



Indonesian Pharma Manufacturing Overview

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Executive Summary

This report will highlight the current state of the Pharmaceutical manufacturing industry within Indonesia. It will provide insight into the State Owned Industry focus of pharmaceuticals. And give a sense of the size of the industry and projected growth paths.

Overview

The Indonesian economy fully recovered in 2021, despite a temporary slowdown due to a COVID-19 outbreak in the third quarter. Investment picked up, exports boomed, inflation was low, and the budget deficit was lower than forecast. Key reforms were implemented last year, and stronger growth is expected for 2022.

The downside risks are the economic impact of the Russian invasion of Ukraine and potential COVID-19 outbreaks are still of concern.

The medium-term challenge is to harness digitalization to raise productivity and growth.

The Indonesian population is the largest in ASEAN, number four in the world, with 274+ million people at the end of 2021. The steady growth of the Indonesian Pharmaceutical Industry for the last 10 years, can be seen by the increase in the total market size in the pharmaceutical sector.

Increase in Market Size in 2016-2019, from IDR65.9 trillion to IDR88.36 trillion, driven by an increasing awareness of the Indonesian public about medicine and health and an awareness of an increasing trend of non-communicable diseases, which will encourage opportunities in the health sector, especially medicine.

The increasing income of the middle class, which also is expanding with the result of a growing number of Indonesians being able afford the purchase price of medicines.



History

Triple EFF Consulting has found it difficult to get an accurate picture of the Indonesian Pharmaceutical manufacturing industry, due to the fragmented nature of the industry sector.

In 2016 there was a significant increase in the number of foreign industries/PMA (Foreign Investment Limited Liability Company) is also known as a **Foreign Owned Company**, from 24 Pharmaceutical Industries (IF) in 2014-2015 to 35 IF. This shows that foreign industry interest in the potential of the Indonesian pharmaceutical market is very high, driven by the presence of BPJS/JKN through the E catalog system.

This is very different from conditions previously where there were many layoffs at foreign pharmaceutical companies where they were unable to compete with the local pharmaceutical industry.

There have however been several companies that have been around in Indonesia for almost 50 years.

MEIJI Manufacturing

As a pioneer of quality antibiotics since its establishment in 1974, PT. Meiji Indonesia as a subsidiary of Meiji Seika Pharma Co. Ltd. headquartered in Japan, is a pharmaceutical company that has high production quality standards in Indonesia.

PT. Meiji Indonesia has been at the forefront for more than 40 years and will continue to strive to improve quality in the future.

PT. Meiji Indonesia produces various kinds of prescription drugs, OTC (Over the Counter) products, and veterinary drugs which have been successful in both the domestic and international markets.

They continue to innovate by combining years of experience with the support of modern technology. Their products are manufactured with the best raw materials and processed with international standard facilities.

They have over the years received various awards and certifications, including the A+ classification for Good Manufacturing Practices (GMP) from the Indonesian government and the Japanese government.

They are committed to producing high quality products and have gained the trust of both domestic and foreign companies for *toll-in manufacturing* and export.

PT Kalbe Farma Tbk

Is an Indonesian pharmaceutical, healthcare and nutrition company established in 1966. The company has expanded by strategic acquisitions of pharmaceutical companies, becoming an integrated consumer health and nutrition enterprise

Kalbe International

Is an international marketing company that mainly handles the trading/export transaction of total Kalbe Farma's group of business. This focus, aligned with the shift of

strategy, is adjusted accordingly by transforming the organization from what used to be a trading company into a multi-national corporation that controls the whole value chain.

Their principal distribution partner is PT Enseval Putera Megatrading Tbk (EPMT), which is responsible for delivering pharmaceuticals for Kalbe and third-party principal products to over 1 million outlets in Indonesia.

In addition, Kalbe has also expanded the business portfolio of the Division to include raw material trading, medical device trading and retail and health services. Kalbe's distribution and Logistic network for pharmaceuticals products is the most extensive in Indonesia.

Supported by 2 Regional Distribution Centres (RDC) in Jakarta and Surabaya, and 74 branches in 54 cities, Kalbe reaches more than 1 million outlets all over Indonesia, both directly and indirectly, in cooperation with local sub-distributors.

