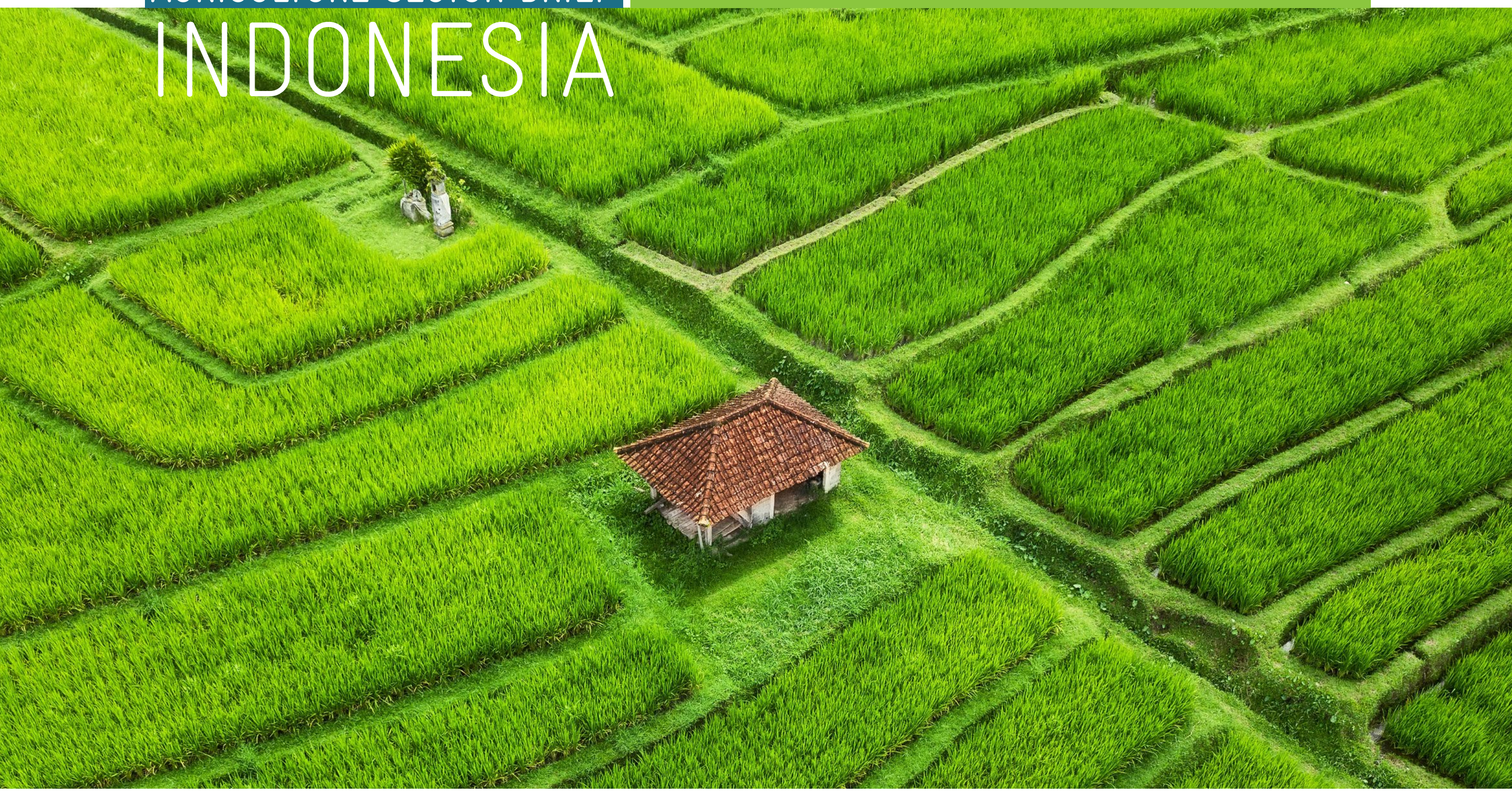
AGRICULTURE SECTOR BRIEF

INDONESIA



Country Overview

The Republic of Indonesia is the largest and most populous among the ASEAN countries, consisting of more than 17.000 islands, including several of the largest on earth - the western part of New Guinea, Borneo (Kalimantan), Sumatra, Java and Sulawesi. By land area, Indonesia is the 14th largest in the world, while with over 270 million people, it is the 4th most populous, with Java being the most densely populated island. Indonesia is a presidential, constitutional republic.

