KEMENTERIAN PERDAGANGAN DALAM NEGERI
DAN KOS SARA HIDUP

MyCC
SURUHANJAYA PERSAINGAN MALAYSIA
MALAYSIA COMPETITION COMMISSION

STUDY ON IMPORTATION OF BEEF, COCONUT AND ONION IN MALAYSIA

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Executive Summary

The Malaysia Competition Commission (MyCC) is an independent statutory body and is Malaysia's national competition authority (NCA). MyCC derives its powers, functions, and responsibilities from the Competition Commission Act 2010 [Act 713] to enforce the Competition Act 2010 [Act 712].

Consistent with the functions provided under section 16(g) of Act 713, MyCC was directed to study the competition issues in the importation of food-based products. MyCC decided to focus on the beef, coconut, and onion markets given their cultural, economic, and dietary significance. These staples face various market pressures, warranting an in-depth review of their supply chains, pricing dynamics, and regulatory environments:

High consumer demand and dietary importance: Beef, coconut, and onions are staples of Malaysian cuisine, uniting diverse culinary traditions across ethnic groups. Coconuts, particularly in the form of coconut milk (*santan*), are essential in cooking, beverages, and desserts, while onions serve as a universal flavour base in *sambal*, curries, stir-fries. Their widespread use highlights their role in food security and consumer welfare.

High import dependency: Despite their central role in Malaysian cuisine, beef, coconut, and onions heavily rely on imports, making them vulnerable to market fluctuations and competition challenges.

The beef market saw its import dependency ratio (IDR) rise from 76.7% in 2018 to 84.5% in 2023 as local production struggled to meet demand. Imports from Australia, India, and Brazil dominate, but Halal compliance regulations add complexity, potentially limiting competition. A 30% Bumiputera import quota was introduced in 2017 aimed to reduce market concentration, though its impact remains uncertain.

The coconut market, while less import-dependent than beef, still relies on imports to stabilise prices during production shortfalls. The IDR fell from 33.9% in 2018 to 30.6% in 2023, but import surges in 2021 disrupted local markets, affecting small-scale farmers. Heavy reliance on a single importing country further heightens supply chain risks.

For onions, Malaysia is entirely dependent on imports, with a 100% IDR, exposing prices to global market fluctuations. While rising imports meet domestic demand, limited supply diversification increases the risk of affordability issues during disruptions.

Distinct geographic markets: Malaysia's geographic diversity creates region-specific challenges in food markets. Peninsular Malaysia benefits from better infrastructure, streamlined distribution, and economies of scale, leading to more competitive pricing. In contrast, Sabah and Sarawak face logistical and regulatory hurdles that drive up costs and reduce market efficiency.

Stricter quarantine protocols to maintain Foot and Mouth Disease (FMD)-free status raise transaction costs and limit supplier entry. Higher transportation expenses limited cold chain infrastructure, and fragmented supply chains further contribute to price disparities and volatility. As a result, consumers in these regions bear higher costs, and large-scale importers find the market less attractive.

The study highlights Malaysia's agricultural sector's dual challenges: high import dependence and the historical use of quantitative restrictions (QRs) via Approved Permits (APs) and Import Permits (IPs). Rising food imports expose the country to price volatility and supply risks. While QRs support food security, rural development, and sustainable agriculture, they also have broader implications for market access, trade efficiency, and compliance with international trade norms.

Sector and market regulation: Historically, QRs helped stabilise prices, protect local producers, and regulate market access. They also play a key role in mitigating agricultural risks through sanitary and phytosanitary (SPS) measures. Malaysia follows frameworks from the Codex Alimentarius Commission (CAC), the World Organisation for Animal Health (WOAH), and the International Plant Protection Convention (IPPC) to manage biosecurity threats from imports.

International trade law: The use of APs and IPs as non-tariff barriers (NTBs) must align with WTO provisions under the Agreements on Agriculture (AoA) and SPS Measures. However, concerns over transparency, efficiency, and trade compliance persist. WTO Trade Policy Review (TPR) sessions have raised questions about these systems, underscoring the need for reforms.

Competition policy and law: APs and IPs shape market dynamics by regulating import access. Poorly implemented QRs can restrict competition, create market concentration, and favour certain players. Adopting evidence-based SPS practices aligned with international standards can help Malaysia balance fair market conditions with protecting domestic producers and consumers.

Concerns initially surrounded the impact of Approved Permits (APs) and Import Permits (IPs) on agricultural markets. However, APs for beef and coconut were abolished in 2022, leaving only IPs and related requirements, such as Halal certification and the Certificate of Conformity of Agricultural Produce (COC), for onions and other products.

Once a country liberalises trade by removing QRs or import quotas—such as Malaysia's abolition of APs—reinstating them would violate WTO obligations and risk trade disputes or retaliation from other members. While WTO rules permit temporary safeguards under GATT Article XIX and exceptions under GATT Article XX, these must be clearly justified and temporary. Thus, reintroducing APs is unlikely without harming Malaysia's trade relations and commitments under WTO agreements and FTAs.

The abolition of APs for most food products has been well received by stakeholders in MyCC engagement sessions, who noted that it fosters a more open and equitable market. Previously, APs limited participation to select permit holders, leading to inefficiencies, inflated costs, and anti-competitive behaviour such as monopolistic practices and collusion.

With APs removed, stakeholders highlight that genuine market players—those who are efficient, competitively priced, and compliant with regulations—now dominate. This has enhanced transparency, reduced entry barriers, and encouraged fair competition, ensuring market dynamics are driven by merit and efficiency rather than administrative controls. In the beef market, the removal of APs has improved import flow, increased competition, and stabilised prices, ensuring a consistent Halal-certified supply. In the coconut market, eliminating import restrictions has enhanced market accessibility, addressing demand gaps without reliance on a few dominant players.

Additionally, stakeholders noted that abolishing APs reduces opportunities for corruption and rent-seeking behaviour linked to permit allocations. Broader market participation not only stabilises consumer prices but also creates a level playing field for SMEs to compete with larger importers and distributors. This underscores the importance of policy reforms that promote trade liberalisation and inclusive growth across Malaysia's agricultural and food sectors.

Despite the positive development upon the abolishment of the AP, the industry players are still facing challenges in the three industries:

Beef: Limited selection of import countries drives up prices as importers compete for adequate beef supplies. Additionally, overlapping labelling requirements from multiple government ministries and agencies delay port clearance, further disrupting the supply chain.

Coconut: Malaysia primarily imports coconuts from Indonesia, as domestic production focuses on young coconuts for fresh drinks rather than mature coconuts, which are essential for coconut milk. This reliance on imports makes Malaysia vulnerable to export policy shifts from supplier countries. Coconut importers and local farmers also face challenges in sourcing preferred seedling varieties like *Matag* for coconut milk production. Additionally, not all seedlings are recognised by the DOA—farmers using unrecognised varieties such as *Gadong* or Vietnam Dwarf, are ineligible for subsidies and bear the risk of poor crop yields. The growing demand for coconut water has further shifted harvesting patterns, reducing the availability of mature coconuts and byproducts, thus exacerbating supply constraints in the market.

Onions: Malaysia relies entirely on imported onions, making it vulnerable to export policy shifts, as seen in India's export ban (Dec 2023 – May 2024). In response, Malaysian importers turned to China and Pakistan, causing domestic price increases. Onions are perishable, requiring strict storage conditions to prevent spoilage. Poor storage can degrade quality, while prolonged import and storage periods may cause sprouting, rendering them unsellable as fresh onions. Balancing import volumes and storage capacity is crucial—overstocking strains storage facilities, while undersupply leads to shortages and price spikes.

The study examined the onion cartel practices in the Philippines and beef and garlic importation cartels in Indonesia, which highlight vulnerabilities in NTB-regulated systems and provide key lessons for tackling anti-competitive practices. These cases reveal how importer collusion, combined with bureaucratic inefficiencies and discriminatory regulations, can manipulate supply, inflate prices, and distort markets.

Onion importation cartel (2024): The Philippine onion market, which imports 10%–20% of its annual demand, experienced a sharp price spike in late 2022, with prices surging to PHP700/kg despite low farmgate prices. In response, the Philippine Competition Commission (PCC) launched an investigation into alleged collusion by 12 entities controlling over 50% of imported supply.

Manipulation of import process: These entities manipulated the Sanitary and Phytosanitary Import Clearances (SPSICs), pre-arranging allocations and timing permit releases to create artificial shortages, inflate prices, and exclude competitors. Documents and communications confirm coordinated supply control and price manipulation, harming consumers and farmers by restricting competition and reinforcing dominance.

The PCC Enforcement Office filed Statement of Objections (SO), recommending PHP2.4bn in fines. The case is awaiting a Commission hearing under its quasi-judicial powers.

Beef importation cartel (2015): Indonesia's Beef Self-Sufficiency Programme (BSSP) imposed strict import restrictions through complex licensing and quotas to reduce import reliance. However, the system unintentionally enabled anti-competitive practices, including:

Import restrictions and licensing complexities: Lengthy, discriminatory licensing processes favoured state-owned enterprises (SOEs) over private importers. Imported beef was barred from traditional markets, limiting access for lower-income consumers and increasing domestic producers' market power.

Cartel activities: Collusion among 32 importers controlled 65% of the market in key regions like Jakarta, Bogor, Depok, Tangerang, and Bekasi (JABODETABEK). Coordinated supply restrictions, quota hoarding, and price-fixing drove beef prices to nearly twice the international level.

Outcome: The Indonesia Competition Commission (KPPU), found importers guilty of price-fixing and supply restrictions, exacerbating high beef prices, limiting consumer access, and restricting competition.