State Owned Enterprise

At present, the pharmaceutical industry in Indonesia is still faced with some significant challenges, where Indonesia still relies on imports, especially for pharmaceutical raw materials or Active Pharmaceutical Ingredients (API).

Another challenge is access to get pharmaceutical products that tend to be difficult because of limited distribution channels that make the price of drugs relatively expensive, and the next challenge is the latest innovations that can give birth to pharmaceutical products needed by the community.

The idea of joining Bio Farma, Kimia Farma and Indofarma in a BUMN Holding, was formed so that each of these companies will contribute to national pharmaceutical security, so that pharmaceutical product prices will be cheaper.

This will reduce the cost of API prices and the community will have better access to pharmaceutical products with a wide and even distribution network, that could even include export to foreign countries.

Bio Farma as the holding company will encourage Kimia Farma Tbk and Indofarma Tbk,

to be able to penetrate a wider market with product standards that have been qualified from the World Health Organization (WHO).

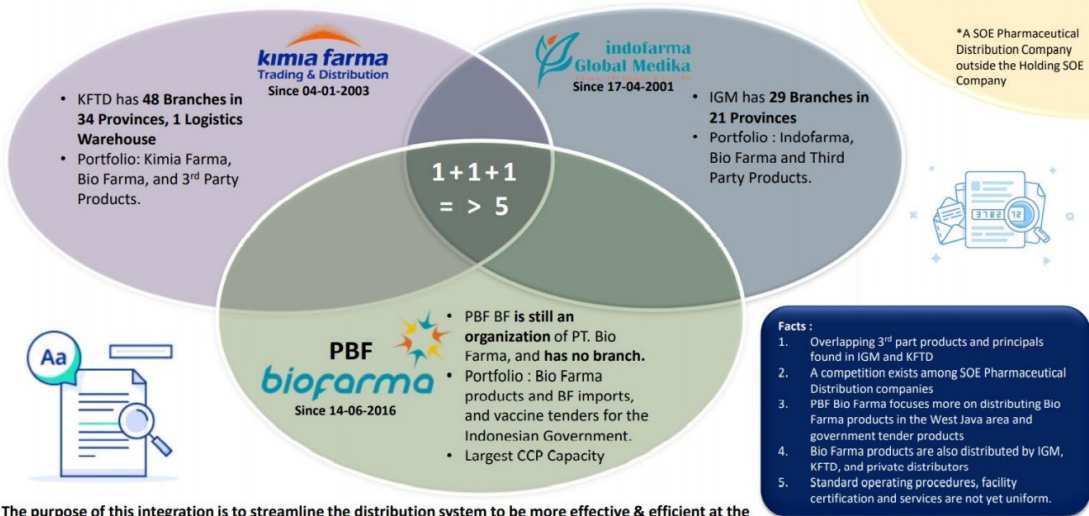
Bio Farma said that so far, no company has succeeded in gaining a high market share in Indonesia, and by consolidating into a state-owned holding, there is optimism that BUMN holding could see their market share could increase.

The collaboration looks like below:

The Leading & Biggest Vaccine Manufacturer in South East Asia



Overview of the SOE Holding Pharmaceutical Distribution Companies



The purpose of this integration is to streamline the distribution system to be more effective & efficient at the SOE Pharmaceutical Holding company in order to be able to compete globally.

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Indonesia's own COVID 19 vaccine manufacture

Jakarta (ANTARA) - The Merah Putih Vaccine Research Team at Airlangga University is preparing to use the Merah Putih vaccine as the fourth dose of COVID-19 vaccination in Indonesia.

The vaccine that will be produced in collaboration with Biotis and JBio is the Zififax vaccine. The vaccine has received an Emergency Use Authorization (EUA) permit from the Indonesian Merak Putih POM Agency in October 2021, likewise, the Halal and Clean Certificate from the Indonesian Ulema Council (MUI), was published in the same month.

PT Biotis the company tasked with manufacturing the Merah Putih vaccine has a factory located at Jalan Pemuda No. 89, Curug Village, Gunung Sindur District, Bogor Regency.

The founders are 2 foreign investors from China, namely Pharmally International Holding Company and Harbin Weike Biotechnology Company. The groundbreaking of the factory was carried out on July 23, 2016.

