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Report Highlights:

The outbreak of Foot and Mouth Disease (FMD) has significantly disrupted Indonesia's fresh milk production, which dropped 35 percent compared with the previous years' production. The decline in domestic fresh milk production has been offset by a significant increase in imported whole milk powder. A rebound of the food service sector industry is expected to support a modest increase in the trade of dairy ingredients in 2022 and 2023.

Production

Indonesia's milk production in 2022 was significantly affected by a Foot and Mouth Disease (FMD) outbreak that began mid-April. On average, milk production dropped 80 percent in the first two weeks of infection. The outbreak affected more than 90 percent of dairy cattle associated with dairy cooperatives on the island of Java, although large and medium-sized dairy farms with better management and avoided the outbreak altogether. On average, post-outbreak milk production is 35 percent below the pre-FMD production rate.

The outbreak reflects common FMD characteristics such as being highly contagious with a low mortality rate in adult animals, but high mortality in young animals. Dairy cattle depletion (mortality and force culling) at six months after the onset of the outbreak is 3.96 percent. However, almost all calves of the dairy cooperatives reportedly died of the disease. Dairy cattle veterinarians reported findings of irreparable damage to internal organs and milk ducts of the affected cows, which explains the production drop.

Most of Indonesia's fresh milk is produced by the members of 59 dairy cooperatives whose dairy cattle, according to the Indonesian Dairy Cooperatives Association, yield 13 liters of milk per head on average. Due to the impact of the FMD outbreak, these smallholder farmers' production of 430,000 metric tons (MT) accounts for 72 percent of Indonesia's fresh milk production. Several larger modern dairy farms, whose milk yields exceed 25 liters per head, are producing the remaining 28 percent of the fresh milk. Post estimates these modern dairy farms' production will reach 160,000 MT, bringing Indonesia's total 2022 fresh milk production to 590,000 MT.

The FMD outbreak also highlights the challenges of Indonesia's dairy genetic quality and feed availability. FMD-affected dairy farmers requested government assistance in the form of dairy heifers as opposed to financial assistance as the disease affected the heifers' ability to produce calves and exposed the need for genetics reinforcement. In order to strengthen local dairy genetics, the government routinely conducts progeny tests search for superior bulls from the local stock and subsequently distributes their semen through artificial insemination centers located in West and East Java Provinces. Recently, more dairy cooperatives entered into agreement with local plantations to grow fodder for their cattle. However, some complain that the fodder cannot grow properly due to the lack of fertilizers.

Currently, only Australian dairy cattle can be imported into Indonesia as it is the only country approved by the Government of Indonesia (GOI). Other countries, such as Brazil, Denmark and the United States, are reportedly in the process of obtaining approval to export cattle to Indonesia.

Around 98.5 percent of Indonesia's dairy cow population is located on Java Island, while small dairy cattle operations can also be found in the North Sumatera and Lampung provinces. Several pioneering dairy cattle operations are also in South Sulawesi and West Sumatera Provinces. The number of dairy cattle under the management of dairy cooperatives is 89 percent while the remaining 11 percent are raised by mid and large-sized dairy farms.

Consumption

Prior to the FMD outbreak, dairy cooperatives supplied 90 percent of their fresh milk production to milk processing companies and used the remaining 10 percent to process their own pasteurized drinking milk, yogurt, and a small quantity of cheese. As a result of FMD, the dairy cooperatives have sold all of their supplies to milk processing companies. At least 20 percent of Indonesia's fresh milk production is produced by a few vertically integrated dairy farm-processors as liquid milk and small quantities of cheese and cream.

Indonesia does not produce skimmed milk powder (SMP) while the majority of imported SMP is recombined with local milk in the form of whole milk powder (WMP) and other imported ingredients to form reconstituted milk. This product is generally cheaper than fresh pasteurized milk. SMP, along with lactose, are used as ingredients in food manufacturing and producing powdered milk beverages. Most of the imported WMP is repackaged and used in Indonesia's retail market.

