

THAILAND: FOOD INDUSTRY

Thailand has long been called "the kitchen of the world" with its abundant natural resources, highly-skilled workforce, and strength in research. The food industry contributed roughly 23% of the country's GDP. The value of Thailand's food industry, including local consumption and exports, is expected to reach USD 102 billion in 2017.1 Thailand is also one of the largest net food exporting countries in the world and the second in Asia with a food trade balance at a record value of USD 16.7 billion in 2016 ²

In leveraging its geography with local agricultural resources, the Thai government designated the food industry as one of ten key growth engines in-line with the "Thailand 4.0" economic model. The government also created the foodoptimized industrial park, known as Food Innopolis.

Abundant Raw Materials

With abundant natural resources, a year-round growing season, relatively low labor costs, and a skilled workforce, Thailand enjoys numerous competitive advantages in the food and agricultural industries. Roughly 50% of total land area in the country is used for agricultural purposes, allowing over 80% of raw materials to be used in the food industry which can be sourced locally at competitive prices.¹ The country is a top-ten global producer of some important agricultural products including rice, cassava, sugarcane, palm oil, coconut, pineapple, and natural rubber.²

Thailand Agricultural Export Value by Product in 2016³

Rice

[In Billion USD]

Others



Source: 1,2,3 Office of Agricultural Economics

Thailand's Food Export Ranking³



Canned Tuna
(44% of world exports)

Canned Pineapple
(41% of world exports)

2nd Rice (23% of world exports)

2nd Sugar (16% of world exports)

Source: ¹ The Federation of Thai Industries (Food Industry Club)

³ National Food Institute

Note: Exchange Rate (BOT, July 1, 2017): USD 1 = THB 34.13

Food Processing

Hosting roughly 9,000 food processing companies in Thailand, the country is the main producer and exporter for several processed foods including canned tuna, frozen seafood, shrimp, and chicken.¹ Processed food exports contribute about 52% of total food exports and account for nearly 15% of Thai manufacturing output.2

Minimally **Processed** Moderately **Processed**

Highly **Processed**



Minimally Processed Foods

As one of the world's leading producers of agricultural commodities, Thailand's food supply is large enough to serve the global market. Raw materials are processed to increase the products' shelf life and quality. Thailand produced over 2.4 million tons of chicken and over 200,000 tons of shrimp in 2016, placing the country in the top five globally as both a chicken and shrimp exporter. Approximately 70% of poultry production is locally consumed. This number is expected to increase by 4-5% in 2017, from around 1.7 million tons in 2016.3 Thailand also supplies various frozen seafood products such as frozen cuttlefish and fish meat to serve consumers throughout the world.

KEY PLAYERS



















Source: 1,2,3 National Food Institute



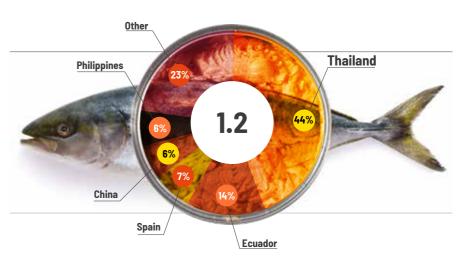
Moderately Processed Foods

To further extend shelf life and add more value to local agricultural and fisheries products, Thailand adopted canning, high-technology freeze drying, and other preservation processes. The country

> exported over USD 2 billion in canned tuna and USD 611 million in canned pineapple in 2016 and stood as the top global exporte or both products.1



[In Billion Tons]



KEY PLAYERS

























Source: 1,2 National Food Institute



Highly Processed Foods

With strong support from the government, Thai manufacturers are investing considerable resources in research and development to boost their productivity and efficiency. Many companies are using computerized systems to control their production processes. Combined with the changing lifestyles of consumers, purchases of processed foods are rapidly growing. Ready meals, convenient meat and meat products have shown both strong domestic and export demand.

Ready Meals

Urbanization and increasingly busy lifestyles are the main drivers of the double-digit ready meal growth rate in Thailand. In addition to the emerging local demand, Thailand is also a prime production base for ready meals. The export value is expected to reach USD 167 million in 2017 at a 12.4% annual growth rate. The country is currently the 9th largest ready meal exporter in the world, accounting for a 3.7% market share in 2016.1 The local consumption value is expected to reach 270 million in 2017.2

KEY PLAYERS

















Source: 1,2 National Food Institute



Thailand's Ready Meal Local Consumption Value 2012-2017F³ [In Billion USD]

300 245.0 217.8 193.0 200 168.9 149.0 100 2012 2013 2014 2015 2016 2017F

Source: 3 National Food Institute

Note: *Compound Annual Growth Rate (2012-2017F)