The archipelago has been known for its trade routes and valuable goods from at least the 7th century AD. Its natural resources, despite former colonialism and recent exploitation are still vast and rich, which support a diverse agriculture.

In the last decade, Indonesia showed a formidable economic growth, with some remaining threats and weaknesses, that could be important factors during and after the COVID-19 pandemic. In the last quarter of 2019, GDP growth reached 5%, fuelled by government consumption and foreign investments, as private consumption slowed down, and imports fell accordingly. The latest available data showed early signs of downturn of the economy, with exports and imports falling, and consumer confidence declining. The government has adopted two economic stimulus packages in February and March 2020, fighting the consequences of the pandemic.

The economy likely contracted sharply in the second quarter of 2020 due to containment measures at home and abroad. Retail sales were down around 20% in May, and the Central Bank expects a further double-digit decline during the year, suggesting depressed private consumption. In addition, the manufacturing PMI was deep in contractionary territory throughout the quarter amid soft output and new orders. Moreover, administrative and communicative difficulties have hampered the rollout of the government's US$ 49 billion stimulus package, likely accentuating the downturn. While economic conditions should have improved at the tail end of Q2 and heading into Q3 thanks to the easing of social distancing restrictions in June and recoveries abroad, elevated new COVID-19 cases continued to dampen momentum.

The latest available macroeconomic indicators are shown in this table, with the note that most of the experts believe that after the COVID-19 crises, the Indonesian economy will find its way back to growth again.

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	258	3,607	5.0	3.0	9.5	145	136
2017	261	3,885	5.1	3.6	11.8	169	157
2018	264	3,946	5.2	3.2	-8.7	180	189
2019	267	4,194	5.0	2.6	-3.2	167	171

Sector Overview

General characteristics and regulations

The agricultural area of Indonesia is around 602 million hectares, roughly one third of the total landmass of the country, while another 900 million hectares are covered in forests. In 2018, the sectors' contribution to the gross domestic product (GDP) was 12.8%, but the large number of people living from agricultural activities clearly shows its importance to the Indonesian economy.

Smallholders, with less than two hectares of land to farm, dominate the sector, while 'real' SMEs remain small and underdeveloped compared to more developed ASEAN counterparts in Malaysia or Thailand. Still, the growing number of entrepreneurial farms contribute more to Indonesia's agricultural export than small family units.

The percentage of poor people in March 2019 was 9.41%, down 0.25% from September 2018. This still means about 25 million people, but shows the tendency that the population living in rural areas, and from agriculture is slowly decreasing. The number of villages in Indonesia was 83.931 in 2018, from which 25% were classified as underdeveloped.

Indonesia's general development goals cannot be reached without agricultural development, so the country has a 2015-2045 masterplan for the sector. The main general objectives of this plan and the rural development efforts of the country are:

- Accelerating food production, especially protein sources
- Food nutrition for all people, increasing food availability and safety
- Improving welfare of farmers and rural communities

Traditionally, food security policy has focused on the most traditional crops and livestock including rice, corn, chili, soybean, sugarcane and beef/buffalo. The main target is to reach or sustain self-sufficiency. The target was reached in 2016 for rice, corn, chili and onion.

The programme supporting this switch from rice to other products has three main elements, assistance in cultivation management, seed provision and area development. In the 2010s, this large-scale state initiative brought success. Corn, chili and shallot productions rose well, while efforts to spur the production of soybean, sugarcane, and beef/buffalo were not quite as effective.

Food security remains the greatest challenge for Indonesian agriculture. The Economist Intelligence Unit's Global Food Security Index (GFSI) ranking of the country improved from 74th to 65th place from 2015 to 2018. The GFSI ranking was based on measuring food available.

Most important products and segments - crops

Rice

Rice cultivation is well-suited in regions that have a warm climate, low labour costs and high amounts of rainfall. Most of the Indonesian archipelago meet these requirements,' so rice is the main grain consumed in Indonesia. After China and India, Indonesia is the 3rd largest producer of rice, and due to the efforts made by the Ministry of Agriculture, rice production increased from 75 million tons in 2015 to 83 tons in 2018. This prominent global ranking does not mean that Indonesia is self-sufficient in rice, and it still has to import rice almost every year, sometimes only to keep reserves at a safe level. The problem is the larger per capita rice consumption of nearly 150 kg per person annually, the sub-optimal technologies used by farmers, and the unchangeable fact that the country is frequently affected by natural disasters.