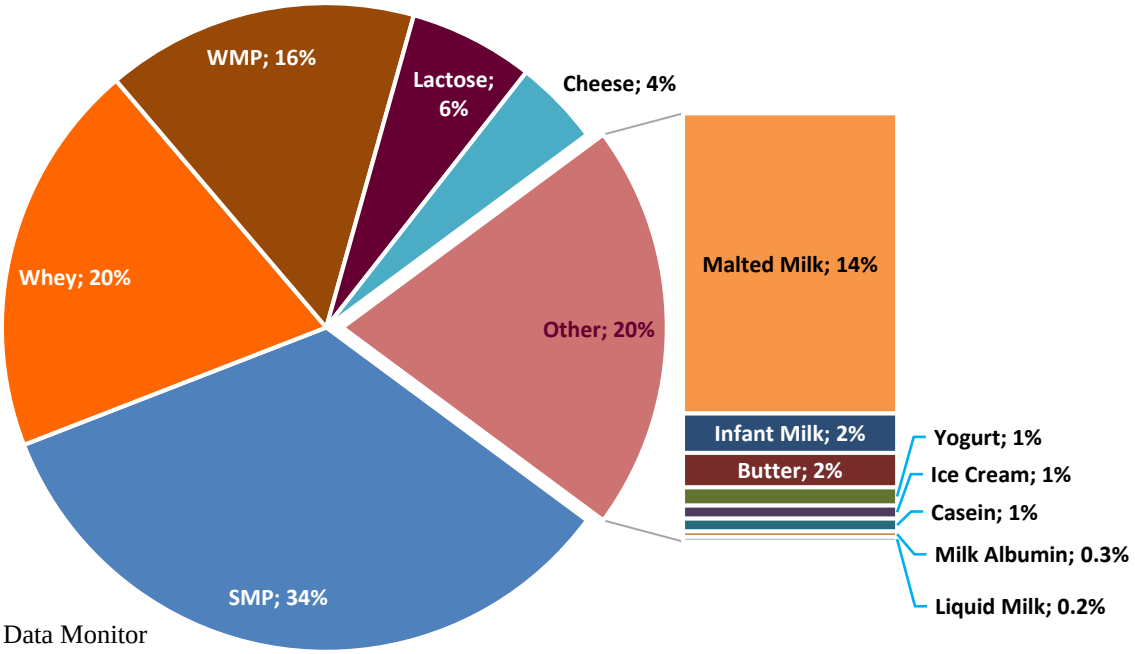
The Indonesian retail and foodservice dairy market grew steadily by 4 percent in 2021 and is expected to increase 6 percent in 2022 and 2023 respectively. The growth is driven by retail sales that increased 5 percent in 2021 and are expected to grow by 6 percent in 2022. Milk sales in the foodservice market are struggling but are expected to grow nearly 5 percent in 2022.

The GOI forecasts total dairy consumption in 2021 at 4.02 million metric tons (MMT), almost 3 percent lower compared with the previous year's consumption due to the negative performance of the foodservice market. Based on the retail and foodservice performance, Post estimates Indonesia's total dairy consumption will be 4.25 MMT in 2022. Approximately 60 percent of dairy product consumption is in the form of liquid fresh pasteurized milk, UHT milk, flavored/fermented milk, and evaporated/condensed milk. The remaining 40 percent of consumption includes powdered milk, cheese, food service, confectionary goods, bakery, and pharmaceutical uses. Post estimates total dairy consumption will increase 6 percent in 2023 based on continuing strong retail demand for liquid milk and the rebounding of the foodservice sector as COVID-19 restrictions are lifted.

Trade

Indonesia relies on imported dairy products to meet its domestic demand. Post estimates Indonesia imported 80 percent of its dairy ingredients in 2021. Post believes there will be a sharp drop of local fresh milk production and estimates Indonesia's dairy imports will rise to 86 percent of total dairy ingredients in 2022 due to the adverse impact of the FMD outbreak.