Exchange Rate (BOT, July 1, 2017): USD 1 = THB 34.13





Demand for halal foods has undergone tremendous growth in the last few years. The global halal food market is projected to be worth USD **1.6 trillion by 2018**, accounting for an estimated 16 percent of the total global food industry.1 Thailand currently ranks 13th among the world's largest halal food producers.2



Sources: 1 World Islamic Economic Forum ² National Food Institute



Thailand's halal certification standards have developed over the last 68 years. Currently, there are more than 8,000 factories and over 150,000 products receiving halal certification.² Furthermore, the Thai government has prioritized halal foods by formulating a five-year plan (2016-2020) to position Thailand to be among the top five exporters of halal products in the world. Over USD 11.5 million was been allocated to enhance halal businesses in Thailand.

KEY PLAYERS

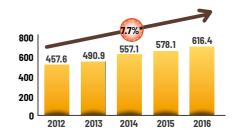
cpYam PFP Sources: 1 Halal Food Information Center ² The Halal Science Center, Chulalongkorn University

Food Seasoning

Thailand's strengths in food processing have also brought the country to global prominence in the OTATO SPICE seasonings and ingredients industries. The value of Thailand's food ingredients exports in 2016 reached USD 616 million. With over 550 manufacturers, Thailand is the 6th largest food seasoning exporter in the world, accounting for a roughly 5.4% market share.1 The top export destinations are Australia, the Philippines, Indonesia, Japan, and Malaysia. In addition, local demand for food seasoning is also significant with a sales value of over 1.1 billion in 2016.2

Thailand's Food Seasoning Export Value 2012-2016³

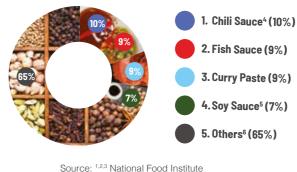
[In Billion USD]





Exports of Food Seasoning by Products¹

[In Billion USD]



- Note: * Compound Annual Growth Rate (2012-2016) Exchange Rate (BOT, July 1, 2017): USD 1 = THB 34.13
 - ⁴ Number of chili sauce includes chicken sauce
 - ⁵ Number of soy sauce includes oyster sauce.
 - ⁶ Others include tomato sauce, mustard, monosodium glutamate, etc. (Excluding sugar)



High-tech Food Ingredients

As the world's largest exporter of cassava products, the country exported over 11 million tons in 2016 at a total value of USD 3 billion.¹ Cassava starch is used as an ingredient in many products such as breads, frozen foods, and confectionery. By prioritizing research and development, the country is becoming an important production hub for advanced food ingredients such as artificial sweeteners, e.g. maltitol, crystalline, sorbitol, and high-quality monosodium glutamate (MSG). Offering a variety of raw materials, leading global companies manufacture their food ingredient products in Thailand for export back to their home countries, as well as for the global market.

KEY PLAYERS

















Sources: 1 Thai Tapioca Starch Association

Beverages

Beverages are also recognized as a huge industry in Thailand. The country's non-alcoholic beverage market was worth roughly **USD 7.9 billion with a 5.2% CAGR¹** and an export value of USD 1.1 billion in 2016.² The largest export destinations are ASEAN countries including Vietnam, Cambodia, and Myanmar.



Functional Drinks

With growing demand for premium products, Thai consumers are looking for **more-sophisticated flavors** and are increasingly concerned about their nutritional intake. They are therefore more willing to pay for products with **better functionality**. As a result, functional drinks are enjoying increasing popularity among Thai consumers. This market was worth **USD 1.6 billion in 2016**³ and is expected to grow as consumers focus on their well-being. Collagen and hyaluronic acid are among the ingredients being added to beverages for functions such as improving the skin's smoothness and delaying the aging process.

KEY PLAYERS



















Source: 1,3 Euromonitor 2 Thai Customs

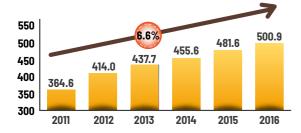


Fruit Juices

Changes in consumer behavior and an increasing focus on health are the driving factors in continued demand for fruit juices in Thailand. In 2016, local consumption for fruit juices was valued at over USD 500 million.1 With a 25.9% growth rate, coconut water is the fastest growing fruit juice product.2 As the land of tropical and citrus fruits, Thailand has around 100 juice manufacturers³ supplying various high-quality fruit juices to the global market, such as coconut, pineapple, orange, tomato and guava, and other high quality juices.