Rice production is dominated by the smallholder farmers, not large or state-owned enterprises. Smallholders account for 90% of the production, each farmer is holding an average of less than 0.8 hectares. Most rice is produced in South Sumatra, West, Central and East Java and South Sulawesi.

The international trade market for rice is remarkably shallow. A few years ago, the World Bank estimated that only 5% of global rice production was traded internationally, which implies that rice prices are vulnerable to small changes in supply and demand. Indonesia aims to become a rice exporter, but the above-mentioned factors should be improved first.

The government uses two approaches at both ends of the supply chain to reach self-sufficiency. It encourages farmers to increase their production by stimulating technological innovation and by providing subsidized fertilisers. On the demand side, there are campaigns such as 'one day per week without rice' promoting switching to other staple foods.

Corn

Although rice is by far the most important food crop, corn is the major source of calories for about 18 million people, especially in Java Timur and Java Tengah provinces. About 75% of corn production is consumed as a staple food source. Corn cultivation is concentrated on Java and Madura under a variety of conditions, but most frequently on **tegalan**, or rain-fed land without the system of dikes characteristic of floodable **sawah**.

Corn production was the most successful performer among Indonesian agricultural products. It has jumped from 19.61 million tons in 2015 to 30.06 million tons in 2018, showing a growth rate of 15.61% per year.

Cocoa
Most of the global cocoa production originates from the African continent, but Indonesia is ranked 6th in the world with its 200,000 tonnes yearly production in 2019/2020. The cocoa season runs from October to September.

In the past 20 years, this segment experienced massive growth, driven by rapid expansion of smallholder farmer participation, and nowadays they outperform large state-owned plantations and large private estates. Currently approximately 1.5 million hectares are used for cocoa plantations. The main cocoa producing region is the island of Sulawesi, with nearly 75% of the national production.

The cocoa bean is one of the most important agricultural export products of Indonesia, the fourth largest by foreign exchange earnings in the sector. However, the majority of Indonesia's cocoa export constitutes raw beans, instead of processed cocoa. The largest destination markets are Malaysia, the US and Singapore. Usually, at least half of the national production is exported every year.

Coffee
Coffee that is sold on the world market is usually a combination of roasted beans of two botanical types, arabica and robusta, where the difference between them mainly lies in its taste and level of caffeine. Indonesia was the fourth largest producer in the world with 11 million 60kg sacks production in 2019. The equatorial climate with mountainous terrain provides good conditions for coffee throughout the region. In terms of trading, Indonesia became the world's fourth largest exporter, however most of the production is the lower quality robusta type. Indonesia is also famous for having a number of speciality coffees such as 'kopi luwak' and 'kopi Mandailing'. Regarding agricultural commodities, coffee is Indonesia's fourth-largest foreign exchange earner after palm oil, rubber and cocoa.

Tea
In the mountainous parts of Indonesia, constant cool temperatures and high humidity are ideal for tea plants to grow. The plant can first be harvested after it has reached the age of around four years. When harvesting, only light-green young leaves are selected, so manual picking is more efficient, which makes tea production a labour-intensive business.

Indonesia currently ranks seventh on the list of the world's largest tea producers. However, due to the lucrative business prospects of palm oil, the country's tea output has declined in recent years as some tea plantations were transformed into palm oil plantations, while other tea estates have been given up for the production of vegetables or other crops considered more profitable. Nowadays, usually half of the yearly production goes to export, Russia, United Kingdom and Pakistan being the largest target markets.

Palm oil

Global palm oil production is dominated by Indonesia and Malaysia. These two countries, together, account for around 85 to 90 % of total global palm oil production. Indonesia is the largest producer and exporter of palm oil worldwide. Few Indonesian industries have shown such robust growth as the domestic palm oil industry during the past 20 years. This growth is reflected by the country's rapidly rising production and export figures as well as by the growing quantity of its palm oil estate area. Driven by increased global demand and higher yields, palm oil cultivation has been expanded significantly by Indonesian farmers and conglomerates. This has been at the expense of the environment and at the expense of production figures of other agricultural products such as cocoa or coffee because farmers switched to palm oil plantation due to the promising perspectives.