Chart 1. Global Dairy Exports to Indonesia, by product, January-July 2022



Source: Trade Data Monitor

Global export of dairy ingredients between January and July of 2022 to Indonesia reached 408,000 MT, more than a three-percent increase compared with the same period of 2021 (395,000 MT). Dairy products with the highest export volume are skimmed milk powder (SMP) followed by whey, whole milk powder (WMP), lactose, and cheese.

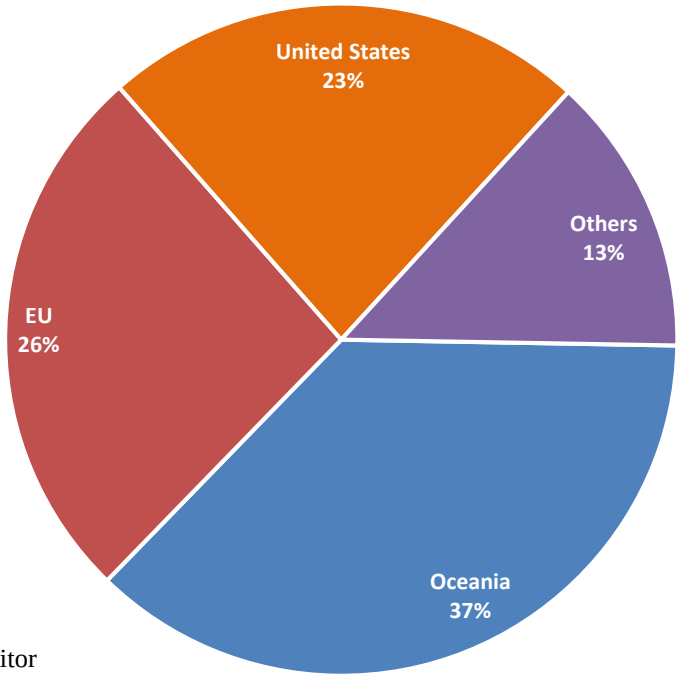
Table 1. Global Dairy Products Exports to Indonesia, 2019-2022 (MT)

	2019	2020	2021	Jan-Jul 2021	Jan-Jul 2022	Market Share (%)	Difference (%)
SMP	186,713	206,745	201,043	128,808	138,635	34	8
Whey	116,450	112,635	136,595	77,799	80,284	20	3
WMP	56,579	50,538	63,697	45,019	63,578	16	41
Lactose	26,543	38,404	34,512	21,335	25,394	6	19
Cheese	28,696	25,847	28,165	16,842	17,491	4	4
Malted Milk	96,457	110,352	117,351	72,429	57,993	14	-20
Infant Milk	8,214	8,607	11,092	6,568	7,608	2	16
Butter	9,068	6,857	8,086	5,347	6,667	2	25
Yogurt	8,641	7,347	7,784	4,902	3,513	1	-28
Ice Cream	11,687	18,685	15,531	12,273	2,521	1	-79
Casein	2,239	2,408	3,254	1,952	2,482	1	27

	2019	2020	2021	Jan-Jul 2021	Jan-Jul 2022	Market Share (%)	Difference (%)
Milk Albumin	834	966	1,205	831	1,031	0.3	24
Liquid Milk	1,092	1,428	2,666	926	913	0.2	-1
Total	**553,213**	**590,818**	**630,981**	**395,031**	**408,110**	**100**	**100**

WMP, whey, and SMP are the dairy ingredients with the biggest market share between January and July 2022, while WMP and lactose show the highest increase compared with the same period last year. On the other hand, imports of ice cream and malted milk are decreasing significantly, by 80 and 21 percent respectively. China was the largest exporter of ice cream to Indonesia since 2016, with market share above 70 percent on average. A Chinese company invested in building an ice cream factory in Indonesia, and since its production began at the end of 2021, Chinese ice cream exports have decreased significantly. According to Euromonitor, flavored milk faces competition from products manufactured locally as well as milk alternatives.

