



AGRICULTURE SECTOR BRIEF

SINGAPORE



Country Overview



Singapore is a sovereign city-state, the largest of its kind in the world, located at the southernmost extremity of Eurasia and only about 130 kilometres north of the equator. Singapore's population is 5.6 million and its economy is extremely open, with trade and services providing jobs and income to most of its companies and inhabitants.




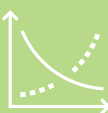


The last quarter of 2019 showed a robust growth, thanks to the services and construction sectors. The long-suffering manufacturing sector was on the rise in January, but was immediately hit by the coronavirus outbreak.

Activity contracted sharply in the second quarter, plunging the economy into recession following the first quarter's mild downturn. Circuit breaker policies enacted in early April to stem the spread of the viral outbreak impacted production, with the services industry suffering from curtailed domestic demand—retail sales plummeted in April and May—and drastically reduced visitor numbers.

Singapore is the second busiest container port in the world, with more than 37 million TEUs per year, thanks to its fortunate geographical location, and logistics and international trade are key sectors of the island-state's economy.



MOST IMPORTANT ECONOMIC FIGURES FROM THE LAST FEW YEARS:

Indicator	 Population (million)	 GDP per capita (USD)	 Economic growth (GDP annual variation, %)	 Inflation rate (%)	 Trade balance (billion USD)	 Exports (billion USD)	 Imports (billion USD)
2016	5.6	55,615	3.0	-0.5	92.5	396	304
2017	5.6	56,788	3.2	-0.5	90.8	374	283
2018	5.6	60,722	4.3	0.6	97.0	413	316
2019	5.7	65,953	3.4	0.4	104.0	459	355

Sector Overview



a small amount is produced locally, like some fruits and vegetables (ca. 8% of the country's consumption), fish (8%) and eggs (26%). There is some livestock production on the island as well, mostly poultry and a very limited amount of pork.

In March 2019, the government of Singapore set the "30 by 30" goal which aims to become 30% self-sufficient in food production by the year 2030. It aims to achieve this through high-tech vegetable farms (i.e. multi-storey hydroponics farms), and through aquaculture. By using multi-storey hydroponics farms, land productivity can be increased, and energy and water resource use can be maximised.

Most important products and segments

Vegetables and other food crops

Singapore's few local farms mainly produce leafy vegetables and beansprouts, and all production is consumed domestically. The technology used is soil or hydroponic cultivation. It is possible to increase yields further by using vertical farming and other high-end technologies, but physical space for farming remains very limited on the island.

The Kok Fah Technology Farm has soil cultivation of leafy vegetables under protected netting. The farm's total area is 7.3 hectares, and it produces about 1,400 tonnes of vegetables yearly, which amount to 14% of local consumption. The farm remains competitive by marketing products directly to supermarkets, and the farm itself has a cold-room, processing and packaging facilities, overhead mist sprinkler system, etc. The vegetables grown include bayam (*Amaranthus gangeticus*), caixin (*Brassica chinensis*), gailan (*Brassica alboglabra*) and kang kong (*Ipomoea aquatica*). The vegetables are mainly packed and sold under the Pasar brand.

Flower crops

Mainly for decorative purposes, and focusing mostly on different species of orchids, there are 153 orchid farms in Singapore, mainly on the northern part of the island. Flowers are exported to Japan, USA and the EU.

Fishing

There are ca. 100 licenced small-scale fish farms in Singapore with very traditional technology, producing local favourites for the domestic market, plus there are about a dozen high-tech aquacultures, where aquarium fish are kept, mainly for export markets. From the two very different segments, the latest seems to be the future of Singapore's fish farming, though investment and technology costs are high. Coastal fish farms produce marine species like groupers, seabass, snappers, green mussels and crustaceans like shrimps and crabs. Freshwater farms are dealing with snakeheads, tilapia, catfish and carp.