Garlic importation cartel (2013): Similar issues were evident in Indonesia's garlic market, which relied on imports to meet over 95% of domestic demand. Stricter import regulations, introduced in 2012, required importers to obtain multiple approvals (RIPH and SPI certificates), which were often delayed or unfairly allocated. Key issues included:

Cartel formation: 19 importers controlled 81.4% of the garlic market, coordinating supply schedules to create artificial shortages and inflate prices.

Regulatory failures: The RIPH certification process favoured larger importers, while smaller players faced delays and barriers. Importers engaged in stock hoarding and quota manipulation, contributing to a price surge from Rp10,000–20,000/kg to Rp80,000–100,000/kg within months.

Government involvement: The KPPU implicated government agencies for enabling collusion through opaque quota allocation and inconsistent enforcement of import regulations.

Across all cases, common anti-competitive practices included:

» **Supply restrictions**: Deliberate import delays and stock hoarding to create artificial shortages.

» **Quota hoarding**: Exploiting non-transparent quota systems to control market supply.

» **Price fixing**: Agreements among importers to inflate prices, reducing competition.

» **Regulatory manipulation**: Preferential treatment for dominant importers, sidelining smaller competitors.

» **Complex and opaque procedures**: Facilitated favouritism and regulatory capture, enabling dominant firms to manipulate the system to their advantage.

In the absence of a global competition regime like the WTO for trade, national competition laws regulate markets domestically and support global enforcement. Strong laws enable effective domestic enforcement while engaging in regional or bilateral agreements. In the agricultural markets like beef, coconut, and onion, robust competition laws in Malaysia promote market fairness, support food security, and protect farmers, consumers, and the economy.

Market access measures like import quotas, tariffs, non-tariff measures (NTMs), and NTBs can create competition challenges, particularly in their implementation and procedural aspects. In Malaysia's context, the progressive removal of some quotas (e.g., APs) has fostered a more competitive and efficient agricultural market, aligning with international trade norms. However, notable competition issues persist:

Monopolistic practices: Dominant firms exploit quotas to manipulate prices, restrict supply, and collude, reducing competition and harming consumers.

Artificial scarcity: Import restrictions create supply shortages, leading to inflated prices and limited consumer choices.

Protection of inefficient producers: Quotas shield domestic producers from competition, discouraging innovation and resource optimisation.

Supply chain disruptions: Restrictions impact downstream industries by increasing input costs and causing volatility during demand spikes.

Preferential treatment: Quota allocation often favours politically connected firms, entrenching their market dominance.

Barriers to entry: Smaller or new firms struggle to enter markets dominated by established players with access to quotas.

Informal markets: Scarcity and high prices encourage smuggling and unregulated trade, distorting markets and reducing government revenue.

Procedural complexity: Lengthy and opaque import procedures increase costs, reduce efficiency, and discourage competition.

Price volatility: Quotas exacerbate market instability, particularly during seasonal demand fluctuations, disproportionately affecting consumers.

These issues underline the need for transparent and competitive implementation of market access measures to minimise distortions and promote fair competition.

This study examines the challenges in Malaysia's beef, coconut, and onion markets, shaped by global trade dynamics, domestic inefficiencies, and supply chain weaknesses. Stakeholder insights from importers, manufacturers, farmers, industry representatives, and government agencies highlight key issues affecting these markets. Organised into general and sector-specific challenges, the findings identify areas for policy intervention and strategic reforms to enhance market efficiency and food security.

General issues

Challenges in Malaysia's trade policy: Malaysia's trade policy, while robust, faces vulnerabilities due to global and domestic factors:

- **Global trade tensions**: Geopolitical disputes, such as US-China trade tensions, disrupt supply chains and emphasise the need for diversification in trade partnerships.
- **Non-tariff barriers (NTBs)**: Technical standards, licensing requirements, and customs inefficiencies hinder domestic and international trade flows. Streamlining NTBs requires simplifying procedures, enhancing transparency, and ensuring compliance measures are not overly restrictive, allowing for smoother, more efficient trade flows.
- **Port congestion**: Limited capacity and outdated infrastructure at key ports, such as Kota Kinabalu Port, increase costs and delays, reducing Malaysia's competitiveness.
- **Sustainability standards**: International buyers demand environmentally sustainable practices, requiring Malaysia to align its trade policies with global ESG standards.
- **Innovation and competitiveness**: To enhance global relevance, Malaysia must invest in R&D, technology adoption, and workforce skills to move up the value chain.

Smuggling: Smuggling persists as a major issue due to price differentials and regulatory burdens:

- **Beef**: Illegal imports bypass Halal and safety standards, jeopardising food quality.
- **Coconuts and onions**: Cross-border smuggling from neighbouring countries exploits porous borders and seasonal supply gaps.

Fragmented regulatory processes:

- Importers face multiple agencies and inconsistent enforcement at entry points. For instance, unclear role definitions among FAMA, DOA Sabah, and DOA Sarawak complicate the clearance process, leading to inefficiencies. These inefficiencies are highlighted by discrepancies between official documentation and actual practices on the ground.

Beef market challenges

Rising feed costs: Cattle feed costs have surged, increasing operational expenses for breeders. Global commodity price volatility, currency fluctuations, and Malaysia's dependence on feed imports exacerbate this issue. These higher costs ripple through the supply chain, resulting in elevated beef prices for consumers.

Limited import sources: Strict Halal certification and SPS approvals limit sourcing options to a few countries, intensifying competition among importers. This restricted supplier base drives up prices and reduces flexibility in addressing supply disruptions.

Food fraud and false labelling: Widespread mislabelling, such as marketing buffalo meat as beef, erodes consumer trust and raises concerns. Gaps in Malaysia's Food Regulations 1985 exacerbate this issue, allowing unethical practices to persist.

Halal requirements are perceived as trade obstacles: Halal certification, while vital for consumer confidence, is perceived as an NTB by exporters, creating trade friction and higher compliance costs. Additionally, labelling requirements delay shipments, increasing port storage fees and overall costs.

Allanasons Pvt Ltd.'s Malaysian subsidiary: India's largest buffalo meat exporter recently established a Malaysian subsidiary to streamline direct supply to Malaysia. While this move enhances supply chain efficiency, it raises competition concerns by potentially increasing market concentration and consolidating Allana's market power, with its share of beef imports in Peninsular Malaysia possibly reaching 50%. Malaysian importers fear reduced competition and the risk of Allana leveraging its dominance to control the supply chain. In response, some have protested by ceasing procurement from the company.

Coconut market challenges

Dependence on a single importer: Malaysia relies heavily on Indonesia for coconut imports, exposing the market to geopolitical risks. Recent examples of export restrictions by other countries, such as India's rice and onion bans, underscore this vulnerability.

Limited seedling availability: Farmers struggle to access high-quality seedlings for mature coconuts. Varieties like *Matag*, suitable for coconut milk production, are limited, and uncertified imports (e.g., *Gadong* seedlings) raise SPS concerns and reduce eligibility for subsidies.

Changing consumption trends: The growing popularity of coconut water has increased demand for young coconuts, shifting resources away from mature coconut production. This shift affects the availability of raw materials for the processing industry.

Farmer migration to palm oil: Coconut farmers are increasingly converting plantations to palm oil due to better profitability, further reducing the coconut supply.

Onion market challenges

Total import dependence: Malaysia's full dependence on onion imports makes its market vulnerable to global supply disruptions, like India's recent export ban. Sourcing from alternative suppliers such as China and Pakistan leads to increased costs.

Storage constraints: Onion perishability requires controlled storage conditions, which are often inadequate. Improper storage leads to spoilage, impacting supply and quality while increasing prices.

Domestic production challenges: Efforts to localise onion production face significant hurdles due to unsuitable climatic conditions and limited high-quality seedlings. Current research by MARDI is still in its nascent stages, necessitating continued reliance on imported onion seeds.

Consumer tastes and preference: Malaysia's total reliance on imported onions is further complicated by strong consumer preferences for Indian and Thai small red onions, prized for their distinct flavour in traditional dishes. This skews demand, making import diversification difficult, even when alternatives exist. Further pressure comes from South Asian foreign workers, who drive additional demand for Indian and Thai onions, exacerbating price volatility and supply imbalances. As a result, Malaysia remains highly vulnerable to external disruptions.

Finally, the recommendations and conclusions of this study address competition issues in Malaysia's beef, coconut, and onion markets following the abolition of APs for most agricultural products. While this policy shift eliminated QRs, it also introduced new market challenges and opportunities. Since reinstating restrictions is not viable without severe trade consequences, the focus must be on building a competitive, transparent, and resilient marketplace. This study presents general strategies to enhance fair competition and market efficiency under the revised trade framework, alongside sector-specific recommendations.

