

THE INDONESIA'S DAIRY
POLICY ENVIRONMENT
UPDATE: MILK PRICE AND
IMPORTATION REGULATION
OF DAIRY PRODUCTS AND
CATTLE

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Introduction

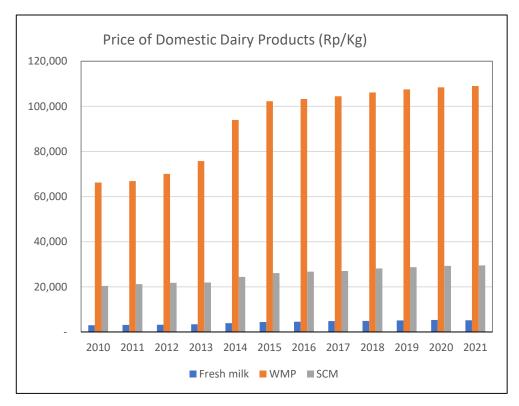
- Indonesia is a net importer of dairy products and was the ninth world's largest importer in 2019. Only about 20% of milk production meets domestic milk demands, and the other 80 percent still has to be imported, which costs a substantial foreign exchange of around 700 million USD in 2020.
- The very high dependence on imports makes the domestic dairy product market vulnerable to price fluctuations in the world market.
- The world market for dairy products has been long characterized by instability in supply and demand, resulting in high price volatility.
- High volatility of world prices implies high risk and uncertainty that can result in depletion of foreign exchange for imports when there is a spike in the world market prices.
- This condition must be anticipated with policies and programs to increase domestic dairy production if reducing import dependency and domestic dairy product prices are the government's primary concerns.

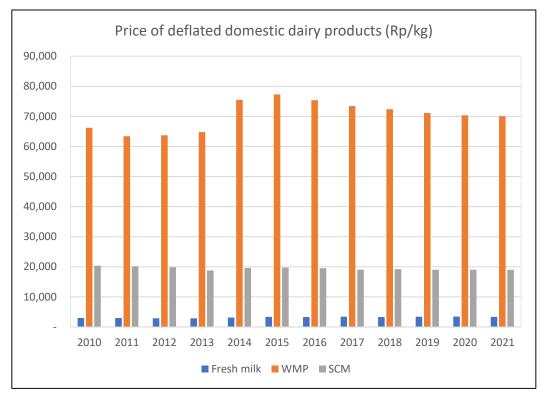
Objectives of Policy Reviews

- This dairy policy review aims to identify and recommend strategies and policies to support the development of sustainable, profitable, and smallholder-inclusive dairy supply chains.
- The review focuses on the following aspects:
 - Prices of domestic and imported dairy products
 - Importation and regulation of live dairy cattle, cement and embryo
 - Importation and regulation of dairy products
 - Impacts of government's import policies
- The review ends with: Conclusion and Policy recommendation

DOMESTIC AND WORLD'S PRICES OF DAIRY PRODUCTS

Prices of domestic dairy products



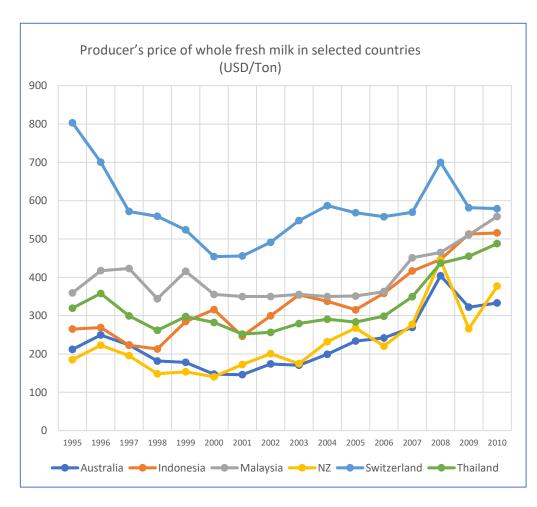


Source: GKSI for fresh milk; DG of Domestic Trade, MOT, for WMP and SCM

During 2010-2021:

- The farmgate price of fresh milk has stagnated, both in a nominal & deflated terms
- Nominal price of Sweetened Condense Milk (SCM) has slightly increased but declined in deflated term.
- Nominal price of Whole Milk Powder (WMP) has increased, soared in 2014, and continued to increase since then; but fluctuated in its deflated term.