Thailand's Juice Sales Value 2011-20164

[In Billion USD]



KEY PLAYERS



















Sources: 1,2,4 Euromonitor ³ Ministry of Industry

*Compound Annual Growth Rate (2011-2016) Note:

Exchange Rate (BOT, July 1, 2017): USD 1 = THB 34.13

OPPORTUNITIES

By implementing advanced technologies and food standards, Thailand is working to ensure the best quality of foods for the global market. In addition, the government is promoting a campaign focused on healthy living and ensuring an optimum level of physical and mental heath.



Along with global trends, healthy foods have become mainstream among many Thais. The local consumption value for healthy foods in Thailand reached USD 5.3 billion in 2016 at a 6.7% growth rate.1 The government is continuing to support this rapidly growing sector by providing a mix of tax incentives and support for research to ensure that the country's food manufacturers produce the highestquality products which benefit both the health of consumers and the environment.

Thailand's Healthy Foods Market Value 2011-2016²

[In Billion USD]



Source: 1,2 Euromonitor

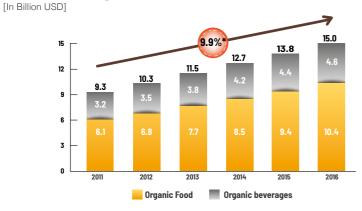
*Compound Annual Growth Rate (2011-2016)

Exchange Rate (BOT, July 1, 2017): USD 1 = THB 34.13



Organic products are an emerging but increasingly important category in Thailand. Consumers are more sophisticated and becoming aware of the benefits of organic foods. Almost 300,000 rai (118,610 acres) in Thailand are being used for organic agriculture.1 Thailand's organic consumption was valued at USD 15 million in 2016.2 Organic rice is the largest sector, accounting for 65% of the total organic food market. Organic coffee and green tea had the highest growth among beverages at 8.9% and 7.3% respectively from 2011-2016.3 Organic products from Thailand are exported and sold in many well-known global supermarket chains and organic-focused retailers such as Whole Foods Market and Wal-Mart.

Thailand's Organic Products Market Value 2011-20164



KEY PLAYERS



















Sources: 1 Earth Net Foundation and Green Net Cooperative 2,3,4 Furomonitor

*Compound Annual Growth Rate (2011-2016) Note:

Exchange Rate (BOT, July 1, 2017): USD 1 = THB 34.13

Dietary Supplements and Medical Foods

Sales of dietary supplements and vitamins in Thailand rose to over USD 1.6 billion, achieving double-digit growth of 11% in 2016.1 More Thais are shifting towards living a healthy lifestyle and increasing numbers of consumers are starting to take care of their health at a younger age. The rapidly aging population is also generating substantial growth in this market. The number of people aged 65 or older is expected to reach nearly 1.5 billion in 2050.2 And based on a report from the United Nations, by 2030, the aging population will account for 20% of Thailand's total population.3



As supplements function as preventive medicine, medical foods are formulated to treat diseases and disorders ranging from asthma to diabetes. The medical food industry in Thailand is thriving. Many leading global manufacturers have their facilities in Thailand, including Mead Johnson Nutrition, Abbott, Novartis, and Thai Otsuka. This sector directly benefits from the world-class reputation of Thailand's medical services industry as the country attracts over two million foreign patients annually.4 Some companies, such as Thai Otsuka, have achieved double-digit growth in revenues in 2016.



KEY PLAYERS















Sources: 1 Euromonitor

- ² World Health Organization (WHO)
- ³ The United Nations
- ⁴ Thai Medical Devices Technology Industry Association (THAIMED)



Healthy Fats and Oil

With abundant high-quality raw materials, various premium healthy oils are being developed to serve the market such as rice bran, sunflower, and coconut oils. With strong support from the government in research and development, Thailand is well-positioned as one of the **leading players in the global rice bran oil market** with a total annual production capacity of **54,500 million tons.** Rice bran offers important benefits due to its high levels of omega fatty acids which promote cardiovascular health. Major export destinations include South Korea, Australia, and the US.

KEY PLAYERS

















Supporting Industries

Food Machinery and Equipment

As one of the largest food producers in Asia, the country is constantly developing **cutting-edge technologies** to meet ever-increasing global demand. Food processing machines imported to Thailand had an **import value of over USD 201.2 million in 2016.**² The country has also increased its capacity and world-class safety standards in food machinery and equipment covering all processes involved in food production, in addition to being used in manufacturing food seasoning.