The national goal by 2030 is to reach nearly 100,000 tonnes of finfish production, but to reach this stage, small fish-farms should be integrated to about 10 large farms, using more advanced technology.

Livestock

The whole livestock industry in Singapore means chicken and duck, and very few pigs. While 46.5 million chickens are processed in ten slaughterhouses, there are four duck slaughterhouses for the estimated six million ducks per year, and only one slaughterhouse processes pigs, with fewer than 350,000 head per year.

More detailed information can be found on the Singapore Food Agency website.

The agritech sector in Singapore

In Singapore, high-tech urban farming and modern aquaculture is expected to power the next leap in primary food production innovation and is backed by strong investor demand. According to consultancy firm Allied Market Research, the global vertical farming market size is projected to reach US\$ 12.77 billion (SG\$ 17.4 billion) by 2026, from US\$ 2.23 billion (SG\$ 3 billion) in 2018, growing annually at 24.6%. The modern aquaculture market size of US\$ 135 billion (SG\$ 183.7 billion) in 2017 is expected to grow at 4.7% annually to US\$ 274.8 billion by 2025 according to figures from Allied Market Research in 2019. Singapore-based companies can ride on this global momentum to commercialise their ideas for local and regional markets.

In addition to an emerging economic opportunity, agri-tech will contribute to building up Singapore's food resilience and supporting the "30 by 30" goal to produce 30% of its nutritional needs locally by 2030.

To support the development of the agri-tech industry in Singapore, the Government announced the establishment of the Agri-Food Innovation Park (AFIP) in 2019. This pilot cluster aims to catalyse innovation in the agritech ecosystem by bringing together high-tech urban indoor farming and associated R&D activities. Located within the Greater Sungei Kadut area, forming part of a larger Northern Agri-Tech and Food Corridor with food-related industries, the AFIP will foster the co-location of activities across urban agriculture and aquaculture, and serve as a better base to attract companies, R&D talent and investment to Singapore. More detailed information can be found on the AFIP website.



Regulations



Singapore is heavily dependent on imported food, so the two main considerations on national sourcing strategy include:

- Import source diversification
- Food security and safety

Not only the COVID-19 pandemic, but recently the global animal-health problems, including bird flu, and swine fever highlighted these issues, and the newly reorganised Singapore Food Agency is always considering security and safety questions while licensing new products or businesses.

In April 2019, the Singapore Agri-Food and Veterinary Authority restructured to form the Singapore Food Agency (SFA) and the Singapore Animal and Veterinary Service (AVS). SFA is under the Ministry of the Environment and Water Resources and oversees all food-related matters including food safety and security. AVS is under the National Parks Board (NParks) and oversees all non-food related animal, plant, and wildlife management matters. Singapore food safety regulations serves as a role model for many other national agencies, and widely considered to be the strictest, yet transparent institution in the world. As Singapore is highly import dependent, food security is an ever-present issue; the aim of the country's regulation is ensuring continued foreign supply of high-quality and healthy food.

All agri-food products are subject to inspection and sampling, and SFA can impose trade restrictions: as it happened lately with the countries affected by the African swine fever and the avian flu. Information on food imports can be found on the SFA website.

Tariffs

Singapore is located at the heart of South East Asia, well placed to serve the fast-growing markets of the Asia-Pacific region and by extension to the world. Singapore offers a high level of connectivity as the primary transshipment hub in the region, and also as a major global maritime hub.

Singapore's commitment to liberalise trade is evident from its list of 25 Free Trade Agreements (FTAs) in force with 64 trading partners, as of September 2020. Amongst the list of regional agreements with ASEAN, the ASEAN Trade in Goods Agreement eliminates tariffs for all product lines. Singapore imposes a 7% goods and services tax (GST) on all goods imported. There are various trade facilitation schemes for goods stored in licensed or Customs approved warehouses and free trade zones which allow the suspension of GST and tariffs payable.