Producer's price of fresh milk in Selected Countries

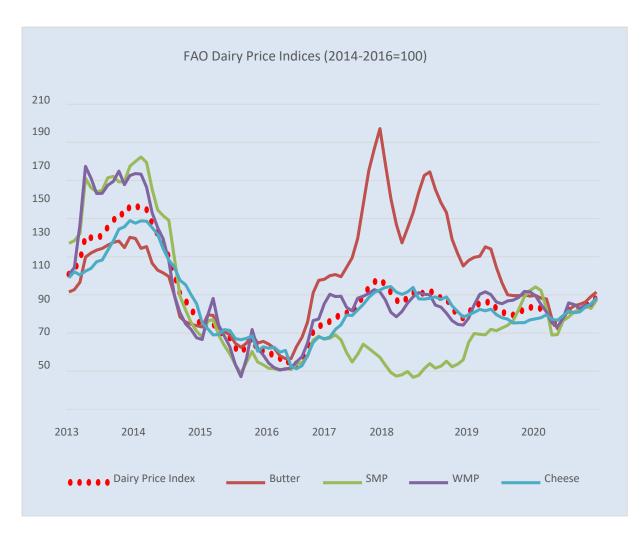


It's worth knowing the unit cost of fresh milk in exporting and net-importing countries, including Indonesia. The producer's price of fresh milk in selected countries is as follows (FAO-stat):

- Despite its being a world net-exporter of dairy products, Switzerland has been one of the most expensive producers with an average unit cost of USD 578/ton during 1995-2010.
- New Zealand and Australia have been producers of cheap fresh milk, at an average of USD 230/ton.
- It is not surprising that Australia and NZ are highly competitive world exporters of dairy products.
- Indonesia's unit cost of fresh milk (USD 336/ton) was lower than Malaysia's (USD 401/ton) and Switzerland's (USD 578/ton)

Source: FAOStat-Trade data

The world's dairy product price index (1)



Source: FAO Dairy Market Review, April 2021

- Historically, the world market prices of dairy products have always been volatile.
- The FAO dairy price index shows the price fluctuation during 2013-2020.
- The dynamics of production in the major dairy exporting countries and consumption in the world's major importing countries determine the volatility.
- The main exporting countries of dairy products include New Zealand, Germany, the USA, Netherland, France, Belgium, and Australia.
- The top five dairy importing countries in 2019 were China, Germany, Belgium, Netherlands, dan Italy.
- Indonesia was the top 9th world importing country of dairy products.

IMPORTATION OF LIVE DAIRY CATTLE CEMENT AND EMBRYO

Laws and Regulations on the Importation of Live Cattle

No	Law/Regulation	Description				
1	Minister of Agriculture (MOA) Regulation No. 41/2019	Importation of large ruminants into the territory of the Republic of Indonesia.				
2	Minister of Trade (MOT) Regulation No. 20/2018	Second Amendment to Minister of Trade Regulation Number 59/M-Dag/Per/8/2016 concerning Provisions on Exports and Imports of Animals and Animal Products.				
3	MOA Regulation No. 2/PERMENTAN/ PK.440/2/2017	Amendment to the MOA Regulation No. 49/PERMENTAN/Pk.440/10/2016 Importation of Large Ruminants into the Territory of The Republic of Indonesia				
4	MOA Regulation No. 49/PERMENTAN/PK.44 0/10/2016	Importation of Large Ruminant Livestock into the Territory of the Republic of Indonesia.				
5	MOA Regulation No. 48/PERMENTAN/PK.21 0/10/2016	Special Efforts to Accelerate the Increase of Pregnant Cattle and Buffalo Populations (UPSUS SIWAB).				
6	MOA Regulation No. 10/PERMENTAN/PK 210/3/2016	Provision and Distribution of Frozen Cement for Ruminants.				

