavor Genes**
5. **Deliver Better Peanuts**



The ultimate goal is to identify the exact genetic markers tied to flavor, allowing scientists to breed high-yielding, disease-resistant peanuts that are guaranteed to taste great, **long before they are ever planted in the soil.**

Source: The chemistry of taste: Researchers seek the chemical clues that make a tasty peanut | UGA CAES Field Report fieldreport.caes.uga.edu/news/chemistry-of-peanut-flavor/

THE SECOND KERNEL

SEMICONDUCTORS: FROM CLEANROOM TO PEANUT PROCESSING



Great manufacturing is rarely defined by the final inspection. It is defined by everything that happens before it.

The semiconductor industry proves this every day. Inside highly controlled cleanrooms, advanced air filtration, environmental monitoring and contamination control protect billions of microscopic transistors from defects. Engineers know that quality cannot be inspected into a chip—it must be designed into the manufacturing environment itself.

That lesson reaches far beyond electronics.

Today, premium peanut processors are adopting the same philosophy. Leading multinational snack manufacturers no longer evaluate only kernel quality or laboratory reports. They assess the processing environment itself—food safety systems, hygienic production areas, controlled air handling, sanitation programmes and end-to-end traceability. These systems don't simply support quality; they create the conditions for it.

Quality is engineered throughout the journey. Inspection simply verifies it.

THE QUALITY JOURNEY: 7 DISCIPLINED STEPS

01	02	03	04	05	06	07
HARVEST	DRYING	STORAGE	PROCESSING	SORTING	PACKAGING	INSPECTION
Good farming starts quality	Careful drying locks in freshness	Safe storage protects value	Hygienic processing ensures purity	Advanced sorting delivers consistency	Smart packaging preserves quality	Final inspection verifies our promise

KEY INSIGHT:

Quality isn't created during export inspection. It's protected throughout the journey. Every disciplined step strengthens customer confidence and preserves more of the value already produced in the field.

WHY THIS MATTERS?

According to the Food and Agriculture Organization (FAO), approximately 14% of the world's food is lost between harvest and retail, with much of the loss occurring during handling, storage and processing.

Every improvement in process discipline helps preserve quality, reduce waste and protect the value created in the field.

Food Available Between Harvest & Retail



KEY INSIGHT:

- **14%** of food produced globally is lost between harvest and retail (FAO).
- Every improvement in post-harvest management helps preserve more quality and value.

Where Quality Creates the Greatest Value

WHAT BOTH INDUSTRIES ARE REALLY MANUFACTURING:

SEMICONDUCTOR INDUSTRY		PREMIUM PEANUT PROCESSING
Cleanroom Environment	=	Hygienic Processing Facility
Air Filtration	=	Controlled Air Handling
Contamination Prevention	=	Food Safety Systems
Process Discipline	=	Process Discipline
Reliable Chip	=	Trusted Food Product

KEY INSIGHT:

Whether manufacturing advanced microchips or premium food products, excellence begins with controlling the process—not correcting defects at the end.



SECOND KERNEL PERSPECTIVE:

The semiconductor industry transformed manufacturing by preventing defects before they occurred. Premium peanut processing is applying the same principle by embedding food safety and process discipline into every stage of production.

"AS CUSTOMER EXPECTATIONS CONTINUE TO RISE,

will tomorrow's competitive advantage come from the product itself—or from the process behind it?"

ROOT MEETING IN PROGRESS

Scientists discovered that peanut roots exchange information beneath the soil.



PEANUT BLOG

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