Initially the factory was created to produce Avian Influenza (bird flu) vaccines and Newcastle Disease vaccines. To build this vaccine factory, the total investment cost

disbursed in 3 years reached USD 100 million or equivalent to Rp 1.43 trillion (USD 14,300-dollar exchange rate).

Resilience & future opportunities

Industry Minister, Agus Gumiwang Kartasasmita, has claimed 220 companies support the pharmaceutical industry in Indonesia: and 90 percent of these focus on the downstream sector in producing medicines.

Meanwhile, the government continues to strive to reduce imports by 35 percent by the end of 2022. Hoping the country can overcome dependence on raw material imports.

According to data from the Ministry of Health, up to 2021, there are 241 pharmaceutical formulation industries, 17 pharmaceutical raw material industries, 132 traditional medicine industries, and 18 natural product extraction industries.

The growth of medical equipment production facilities continues to increase. From 2015 to 2021, medical device production companies increased from 193 to 891 companies.

And in the last five years, the domestic medical device industry has grown by 361.66 percent or approximately 698 companies.

Indonesia exported pharmaceutical products and medical devices to several countries, the Netherlands, England, Poland, Nigeria, Cambodia, Vietnam, the Philippines, Myanmar, Singapore, South Korea and the United States.

Quick licensing

The government has prepared a road map to accelerate the pharmaceutical and medical device industry's development, including steps to be followed, product development targets, and time frames.

The target of the roadmap is to produce high-tech raw material products.

And the long-term focus is to help pharmaceutical and medical device industries become independent and meet the population's needs while reducing dependence on imported products.

The Chairman of the Indonesian Investment Coordinating Board (BKPM), Bahlil Lahadalia, and the Minister of Health, Budi Gunadi Sadikin, agreed during the pandemic to provide accelerated licensing for medical equipment providers.

Medical equipment business licensing in Indonesia can be accelerated within 1 x 24 hours (one day) simply using BKPM's Online Single Submission (OSS) system and optimizing monitoring through BKPM Investment Control and Command Centre.

The providers will receive a Business Identification Number (NIB), an Industrial Business License, and a Commercial or Operational License.

After which, the Ministry of Health's system will process their requests for Production Certification and Distribution License.

Some of the products that were included in the acceleration services include surgical masks, Personal Protective Equipment (PPE) and Hand Sanitizer (HS).

The government will provide fiscal and non-fiscal incentives to investors who will invest in Indonesia.

The tax holiday, tax allowance, super tax deduction and import duty exemption are some of the incentives available.

Indonesia's strong economic growth and favourable demographics make it an excellent country for investors.

The Omnibus Law on Job Creation, as a part of structural regulatory reform, improving the investment climate and the ease-of-doing-business in Indonesia.

The need for cold chain players

Based on a survey conducted by CIC, at the end of 2018, there were around 69 major cold storage companies throughout Indonesia with a total capacity of 370,000 tons per year.

The number one Company being PT Enseval Putera Megatrading Tbk (EPMT), which is responsible for delivering pharmaceuticals for Kalbe and third-party principal products to over 1 million outlets in Indonesia, (mentioned earlier).

The table below shows the top 10 companies.

No.	Name of Company	Capacity (Ton)	Share (%)
1	Enseval Putra Megatrading Tbk, PT	59,000	15.9
2	Unilever Indonesia, PT (Wall's ice cream)	50,000	13.5
3	Sukanda Djaya, PT	45,000	12.2
4	Kiat Ananda Cold Storage, PT	30,000	8.1
5	Mega Internasional Sejahtera, PT	21,000	5.7
6	Indomaguro Tunas Unggul, PT	15,000	4.1
7	Dharma Samudera Fishing Industries, PT	14,000	3.8
8	Savina Cold Storage	9,000	2.4
9	Wahana Cold Storage, PT	7,000	1.9
10	Lion Super Indo, PT/Super Indo	6,600	1.8

To maintain a cold storage facility requires a substantial investment, and it's not surprising that many companies do not have their own cold storage facilities. Rather, many of them rent or cooperate with cold storage owners. This makes it is very difficult to know the exact amount of cold storage operation in Indonesia.