- Imports of live cattle are regulated in a number of government laws and regulations, ministerial regulations, and the Decrees of Head of Quarantine.
- The Minister of Trade (MOT) regulation on the importation of live cattle of large ruminants is primarily intended to facilitate beef cattle fattening (feedlot) establishment to increase beef production.
- There is no specific Government or Ministerial regulation explicitly regulates the importation of heifer and live dairy cattle/cows.
- Indonesia's dairy farms mainly use the Frisian-Holstein breed, but one integrated company has been trying out Jersey cows, known to consume less feed, be more resistant to diseases and hot weather, and produce milk with higher fat and protein contents.
- Dairy cattle, both heifer and lactating cows, were mainly imported from Australia

Laws and Regulations on the Importation of Cement and Embryo

- Besides importing heifer and lactating dairy cattle, the government has also encouraged and facilitated the importation of frozen cement and embryos.
- The government has also encouraged and facilitated the development of the domestic production of frozen cement and embryos.
- The MOA Regulation No. 10/2016 regulates the supply and distribution of frozen semen for large ruminants:
 - Provision of frozen cement for ruminants must prioritize domestic production
 - The provision of frozen cement from domestic production must be 60% from native livestock or local ruminants
 - If frozen cement in the country is not enough, it can be imported.
- Indonesia has claimed itself as a self-sufficient country for frozen cement.
- There was a Indonesia-Belgium bilateral agreement on embryo transfer in 2016 for Indonesia to import "Belgian blue" embryos from Belgium. This embryo transfer program has been progressing well. Until Sep 2018, 43 breeds of Belgian Blue cows had been born.

IMPORTATION OF DAIRY PRODUCTS

Laws and Regulations on the Importation of Dairy Products (1)

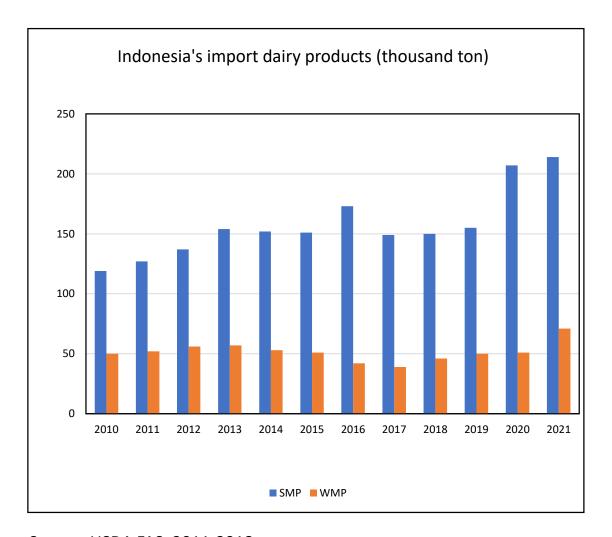
- Before the 1998 economic crisis, the government tightly restricted the importation of dairy products by implementing sets of policy instruments, including import tariff, import quota, import licensing, and the well-known local content requirement (BUSEP).
- This BUSEP policy was removed as part of the Indonesian government's agreement with the IMF as stipulated in the IMF Letter of Intent. Since the BUSEP is inconsistent with the WTO rules, reimplementing this policy will almost certainly be sued by exporting countries in the WTO dispute settlement process.
- Up until now, the government still restricts dairy product imports to keep smallholder dairy farms operating profitably.