Malaysia's future international trade policy for agricultural products

- Promote diversification of import sources
- Adopt market-oriented trade policies
- Support domestic agricultural competitiveness
- Address port inefficiencies and congestion
- Focus on food security in trade agreements
- Address NTBs
- Establish trade monitoring and analytics for agricultural products

Fostering collaboration across stakeholders

- Establish a single multi-stakeholder platform
- Establish a circular economy hub for coconut processing in Sabah
- Manage consumer preferences and supply chain vulnerabilities for onions

Addressing smuggling activities

- Streamline import procedures and reduce regulatory burdens
- Enhance border enforcement and surveillance
- Address domestic supply shortfalls

Addressing the mislabelling of meat products

- Strengthen labelling, including Halal labelling, regulatory framework
- Enhance processing standards to align with international best practices
- Impose stiffer penalties

Addressing the increasing costs of cattle feed

- Explore alternative feed sources
- Incentivise innovation in feed production
- Strengthen trade policies for feed imports
- Promote awareness of dual-purpose cattle for milk and meat production
- Increasing calving rates to boost productivity
- Enhance education and training

Addressing availability issues of coconut seedlings and onion seeds

Addressing the shift from coconut to palm oil cultivation

Addressing competition issues

- Addressing competition issues from QR mechanism
- Strengthen competition enforcement for agriculture sector
- Enhance market transparency
- Conduct training and advocacy for companies with common ownerships
- Develop oversight of intermediaries in the supply chain
- Establish a market competition observatory
- Promote entry of new players
- Address supply chain inefficiencies
- Empower consumers

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Abbreviations

ACRA	Accounting and Corporate Regulatory Authority (Singapore)
AEC	ASEAN Economic Community
AKMAL	Royal Customs Academy
ALOP	Appropriate Level of Protection
AMAS	Agribusiness and Marketing Assistance Service (Philippines)
AoA	Agreement on Agriculture
AI	Artificial insemination
AP	Approved Permit
API	Importer Identification Number (Indonesia)
AQA	Agriculture Quarantine Agency (Indonesia)
AQS	International Animal Quarantine Station (Thailand)
ASEAN	Association of Southeast Asian Nations
BIF Plan	National Beef Industry Development Strategic Plan 2021-2025
BLESS	Business Licensing Electronic Support System
bn	billion
BNM	Bank Negara Malaysia
BPI-NPQSD	National Plant Quarantine Services Division (Philippines)
BPOM	National Agency of Drug and Food Control (Indonesia)
BSE	Bovine spongiform encephalopathy
BSSP	Beef Self-Sufficiency Programme
Bulog	National Logistics Agency (Indonesia)
°C	Degree Celsius
CAC	Codex Alimentarius Commission
CAGR	Compound annual growth rate
CAP	Common Agricultural Policy
CCI	Competition Commission of India (India)
CCP	Cargo Clearance Permit (Singapore)
CCTV	Closed-circuit television
CFT	Complement Fixation Test
CIPS	Center for Indonesian Policy Studies (Indonesia)
CMA	Competition and Markets Authority
CO	Certification of origin
COC	Certificate of Conformity of Agricultural Produce
CoVP	Code of Veterinary Practice for Meat Processing Plant
CPTPP	Comprehensive and Progressive Agreement for Trans-Pacific Partnership
CR	Concentration ratio
DA-BPI	Department of Agriculture-Bureau of Plant Industry (Philippines)
DAH	Department of Animal Health (Vietnam)
DLD	Department of Livestock Development (Thailand)
DOA	Department of Agriculture
DOA Thailand	Department of Agriculture, Thailand (Thailand)
DOSM	Department of Statistics Malaysia
DVS	Department of Veterinary Services
EBL	Enzootic bovine leucosis
EDI	Electronic Data Interchange (Thailand)
ELISA	Enzyme linked immunosorbent assay
ESCAS	Exporter Supply Chain Assurance System (Australia)
ESG	Environmental, social, and governance
EU	European Union
FAMA	Federal Agricultural Marketing Authority
FAO	Food and Agriculture Organization of the United Nations
FCFS	First-Come, First-Served
FDA Thailand	Food and Drug Administration, Thailand (Thailand)
FELCRA	Federal Land Consolidation and Rehabilitation Authority
FGD	Focus group discussion
FMD	Foot and mouth disease
FoSIM	Food Safety Information System of Malaysia
FTA	Free trade agreement

FTC	Federal Trade Commission (US)
GAP	Good Agricultural Practices
GATT	General Agreement on Tariffs and Trade
GDP	Gross domestic product
GI	Geographical indication
GIRO	General Interbank Recurring Order
GMO	Genetically modified organism
GMP	Good Manufacturing Practice
GLC	Government-linked company
HACCP	Hazard Analysis Critical Control Point
HHI	Herfindahl-Hirschman Index
HPC	Halal Panel Committee
HS	Harmonized System
HVC	High value commodities
ICQ	Immigration, Customs, and Quarantine
IDR	Import dependency ratio
INSW	Indonesia National Single Window (Indonesia)
IP	Import Permit
IPPC	FAO International Plant Protection Convention
ISPM	International Standards for Phytosanitary Measures
ITO	International Trade Organization
JAKIM	Department of Islamic Development Malaysia
JKPPBT	High-Risk Import Application Committee
JIM	Immigration Department of Malaysia
KDN	Ministry of Home Affairs
KE	Ministry of Economy
kg	kilogram
KK	Kedah-Kelantan
KKR	Ministry of Works
KPDN	Ministry of Domestic Trade and Cost of Living
KPI	Key performance indicator
KPPU	Komisi Pengawas Persaingan Usaha (Indonesia)
KUSKOP	Ministry of Entrepreneur and Cooperatives Development
LDC	Least developed country
LOE	Letter of exemption
LPP	Farmers' Organization Authority
LSD	Lumpy skin disease
LYD	Lethal yellowing disease
MAFS	Ministry of Agriculture and Food Security
MAIN	State Islamic Councils (Majlis Agama Islam Negeri)
MARD	Ministry of Agriculture and Rural Development (Vietnam)
MBCA	Malaysian Border Control and Protection Agency
MAQIS	Department of Quarantine and Inspection Services Malaysia
MARDI	Malaysian Agricultural Research and Development Institute
mg	milligram
MIMA	Maritime Institute of Malaysia
MITI	Ministry of Investment, Trade and Industry
MIS	Majlis Islam Sarawak
MKIC	Malaysian Kuwaiti Investment Co. Sdn Bhd
mn	million
MOA	Ministry of Agriculture (Indonesia)
MOF	Ministry of Finance
MOH	Ministry of Health
MPC	Malaysia Productivity Corporation
MRD	Malayan Red Dwarf (coconut)
MS	Malaysian Standard
MSPO	Malaysian Sustainable Palm Oil
mt	Metric tonne
MUDeNR	Ministry of Natural Resources and Urban Development, Sarawak
MUIS	Majlis Ugama Islam Sabah
MyCC	Malaysia Competition Commission
MYD	Malayan Yellow Dwarf (coconut)
MyOGA	Malaysia OGA System (OGA = Other Government Agencies)
NAP	National Agro-Food Policy
NCA	National competition authority
NEP	New Economic Policy
NIB	Business Identification Number (Indonesia)
NKV	Veterinary Control Number (Indonesia)
NRA	National Risk Assessment
NTB	Non-tariff barrier

NTM	Non-tariff measures
OECD	Organisation for Economic Co-operation and Development
OSS	Online Single Submission (Indonesia)
PC	Phytosanitary certificate
PCC	Philippine Competition Commission (Philippines)
PI	Import Approval (Indonesia)
PIA	Permit issuing agency
PKC	Palm kernel cake
PKH	Directorate General of Livestock and Animal Health (Indonesia)
PKKM	Food Safety and Quality Programme
PKPS	Perbadanan Kemajuan Pertanian Selangor
PMD	Prime Minister's Department
PPK	Area Farmers' Organization
PPP	Public-private partnerships
PRA	Pest Risk Analysis
QR	Quantitative restrictions
R&D	Research and development
RCEP	Regional Comprehensive Economic Partnership
RCO	Refined coconut oil
RIPH	Rekomendasi Impor Produk Hortikultura (Horticulture Product Import Recommendation)
RISDA	Rubber Industry Smallholders Development Authority
RM	Ringgit Malaysia
RMCD	Royal Malaysian Customs Department
RMP	Royal Malaysian Police
Rp	Indonesian Rupiah
SDT	Special and differential treatment
SFA	Singapore Food Agency (Singapore)
SGD	Singapore Dollar
SIUP	Trade Operation Permit (Indonesia)
SKV	Veterinary Health Certificate
SME	Small and medium-sized enterprise
SMK	Customs Information System
SOE	State-owned enterprise
SPEED	MAQIS Importer, Exporter, and Trade Agent Registration System
SPS	Sanitary and phytosanitary
SPSIC	Sanitary and Phytosanitary Import Clearances
SSG	Special safeguards
SSL	Self-sufficiency level
SUA	Supply and Utilisation Account
TBT	Technical barriers to trade
TCD	Thai Customs Department (Thailand)
tn	trillion
TPR	Trade Policy Review
TRQ	Tariff-rate quota
UAE	United Arab Emirates
UEN	Unique Entity Number (Singapore)
UHT	Ultra-high temperature
UiTM	Universiti Teknologi MARA
UNIMAS	Universiti Malaysia Sarawak
UPM	Universiti Putra Malaysia
UTeM	Universiti Teknikal Malaysia
UK	United Kingdom
UPEN	Economic Planning Unit
US	United States of America
USD	United States Dollar
UUM	Universiti Utara Malaysia
VCIS	Vietnam Customs Intelligence System (Vietnam)
VCO	Virgin coconut oil
VNACCS	Vietnam Automated Cargo Clearance System (Vietnam)
VOC	Verification of Compliance
WAHIS	World Animal Health Information System
WHO	World Health Organization
WITS	World Integrated Trade Solution
WOAH	World Organisation for Animal Health
WTO	World Trade Organization

1.0 Introduction

The Malaysia Competition Commission (MyCC) is an independent statutory body and the country's national competition authority (NCA). Established under the Competition Commission Act 2010 [Act 713], it enforces the Competition Act 2010 [Act 712] to promote economic development through the protection of competition. MyCC's mission is to maximise consumer welfare by encouraging efficiency, innovation, and entrepreneurship, which lead to competitive prices, better product quality, and greater consumer choice.

Section 11(1) of Act 712 empowers the MyCC to conduct market review, which must be published with findings and recommendations. Since 2012, MyCC has completed seven market reviews across various sectors including professional fees, broiler production, pharmaceuticals, building materials, food, wholesale and retail, and transportation.

