



Castor on the rise

The castor oil market is forecast to expand against a backdrop of increased demand from the pharmaceutical and cosmetics industries

Gill Langham

Extracted from castor seeds, castor oil is a non-edible vegetable oil that is mainly used in preservatives, medicines and lubricants.

India is currently the largest producer of castor seeds and accounts for over 80% of global production, followed by China and Brazil, according to MarketWatch.

The worldwide market for castor oil is expected to grow at a CAGR of approximately 4.1% between 2019 and 2024, a report by 360 Research says.

Asia Pacific is the largest consumer of castor oil and is expected to retain the higher growth rate during the next few years due to strong growth in the pharmaceuticals and cosmetics industries, according to the report.

China and India are major players in the production and consumption of castor oil in the Asia Pacific region.

Meanwhile, the castor oil market in Europe was growing on the back of rising demand of bio-based cosmetic production.

Castor conference

The global castor industry and emerging trends were among the topics discussed at the Global Castor Conference 2021 organised by the Solvent Extractors' Association of India (SEA) on 24 February. An update was also given on the SEA's Model Castor Farms and Water

Conservation projects, which are helping farmers achieve higher productivity.

The Indian castor oil industry has emerged from the COVID-19 pandemic in a strong position, according to SEA president Atul Chaturvedi.

The country's castor oil exports in 2020 reached a record 650,000 tonnes compared to 545,000 tonnes the previous year, according to the SEA.

"We are meeting after almost a year and during that period the world has changed dramatically due to coronavirus," Chaturvedi said at the opening of the event. "In the calendar year 2020, India's castor oil exports have shown a remarkable resurgence."

In 2020, China alone imported more than 300,000 tonnes of castor oil from India, the highest import value recorded, Vivian Patel, of leading sebacic acid producer Hengshui Jinghua Chemical Company, said.

Record exports

The record level of castor oil exports from India recorded in 2020 followed a growth trend of between 8%-9% between 2009 and 2020, according to Adani Wilmar general manager Shailesh Baldha who spoke about the country's castor dynamics at the conference.

"Looking ahead, with a similar growth level, we can expect exports to reach

700,000 tonnes in 2021," he said.

However, despite the record level of castor oil exports from India in 2020, Thomas Mielke, editor of *Oil World*, said a global production deficit in castor seed and oil could be developing worldwide in October/September 2021/22.

This was mainly due to reduced plantings and production in India, the key player, which accounts for more than 95% of world exports of castor oil, he said.

Castor seed had lost attractiveness relative to edible oilseeds and other crops, according to analysis provided by Mielke.

"Unless castor seed prices appreciate sufficiently in April/July this year, Indian farmers will, most likely, reduce castor plantings," he added.

China view

An overview of the castor sector in China was given at the webinar by Hengshui Jinghua Chemical Company's Patel.

In contrast to most other major countries, China had made a relatively rapid post-COVID recovery with its GDP growing by 2.3% in 2020 and forecast to touch 8% this year, she said.

However, due to the falling prices of castor oil in domestic and international markets, China's castor plantation would be minimal in 2021, according to Patel.

China held between 45% and 50% of the castor oil market and had become the largest global consumer of sebacic acid – a castor oil derivative, she said.

In 2020, around 160,000 tonnes of castor oil were used to produce sebacic acid in the country – the lowest figure in recent years, Patel added.

Hengshui Jinghua Chemical Company consumed between 82,500-90,000 tonnes of castor oil in 2020 and produced 41,000 tonnes of sebacic acid but expected to increase production to 46,000 tonnes in 2021.

The market demand for sebacic acid is expected to be between 85,000-90,000 tonnes in 2021 (compared to 76,000 tonnes in 2020), according to Patel.

It was forecast that China would import 340,000 to 350,000 tonnes of castor oil this year, she said.

Other growth areas for castor included green chemicals, adhesives and polymers.

With the price growth in petrochemical products alongside a global sustainability drive, castor oil applications had increased substantially in recent years in all sectors such as resins and adhesives including sebacic acid, Patel explained.

US outlook

In the USA, the economy is the main driver for castor oil demand – from

personal care to rubber, plastics, coatings and textiles – according to Andrew Pollack, castor derivatives specialist from Alnor Oil Company.

In his presentation about the US market for castor oil, Pollack explained how the 3.5% contraction in the USA's GDP had been the country's worst economic performance since 1946.

However, the economy had increased by about 4% in the fourth quarter of 2020, he said, and US President Joe Biden had launched a US\$2tn stimulus plan.