Laws and Regulations on the Importation of Dairy Products (2)

N o	Law/Regulation	Description					
2	MOT Regulation No 20/2021 MOT Regulation No 72/2019	Import policy and regulation The amendments to the Minister of Trade Regulation No. 29/2019 the provisions for export and import of animals and animal products					
3	MOT Regulation No. 29/2019	Provisions for the export and import of animals and animal products					
4	MOA Regulation No. 33/PERMENTAN/PK. 450/7/2018	The second amendments to the Minister of Agriculture Regulation No. 26/PERMENTAN/PK.450/7/2017 concerning Milk Supply and Distribution.					
5	MOA Regulation No. 30/PERMENTAN/PK. 450/7/2018	Amendments to the Minister of Agriculture No. 26/PERMENTAN/PK.450/7/2017 concerning Milk Supply and Distribution.					
6	MOA Regulation No. 26/PERMENTAN/PK 450/7/2017	Milk Supply and Distribution.					
7	MOA Regulation No. 13/PERMENTAN/PK. 240/5/2017	Livestock Business Partnership.					
8	MOT Regulation No. 87/M- DAG/PER/10/2015	Provisions on the Import of Certain Products.					

- The importation of dairy products is regulated in several government acts and regulations, ministerial regulations, and the Decrees of Head of Quarantine.
- The import policy on dairy products consists of several measures, including restriction on timing and volume of milk imports, import tariffs, non-automatic import licensing, a requirement to get import permit and recommendation, quarantine regulations, and restrictions on the ports of entry.
- Besides the MFN tariff, Indonesia also implements a preferential import tariff, including a zero percent import tariff on Australian and New Zealand dairy products.

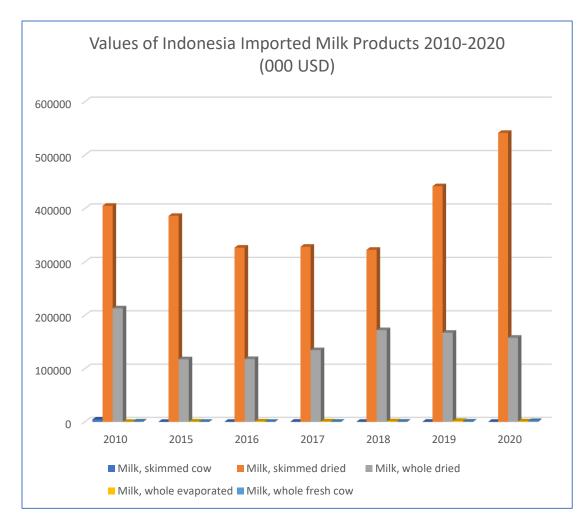
Indonesia's imports of main dairy products (thousand tons)



- Indonesia's imports of SMP and WMP during the 2010-2021 period were fluctuating but slightly increasing, at the annual growth rates of 6.1 percent for SMP and 4.2 percent for WMP.
- In 2013-2017, imports of SMP and WMP during 2013-2017 declined, due to devaluation of Rupiah and bureaucratic measures such as sanitary, health and halal certificate requirements.
- Interestingly, at the beginning of and during the Covid-19 pandemic (2019-2021), imports increased at 18.5 percent for SMP and 20.6 percent for WMP

Source: USDA FAS, 2011-2018

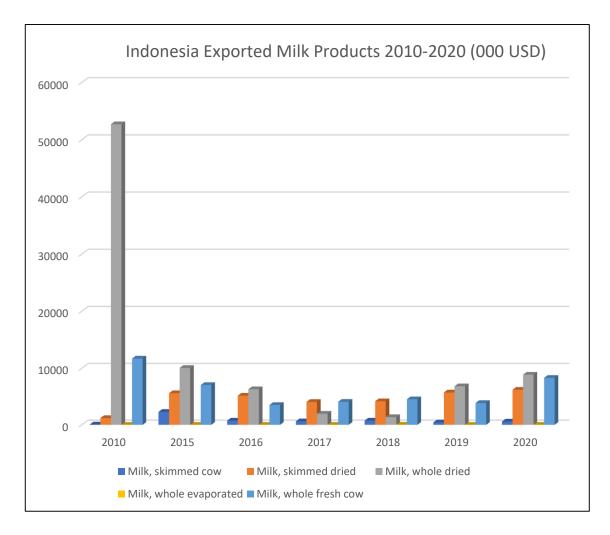
Values of Indonesia's imported dairy products (000 USD)