Indonesia's oil palm plantation and processing industry is a key to the country's economy. The export of palm oil is an important foreign exchange earner while the industry provides jobs to millions of Indonesians. In terms of agriculture, palm oil is the most important industry of Indonesia contributing between 1.5 - 2.5 % of the nation's gross domestic product (GDP). Almost 70 % of Indonesia's oil palm plantations are located on Sumatra where the industry was started during the colonial period. The remainder - around 30 %, is largely found on the island of Kalimantan. The total area of plantations is currently around 11.9 million hectares.

Yearly palm oil production grew by nearly 50% in the last 4-5 years.

Palm oil production in Year

2016	2017	2018	2019
31.73 Million MT	34.94 Million MT	42.88 Million MT	45.86 Million MT

A negative side-effect of palm oil production - apart from its impact on people's health due to the high level of saturated fat - is that the palm oil business is a key driver of deforestation. Indonesia is the world's largest producer and exporter of palm oil but it is also the largest greenhouse gas emitter after China and the United States. The majority of Indonesia's palm oil output is exported. The most important export destination countries are China, India, Pakistan, Malaysia, and the Netherlands. Although the numbers are very insignificant, Indonesia also imports some palm oil, primarily from India.

State-owned enterprises play a very modest role in the Indonesian palm oil sector as they own relatively few plantations. Meanwhile, big private enterprises including the Wilmar Group and Sinar Mas Group are dominant, producing slightly over half of total Indonesian palm oil output. Smallholder farmers account for around 40% of total production.

Rubber

Rubber, known for its elastic quality, is a commodity that is used in many products and applications around the globe, from industrial to household products. There are two types of rubber, natural and synthetic. Natural rubber is made from the juice or latex from the rubber tree, while the synthetic type is made from petroleum. Both types are interchangeable and as such influence each other's demand; when the price of petroleum rises, demand for natural rubber will increase. Indonesia is one of the largest producers and exporters of natural rubber.

The rubber tree needs constant high temperatures of around 26-32 degrees Celsius. and a wet environment in order to be most productive. These conditions are found in South-east Asia where the majority of the world's rubber output is produced. Around 70% of global production comes from Thailand, Indonesia and Malaysia. It takes seven years for a rubber tree to reach a productive age, after which it can produce up to 25 years. Due to the long cycle of the tree, short-term supply adjustments cannot be made.

As the second-largest rubber producer, Indonesia supplies a substantial amount of rubber to the global market. Since the 1980s, the Indonesian rubber industry has experienced steady production growth. Most of the country's rubber output - approximately 80%, is produced by smallholder farmers and government and private estates play only a minor role in the domestic rubber industry.

Around 85% of Indonesia's rubber production is exported. Almost half of exports are shipped to other Asian countries, followed by North America and Europe. The top five Indonesian rubber importing countries are the USA, which accounts for almost 22% of Indonesia's total rubber exports, China, Japan, Singapore and Brazil.

Horticulture

In the last decade, figures of fruit and vegetable production in Indonesia grew constantly, as more farmers have switched from rice to horticulture production to cater to the growing demand for healthy, fresh and well-priced local greens and fruits. This positive trend is threatened by even faster growing imports, with competition from other ASEAN countries, China and Australia.

Local production, overall, is still insufficient to meet domestic demand. Prices on the local market often fluctuate, and demand is more than current domestic production. For suppliers, this creates and unpredictable and unstable market, which prevents a lot of traders from entering the market.

Other food crops

The most relevant food crops other than the above-mentioned are cassava, sweet potatoes, peanuts and soybeans.

Most important products and segments – livestock

Beef
Beef is the third most consumed protein in Indonesia behind chicken and fish. However, it is perceived to be the most important source of protein and is used widely in a variety of traditional dishes, such as bakso (meatball) and rendang (meat dish cooked with coconut milk)

For decades the government has been proclaiming the goal of making Indonesia self-sufficient in a number of agricultural commodities, including beef. In the case of beef, the implementation of a quota system took a serious toll on imports in recent years. While imports accounted for 58% of national consumption in 2009, that share dropped to 22% in 2013, according to figures compiled by ANZ Bank. US exports to Indonesia plunged by 90% in volume and 70% in value in 2012 from 2011 (US Meat Export Federation). The quota system also affected live exports from the principal supplier Australia.