In 2024, MyCC was directed to study competition issues in food importation. This is consistent with one of its functions as provided by section 16(g) of Act 713, which is,

> ***to carry out, as it considers appropriate, general studies in relation to issues connected with competition in the Malaysian economy or particular sectors of the Malaysian economy.***

In this study, MyCC analysed the beef, coconut, and onion markets in Malaysia. For ease of reference:

The beef market includes meat from cattle and buffalo.

The onion market includes onions and shallots.

The initial focus was on the impact of quantitative restrictions (QRs)—notably approved permits (APs) and import permits (IPs)—on those markets. While the APs for beef and coconut were abolished in 2022, onion imports have never required AP.[1] However, IPs and related mechanisms remain in place for these and other agricultural products.[2] This study examines potential competition issues arising from in the importation of beef, coconut, and onion into Malaysia.

This document is the Public Report, which outlines and discusses the following:

This study provides a comprehensive analysis of Malaysia's beef, coconut, and onion markets, focusing on identifying competition issues and proposing actionable recommendations. By assessing governance structures, market dynamics, and trade policies, it supports MyCC's mandate to promote competition and enhance market efficiency. This study serves as a resource for policymakers, stakeholders, and industry players to help build a more competitive and resilient food supply chain in Malaysia.

[1] *The Department of Veterinary Services of Sarawak (DVS Sarawak) still imposes AP for the importation of buffalo meat from India.*

[2] *MAFS (2022). Removal of Approved Permit (AP) for Agrofood Commodities. Currently, APs are required for the importation of rice, sugar, and wheat flour. The AP for rice is under the purview of MAFS and for sugar and wheat flour, under the purview of KPDN.*

2.0 Study Objectives

The general directive for this study is to examine potential competition issues in the importation of food-based products. MyCC has chosen to focus on the beef, coconut, and onion markets, which are three food-based products that are critical to Malaysia's food security and consumer welfare.

2.1 High consumer demand and dietary importance

Malaysia is a multicultural society, home to Malays, Chinese, Indians, and various Indigenous communities, each with unique culinary traditions. Despite this diversity, beef, coconuts, and onions serve as staple ingredients consistently consumed across all races due to their versatility, cultural significance, and use in traditional dishes. The shared reliance on these food items highlights their central role in Malaysian cuisine and underscores the need for competitive, efficient markets to ensure consistent supply and affordability.

Beef is a significant protein source in Malaysian households, though its consumption varies among the various communities due to their religious and cultural practices.

Coconuts are deeply integrated into Malaysian cuisine across all races, making them a staple in cooking, beverages, and desserts. Indeed, coconut was the most consumed fruit by the population in 2023 with 24.9kg/year.[3]

Onions are universally used across Malaysia's communities and racial groups as a base ingredient for flavouring dishes.

The cultural and social importance of beef, coconut, and onion makes them sensitive food items, subject to price control under the various *Skim Harga Maksimum Musim Perayaan* (SHMMP). For example, for the Hari Raya Aidilfitri in 2024, the Ministry of Domestic Trade and Cost of Living (KPDN) listed local beef (except for tenderloin), imported beef, coconut and grated coconut, as well as imported shallots, yellow onions, and Indian red shallots, as among the 22 items under the SHMMP.[4] For the 2024 Deepavali, KPDN listed imported large red onions, small red onions and rose onions (from India), whole coconuts and grated coconuts to be among the 8 items under the SHMMP.[5]

[3] *DOSM (2024). Supply and Utilization Accounts for Selected Agricultural Commodities, 2019-2023.*

[4] *Malay Mail (2024). Domestic Trade and Cost of Living Ministry lists 22 items under maximum price scheme for Aidilfitri.*

[5] *The Sun (2024). Eight items listed in Festive Season Maximum Price Scheme for Deepavali 2024 – Armizan.*

2.2 High import dependency

Malaysia recorded high reliance on imports for beef, coconuts, and onions, which exposes the markets to external vulnerabilities and competition challenges:

Beef

Malaysia has been recording a steady increase in trend for its import dependency ratio (IDR) for beef from 76.7% in 2018 to 84.5% in 2023.[6] This highlighted the fact that the local production cannot meet the domestic consumption demand. Beef is a culturally significant product in Malaysia, particularly among its Muslim population. Ensuring Halal compliance adds regulatory complexity and affects the importation process and dynamics. In September 2017, the government announced the imposition of a minimum 30% quota for Bumiputera importers to break the beef import monopoly.[7] The heavy reliance on external sources like Australia, India, and Brazil raises concerns about market concentration and the fairness of Malaysia's import restriction policy. The study aims to analyse if any competition or regulatory issues for the beef market which were raised in the past are already resolved and whether there are any potential new competition issues that need to be addressed.

Coconuts

While Malaysia produces coconuts domestically, imports play a critical role in meeting consumer demand, particularly during production shortfalls. Imported coconuts supplement local supply and contribute to price stabilisation. Malaysia has been recording a declining trend for its IDR for coconuts from 33.9% in 2018 to 30.6% in 2023.[8] In between these years, there was a surge of coconut imports up to 2021, causing a glut in the domestic market and affecting the small local coconut farmers.[9] Coconuts are a high-value commodity, with per capita consumption reaching 24.9kg in 2023, making market stability a concern for policymakers.[10] Additionally, limited availability of coconut seedlings and reliance on a single importing country create vulnerabilities in the supply chain. This study aims to analyse if there are any competition issues that could potentially arise from the importation of coconuts, thus affecting the market structure and supply value chain for coconut.

Onions

Malaysia has been recording 100% IDR for onions throughout the years. Indeed, Malaysia is currently one of the largest importers of onions in the world and the import trend has been rising throughout the years to meet the high domestic consumption. Complete reliance on imports makes domestic onion prices sensitive to global market fluctuations, potentially leading to affordability challenges should there be supply disruptions. This study aims to analyse any competition issues that could potentially arise from the importation activities for onions, which in turn may affect the market structure and supply value chain for onions.

[6] *MAFS (2024). Malaysia Agrofood in Figures, 2023.*
[7] *The Star (2017). Ministry to impose 30% bumi quota to break beef import monopoly.*
[8] *MAFS (2024). Malaysia Agrofood in Figures, 2023.*
[9] *The Edge (2019). Curbing coconut imports tricky, says ministry.*
[10] *MAFS (2024). Malaysia Agrofood in Figures, 2023.*

2.3 Peninsular Malaysia, Sabah, and Sarawak as distinct markets

A comprehensive analysis of Malaysia's beef, coconut, and onion markets necessitates examining the regions of Peninsular Malaysia, Sabah, and Sarawak as distinct geographic markets due to their unique regulatory environments, logistical challenges, and consumption dynamics. While the overarching national policies govern importation and competition, significant regional differences arise from state-level regulations, infrastructure disparities, and local market conditions that influence supply, pricing, and competition outcomes.

By analysing the markets through this geographic lens, it becomes possible to identify region-specific challenges and opportunities, ensuring that policy recommendations are targeted, practical, and aligned with the unique needs of each region.

2.4 Study structure

To reiterate, of interest to this study is how current relevant policies and regulations, especially on import restrictions such as the AP and IP policies, regulations, and systems, affect the competition dynamics in the beef, coconuts, and onions markets in Malaysia. The study is structured as follows:

Import restriction policy analysis: Examination of the general principles for imports restrictions, notably the AP and IP policies within the agricultural sector, with a special focus on their applicability and suitability for beef, coconuts, and onions imports. The study will evaluate the alignment of past AP system with the broader goals of competition and efficiency in the market.

Evaluation of government policy and regulations on food imports: Evaluation of the impact and effectiveness of the government's recent initiatives aimed at reducing the import of beef, coconuts, and onions; and increasing self-sufficiency levels (SSLs) within the country.

Market structure and supply chain assessment: Assessment of the current market structure and supply chain for beef, coconut, and onion markets in Malaysia. This includes analysing the statistics related to the import, supply, demand, and consumption patterns of these products to identify market concentration, potential bottlenecks or inefficiencies.

Policy implications and recommendations: Based on the findings, the study outlines key policy implications and provides recommendations to foster a more competitive market environment and ensure best regulatory practices, thus benefiting both consumers and producers by enhancing market efficiency and product availability.

2.5 Recap of the 2019 MyCC Market Review on Food Sector in Malaysia

In 2019, MyCC published the Market Review on Food Sector in Malaysia under the Competition Act 2010 (2019 Market Review). MyCC undertook the Market Review as there were concerns on the inconsistency of food supply, increased trend of price, and high food costs. As such, MyCC viewed the need to determine the level of competition and to assess the prevailing industry's practices and regulations that may restrict or distort competition and cause unnecessary regulatory burden to market players.

In the 2019 Market Review, MyCC analysed the supply chain, issues and challenges, and recommendations for the following food sub-sectors:

01 Beef

02 Fish (Indian mackerel)

03 Vegetables (mustard leaf and round cabbage)

04 Infant formula

The 2019 Market Review focused on understanding the regulations governing the industry, market structure, supply chain, industry players, pricing trends, market concentration, and competition issues. It summarised the findings on market concentration for the selected sub-sectors in a table, which is replicated in Table 1.

Table 1: Market concentration nationwide across the food sub-sectors

Product group	Level of supply chain	Level of concentration
Beef	Producers	Between low and moderate
	Importers	Between moderate and high
Fish	Producers	Low
	Importers	High
	Wholesalers	Low
Infant formula	Manufacturers/ Importers	High
Vegetables	Producers	Between low and moderate
	Importers	Low
	Wholesalers	Low
All	Retailers	Low

Source: MyCC (2019)

The 2019 Market Review highlighted the risks of Malaysia's status as a net food importer, noting its vulnerability to global price volatility and supply shocks. These external pressures impacted local supply chains, with costs ultimately passed to consumers.