Source: FAOStat-Trade data

- Imports of dairy products were mainly from New Zealand, Australia, and the US.
- Trade values of Indonesia's dairy products during the period 2010-2020 continued to increase from 624 million USD to 702 million.
- SMP and WMP dominated Indonesia's import values, amounted to 542 million USD for SMP and 158 million USD for WMP in 2020.
- The dairy processors use the majority of imported SMP and WMP to recombine with local milk and other imported ingredients to form reconstituted milk (UHT).
- Only a few large processors produce and sell fresh pasteurized milk, while most others produce and sell reconstituted milk, which is generally cheaper.

Values of Indonesia's exported dairy products (000 USD)



- Although much smaller than the import values, Indonesia has exported several dairy products during the 2010-2020 period.
- Intra-industry trade has occurred in the dairy industry, indicating that Indonesia has been part of the global value chains in the dairy industry.
- Whole dried milk (WMP), Skim dried milk (SMP), and whole fresh milk (WFM) dominated Indonesia's milk product exports.
- With the proper government supports and policies, the smallholder dairy farms can become a source of foreign exchange-earners and a source of growth in rural areas.
- The development of dairy farming and increased milk production will, at the same time, be a strategic step to combat stunting.

Source: FAOStat-Trade data

IMPACTS OF GOVERNMENT'S IMPORT POLICIES

Import Parity & Retail Prices, Quota Rent and NPR of WMP 2010-2017

	2010	2013	2015	2017
FOB (US\$/kg)	3.51	4.15	2.51	3.18
CIF (FOB+ F&I cost (\$100/ton))	3.61	4.25	2.61	3.28
X-rates (Rp/\$)	8,991	12,189	13,795	13,548
CIF (Rp/kg)	31,594	50,523	34,612	43,069
Import tariff (5%)	1,580	2,526	1,731	2,153
Landed prices (Rp/kg)	33,174	53,050	36,342	45,223
PPH or VAT (2,5%)	829	1,326	909	1,131
Handling cost and losses (5%)	1,700	2,719	1,863	2,318
Importer's profit (2,5%)	832	1,331	912	1,135
Margin profit of distributor (2.5%)	811	1,296	888	1,105
Margin profit of retailer (2.5%)	810	1,295	887	1,104
Import parity at retailer (Rp/kg)	38,157	61,018	41,801	52,015
Retail Price of WMP (Rp/Kg)	66,214	75,705	102,246	104,464
Quota rent (Rp/Kg)	28,057	14,687	60,445	52,449
NPR (%)	73.5	24.1	144.6	100.8
Course: Author's calculation				

Source: Author's calculation

- The government's import policies including volume restrictions has created a huge quota rent, which is a cost that consumers and the economy must bear.
- The total value of quota rent has been fluctuated in an increasing trend.
- Given the volume of WMP import in 2017 of 39,000 tons, the total quota rent enjoyed by importers amounted to Rp2.0 trillion or USD 151 million.
- The more restrictive the import is, the higher is the quota rent.

Import Parity, Retail Prices and NPR of Fresh milk 2010-2017

	2010	2013	2015	2017
FOB WMP (US\$/kg)	3.51	4.15	2.51	3.18
CIF (FOB+ F&I cost (\$100/ton))	3.61	4.25	2.61	3.28
X-rates (Rp/\$)	8,991	12,189	13,795	13,548
CIF of WMP (Rp/kg)	31,594	50,523	34,612	43,069
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Handling cost and losses (5%)	1,700	2,719	1,863	2,318
Importer's profit (2,5%)	832	1,331	912	1,135
Import parity WMP at wrh (Rp/kg)	36,536	58,426	40,025	49,805
Import parity of fresh milk at wrh				
(Rp/kg)	3,654	5,843	4,003	4,981
Price of fresh milk at wrh (Rp/kg)	3750	4800	5250	5800
NPR (%)	2.6	-17.8	31.2	16.5