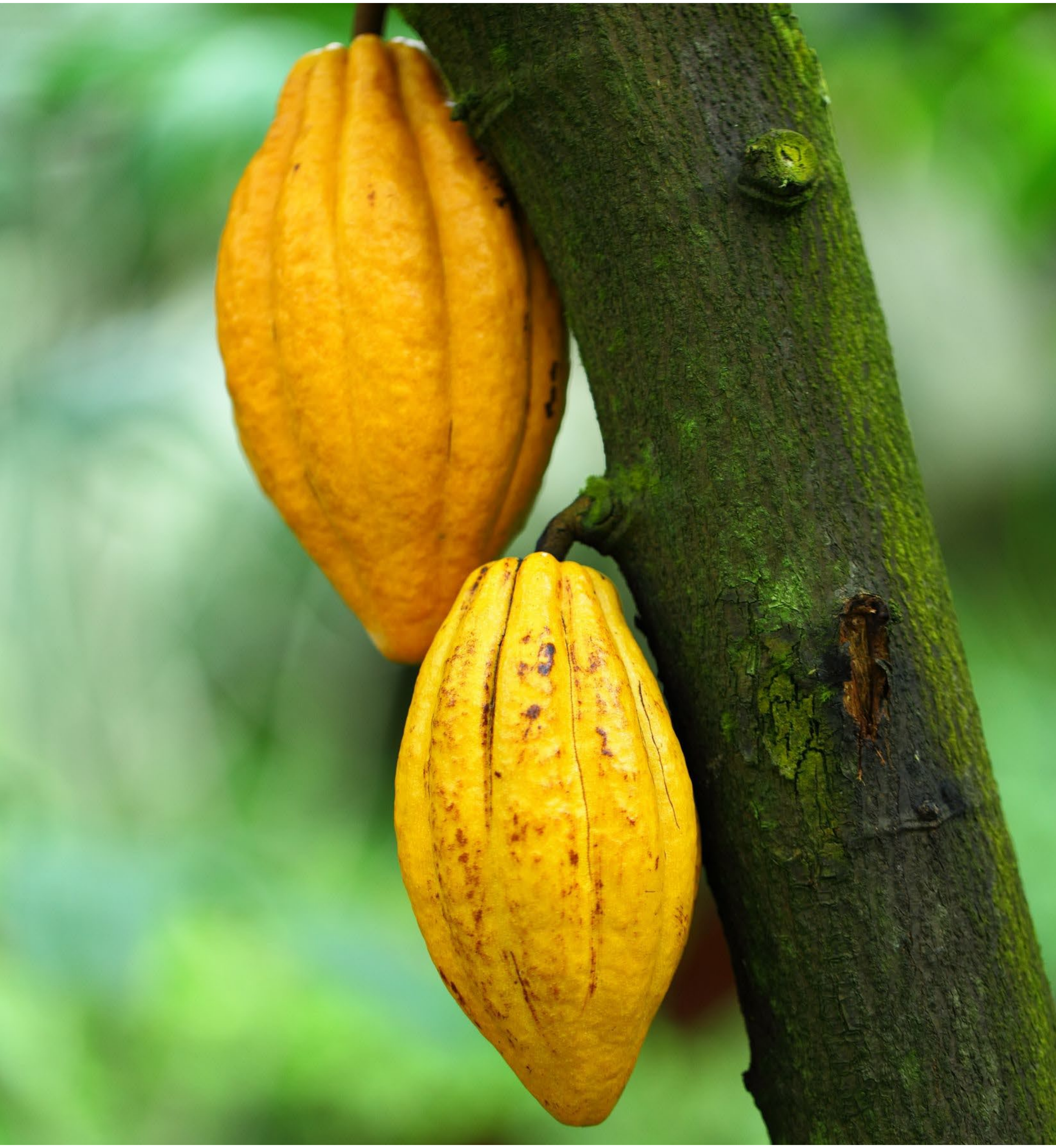
During this decade, cattle production went up to 16.5 million heads per year (latest data from 2018), but is now stagnating, as it appears that there is no room for further growth under the current circumstances.

Poultry
Chicken meat demand in Indonesia this year is projected to increase by 6.2% to 3.25mt, according to a forum in Bogor. Supply, meanwhile, is projected to escalate by 7.8% to 3.6mt. Broiler DOC production is projected to reach 3.5 billion with a weekly production of around 67.15 million chicks. The forum also noted that per capita chicken meat consumption in Indonesia has reached 12.13kg and recommends that promotions by the stakeholders are needed to raise consumption further.