However Indonesian cold chain capacity is growing:

Projection of Potential Demand for Cold Storage in Indonesia, 2019–2024 Capacity (tons)

Additional Production Capacity (thousand tons):

2019 462,750 an annual increase of 92,550t

2020 548,359 an annual increase of 85,609t

2021 631,161 an annual increase of 82,802t

2022 692,384 an annual increase of 61,223t

2023 765,084 an annual increase of 72,700t

2024 824,760 an annual increase of 59,677t

- **YoY Tonnage increase since 2021 Averaging 61,100t**

The pharmaceutical industry has a need for cold storage in the form of warehousing and transportation. Cold Storage services include refrigerators, chilled rooms, thawing rooms, freezer rooms, blast chillers and blast freezers.

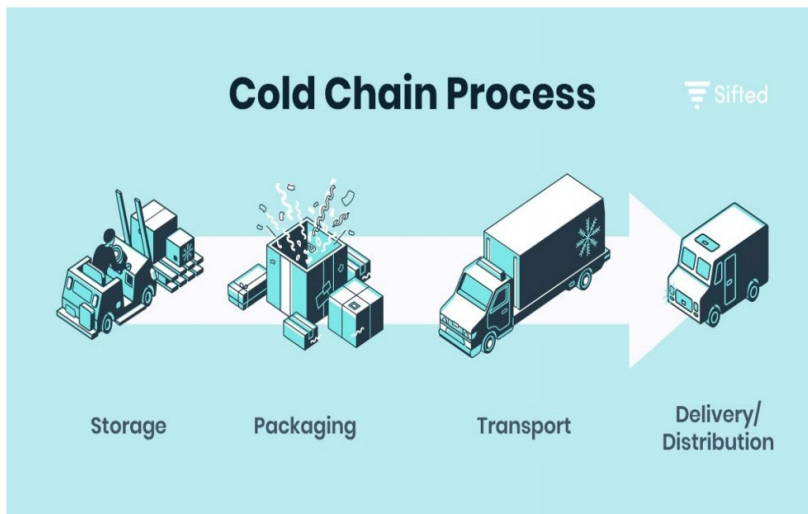
Greater Jakarta has more than 40 cold chain companies with major locations of cold storage being North Jakarta, West Jakarta, and Bekasi.

The basic storage types can be divided simply into Industrial and Commercial. Commercial sites are for business activities such as logistics and supply chain management hubs and generally have the capacity of below 500 tons, these units are generally leased or rented.

The industrial storage facilities have more than 500 tons capacity and function usually as a part of production facility. However, there is a growing trend of new build cold storage warehouses.

One of the noted changes evident post the pandemic is that Cold Chain and pharmaceutical refrigerated Cold storage always used to be pallet in and pallet out. Now, like many sectors, refrigerated is transitioning to pallet in and case out or pallet in and singles out.

This is largely driven by Ecommerce and cold chain players recognizing that the increase of more B2C (Business to Consumer) & D2C (Direct to Consumer). Which in turn will require more, smaller, storage spaces, usually for fulfilment purposes.



Cold chain care

Suppliers, manufacturers, and carriers are all aware of the critical nature of maintaining temperature-sensitive goods. They understand the consequences of a broken cold chain and cannot afford gaps or fluctuations.

In addition, there are safety risks with these complex deliveries that could result in an inferior product and possible sickness to the end-user.

For example, food products are associated with foodborne illness when not kept at an adequate temperature.

If the box spent a few hours in transit 5/10 degrees over or under their set temperature, the customer is now at risk.

The product has now been compromised due to a lack of cold chain maintenance.

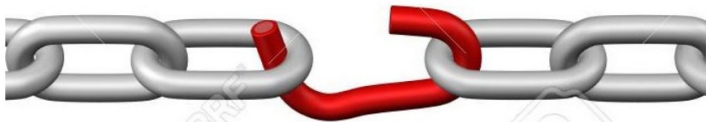
These risks only double when it comes to medications and pharmaceutical goods, which the Covid-19 pandemic further highlighted through the transportation of temperature-sensitive vaccines.

Temperature sensitive products also need to be monitored each step of the supply chain link with data tracking technology to ensure their viability for end-use.

