VOL 80 • APRIL 2024

PEANUT POST

DISCOVER THE GLOBAL PEANUT INDUSTRY

THE COMPLEXITY OF THE PEANUT INDUSTRY

Market Wizard P2

Global Market P3

Sustainability P4

Current Crops
Peanut Voice
Peanut Science
Shelled Facts

MARKET WIZARD

Complexity and modesty are two divergent paths that converge within a singular crop: peanuts and the individuals associated with it.

The Peanut

Can a single crop diversify into multiple commodities? Few agricultural products have achieved this feat. Take peanuts, for instance. They serve various purposes, including in-shell consumption, nut-based snacks and confectioneries, edible oil, meals, protein, butter, and biomass. Each vertical of the peanut is an industry by itself. Only a handful of companies have laid their hands on each industry vertical and continue to build on them. The evolution of the peanut's cultural significance has been crucial in shaping its multifaceted usage today. Its indust rial utilisation of oil during WWII prope lled its popularity, while therapeutic applications of peanut butter added further value. Historical dissemination of peanuts by the Spanish, Africans, and Portuguese ensured its global reach, thus solidifying its place in history.

The Producers

India and China are the world's largest peanut producers, followed by Africa, particularly Nigeria, Senegal, and Sudan. Observing the production growth alongside their population growth raises the question: are these regi ons focusing on increasing production to feed the world or primarily to sustain their population? Despite boasting a substan tial annual peanut production of 18 million tons, China has transitioned into a permanent net importer of peanuts. The main hindrance lies in the yield per hectare, primarily attributed to econo mic factors hindering the industriali sation of the production sector. This backward economic approach impedes the maximisation of agricultural output potential. Countries like Brazil, Argen tina, and the United States are indeed developed origins of peanut production. However, unlike India and China, they struggle to meet global demand amid a lack of ultra-large-scale production. While these developed countries possess advanced agricultural practices and technology, the scale of peanut cultiva tion is comparatively smaller. This limits their ability to fulfil the extensive worldwide demand for peanuts.

THE GLOBAL MARKET FOR PEANUT OIL IS VALUED AT APPROXIMATELY 10.85 BILLION DOLLARS.

The Consumers

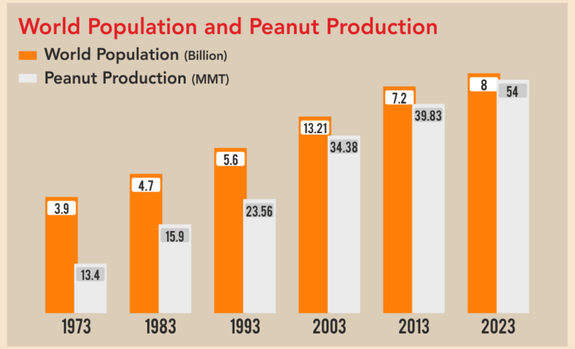
As the world edges closer to a projected global population of 9.8 billion by 2050, with the FAO forecasting peanut product ion to surge from 52 million tons to 68 million tons by the same year, significant shifts in consumption patterns are anticipated. Based on our analysis, the EU could consume as much as 2.5 MMT, while Indonesia's consumption may reach around 1.45 MMT by 2050. Which origins will take the lead in supplying this growing dem and? Will government policies drive it? Or by a few compan ies taking a pioneering stride? Will India and China continue to be the largest homemade consumers? How did peanuts become a widely grown crop in the past century? Will history repeat?

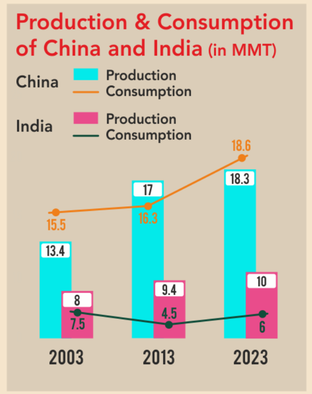
ACCORDING TO FAO PROJECTIONS, THE PEANUT INDUSTRY IS ESTIMATED TO REACH A VALUE OF $65 BILLION BY THE YEAR 2050.

Editor's Pick

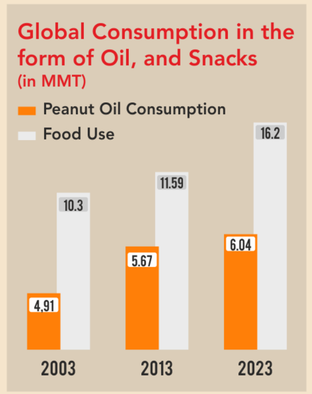
Groundnut Seed Cultivation Transfo rms Malkangiri Farmers' Fortunes

Odisha Agriculture Department Initia tive Groundnut seed cultivation revolut ionises farming in Malkangiri's Khaira put, aided by government guidance. Previously reliant on traditional crops like paddy and millet, farmers now focus on high-yield ground nut seeds, escaping dealer exploitation. Yield increases from 5 to 7-8 quintals per acre, boosting incomes significantly. Government support and counselling inspire farmers to expand seed cultivation, ensuring sustainable agricultural practices. This success prompts plans to educate neighbouring farmers, ensuring wide spread adoption and prosperity.