Under international trade laws, imports of animal, meat and plant products require IPs issued by the relevant permit issuing agencies (PIAs) under the Customs Act 1967 [Act 235]. These permits were part of the agricultural import and export quota control (APs) implemented to manage the import and export quantity into the domestic market, to ensure adequate supply especially during peak seasons.

The 2019 Market Review highlighted that lack of monitoring of APs resulted in third-party importers (AP agents) operating in the system. Genuine players which did not manage to get their AP quota resorted to purchasing the quota via these third parties and having to pay "agent fees". These fees were subsequently passed through to consumers. In view of these concerns, one of the recommendations in the 2019 Market Review was for transparency in the AP approval system and for relevant authorities to monitor closely the post-granted AP market situation.

3.0 Methodology and Literature Review

This section discusses the research methodology used, as well as the literature review, which highlights research done on the beef, coconut and onion markets, both in Malaysia and internationally.

3.1 Methodology

The methodology for this study encompasses several activities, each designed to ensure its recommendations are relevant, practical, and effectively promote and strengthen competition in the beef, coconut, and onion markets in Malaysia. These activities aim to gather, verify, and analyse data for the study, and they can be categorised into primary and secondary research work.

3.1.1 Primary research work

The primary research work for the study is done via interviews, focus group discussions (FGDs), as well as engagement and advocacy activities. These are with relevant stakeholders in the markets including the government Ministries and agencies (policymakers and regulators), industry players (associations and companies), consumer associations, and the academic community – Appendix I provides the list of stakeholders (ministries, government agencies, and academic institutions) engaged for the Study. The activities to collect primary sources are organised and held throughout Malaysia, via focused engagement sessions.

3.1.2 Secondary research work

The secondary research work for the study is done via desktop research, which is undertaken right at the start and throughout the research process for the study. The team reviews and analyses available documents online from a diverse range of sources, both national and international, including from/by the government, industry, and academia. Such sources include official statistical publications, industry and market reports, company websites and publications (e.g., annual reports and press releases), journal articles, and competition cases.

3.1.3 Structure-conduct-performance (SCP) competition paradigm

This study analyses competitive dynamics in the beef, coconut, and onion markets by using the SCP paradigm, which suggests that the market structure influences the conduct of firms within that market, which in turn affects the overall performance of the industry. This approach is useful for studying industries with complex supply chains where various factors—ranging from market concentration to regulatory practices—can impact competition:

Structure: understanding the market structure by examining factors such as:
Market concentration: Number of firms, degree of market power, and any potential dominance by a few players in key areas of the supply chain.
Barriers to entry: Regulatory constraints, high capital requirements, or established networks that could prevent new entrants from participating.
Vertical integration: The extent to which companies operate in multiple stages of the supply chain.

Conduct: understanding how the industry players behave in terms of:
Pricing strategies: Are there pricing practices that may indicate anti-competitive behaviour, such as price-fixing, collusion, or predatory pricing?
Collaboration or agreements: Are there formal or informal agreements between firms that reduce competition, such as joint ventures (JVs), strategic alliances, or supply agreements that give specific players preferential treatment?
Innovation and investment: How are companies investing in improving production efficiency, technology, and product quality? Does the presence of large firms discourage smaller players from innovating?

Performance: evaluating economic and competitive outcomes such as:
Profitability: Are certain firms generating excess profits due to a lack of competition, and how does this impact the overall efficiency of the market?
Efficiency: How well is the market performing in terms of resource allocation, productivity, and meeting consumer demand? Are inefficiencies driven by market structure or behaviour?
Consumer welfare: Are consumers benefiting from competitive prices and product quality, or are they bearing the burden of higher prices due to anti-competitive practices?

3.1.4 Value chain analysis

This study analyses the value chains of the beef, coconut, and onion markets, focusing on the importation segment and the impact of QRs like APs and IPs. These mechanisms shape market access, participation, and value distribution, influencing competition and efficiency. Rather than examining the entire value chain, the study identifies inefficiencies, bottlenecks, and power imbalances arising from import-related policies. The findings highlight how QRs hinder competition and equitable market access, offering actionable insights into their effects on market structure and efficiency.

By targeting import regulations, this analysis guides policy recommendations to enhance fair market access, reduce inefficiencies, and promote competition, ensuring a focused approach without extending beyond regulatory impacts.

3.1.5 Market concentration analysis

Market concentration analysis assesses competitive dynamics in Malaysia's beef, coconut, and onion markets by examining market share distribution among firms. It reveals the level of competition, market power, and dominance of larger players. Using the SCP paradigm, the study links market structure (firm size and number) to firm behaviour (pricing, collusion) and performance outcomes (efficiency, productivity, and consumer welfare). Additionally, concentration at key value chain stages—such as input supply, processing, or distribution—can have cascading effects on industry-wide competition.

HHI: A measure of market concentration that considers the relative size distribution of the firms in a market and is calculated by summing the squares of the individual market shares of all the firms in the market. For example, for a market consisting of four firms with shares of 30%, 30%, 20%, and 20%, the HHI is 2,600 ($30^2 + 30^2 + 20^2 + 20^2 = 2,600$). It approaches zero when a market is occupied by a large number of firms of relatively equal size and reaches its maximum of 10,000 points when a single firm controls a market. The HHI increases both as the number of firms in the market decreases and as the disparity in size between those firms increases. Markets with HHI below 1,500 are considered to be competitive, 1,500–2,500 to be moderately concentrated, and above 2,500 to be highly concentrated. Additionally, transactions that increase the HHI by more than 100 in highly concentrated markets are presumed to be likely to enhance market power.

CR: Measures the market share held by the largest firms in a market, making this less comprehensive measure compared to the HHI. It is typically calculated as the sum of the market shares of the largest n firms, with CR4 (the market share of the largest 4 firms) and CR10 (the market share of the largest 10 firms) being common forms. A higher CR means the market is more concentrated. For example, CR > 80% indicates an oligopolistic market while CR < 40% suggests a more competitive market.

3.2 Literature review

Existing research on beef, coconut, and onion markets covers sector dynamics, trade policies, and competition concerns. However, few studies integrate sector performance, trade issues (APs, IPs, and QRs), and competition into a single framework. Studies on sectoral challenges and market concentration often overlook trade policy impacts on market access and value chain efficiency. Conversely, research on QRs and trade policies rarely examines their effects on competition and power imbalances within the value chain. This fragmentation calls for a more integrated approach to understanding the interaction between trade policies, competition, and market behaviour. This review synthesises existing literature identifies gaps and informs a comprehensive analysis of these critical sectors. Table 2 summarises key studies in this area.

Table 2: Summary of key research

Study	Highlights
Competitive Assessment of Onion Markets in India (2012)[11] ("2012 CCI Report")	Key learnings on the onion markets in India: ⇒ **Market structure**: The onion market is dominated by traders and commission agents, leaving farmers with minimal influence over price discovery. The average farm holdings are small, limiting farmers' ability to negotiate prices or hold produce for longer periods. Meanwhile, established traders and barriers to entry for new players contribute to an oligopolistic structure. ⇒ **Competition issues**: There is evidence of collusion among traders, particularly in major markets such as Lasalgaon and Ahmednagar. Practices like secret bidding and informal agreements between traders reduce market competition. Commission agents often align with wholesalers, creating anti-competitive dynamics that marginalise farmers. Long-standing dominance by certain commission agents and wholesalers creates significant barriers for new entrants, reinforcing the oligopolistic nature of the market. ⇒ **Price dynamics**: Onion prices are highly volatile due to both market inefficiencies and external shocks such as unseasonal rains. This volatility disproportionately affects farmers, who are unable to benefit from price increases, and consumers, who face inflated costs. Poor market linkages and speculative practices exacerbate price instability. Also, traders use hoarding as a tactic to create artificial supply shortages during lean seasons, especially around festivals and high-demand periods, leading to price spikes. ⇒ **Supply chain inefficiencies**: Limited storage facilities compel farmers to sell immediately after harvest, often at lower prices. Traders with access to better infrastructure gain disproportionate control over supply and pricing. ⇒ **Trade and export issues**: Export bans and the fixation of Minimum Export Prices (MEP) often disrupt market equilibrium, leading to both domestic oversupply and loss of credibility in international markets. These policies sometimes favour larger traders who manipulate the system.
Competition Issues in the Food Chain Industry (2014)[12] ("2014 OECD Report")	The 2014 OECD Report highlights the complexity of food supply chains, stressing that competition at all stages is vital for sector performance. Beyond selling power, buyer power also shapes market dynamics, particularly in relationships across the supply chain. The growing influence of downstream players—food processors, distributors, and retailers—can negatively impact farmers. In response, some governments have introduced codes of practice to ensure transparency and fairness in farmer integration. Rising concerns over food pricing have fuelled calls for greater transparency in price setting and transmission. Understanding how competition within and between supply chain stages affects price transmission from production to retail is essential.