Fisheries and aquaculture
The Indonesian government set a target to increase capture fishery production by 2.4% to 6.45 million tonnes in 2016 and aquaculture production growth by 8.72% to 19.5 million tonnes. These targets seem achievable given Indonesia's vast areas suitable for aquaculture which are still largely unused. Currently there are 11.8 million hectares used for aquaculture in the sea, 2.3 million hectares of aquaculture area in brackish water, and 2.5 million hectares used for freshwater aquaculture.

Although the Indonesian government has taken various steps to enhance the local fishery sector, a number of problems remain. One of the major weaknesses of Indonesia's fishery sector is that 95% of the 2.2 million people engaged in the sector are traditional fishermen. These fishermen lack the resources and capital to explore the huge potential of Indonesian aquatic resources. The majority of fishermen still use small boats and traditional equipment, which prevents them from going in to deep waters which results in lower catch volumes. They also have minimum access to finance as banks are generally reluctant to extend credit to the fishery sector, especially smallholder players, due to the high level of bad debts, which reached as high as 11.76%.

Lastly, the final major obstacle that hinders the growth of the fisheries sector is the low level of fish consumption in Indonesia, which until 2011 was ranked 5th in the ASEAN at 32.25 kg/capita/year. This is in contrast with national fish production which ranked number one in the ASEAN.



Regulations

Tariffs

Indonesia's average most-favoured-nation applied tariff is 6.9%. This rate is not too stable, and in the last five years Indonesia increased its applied tariff rates for a wide range of agricultural and food products such as milk products, animal and vegetable oils, fruit juices, coffee and tea. These steps are clearly intending to hold off foreign competitors.

The simple bound tariff rate is different, and much higher than the applied tariff: more than 1300 agricultural products have the bounding tariff of over 40%. Tariffs on fresh potatoes are bound at 50%, although the applied rate is only 20%. The high bound tariff rates, with unexpected and frequent changes in applied rates, create uncertainty for foreign traders seeking to enter the Indonesian market.

Indonesia, on the other hand, has a very extensive preferential trade relationship with many countries. Most importantly, duties on imports from ASEAN countries generally range from 0-5%, except items on the exception list. On ASEAN or bilateral basis, Indonesia also provides preferential market access to Australia, China, Japan, Korea, India, Pakistan and New Zealand.

As extensive documentation is needed prior to importation of goods, it is advisable to use local custom brokers' services, as they are acquainted with the procedures and required format of documentation. The process of providing the documentation includes a requirement that the importer notifies the customs office prior to the arrival of goods and submits import documents electronically through the electronic data interchange (EDI) in a standardised format placed on flash drives. In addition to providing the import documentation, the Custom Office will conduct physical inspection of imported goods.

Since 2013, food products are required to have Indonesian language labelling.

Non-Tariff Measures

Non-tariff measures are legal tools of a country's trade regulation, other than ordinary custom tariffs. These measures have an economic effect on international trade in goods, especially in quantities and prices, or both. Not all of these legal instruments work as a barrier, but many of them can keep foreign SMEs away from the market entry.

The three main categories of NTMs:
- Measures imposed on imports, such as import quotas, prohibitions and custom procedures and import administration related fees
- Measures imposed on exports, like export taxes, quotas, or subsidies
- Measures imposed internally on the market, in the domestic economy

Indonesia is among the top ten countries in terms of the quantity of imposed non-tariff measures. The most commonly used types are:
- Registration requirement for importers, often with traceability information requirements
- Inspection requirements like pre-shipment inspection
- Export registration and export price control measures
- Product quality or performance requirements
- Licensing or permit requirement

Regarding animal products, 100% of the imported goods are affected by non-tariff measures, while in vegetables it is 99,27%.

In Indonesia, no fewer than 14 different government agencies can issue non-tariff measures, and complying with all regulations is a challenge for smaller traders or producers. The total number of non-tariff measures was 638 in 2018, according to a recent study. Of these 14 government bodies, the Ministry of Trade, the Ministry of Industry and Ministry of Agriculture are the most active, responsible for almost 90% of the relevant regulations. Further difficulty from the traders' point of view is that Indonesia is imposing multiple NTM on many goods, making compliance even more complicated. A local advisor or logistic partner might be necessary for most foreign companies.