- Nominal Rate of Protection (NPR) is a simple measure of the level of protection or price incentives given to producers.
- During 2010-2017, the NPR for WMP has always been higher than the NPR of fresh milk, meaning that dairy farmers gotten less protection than milk processors.
- In 2013, the NPR of fresh milk was even negative -17.8% meaning that the government taxed dairy farms instead of subsidizing them.
- The analyses show that the existing dairy import policy has more benefited milk importers and processors at the expense of the economy and milk consumers at large.

Source: Author's calculation

CONCLUSION AND POLICY RECOMMENDATION

Conclusion (1)

- The domestic price of fresh milk has practically not changed during 2010-2021 period, both in nominal and real prices.
- In contrast, the price of powdered milk soared in 2014 and had continued to increase since then. The increase in the price of powdered milk was triggered by the increase in prices of dairy products in the world market.
- The world market prices of dairy products have always been volatile.
- Global milk production has increased at the start and during the Covid-19 pandemic driven by output increases in all geographical regions.
- The increase in milk production in several countries during the Covid-19 pandemic cannot be separated from the role of the government.
- Imports of live cattle are regulated in a number of government laws and regulations, ministerial regulations, and the Decrees of Head of Quarantine.
- Dairy cattle, both heifer and lactating cows, were mainly imported from Australia

Conclusion (2)

- The government still restricts dairy product imports to keep smallholder dairy farms operating profitably.
- The import policy on dairy products consists of several measures, including restriction on timing and volume of milk imports, import tariffs, non-automatic import licensing, quarantine regulations, and restrictions on the ports of entry.
- Imports of dairy products were mainly from New Zealand, Australia, and the US, in milk powder (SMP and WMP).
- The dairy processors use the majority of imported SMP and WMP to recombine with local milk and other imported ingredients to form reconstituted milk (UHT).
- Although much smaller than the import values, Indonesia has exported several dairy products during the 2010-2020 period.
- The existing dairy import policy has benefited more milk importers and milk processors than dairy farmers at the expense of the economy and milk consumers at large.

Policy Recommendation (1)

- Policies and programs for developing smallholder dairy farms are critically important. The government needs to concretely facilitate the development of smallholder dairy farming, both in Java and outside Java
- Consistent policies and programs are needed for this purpose, such as programs that can
 ensure the availability of easily accessible technology, affordable feed and medicines,
 heifers and breeder cows, and other cost-reducing technologies in dairy farming.
- The development of smallholder dairy farms is not the only way out to meet the evergrowing national milk demand and, at the same time, reduce dependence on imports.
- The government also needs to simultaneously encourage and facilitate the development of medium and large-scale dairy farms by attracting private investments, both domestic and foreign direct investments.
- The promotion of partnerships will be the key to the successful development of the national dairy industry, as has happened in several countries, including Japan.
- The business partnership programs between large-scale, medium-scale and smallholder dairy farms need to be encouraged and facilitated to realize an inclusive growth of the dairy industry.

Policy Recommendation (2)

- The government needs to loosen the restrictions on imports of heifers and breeder dairy cows.
- In addition, the national dairy cattle breeding program needs to be accelerated if the government wishes to build an inclusive dairy industry by involving smallholder dairy farmers.
- Smallholder dairy farms, medium and large-scale farms must grow and develop together.
- Import policy is needed to support the development of dairy farms and dairy industry and safeguard them from unfair trading.
- The import policy should use instruments consistent with WTO rules and should not be too restrictive and burdensome in order to minimize rent seeking behavior and moral hazard.
- To be more effective in protecting dairy farmers and minimizing quota rent but not violating WTO rules, the government needs to replace "the import quota" with the tariff equivalent quota.

Thank You!

http://www.adelaide.edu.au/global-food https://www.indodairy.net/