[11] *Competition Commission of India (CCI) (2012). Competitive Assessment of Onion Markets in India.*

[12] *OECD (2014). Competition Issues in the Food Chain Industry. DAF/COMP (2014)16.*

Study	Highlights
Market Study on Food Sector in Indonesia (2018)[13] ("2018 KPPU Market Study")	The 2018 KPPU Market Study undertakes competition analyses of six food markets in Indonesia: rice, beef, shallots, chilis, sugar, and salt. These staple foods experienced significant price fluctuations with price spikes, which affected both producers and consumers. Key learnings on the beef market in Indonesia include: ⇒ **Market structure**: The beef market in Indonesia exhibits characteristics of both oligopsony (at the live cattle stage) and oligopoly (at the beef distribution stage). ⇒ **Competition issues**: The pricing is significantly influenced by a limited number of buyers and sellers, creating an imbalance in market power and pricing autonomy. Also, mergers and vertical integration exacerbate concentration and reduce the bargaining power of smaller market participants. ⇒ **Transportation and quality challenges**: The transportation of live cattle presents significant risks. Stress during transportation due to inadequate facilities results in weight loss, reduced meat quality, and occasional cattle mortality. Practices like overhydrating cattle ("glonggongan cattle") to artificially increase weight damage internal organs and compromise meat quality. ⇒ **Price dynamics**: Beef prices at the consumer level tend to be volatile and often do not fully reflect changes at the producer level. Price reductions at the consumer level are not consistently transmitted back to producers, indicating inefficiencies in price transmission. ⇒ **Trade and import issues**: Imported beef is often mixed with local beef and sold at higher prices, exploiting consumer perceptions of quality and inflating costs. This practice underscores a lack of transparency in the market. ⇒ **Regulatory and policy gaps**: Current regulations fail to adequately address competition and transparency issues within the beef market. Strengthened oversight and clearer policies are needed to mitigate these problems. Key learnings on the shallots market in Indonesia include: ⇒ **Market structure**: The shallot market in Indonesia is characterised by an oligopsony at the producer level, where a few buyers dominate and dictate prices. As the product moves up the value chain, it transitions into an oligopoly among wholesalers and retailers. A small number of large traders and wholesalers dominate access to central markets, limiting competition and market entry for smaller players. ⇒ **Barriers to market entry**: Wholesalers at central markets often restrict access to established suppliers due to long-term relationships, financial dependencies, or family connections. This creates significant barriers for new entrants and limits competition. Informal agreements and exclusivity among wholesalers and large traders exacerbate these access issues. ⇒ **Price dynamics**: Shallot prices exhibit significant volatility, especially at the consumer level, compared to relatively stable producer prices. Marketing margins—the difference between producer and consumer prices—are a major driver of this volatility. Consumers bear the brunt of these price fluctuations, while producers often do not benefit from price increases at the retail level. ⇒ **Supply chain inefficiencies**: The distribution of shallots depends heavily on wholesale markets near urban centres, such as Jakarta. This reliance increases logistical bottlenecks and contributes to inefficiencies in the value chain. ⇒ **Anti-competitive practices**: Large traders and wholesalers may engage in collusive practices to maintain high profit margins and restrict market access for other traders. These practices distort competition and create inefficiencies.

[13] *KPPU (2018). Market Study on Food Sector in Indonesia.*

Study	Highlights
	⇒ **Trade and import issues**: Shallot imports are used as a policy tool to stabilise prices during shortages. However, the import process can undermine local farmers, especially when imports are timed poorly or not transparently managed. ⇒ **Policy and regulatory concerns**: Regulatory mechanisms often fail to address market distortions and price volatility effectively. Oversight of central market practices and trader behaviour is inadequate.
Overview and Constraints of the Coconut Supply Chain in the Philippines (2020)[14] ("2020 IJFS Article")	The 2020 IJFS Article highlights the critical challenges and opportunities in the Philippine coconut supply chain, focusing on addressing production inefficiencies and enhancing global competitiveness. Key learnings include: ⇒ **Major exporter**: The coconut industry is critical for the Philippine economy, providing livelihood to one-third of the population. It is a major agricultural export sector, with products like copra, coconut oil, and desiccated coconut leading global exports. The Philippines is the second-largest global producer of coconuts and the leading exporter of coconut oil and copra cake, with key markets in the Netherlands, USA, Japan, and Europe. ⇒ **Supply chain**: The supply chain involves six key stakeholders: farmers, traders, processors, warehouses/distributors, wholesalers/retailers, and consumers. Coconut products have both domestic and international markets, but approximately 80% of production is exported, with 20% consumed domestically. Farmers sell nuts or copra to traders (community or town-level), who then channel these to processors or export markets. Processors include oil millers, refiners, and producers of non-edible oils or other by-products. ⇒ **Production issues**: A significant portion of coconut trees (15% of total) are ageing, with declining productivity and in need of replacement. Poor agronomic practices, lack of irrigation, pest outbreaks, and natural calamities (e.g., typhoons) further reduce productivity. ⇒ **Structural issues**: Small and fragmented landholdings and multi-layered marketing systems create inefficiencies. Farmers lack entrepreneurial skills and access to information, leaving them dependent on traders for price-setting and market access. ⇒ **Infrastructure issues**: Poor farm-to-market roads increase assembly costs. The milling and refining sectors face raw material shortages due to declining productivity and unorganised supply chains. ⇒ **Competition from substitutes**: Export volumes have declined since 2013 due to production losses caused by typhoons and ageing coconut trees. Coconut products face stiff competition from alternative tropical oils like palm oil in global markets. The global market perceives the Philippine coconut industry as an unreliable supplier due to fluctuating production and export volumes. ⇒ **Competition and pricing issues**: Traders hold significant control over pricing and market access, creating challenges for farmers who lack resources to negotiate or bypass intermediaries.
Trade for Economic Recovery: Import Policies to Support Indonesia's F&B Sector (2022)[15] ("2022 CIPS Study")	The 2022 Center for Indonesian Policy Studies (CIPS) Study discusses Indonesia's import policy to support its food and beverage (F&B) industry, of which beef and onions are key raw ingredients. Key learnings include: ⇒ **Non-tariff measures (NTMs)**: Both the beef and onion markets are heavily impacted by Indonesia's NTMs, which include sanitary and phytosanitary (SPS) regulations, technical barriers to trade (TBT), and pre-shipment inspections. These measures increase compliance costs and delay imports. Restricted imports in both sectors often result in supply shortages, price volatility, and reduced competitiveness for industries reliant on these inputs.

[14] *Marife Moreno, John K.M. Kuwornu, and Sylvia Szabo (2020). Overview and Constraints of the Coconut Supply Chain in the Philippines. International Journal of Fruit Science. 20(sup2). S524–S541.*

[15] *Felippa Amanta and Krisna Gupta (2022). Trade for Economic Recovery: Import Policies to Support Indonesia's F&B Sector. Policy Paper No. 51. CIPS.*

Study	Highlights
	⇒ **Beef markets**: • **Trade restrictions and quantitative limits**: Beef imports are tightly controlled through QRs and import licensing processes. For live animal and livestock, there are additional requirements including recommendation from the Ministry of Agriculture, proof of control of farm for buffalo, breeder cattle or feeder cattle import, and statement that slaughter will be conducted in a slaughterhouse. For beef products, additional measures include approvals based on supply-demand data and strict requirements for cold storage and transportation facilities. • **Regulatory complexities**: Import approval processes for beef involve multiple layers of bureaucracy, requiring recommendations from various agencies. This slows down the availability of imported beef, particularly during high-demand periods, exacerbating market inefficiencies. • **Impact on F&B industry**: Restrictions on beef imports affect the availability of raw materials for Indonesia's F&B industry. For example, chilled or frozen meat, which is crucial for certain F&B products, faces regulatory hurdles that limit accessibility and increase costs. ⇒ **Onion (shallot and garlic) markets**: • **QRs**: Shallots and garlic are subject to strict import quotas designed to protect local farmers and achieve self-sufficiency. However, this policy often leads to domestic shortages and high consumer prices during off-peak production seasons. • **Licensing system issues**: Similar to beef, onion imports require complex licensing processes that include technical recommendations and multiple levels of government oversight. Delays in approval can disrupt supply chains and lead to market inefficiencies. Additional measures required include supply, demand, and stock data, statement on capacity of appropriate transportation and storage, proof of control of transportation (ownership document and/or notarised lease agreement), and proof of control of cold storage (ownership document and/or notarised lease agreement).
Competition in the Food Supply Chain – Contribution from Indonesia (2024)[16] ("2024 OECD Study") Details are in section 7 of this study	The 2024 OECD Study is a contribution by the KPPU on the beef importation cartel case in 2016. Key learnings highlighted include: ⇒ **Growing demand for beef**: Beef is a critical part of the Indonesian diet, especially in urban areas, where demand is driven by population growth, rising incomes, and shifting dietary preferences. Domestic beef production faces challenges such as limited pastureland, high production costs, and disease outbreaks, leading to significant reliance on imports to fill supply gaps. ⇒ **Reliance on import**: Imports play a vital role in ensuring food security and price stability, especially during periods of high demand or production shortfalls. Indonesia imports beef primarily from Australia and New Zealand due to the quality similarity with local grass-fed beef and their proximity to Indonesia. ⇒ **Price volatility**: Beef prices in Indonesia are highly volatile, with spikes often linked to supply shortages during national or religious events. These price increases impact both consumers (by reducing purchasing power) and producers, who see limited benefits due to their low share of the value chain profits. ⇒ **Cartel in beef importation**: The KPPU found evidence of cartel practices among 32 cattle-importing companies (feed lotters) in 2013 and 2015. These companies were accused of restricting supply to drive up beef prices. Business actors colluded to withhold stock, creating artificial shortages that led to price spikes, negatively impacting slaughterhouses, consumers, and smaller market players. ⇒ **Regulatory gaps**: Import quotas and their allocation lacked transparency, with affiliated business groups controlling up to 61% of the market in 2015. This market dominance allowed them to manipulate supply and prices. ⇒ **Corruption and bribery**: Cases of bribery in the beef import system involved government officials and importers, where import quotas were adjusted for financial incentives. This undermined fair competition and exacerbated supply issues.

[16] *OECD (2024). Competition in the Food Supply Chain – Contribution from Indonesia. DAF/COMP/GF/WD (2024)54.*

4.0 Study Background

Malaysia faces a dual challenge of high import reliance and the historical use of QRs (APs and IPs) to regulate food and agricultural imports. The rising food import bill, driven by growing demand for staples and processed foods, increases food security risks and exposure to external shocks like price volatility and supply disruptions. The longstanding use of QRs has significantly influenced market access and trade efficiency, shaping agricultural policy and self-sufficiency goals. Understanding these dynamics is key to aligning policy with national economic resilience.