High Value-Added Food Packaging

Boosted by a supportive government, Thailand has pro-actively adopted advanced technologies and policies to encourage food production that ensures safety and quality. With **over 2,000 food packaging manufacturers,¹** Thailand is home to many leading Japanese, American, and European food packaging companies including Amcor, Huhtamaki, Majend Makcs, and Sealed Air To retain its position as a world leader in the food processing industry and adapt to the changing lifestyles of consumers convenient, safe, impurity-free, functional, and eco-friendly designed food packaging will continue to be major priorities in Thailand.

KEY PLAYERS





















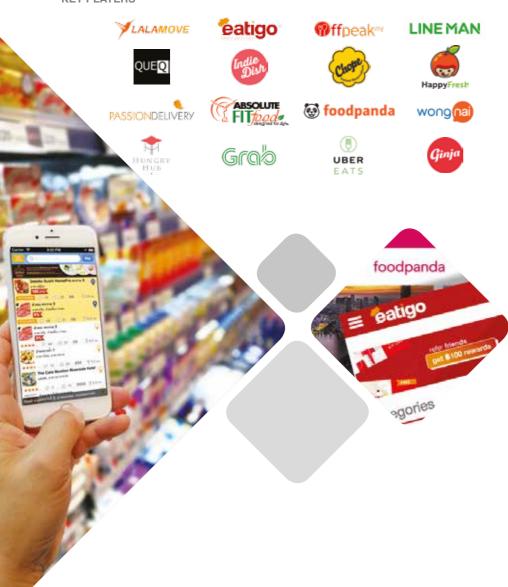
Source: 1 Packaging Intelligence Unit

Digitalized Food Service

An understanding of Thai culture can be achieved by understanding the country's food culture. Thais are very open in accepting and integrating various kinds of foods. With the country's characteristics, together with growth in smart technologies, **tech-savvy entrepreneurs** have found ways to merge technology with food, offering **innovative restaurant recommendations and delivery apps**. Several start-ups have been recognized for their ground-breaking ways in providing food services, ranging from restaurant reservations apps, healthy meals and grocery delivery services to discounted daily deals at restaurants. The online food delivery market is expected to reach **USD 791 million** in 2017, **showing double digit growth of 11%** from the previous year.1 To no one's surprise, Thailand remains ahead of the curve when it comes to food and technology.

Sources: 1 Kasikorn Research Center

KEY PLAYERS



WHY THAILAND?

Abundant Raw Materials

Thailand is well-known as an agricultural powerhouse, with an abundance of resources from land to sea and a year-round growing season. This points to Thailand's strengths as rich in raw materials including **cassava**, **sugar**, **rice and palm oil** that serve both the domestic and global food sectors. The country is ready to drive the world's food industry with its low prices and high quality of products enabling food processing companies to **locally source over 80% of the raw materials needed**.

Strategic Location with Excellent Logistics Networks

Located in the heart of Southeast Asia, Thailand is connected to ASEAN and other countries. Having more than 640 million consumers across Southeast Asia opens up numerous demands for the food industry. **World-class infrastructure** such as Suvarnabhumi International Airport, Laem Chabang deep sea port, and other trade routes allow the country to rapidly connect with many destinations for shipments and delivery of its food products.

Competitive Workforce

A growing pool of expertise combined with the talented Thai workforce provides a tremendous advantage to international companies. Consequently, Thailand is both well-known and well-regarded as the world's top location for labor-intensive food production among many major international players such as Cargill and Mckey Foods, among others. Over 1.1 million people are working in the food sector¹ in Thailand.

Source: 1 National Food Institute



To further enhance competitiveness, The Ministry of Labor launched a strategic framework and roadmap for 2018-2022 aimed at the health service and food industries. This plan is expected to produce approximately 9,600 food scientists, researchers, and technicians. Once fully implemented, a total of up to 126,600 food experts are anticipated in this strategic market.

Strong Government Support

World Food Valley Thailand

With an objective of reaching an export value of USD 58.6 billion in 2036, Thailand's public and private sectors are joining hands to launch the first phase of the "World Food Valley" project covering **2,000 rai in Ang Thong province**. This important project will **provide infrastructure and complete industry development services** such as raw materials and quality control, testing, approval, and mentoring services which will create **anecosystem for the food industry** in order to gather all levels of the value chain together in one place. Numerous investors have shown an interest in investing in this mega-project.