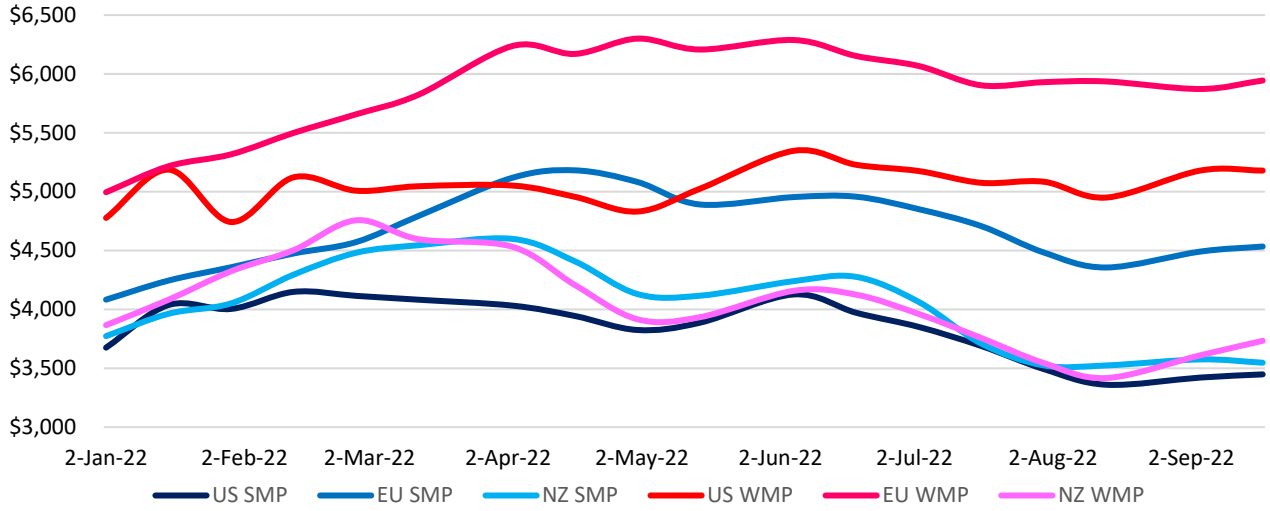
Chart 2. Global Dairy Exports to Indonesia, by exporting country, Jan.-July 2022



Source: Trade Data Monitor

Oceanian countries (i.e., Australia and New Zealand) are the largest dairy exporters to Indonesia in 2022. New Zealand saw its exports increase 35 percent (primarily SMP and WMP products), which increased 86 and 40 percent respectively. Lower SMP and WMP prices were a contributing factor.

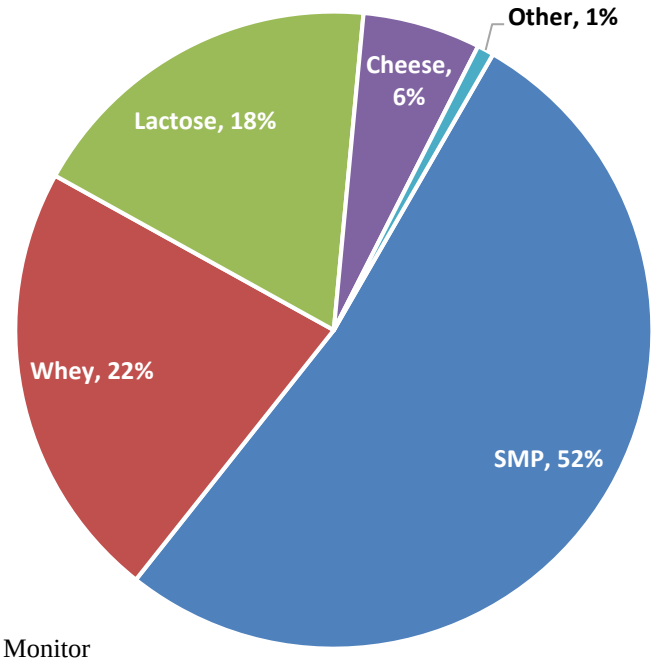
Chart 3. Average SMP and WMP Price Over Time 2022 (USD/T)



Source: U.S. Dairy Export Council

Dairy exports from the United States between January and July 2022 increased 18 percent compared with the same period last year. United States retains its market share lead for SMP (36 percent), due to its relatively lower price and lactose (69 percent). U.S. whey and lactose exports rose 47 percent and 30 percent respectively.