This study recognises the complexity in the discussion on the APs and IPs for the beef, coconut, and onion markets in Malaysia as it intersects with a few subject areas:

Sector/market study

Malaysia's past use of APs and IPs, and the ongoing implementation of IPs, reflects its approach to regulating key agricultural imports to protect domestic interests. APs historically helped manage market access, stabilise prices, and shield local producers from the impact of unrestricted imports. Beyond trade regulation, APs and IPs are linked to food security, rural development, and sustainable agriculture policies. In this context, SPS measures are crucial for safeguarding animal and plant health. International SPS standards—set by the Codex Alimentarius Commission (CAC), World Organisation for Animal Health (WOAH), and the International Plant Protection Convention (IPPC)—ensure imports do not introduce pests, diseases, or other risks to domestic agriculture. For instance, WOAH standards help control zoonotic diseases and livestock health risks in imported livestock and meat. IPPC standards guide the management of plant health risks in imports such as onions and coconuts.

International trade law

APs and IPs serve as trade policy tools to limit imports of specific goods in Malaysia. As QRs and NTBs, they fall under international trade law and are permissible exceptions under the World Trade Organization's (WTO) Agreement on Agriculture (AoA) and Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement). However, their implementation raises concerns over transparency, market efficiency, and compliance with global trade norms. These concerns have been scrutinised in WTO Trade Policy Review (TPR) sessions, highlighting the need for reform and greater regulatory clarity.

Competition policy and law

APs and IPs influence market structure and competition by regulating import access, which can create barriers to entry or foster market concentration. Aligning SPS measures with international standards from the CAC, WOAH, and IPPC enhances transparency and prevents unnecessary market distortions. Overly restrictive SPS standards or improperly implemented APs and IPs may favour certain players while limiting competition. To mitigate this, Malaysia's evidence-based approach to animal and plant health management ensures fair competition, protects domestic producers and consumers, and safeguards biosecurity without distorting the market.

This overlap underscores the need for a balanced approach in designing and enforcing of QRs and SPS measures to meet policy objectives without distorting markets. By aligning with WOAH and IPPC standards, Malaysia can protect its agricultural sector while maintaining compliance with international trade rules. This section outlines Malaysia's international trade policy and explores the link between trade law and the agriculture sector. Section 7 will examine the competition issues arising from QRs implementation.

4.1 The National Agro-Food Policy, 2021 – 2030 (NAP 2.0)

The Malaysian government has introduced several food policies to support agricultural sector growth, with the latest being the National Agro-Food Policy, 2021 – 2030 (NAP 2.0). Effective since September 2022, NAP 2.0 builds on the foundation of the National Agro-Food Policy, 2011 – 2020 (NAP4). Its core objective is to safeguard food security by transforming the national food system. Table 3 provides an overview of the NAP 2.0.

Table 3: Overview of the NAP 2.0

	Description
Areas for transformation	1. Modernisation and development of the agri-food sector to be more sustainable, resilient, and highly technology driven. 2. Improving the wellbeing of the people through the attention paid to food security and nutrition. 3. Ensuring environmental sustainability.
Policy thrusts	1. Modernisation and smart agriculture. 2. Strengthening market and product access. 3. Human capital development. 4. Food system sustainability. 5. Creating conducive business ecosystems and governance.

Source: MAFS

Beyond providing policy guidance for the food industry and specific sub-sectors, NAP 2.0 outlines strategies and action plans to be led and implemented by relevant ministries and government agencies. The government monitors progress through key performance indicators (KPIs) tied to each action plan, ensuring accountability and effective implementation.

With regard to beef, coconut, and onion, it can be observed that:

The NAP 2.0 forecasted the SSL for beef to be stagnant at 22.8% in 2030, with a CAGR of 0.03% from 22.7% in 2021. Total domestic production was forecasted to grow at a CAGR of 1.72% from 46,230mt in 2021 to 53,920mt in 2030, not keeping pace with consumption which was expected to grow at a CAGR of 1.70% from 210,060mt in 2021 to 236,790mt in 2030. As such, Malaysia will continue to import beef, with a forecast total import value of RM1.48bn in 2030 from RM2.11bn in 2021 (CAGR of 13.86%).

The NAP 2.0 does not address coconuts specifically but includes them under high value commodities (HVC). Coconuts are grouped with products like edible birds' nest, ornamental fish, seaweed, herb and spices, floriculture, mushroom, guarana, *kelulut* honey, durian, and pineapple.

There was no specific discussion on onions in the NAP 2.0.

The NAP 2.0 recognises the issues and challenges within the coconut and beef sub-sectors – these are summarised in Table 4.

Table 4: Issues and challenges in the coconut and beef sub-sectors

Products	Issues and Challenges
Coconut	1. Lack of investment. 2. Small production volumes. 3. Poor branding and competition from neighbouring countries (e.g., Thailand). 4. Lack of regulation to address impact on the environment and community.
Beef	1. Infectious virus and diseases. 2. Dependency on imported feed. 3. Unlicensed slaughtering of livestock. 4. Manpower shortage. 5. High barrier to entry for new entrepreneurs. 6. Lack of quantity and quality cattle breeds for breeding. 7. Low awareness of animal husbandry best practices. 8. Improper feeding management system. 9. Challenges in the implementation of ruminant-oil palm integration.

Source: MAFS

While onions are not covered in NAP 2.0, in 2023, MAFS launched the Onion Cultivation Development Project, starting in 2024.[17] On 28 February 2024, the MAFS Minister announced a target of 14,470mt of local onion production by 2026, across 1,374ha, aiming for a 30% SSL by 2030.[18] The project initially involves six states: Perak, Selangor, Perlis, Penang, Pahang, and Kelantan, with potential expansion to Sabah and Sarawak.[19,20] Additionally, MARDI plans to establish Besut, Terengganu as a red onion cultivation hub.[21] Progress includes Perak's pilot project, which yielded 3.3mt from 1ha, with plans to expand cultivation to 10ha in Phase 2.[22]

[17] *The Star (2024). Perak first to harvest homegrown onions.*
[18] *BERNAMA (2024). Govt keen to expand planting of onions to Sabah and Sarawak.*
[19] *See footnote 11.*
[20] *See footnote 12.*
[21] *BERNAMA (2024). MARDI to establish Besut as red onion cultivation hub in Terengganu.*
[22] *See above.*

4.2 National Beef Industry Development Strategic Plan 2021-2025[23]

The National Beef Industry Development Strategic Plan 2021-2025 (BIF Plan) is developed by the DVS and the MAFS. The BIF Plan highlights the following rationales for a strategic plan for the industry:

Reducing import dependency: To reduce Malaysia's significant dependence on the importation of livestock from Australia and Thailand for its domestic consumption.

Increasing local production: To meet domestic demand for meat, and to improve Malaysia's SSL for beef (target of 50% by 2025). This will ensure food security through a stable and sufficient supply of meat.

Sustainable industry growth: To promote sustainable practices in the industry, ensuring long-term growth and stability. This also entails optimising production costs and strengthening the production and market chain to make the industry more efficient and competitive.

The issues and challenges in the ruminant meat industry as outlined in the BIF Plan 2021-2025 include:

01 **High production costs**: Increasing costs of feed, labour, and other inputs make it difficult to maintain profitability and competitiveness.

02 **Low basic livestock population**: The current population of breeding stock is insufficient to meet the growing demand for meat.

03 **Competition with imported frozen meat**: Lower-priced imported meat from countries like India challenges the local fresh meat market.

04 **Insufficient financial resources**: Limited financial resources for development programmes hinder the ability to import quality breeding stock and implement large-scale projects.

05 **Lack of suitable farming areas**: There is a shortage of suitable land for livestock farming, and the use of land in palm oil plantations depends on the policies of plantation companies. There is also lack of interest in livestock farming by the government-linked companies (GLCs) which own large tracts of land.

06 **Skilled labour shortage**: There is a lack of skilled labour in the industry, which affects the efficiency and productivity of livestock farming operations.

[23] *MAFS (2021). Pelan Strategik & Tindakan Pembangunan – Industri Pedaging Negara 2021 – 2025.*

07 **Disease threats**: Diseases such as FMD and brucellosis pose significant risks to livestock health and productivity.

08 **Market competition**: The local fresh meat market faces competition from imported frozen meat, which can be sold at lower prices, affecting the profitability of local producers.

09 **Policy and regulatory changes**: Changes in government policies and regulations at various levels can impact the implementation of development plans and the overall growth of the industry.

10 **Long investment return period**: The long period required to see returns on investment in livestock farming can deter potential investors and farmers from entering or staying in the industry.

The BIF Plan also highlighted the regional development that affected the industry in Malaysia, especially in terms of securing stable and sustainable supply of meat:

Political changes in exporting countries: Political changes in major exporting countries like India and Australia can impact their export policies, affecting Malaysia's ability to secure livestock and meat supplies. For example, changes in the Indian government can lead to shifts in export policies, including restrictions or bans on the export of livestock and meat.

Export Supply Chain Assurance System (ESCAS): Australia has implemented ESCAS, which involves monitoring livestock management from Australia to the importing country, emphasising animal welfare. This system can influence the supply chain and availability of livestock for Malaysia.

Increased demand from other countries: Economic growth in countries like China, Indonesia, Thailand, and Vietnam led to increased demand for ruminant meat, creating competition for limited supplies from major exporters like Australia, New Zealand, Brazil, Pakistan, and India.