Any break in protocol will result in the loss of the product due to spoiled ingredients that must be transported at set temperatures.

Loss of vaccines means loss of resources, money, time, and possible lives.

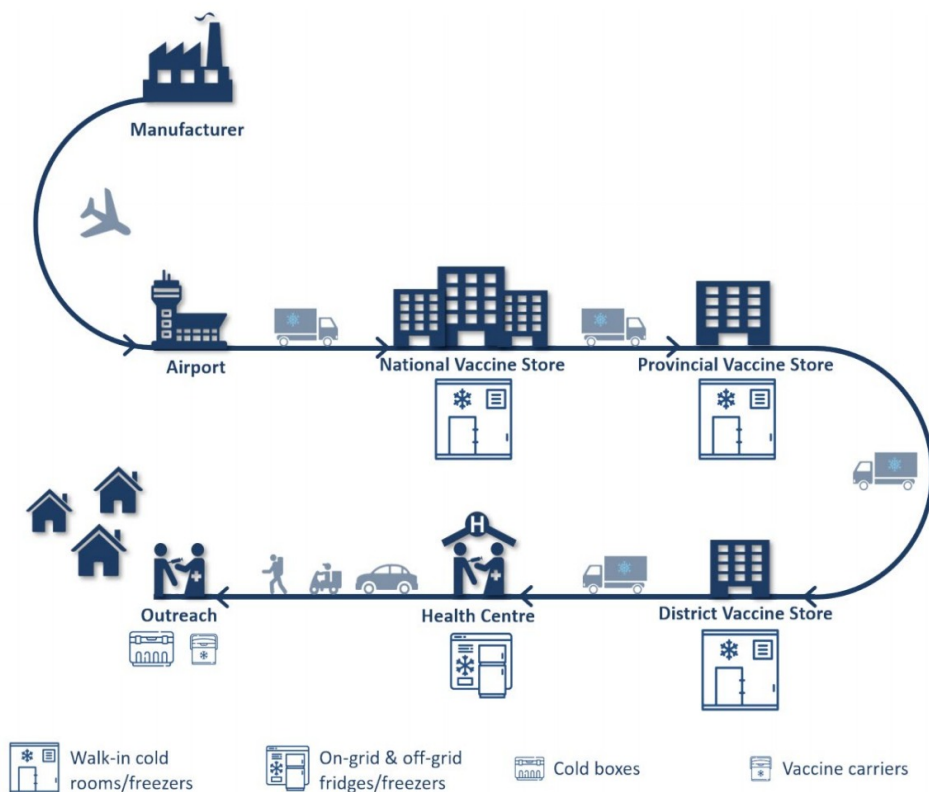
Once the vaccine has been compromised, it must be thrown out. The stakes are high and dangerous for manufacturers whose products' livelihood depends on a perfect cold chain. Cold chains are no different than any chain



They are only as strong as the weakest link.

A vaccine cold chain maintains the quality of vaccines by correct handling, control, storage, and transportation within an appropriate temperature range, from the time of manufacturer to the moment of administration.

A typical vaccine flow for a routine immunization program, includes the infrastructure, transport, cooling equipment and visibility from the point of manufacturer through to the health center and/or outreach service point where it is administered. The full cycle is completed with bio-waste disposal and reverse logistics of reusables equipment.



Prospects look good

Over the medium to long term, increasing affluence of the middle class in the region, fueled by rapid economic development will also underpin the strong pace of growth of the cold chain market.

According to Ernst & Young, Asia Pacific's middle class will amount to 3.3 billion in 2030 or two-thirds of the global middle class, up from just one-third in 2009.

Triple EFF's View

In this briefing we have provided you with some insight into the pharmaceutical manufacturing landscape of Indonesia.

If you know anything about moving goods across the world's largest archipelago, you will be aware of the challenges involved.

Triple EFF has worked in Logistics & Supply Chain in Indonesia for almost 15 years and before that the Supply chain industry and manufacturing in 13 other countries across 4 continents and along the way we have accumulated a lot of knowledge.

We are of the firm belief that ***"Knowledge not shared is Energy wasted"***.

This is one of the main reasons why we have prepared this paper, the other reason is to help you on your way to get to ***"What good looks like for your business"***.



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