Chart 4. U.S. Dairy Exports to Indonesia, 2022

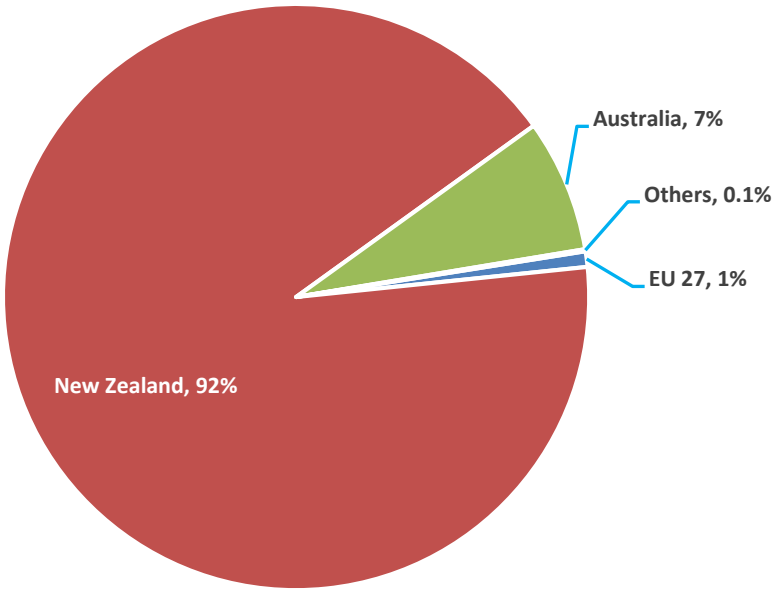


Source: Trade Data Monitor

Whole Milk Powder

WMP exports to Indonesia during January-July 2022 increased 41 percent compared to the same period last year. New Zealand held a 92 percent market share with its exports rising more than 40 percent. Indonesia's demand for WMP imports sharply increased largely due to the FMD outbreak and its impact on Indonesia's fresh milk production. Dairy processors that relied on local fresh milk dairy cooperatives suffered enormously and have turned to imported WMP to sustain their production. This demand has fueled the increase of New Zealand's WMP exports due to its relatively lower price.

Chart 5. Global Whole Milk Powder Exports to Indonesia, 2022

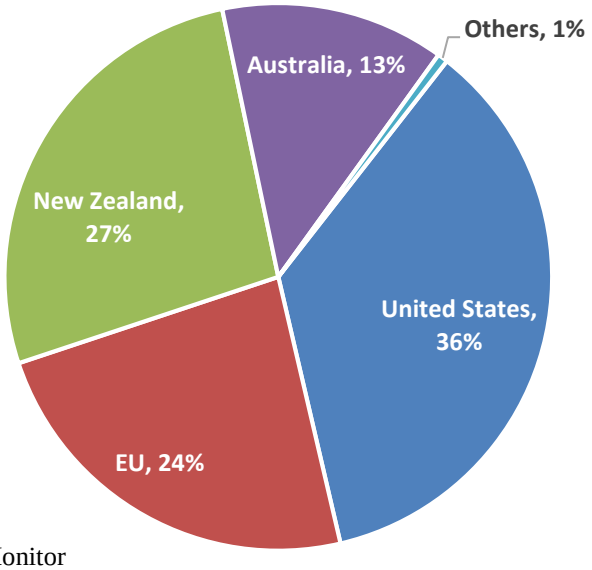


Source: Trade Data Monitor

Skimmed Milk Powder

SMP exports to Indonesia during January-July 2022 increased 8 percent compared to the same period last year. While the United States remains as the market leader of SMP, New Zealand's exports increased 86 percent. New Zealand's competitive prices and closer proximity to Indonesia were major factors in the changes.