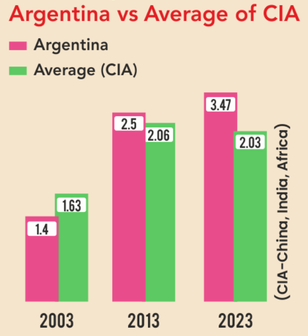
Since 1973, the popul ation has doubled, while peanut product on has tripled. This growth was driven by innovation in products like confectionery and butter, resulting in new market segments.



China and India cons ume 100% and 60% of their production, resp ectively. Higher dispos able income and econo mic activity are fuell ing such growth in domestic consump tion.

THE 'X' FACTORS: CAN ARGENTINA PRODUCE 3M TONS? CAN INDIA HARVEST 15M TONS? CAN AFRICA PRODUCE 30M TONS TO BRIDGE THE GAP? CONCERNS INCLUDE AFLATOXIN, SUSTAINABLE PEANUT PRICES, AND DRIVING INNOVATION FOR PRODUCTION GROWTH.

As in Argentina, utilizing advanced technology, ensu ring seed quality, and pract ising agricultural standards like GlobalGAP is essential for enhancing peanut yields across the CIA (China, India and Africa) region by 50%.



Global Market

ARGENTINA

Despite a lower acreage, the 2024 crop (est. 1.4mn tons) is excellent, with the current harvest above the five-year average (1.2mn tons). The 2024 crop offers bigger kernels and lots of optimism, especially after a poor harvest in 2023 and an inflated pricing situation. Price offers of the 2023 crop are already down to $1700/ton from $2100, and the 2024 crop is offered between $1500-1600/ton. Overall, LATAM's origins have mixed promises regar ding agronomy and the economy. Harvest is set to begin in mid-April.

BRAZIL

Growers are dishe artened as the har vest reaches 50% completion, facing disappointing yields and quality. Yet, there's a glim mer of hope for peanuts due to increased rainfall during maturation. How ever, challenging market conditions per sist, with growers maintaining high prices for inshells. This has made it difficult for exporters to conduct business with importers, hindering trade. Despite the obstacles, stakeholders remain vigilant, hoping for improvements in both yield and market conditions.

CHINA

Most participants remain cautious in the domestic peanut market, resulting in light trading activity. While the market generally operates smoothly, there are disparities among varieties and regions. Delivery of goods in Henan is picking up speed, bolstered by renewed inquiries from Luhua Oil Factory, prompting some dealers to adopt a bullish stance. In comparison, other oil companies are procuring stringent quality standards to pick deals selectively. This has revitalized confidence and heightened enthusiasm among market entrants, leading to a price resurgence.

Meanwhile, dealers in Shandong and Northeast regions maintain stable prices and adopt a wait-and-see approach. As prices stabilize, demand-side caution increases, making high-price transactions more challenging and causing a downward price shift. However, most stockholders remain resolute in supporting prices, resulting in persistently high quotations. The seasonal demand for blanched peanuts during Ramadan and post-CNY oil demand has ended. As the temperature rises in the weather, the consumption of peanut oil may see moderation. Indian peanut oil was traded between $1675 - 1775 / ton, Senegal peanuts between $1100-1175/ton and Sudan peanuts till $1200/ton on a limited volume basis. The market dilemma continues.

USA

A five-year above-average production sets the U.S. crop as a top performer for EU supplies vs. other origins such as Brazil & Argentina. However, the prices in the U.S. have remained stable recently. The Arkansas peanut growers set a state record for average yield with 5,800 lbs. per acre. Exports grew at a staggering 24%, most attributable to the EU, while exports to Mexico grew by 8% and exports to China grew by 24%.

PEANUT SPOTLIGHT

INDIA

The summer crop of 2024 in Gujarat sowing is at 81%, and it's a pest-free crop. Winter crop 2023 stock is at an aver age of 20% in Gujarat and 40% in Rajasthan. Some stocks are held by the stockiest at high prices and are awaiting sow ing demand in May. Export demand in March improved slightly, but oil and meal markets remained at their lowest. Contrary to expecta tions, there is no anticipation of sowing demand from Rajas than, which boasts surplus stocks. Export demand for Rajasthan is poor due to poor yields; stocks are plenty amid poor demand from Bangla desh. The southern crop situations are intense amid new crop harvest. Tamil Nadu is harvesting one of the best crops, resulting in 40-50 Spanish. Export demand for smaller kernels (8090, 90100, 140160) was good in March. Arrivals in a few provinces have dropped 50%, while TN arrivals are growing daily. Crop arrivals in the South will moderate by the end of April. Export demand is expected to moderate by mid-April. Orissa also has an excellent crop; it is compet itive in Delhi, Bengal, and UP markets due to its quality and cost-effectiveness, catering to domestic demand.