Non-tariff measures (NTM)

Singapore actively supports ASEAN free trade, and focuses on streamlining trade-related regulations without compromising domestic consumer protection or product performance and safety standards. This is the reason why the number of coded non-tariff measures increased by 4% from 2015 to 2018, and now counts for around 610 measures. A survey by the World Bank showed that in 2018 10,365 products legally traded in Singapore, were affected by at least one NTM.

The most convenient way of finding more information on certain NTMs is using the TRAINS database, the UNCTAD online tool.



Promotion and business networking

Among all ASEAN countries, business development in Singapore seems the easiest, as many professional business associations are open to foreign traders and networking opportunities are abundant. The regions' most visited trade fairs and product shows are held in the city state.

Some of the business associations an agri-trader may contact are:

- Cocoa Association of Asia
- Grain and Feed Trade Association
- Meat Traders' Association
- Punggol Fish Merchant Association Singapore
- Rubber Trade Association of Singapore
- Seafood Industries Association Singapore
- Singapore Business Federation
- Singapore Coffee Association
- Singapore Fish Merchants' General Association
- Singapore Fruits and Vegetables Importers and Exporters Association
- Singapore Pulses Federation

Sales channels

Agri-food product sales in Singapore are conducted across varying levels of sophistication. Today, only a small proportion of sales are conducted via traditional importers based in key wholesale centres such as Pasir Panjang Wholesale centre, Victoria Wholesale Centre, Jurong Fishery Port. These importers typically sell their products to wet markets, hawkers and smaller food and beverages companies, which then either use them in their cooked products, or sell them on to consumers.

The majority of sales are conducted by larger distributors who typically have their own cold room, warehousing and processing capabilities in their premises. These distributors will typically import agri-food products from all over the world, and supply to food manufacturers, retailers and HORECA players. Some of these players are also engaged in value adding activities such as break bulking, processing and packing the products according to their customers' requirements.

Large grocery retailers tend to also import agri-food products directly from foreign exporters and consolidators. This is especially so for products that are branded under the retailers' own house brands.

Online sales opportunities

There is an increasing use of online sales channels for agri-food products through B2C e-commerce. Many current physical distributors and retailers are tapping on to existing online platforms such as Redmart, Fairprice online, Qoo10, and Amazon Prime to expand their reach out to consumers, or creating their own platforms. There is also a growing presence of online B2B e-commerce with the emergence of platforms such as SeafoodXchange, Octorocket, EzyProcure which are digitalising the procurement and selling process between businesses.

A number of boutique grocery stores, such as Ryan's Grocery and Sasha's Fine Foods, have emerged over the last few years targeting a niche, but loyal group of customers that are conscious about sustainable food production.

Entering the market by using these online channels may be cost-efficient, but still requires proper planning of logistics and operations, and some time to establish a steady sales pace. There are several agents going around Singapore to catch newcomers on the market, but all the larger stores require massive promotion investment from the exporters' side.

Recommendations and Trends



- Doing business in Singapore has its benefits. There is a business saying that “If your product can pass through the Singapore food safety authorities, it can do it anywhere else in the world”. Possessing an SFA permit creates a high level of credit in other countries’ agencies.
- In many proven cases, logistics routes that go through Singapore, are cheaper than freight directly to the final destination. Often a Singaporean buyer can re-export goods to another ASEAN country with lower costs and a higher success rate.
- With a reliable intellectual property and standards framework, a pro-business environment and strong reputation for food safety, Singapore provides a conducive environment to nurture agri- tech start-ups and serves as a landing pad to export relevant solutions to the region. The country has also anchored global accelerators such as GROW, Hatch Blue, Trendlines and The Yield Lab in Singapore to mentor local agri-tech start-ups in areas from fundraising and tech sourcing to product development, commercialisation, and internationalisation.
- Aspiring agri-tech entrepreneurs can start their business in Singapore by tapping on Startup SG initiatives to nurture new ideas and concepts, access opportunities in mentorship, funding, talent, and infrastructure, and further pursue growth opportunities around South East Asia.