Chart 5. Global Skimmed Milk Powder Exports to Indonesia, 2022

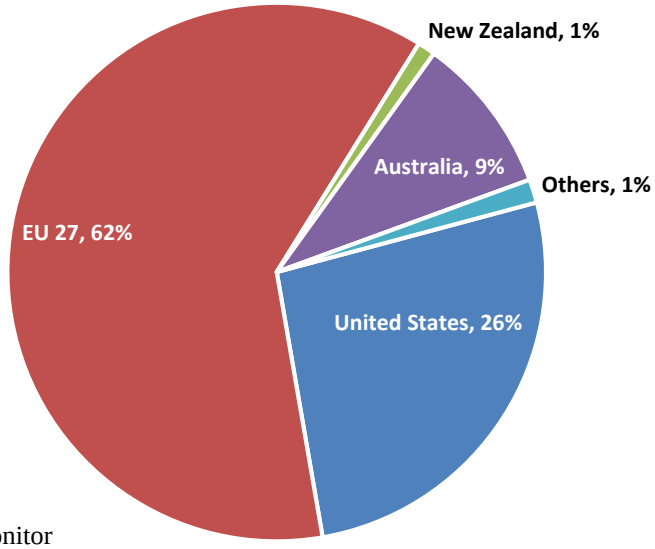


Source: Trade Data Monitor

Whey

Whey exports to Indonesia during January – July 2022 increased three percent. The United States saw its whey exports to Indonesia increase by 47 percent. Despite dropping 10 percent, European whey exports remain the largest share of the Indonesian market. The GOI's continued lifting of COVID-19 restrictions and relatively low U.S. whey prices are contributing to a rebound of the food industry and fueling the demand for whey from the United States.

Chart 6. Global Whey Exports to Indonesia, 2022

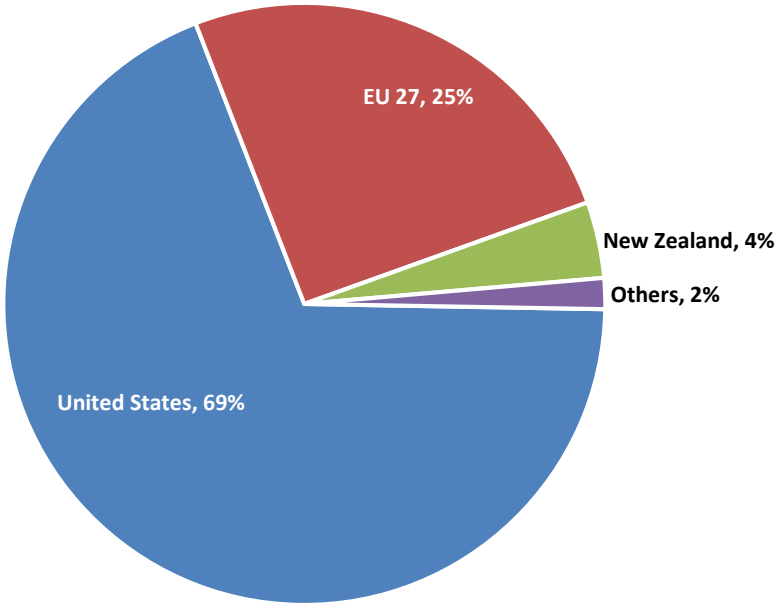


Source: Trade Data Monitor

Lactose

Global lactose exports to Indonesia from January – July, 2022 increased 19 percent compared to the same period the previous year, driven mainly by a 30-percent increase in lactose exports from the United States. According to the food processing industry, Indonesia's infant formula manufacturers, which utilize lactose in their production process, learned from last year's lactose shortage and imported early. Lactose importation during the first semester of 2022 has made supplies of lactose sufficient, thus the second semester of 2022 is not expected to see the same volume of lactose imports.