AFRICA

Tanzania The onset of the new crop season is marked by an estimated yield of 18,000 to 25,000 tons. Prices range from $1050 to $1150 FOB/ton. Stocks have high moisture.

Mozambique The harvest season commen ced with high expectations for a big crop. Current moisture levels are up to 15%, while old crop stocks remain available. Higher new crop flow is projected by the end of April.

Sudan Unknown stock and trade position amid several smuggling activities to neigh bouring countries to ship out. Port Sudan stock is limited. Price offered in the range of $1100-1150 FOB/ton.

Senegal In Senegal, as the season nears its end, farmers' and traders' stocks are diminishing. Currently, sourcing is focused on the interior bushes of the southern region. The first quota of 100,000 tonnes has been fulfilled, while the second quota for exports amid elections. Market prices vary from 560 CFA to 630 CFA, depending on stock splits. Spanish seed stocks are priced at 790 CFA and above. Traders are holding back stock for seed buyers and the local market, anticipating higher procurement prices in June.

Current Crops

ARG — Argentina
Preparing for harvest soon, anticipating an excellent crop with higher yields.
ARG 3842 $1600

BRZ — Brazil
At the halfway point of the harvest, yield and quality persist disappointingly low.
BRZ 4050 $1650

CHI — China
CHI 4151 $1475

IND — India
The Spanish harvest is in full swing in states such as TN, KTK, AP, TL, UP, and OR.
IND 5060 $1350

INDO — Indonesia
New crops are arriving in East Java and Bima; limited cargo due to rain moisture.
INDO 8090 $1175

MOZ — Mozambique
New crop harvest started with high moisture levels, expecting more arrivals by the end of April.
MOZ 8090 $1100

TAN — Tanzania
The new crop harvest is gaining momentum, but the moisture levels remain unstable.
TAN 8090 $1100

USA — U.S.A
Harvest concluded with yield records set.
USA 4050 $1800

PEANUT VOICE

> "After dedicating thirty years to the peanut business, I have established my own company, The Peanut Office B.V."

Mr. Herman Driesens
Owner

What might the future hold for peanut consumption, particularly regarding the potential prominence of organic peanuts?

If you observe the low consumption per capita of peanuts or peanut products in many countries around the globe, it's evident that there is still a lot of growth potential. As far as I can see, it is not widespread. If other reliable origins like Argentina are able (and this is the main issue) to develop organic peanuts, it can grow much faster.

Daily consumption of peanuts and peanut butter can reduce the risk of gallstones.

Daily consumption of peanuts and peanut butter may contribute to a reduced risk of gallstones, primarily due to their high content of unsaturated fats. These healthy fats can positively influence cholesterol metabolism, leading to lower production of cholesterol, which is a key component of most gallstones. Gallstones often form when there's too much cholesterol in the bile, a digestive fluid produced by the liver. By potentially lowering the concentration of cholesterol in the bile, peanuts and peanut butter can reduce the likelihood of gallstone formation. Furthermore, the dietary fiber present in peanuts supports digestive health, which is another factor that may help prevent the occurrence of gallstones. This makes these nutty snacks a beneficial addition to a gallstone-preventive diet.

SUSTAINABILITY

Hope

High oleic peanuts offers a range of sustainability benefits in the form of health, economical and environment.

Prime Minister Narendra Modi's cabinet unveils the master plan to solve problem of hunger and malnutrition with India's ambitious POSHAN Abhiyaan, targeting over 10 crore people. The initiative aims to alleviate stunting, under-nutrition, anaemia, and low birth weight. Seventeen bio-fortified varieties, including Girnar 4 and 5 peanuts rich in Oleic Acid, are introduced to enhance the nutritional value of staple foods.

Partnerships with Farmer Producer Organizations such as VAS Green, Nainamalai, and Nallavur, along side NGOs includ ing MSSRF, NAF, and ISHA Foun dation.

Through strategic alliance with VAS GREEN, Hope Seed and sustainable farming brought together. Farmers gain from this partnership by getting high-quality, certified seeds, post-harvest and direct purchases from farms. Hope seeds have high market value, which guarantees farmers get fair prices. Hope seeds promote Sustainable Farming Practices, prioritize environmental preservation.