"Economists are all positive for the

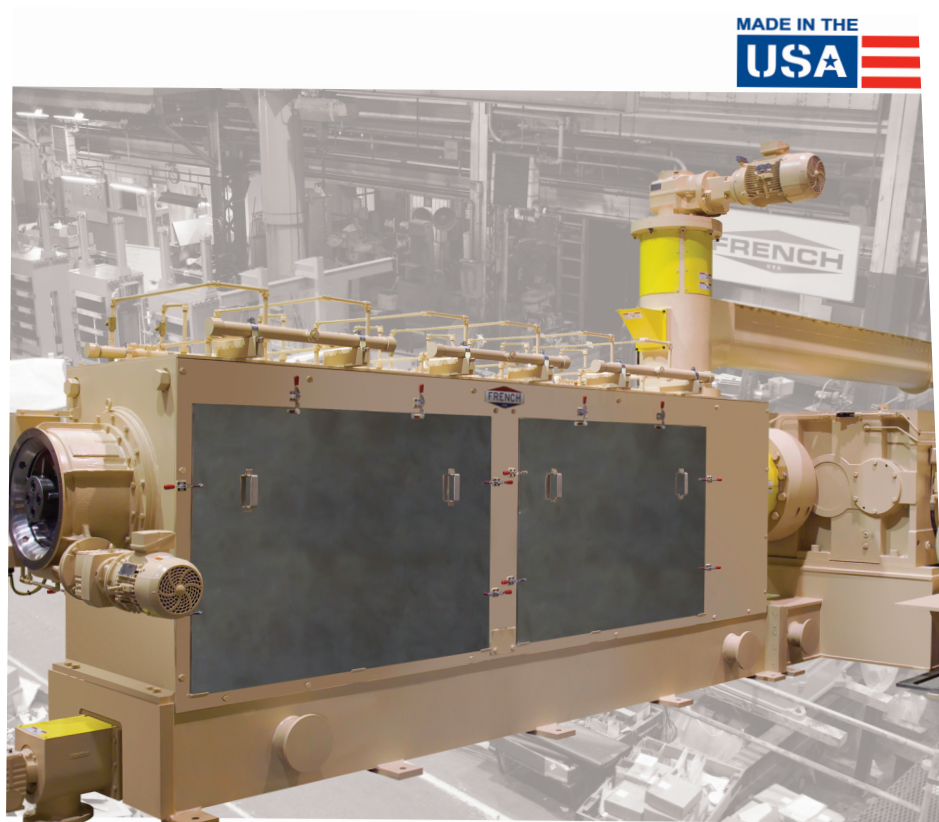
future with estimates giving a forecast for future GDP of around 4.2% growth in 2021," he said.

"Projections are for a big recovery this year and lubricants are expected to get back on track with castor bulk imports seeing an increase in December. The outlook looks good going forward."

EU sector

Castor oil consumption in Europe in 2020 was 149,000 tonnes – 11% down on the previous year and 20% lower than in 2018, according to Eurostat data.

The drop in consumption was linked to ▶



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	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021 (Jan.-Jun.)
import	157	132	224	232	173	228	257	267	280	240	300	210
domestic	62	83	130	99	33	35	24	21	27	20	21	10
total	219	215	354	331	206	263	281	288	307	260	321	220

China is the biggest global consumer of castor oil and is expected to consume 350,000 tonnes in 2021.

Figure 1: Castor oil consumption in China 2010-2021 (KT)

		2019	2020	2021
Castor oil	Carry over	25	40	76
	Import	240	300	350
	Domestic production	20	21	10
Consumption	Sebacic acid	160	160	190
	12HSA	19	35	40
	Others	66	90	120
	Total consumption	245	285	350
Carry over	40	76	86	

Figure 2: Castor oil consumption in China in 2021 – estimate (KT)

Agriculture Organic fertilisers	Plastics & Rubber Polyamide 11 (Nylon) Plastic films Adhesives Coupling agents
Food Surfactants Viscosity reducing additives Flavourings Food packaging	Cosmetics & Perfumeries Perfumery products Lipsticks Hair tonics Shampoos
Paper Flypapers Defoamers Waterproofing additives	Pharmaceuticals Antihelmintic Anti-dandruff Cathartic Emollient
Electronics & Telecommunications Polymers for electronics & telecommunications Polyurethanes Insulation materials	Paints, inks & additives Inks Plasticisers for coatings Varnishes Lacquers
Textile chemicals Textile finishing materials Dyeing agents Nylon, synthetic fibres & resins Synthetic detergents Surfactants, pigment wetting agents	Lubricants Hydraulic fluids Heavy duty automotive Greases Fuel additives Corrosion inhibitors

Figure 3: Main applications for castor oil and its derivatives in Europe

► the effects of the COVID-19 pandemic on the European economy, according to Rabah Djennane, a trader from Loiret & Haëntjens, who spoke about the castor oil market in Europe.

For example, in 2020 less than 10M cars were sold in Europe.

However, the European chemical industry had not seen a deep drop in production, he said.

“There are some positive signs for all the oleochemical products and especially the castor industry.

“We expect a rebound on demand - of approximately plus 8.8% in 2021 – but less than in 2019 due to COVID,” he said.

The main applications for castor oil in Europe include agriculture, polymers and cosmetics, according to Djennane.

The future

Looking ahead, SEA president Chaturverdi said the consensus from the conference seemed to be that demand from China this year might be stable or possibly a little lower than in 2020.

According to COFCO's Denis Ginter, China would not import as much castor oil in 2021 as it was sitting on considerable stocks.

European demand was likely to remain stable and a similar outlook was expected in Thailand, Japan and some other countries.

However, domestic consumption of castor oil could increase in India if edible oil prices remained high.

Delegates also heard how there were signs of developing castor plantations in Africa and Southeast Asian countries.

The general view was that castor was still achieving low prices compared to most other crops and, as the responsiveness of farmers to price was high, the next sowing season could be lower unless castor prices increased.

“Castor is one of the cheapest commodities today in India and as prices are low, farmers are planting other crops,” said COFCO's Ginter.

Outside factors

External factors could also influence the castor sector in the near future.

Possible influences include the continuing COVID-19 situation in India and worldwide, the monsoon pattern, global economic trends and supply chain bottlenecks.

In the long term, a general shift from petroleum-based products to plant-based products globally could benefit castor, attendees heard.

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Hengshui Jinghua Chemical Co

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Source: Loiret & Haëntjens