Chart 7. Global Lactose Exports to Indonesia, 2022

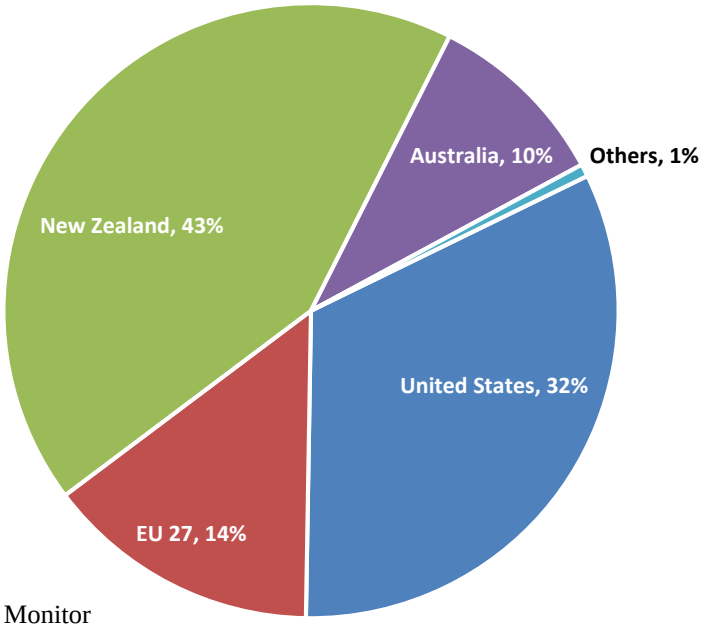


Source: Trade Data Monitor

Cheese

Although U.S. cheese exports during January – July 2022 increased 50 percent, U.S. market share did not increase. Indonesia's imported cheese market is still dominated by Oceania. The relatively lower price of U.S. cheese compared with other regions fueled the increase in U.S. cheese exports, primarily in the food service industry.

Chart 8. Global Cheese Exports to Indonesia, 2022



Source: Trade Data Monitor

Policy

Requirement to Register Fresh Animal Products

On September 12, 2022, the Directorate General of Livestock and Animal Health Services (DGLAHS) of the Ministry of Agriculture (MOA) conducted an information dissemination gathering of importers and trade associations regarding the enforcement of fresh retail animal products registration. This requirement is one of the provisions of the Regulation of the Minister of Agriculture Number 15 Year 2021 regarding the Business and Product Standards for Risk-based Business Licensing Administration of the Agricultural Sector that has not previously been enforced.

The purpose of the provision is to provide MOA with a regulatory framework to supervise and enforce fresh animal product safety, quality, and traceability compliance. It establishes the requirements to register, label, and trace fresh animal products. All fresh, untreated milk intended for retail sale is subject to this requirement, including milk from dairy cattle, buffalo, goat/sheep, and other livestock. Bulk fresh untreated milk intended for further processing is not subject to this provision.

Registration shall be applied for by importers or distributors of the fresh animal products. The registration requirements include:

1. *Origin:* MOA only allows imports of animal products from approved countries and establishments. Import recommendation from the Minister of Agriculture must be included in the registration application.
2. *Food Safety:* the products must comply with the safety and quality requirements of the country-of-origin, proven by attaching:
    a. Sanitary Export Certificate,
    b. Copy of Certificate of Origin,
    c. Copy of Certificate of Analysis, and
    d. Copy of Halal Certificate (for halal-required products).
    Note: The above-mentioned COA must be issued by an accredited laboratory in the country of origin and is valid for *six months*; thus, it must be renewed every six months. The required parameters of each product analysis can be seen in the list below.

Type of Animal Product	**Sample Amount**	**Parameter**	**n**	**c**	**m**	**M**	**Method of Analysis**	**Reference**
Raw milk (cow, horse, goat, and other livestock)	500g	Total Plate Count	5	1	1×10^6 colony/g	NA	SNI 2897:2008	SNI 7388:2009 SNI 3141.1.2011
		Enterobacteriaceae	5	2	1×10^1 colony/g	1×10^2 colony/g	SNI ISO 21528-2:2016	BPOM Regulation No.13/2019
		Salmonella spp.	5	0	negative/25g	NA	SNI ISO 6579:2015; SNI 2897:2008	BPOM Regulation No.34/2019
		Antibiotic residue	2	0	negative		SNI 7424:2008	Refers to SNI 01-6366-2000 or Codex Alimentarius Commission MRLs for Residues Veterinary Drugs in Foods CX/MRLs 2018

n = number of samples tested; **c** = Number of samples which contamination is allowed to exceed m (that is, test positive for contamination), yet the lot will be accepted; **m** = Acceptable level of microbiological contamination; **M** = Maximum acceptable level of microbiological contamination