HOPE farming offers high benefits to women farmers including increased incomes, improved productivity, market access, skill development improves farm productivity and empower women on leadership roles in their communities, environmental sustainability, community develop ment result in investments in children's education, healthcare, and other essential needs, and progress towards gender equality.

- **80% Oleic acid.**
- **41-57% higher pod yield.**
- **High-density lipoprotein level.**

#Peanut 360

Peanut Science

African peanut cultivars BS and UG-ML show decreased toxicity levels when treated with toxigenic A. flavus, likely due to their dark-coloured seed coats.

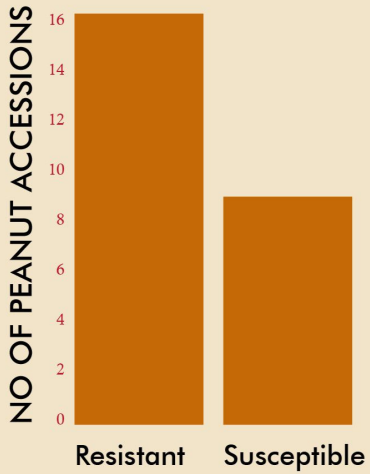
Peanut is among the most important oil crops grown in sub-Saharan Africa due to its nutritive value and economic benefits. In this region, Aspergillus flavus infects peanuts and contaminates them with aflatoxins, leading to food insecurity due to reduced quality. The impact of aflatoxins extends beyond the food chain, causing harm to human and animal health. Selecting and producing aflatoxin-tolerant peanut varieties is a promising strategy to reduce their potential harm.

In this study, we examined the resistance of peanut kernels to aflatoxin accumulation in 25 peanut cultivars collected from various locations in Kenya, Uganda, and Rwanda, based on their unique phenotypic characteristics. To obtain sufficient planting material, the peanut cultivars were grown separately under standard conditions, harvested at their respective maturity dates, and then dried and stored at 4°C before further analysis. At the beginning of the experiment, the kernels were exposed to a laboratory-characterized toxigenic strain (Aspergillus flavus 1EM1901) and incubated at 28°C for 7 days. Subsequently, the samples were analyzed using ELISA for aflatoxins.

Of the 25 cultivars tested, 60% exhibited kernel resistance to aflatoxin accumulation, while 40% were susceptible (with aflatoxin levels ranging from 0.54 ppb to 1692.92 ppb). Two of the resistant cultivars showed a decrease in aflatoxin accumulation when challenged with toxigenic A. flavus. This differential accumulation of aflatoxins suggests the presence of an inherent trait that could be exploited in breeding programs to develop peanut varieties with low aflatoxin accumulation when grown in contaminated soils.

Among the tested cultivars, more than half exhibited kernel resistance to aflatoxin accumulation. Two cultivars, BS and UG-ML, displayed an unusual behavior where toxin levels decreased when challenged by toxigenic A. flavus. This could be attributed to their dark-colored seed coats and the likely involvement of polyphenols.

Findings



These findings are promising in identifying peanut genotypes with aflatoxin resistance Future studies should investigate the aflatoxin resistance of these genotypes under field conditions and explore the gene expression profiles of peanuts during colonization and aflatoxin production. This information will provide more insights into the mechanisms of aflatoxin resistance in peanuts and guide breeding efforts.

Conclusion

More than 50% of peanut accessions exhibited kernel resistance to the accumulation of aflatoxin.

2 accessions BS and UG-ML had toxin levels reducing upon challenge by toxigenic A. flavus.

These outcomes are promising in the quest to determine peanut genotypes with aflatoxin resistance.

Source: Elsie Nyangweso Salano, et al., Peanut (Arachis hypogea) accessions differentially accumulate aflatoxins upon challenge by Aspergillus flavus: Implications for aflatoxin mitigation, Journal of Agriculture and Food Research, Volume 15, 2024, 100923, ISSN 2666-1543, https://doi.org/10.1016/j.jafr.2023.100923.

CONTRIBUTOR SPOTLIGHT

Mr. Deepauk
Procurement Mgr
Agrocrops

Mr. Jorge Rocha
Sales Manager
Samtraco

Mr. Chen Xi Bing
Manager
QingDao FuShuai Oil

Mr.Alex Izmirlian
Co President
Alimenta Agri LLC

Mr. Daman Chand
Sr Mgr procurement
Agrocrops

MOST EFFICIENT CROP KNOWN TO MANKIND

COMPARED TO OTHER NUT AND PROTEIN CATEGORIES, PEANUT IS A SUSTAINABLE OPTION.

LITRES OF **WATER**/KILO PRODUCED

WATER USAGE LTR/KG

PEANUT BLOG

#Peanut360 #Peanutsustainability #Pnutking