Market Entry

Setting-up a business in Indonesia

It is not necessary to set-up a legal entity in Indonesia to sell agri-food products, but the country is offering excellent investment opportunities in the broader agricultural sector, especially in the field of technology transfer, agro-IT and the food processing industry.

Under the terms of Indonesia's Law No. 25/2007 on investment, a foreign investment in the country is defined as an activity conducted by a foreign investor for the purpose of running a business within the territory of Indonesia. The legal entity through which a foreign person, foreign company, or foreign government body can conduct a business and generate revenue is called PT PMA. The establishment of a PT PMA is regulated by Law No. 40/2007 on Limited Liability Companies (Company Law). Such a company can either be partially or 100% foreign owned.

Traditional agri-food distribution

Cruising the streets of any city in Indonesia, one might think that every house has its own grocery. An official estimation showed that there were 4,589,800 traditional small outlets. Convenience stores, supermarkets and even hypermarkets are growing in large numbers, but the market is still dominated by traditional groceries and wet markets. Exporters cannot usually reach this segment directly, and usually a chain of importers and distributors is the only method simple or processed food can reach consumers. The overall packaged food market is growing, and it was expected that it will reach US$ 40 billion by 2021, though growth rates have been affected by the COVID-19 pandemic.

Convenience stores are expanding rapidly in Indonesia and differ from Indonesian minimarkets in that they offer fewer SKUs than minimarkets while offering ready-to-eat foods and a dining area. Minimarkets are in direct competition with traditional independent small grocers - warungs, on the basis of price, cleanliness, food safety, and comfort.

Hypermarkets and supermarkets offer a wide range of food and beverage products and are generally located as anchor stores in shopping centres. Indonesian middle- and upper-income level consumers are increasingly shopping at these stores. Hypermarket and supermarket retailers usually contain in-store bakeries, cafés and restaurants, and prepared meals, with grocery products typically contributing about 65% of total sales.

Minimarkets, convenience stores, and other shops carry a wide range of convenience food items such as readymade meals, bakery products, processed foods, ice cream, and beverages. They sometimes carry a limited offering of fresh fruits and are open 24 hours. These stores are found throughout Indonesia's major urban centres and are also co-located with gasoline stations, such as Bright, Circle K, Bonjour, Indomaret and Alfamart; and railway stations. The number of minimarkets and other small stores will continue to grow.

E-commerce

There were 175.4 million internet users in Indonesia in January 2020, 17% more than in the previous year and giving an internet penetration rate of 64%. More importantly, there were 338.2 million mobile connections in Indonesia at the same moment, which is equivalent to 124% of the total population. These figures show how great potential e-commerce has in Indonesia, which is why most of the global IT-companies, as well as local heavyweights are competing for market shares. Still accounting for only a few percentages of all sales, e-commerce is expected to expand with double digits in the coming years. The only obstacle in front of further growth is the state of infrastructure: delivery, especially in geographically remote areas is very difficult.

The COVID-19 crisis may give a new momentum to the agri-food e-sales. It is now essential for retailers and producers to sell their products through e-commerce platforms in order to survive the lockdown. Online shopping is starting to become habitual for consumers, so this momentum might keep up for years.

Recommendations and Trends

Indonesia is likely to be the fourth largest economy in the world by 2050, if recent trends continue. Agriculture will have a role in this process, even if its share from the GDP will slowly decline. The challenges on the way, or problems to be solved include:

- Irrigation: According to the Ministry of Agriculture, major improvements are strongly required to existing irrigation systems. There have been no large upgrades in the last 30 years, and most systems, on at least 3 million crop fields, are in poor condition.

- Mechanisation of agricultural machinery: Most Indonesian farmers are smallholders and lack the experience of using modern machinery to increase production. This, in line with other poor infrastructural elements, leads to post-harvest loss and damage of crops, often reaching 30-50%.

- Chemical residue from synthetic fertilisers: Even if farmers prefer synthetic fertilisers over organic, as it delivers faster results, in the long run, and on the international market, this would be a disadvantage. Revitalisation and a switch to organic farming could be possible solutions to develop sales.

- Distribution and marketing potential: Producers in Indonesia will be forced by the market to learn global marketing techniques, branding and influencing other countries' consumers. Internally, the focus should be on improving distribution methods.

- Adaptation to consumer trends: it seems that organic farming, production of functional food and other global trends are in Indonesia, but players within agriculture have to learn to adapt to changing consumer preferences.