Animal products complying with the safety and quality requirements shall be proven by a test result certificate issued by accredited or Minister-appointed veterinary laboratory and at least contain:

1) physical examination (organoleptic test against color, consistency, aroma/smell and/or taste),
2) biological examination (microbial contamination), and
3) chemical examination (residue).

3. *Quality Requirements:* Technical requirements of each product are available at the end of this document**.**
4. *Labelling:* Label must include product registration number; product's name, product ingredients' origin; products' ingredients; brand/trademark (if available); type of product; weight; producer or importer or distributor's name and address; halal for the required product; date and production code; expiry date; QR code for Animal Product Registration and traceability information system.
5. *Additional:* Animal products with certain specifications/claims must comply with the requirements and tests in accordance with the specifications/claims.

Comprehensive Economic Partnership Agreement

In 2022, Indonesia began to implement its Schedule on Tariff Commitments on Goods originating from the European Free Trade Association (EFTA) countries (Iceland, Liechtenstein, Norway, and Switzerland). The Indonesia and EFTA Comprehensive Economic Partnership (IE CEPA) entered into force on November 1, 2021. This CEPA gives U.S. dairy products strong competition due to low or zero tariff rates on dairy products, especially from Switzerland.

Stocks

Dairy manufacturers import milk powder on an as-needed basis, and any inventory can be considered pipeline stocks. All locally produced WMP or its equivalent are used in-country. As a result, WMP and SMP stocks are expected to remain low and unchanged.

Table 2

Skimmed Milk Powder Production, Supply, and Distribution

Dairy, Milk, Nonfat, Dry	2021		2022		2023	
Market Begin Year	Jan 2021		Jan 2022		Jan 2023	
Indonesia (000MT)	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Beginning Stocks	11	11	11	11	0	12
Production	0	0	0	0	0	0
Other Imports	199	199	210	210	0	220
Total Imports	199	199	210	210	0	220
Total Supply	210	210	221	221	0	232
Other Exports	2	2	1	2	0	2
Total Exports	2	2	1	2	0	2
Human Dom. Consumption	197	197	209	207	0	219
Other use, Losses	0	0	0	0	0	0
Total Dom. Consumption	197	197	209	207	0	219
Total Use	199	199	210	209	0	221
Ending Stocks	11	11	11	12	0	11
Total Distribution	210	210	221	221	0	232
CY Imp. from US	0	0	0	0	0	0
CY Exp. to US	0	0	0	0	0	0
TS = TD	0	0	0	0	0	0
Note: Number in the last column of each year is not official USDA figure						

Table 3

Whole Milk Powder Production, Supply, and Distribution

Dairy, Dry Whole Milk Powder	2021		2022		2023	
Market Begin Year	Jan 2021		Jan 2022		Jan 2023	
Indonesia (000MT)	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Beginning Stocks	5	5	10	10	0	8
Production	96	96	100	59	0	61
Other Imports	63	63	80	100	0	106
Total Imports	63	63	80	100	0	106
Total Supply	164	164	190	169	0	174
Other Exports	1	1	1	1	0	1
Total Exports	1	1	1	1	0	1
Human Dom. Consumption	153	153	170	160	0	165
Other use, Losses	0	0	0	0	0	0
Total Dom. Consumption	153	153	170	160	0	165
Total Use	154	154	171	161	0	166
Ending Stocks	10	10	19	8	0	8
Total Distribution	164	164	190	169	0	174
CY Imp. from US	0	0	0	0	0	0
CY Exp. to US	0	0	0	0	0	0
TS = TD	0	0	0	0	0	0
Note: Number in the last column of each year is not official USDA figure						

Attachments:

No Attachments