Rental spaces and facilities for research, development and innovations





Food Innopolis

Food Innopolis was established at Thailand Science Park in 2016. Totaling **124,000 square meters**, it is a fully equipped facility offering both wet and dry laboratories and an array of available resources including:

- Over **3,000** highly-skilled food researchers
- 10,000 food science students
- **150** food research laboratories
- 20 pilot plants
- 11 factories related to Food and Agriculture at major institutions

Food Innopolis was founded to enhance Thailand's food industry by strengthening the value chain from start-ups and SMEs to large companies, developing value-added outcomes, and building a world-class innovation ecosystem meeting global needs. Almost 40 companies have already set up their laboratories at Food Innopolis and roughly 30 percent of this group are leading international companies. Some of the companies represented include CP, SCG, Malee, Thai Oil, Thai Otsuka, Ou-waa soft, Lion, Taisei Kogyo and Mitr Phol.¹

Special Government Privileges

Tenants at Food Innopolis will receive special privileges from the government including a tax exemption on import duties on machinery and equipment for use in R&D, and a corporate income tax (CIT) exemption for up to 13 years with an additional 50% reduction for five years. Work permit and visa facilitation for foreign specialists and researchers, including the Smart VISA, will also be provided. Incentives from the Revenue Department will cover the accelerated depreciation allowances for machinery used in R&D and a 300% CIT deduction for technology and innovation research and development expenses. Investors can also obtain additional funding from various government agencies such as The Thailand Research Fund (TRF), Agricultural Research Development Agency (ARDA), National Science and Technology Development Agency (NSTDA), and National Innovation Agency (NIA).

Source: 1 Ministry of Science and Technology, Food Innopolis

INVESTMENT INCENTIVES

INVESTMENT INCENTIVES

BOI Incentives



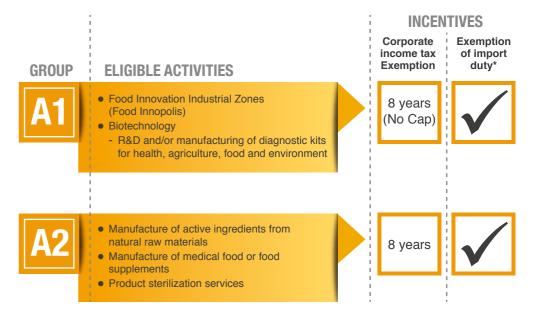
BOI recognizes the importance and value of the food industry, and offers a wide range of tax and non-tax incentives for projects that meet national development objectives.

Non-Tax Incentives

These activities also receive the following non-tax incentives:

- Permit to bring in expatriates
- Permit to own land
- Permit to take or remit foreign currency abroad

Tax Incentives



Note: * Exemption of import duty on machinery and raw or essential materials used in manufacturing export products

GROUP

ELIGIBLE ACTIVITIES

- Manufacture of modified starch or starch made from plants that have special properties
- Produce or provide services for modern agricultural systems such as detection or tracking systems, controlling usage systems of related resources such as water, fertilizers, pharmaceuticals and smart farming systems
- Manufacture of oil or fat from plants or animals (except for soybean oil)
- Manufacture or preservation of food, beverages, food additives or food ingredients using modern technology (except for drinking water,ice cream, candy, chocolate, gum, sugar, carbonated soft drinks, alcoholic beverages, caffeinated beverages and flour or starch made from plants, bakery products, instant noodles, essence of chicken and bird's nest)
- Digital Services
- Software platform
- Managed service
- Digital architecture design service
- Digital services such as FinTech, DigiTech, MedTech, AgriTech, etc.



- Manufacture of natural extracts or products from natural extracts (except for medicine, soap, shampoo, toothpaste and cosmetics)
- by-products or agricultural waste (except for those with uncomplicated production processes, e.g. drying, dehydration)

INCENTIVES

Corporate income tax Exemption Exemption of import duty*

5 years



Manufacture of products from agricultural

3 years



Note: * Exemption of import duty on machinery and raw or essential materials used in manufacturing export products



Supporting Organizations



National Food Institute

Provides academic and technical knowledge and updated information to promote "Value Creation" in the Thai food industrial sector and to boost the competitiveness of the food sector.



Food Innopolis

A global food innovation hub with a fully-integrated infrastructure for science and technology focusing on research, development and innovation in the food industry.



Food Processing **Industry Club**

Supports and strengthens the relationship between the club's members to further improve the network in order to enhance efficiency in the food industry.



Thai Food Processors' Association

Provides recommendations and support in establishing domestic food regulations and international food standards. Also serves as a communications link between members and government agencies.



The Halal **Standard** Institute of **Thailand**

Promotes and increases the competitiveness of the country's halal food industry to support production, expand export opportunities, and protect Islamic consumers locally.



The Halal **Science Center** Chulalongkorn University

Provides analytical services, conducts R&D on new product innovation, and support related to scientific matters involved in the certification of Halal foods to enhance the quality of Thailand's Halal foods industry.

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