China's rising demand: China's rapid urbanisation and improved living standards have significantly increased its demand for meat, impacting global supply and competition in the market.

ASEAN import quotas: Countries like Indonesia, Vietnam, and Thailand have increased their import quotas from Australia to meet domestic demand, affecting the availability and pricing of livestock and meat for Malaysia.

Dependence on imports: Malaysia's reliance on imported meat and livestock poses a risk to long-term supply sustainability, especially with increasing competition and limited availability from exporting countries.

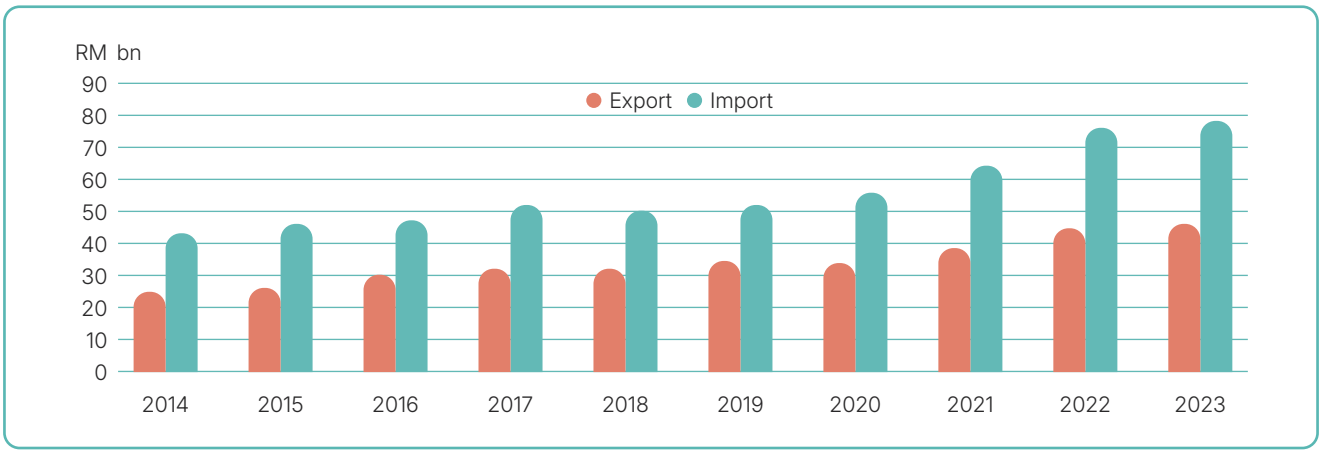
The BIF Plan then identified the following 12 strategies to address these issues and challenges:

01	**Increasing the capacity of the ruminant industry**: Increasing the population of quality breeding stock and enhancing breeding services.
02	**Intensifying the development of ruminant farms**: Encouraging the involvement of private companies and palm oil plantations in ruminant farming.
03	**Increasing the production of local animal feed**: Providing incentives for the production of fodder and silage and stabilising the price of palm kernel cakes.
04	**Building the capacity and competence of livestock entrepreneurs**: Developing skilled labour and providing continuous guidance to potential farmers.
05	**Improving the quality of veterinary technical services**: Establishing Veterinary Extension Centres (VetEC) and enhancing the management of livestock assistance schemes.
06	**Providing initial capital for ruminant farming**: Strengthening financing mechanisms and providing suitable farming areas.
07	**Focused and continuous research and development (R&D)**: Conducting R&D in breeding, nutrition, production systems, and market demand for fresh meat.
08	**Strengthening disease control programmes**: Improving disease control practices at the farm and national levels, as well as promoting good farming practices.
09	**Establishing strategic partnerships with local and international parties**: Increasing collaboration opportunities in the ruminant industry.
10	**Optimising land use**: Implementing integrated farming programmes and establishing clear land use policies for livestock production.
11	**Enhancing meat marketing**: Enhancing the concept of fresh meat marketing centres and promoting high-value meat markets.
12	**Streamlining and strengthening the meat value chain system**: Improving slaughterhouse regulations, meat labelling, and logistics services.

4.3 Malaysia has a high reliance on imported food products

The 2019 Market Review by MyCC observed the rising food import bill for Malaysia between 2013 and 2017. Indeed, Malaysia is a net importer of food products and the gap between its food export and import has widened in the past ten years – see Figure 1.[24] In 2023, Malaysia exported RM46.5bn and imported RM78.8bn worth of food products, bringing the net import to RM32.3bn. This compares to the total food export and import of RM25.7bn and RM42.6bn, respectively in 2014, which resulted in the net import of RM17.0bn. Table 5 describes the latest import and export trends for beef, coconut, and onion.

Figure 1: Food import and export for Malaysia between 2014 and 2023



Source: DOSM

Table 5: Import and export of beef, coconut, and onion

Product group	Description
Fruits: Coconut[25]	In 2023, coconut led the fruits sub-sector with the highest production at 623,663mt, valued at RM1.0bn. The planted area stood at 79,412ha, and it was the most consumed fruit, with 24.9 kg/year. However, SSL declined to 70.3%, while the IDR rose slightly to 30.6%.
Vegetables: Onion[26]	In contrast to coconuts, the onion[27] market remains fully import-dependent due to past policies that favoured imports over local production, citing uneconomical domestic cultivation. As a result, Malaysia is now one of the world's largest onion importers.[28] In 2023, the SSL was 0% and the IDR remained 100%, consistent with previous years. In 2022, per capita consumption was 14.8kg, supported entirely by imports totalling 485,127mt.
Meat and livestock: Beef[29]	In 2023, beef was the third most consumed livestock product in Malaysia with per capita consumption of 6.7kg. Local production rose to 38,667mt in 2023 (2022: 35,934mt; 2018: 40,043mt). To meet demand, Malaysia continues to rely heavily on imports, reflected in its rising IDR (2023: 84.5%, 2022: 85.6%; 2018: 76.7%) and decreasing SSL (2023: 15.9%, 2022: 14.7%; 2018: 23.7%).

Source: DOSM

[24] *DOSM (2023). Monthly External Trade Statistics, December 2023.*
[25] *MAFS (2024). Malaysia Agrofood in Figures, 2023.*
[26] *DOSM (2023). Selected Agricultural Indicators, 2023.*
[27] *DOSM report refers to onions in general.*
[28] *Feedback received from participants in the FGD1 in Kota Kinabalu, Sabah (26 June 2024).*
[29] *MAFS (2024). Malaysia Agrofood in Figures, 2023.*

4.3.1 Global live cattle and buffalo exporting countries

According to World Bank's World Integrated Trade Solution (WITS) data, 141 countries exported live cattle and buffaloes in 2023. Live cattle and buffalo exports were valued at USD9,126.9mn, with 68.2% concentrated among the top ten exporters (see Table 6). France and Canada alone accounted for 34% of the total, highlighting their dominance in the global market.

Table 6: Top 10 live cattle and buffalo exporting countries, 2023

No.	Country	USDmn	Market share (%)
1	France	1,754.1	19.2
2	Canada	1,348.9	14.8
3	Australia	632.6	6.9
4	Brazil	488.7	5.4
5	Mexico	424.1	4.7
6	US	419.2	4.6
7	Netherlands	302.9	3.3
8	Spain	301.6	3.3
9	Czech Republic	285.0	3.1
10	Germany	271.2	3.0
	Total	**6,228.3**	**68.2**

Source: WITS

4.3.2 Global beef and buffalo meat exporting countries

In 2023, global beef and buffalo meat exports totalled USD62,560.5mn, with the market more concentrated than the live cattle and buffalo trade. The top ten exporters accounted for 74.3% of the total, with Brazil, the US, and Australia alone contributing 41.4%, underscoring the dominance of a few major players in the global market (see Table 7).

Table 7: Top 10 beef and buffalo meat exporting countries, 2023

No.	Country	USDmn	Market share (%)
1	Brazil	9,495.4	15.2
2	US	8,581.7	13.7
3	Australia	7,660.2	12.2
4	Netherlands	3,467.7	5.5
5	India	3,306.7	5.3
6	Canada	3,299.1	5.3
7	Ireland	2,820.8	4.5
8	Argentina	2,758.8	4.4
9	New Zealand	2,714.6	4.3
10	Poland	2,372.4	3.8
	Total	**46,477.4**	**74.3**

Source: WITS

Source: MyCC

4.3.3 Global coconut exporting countries

In 2023, Thailand led global coconut exports with USD453.7mn, followed by Indonesia and the Philippines (see Table 8). Together, these three countries accounted for 68.3% of global export value. Thailand primarily exported to China, while the Philippines' main markets included the US, the Netherlands, and China.

Table 8: Top 10 coconut exporting countries, 2023

No.	Country	USDmn	Market share (%)
1	Thailand	453.7	31.6
2	Indonesia	277.4	19.3
3	Philippines	250.1	17.4
4	Sri Lanka	90.9	6.3
5	India	84.5	5.9
6	Netherlands	77.9	5.4
7	Singapore	33.0	2.3
8	Germany	22.5	1.6
9	United Arab Emirates	17.5	1.2
10	Mexico	14.7	1.0
	Total	**1,322.1**	**92.1**

Source: WITS

Source: MyCC

4.3.4 Global onion exporting countries

With a total market size of USD5,051.0mn in 2023, the Netherlands accounted for 23.3% of global onion exports, making it the largest onion exporter in the world. It was followed by China (12.9%) and India (12.7%), further emphasising the significant role of these countries in the global onion trade. Collectively, the top ten exporters dominated the market, contributing 79.9% of the total export value (see Table 9), highlighting a high level of concentration in the industry.

Table 9: Top 10 onion exporting countries, 2023

No.	Country	USDmn	Market share (%)
1	Netherlands	1,174.5	23.3
2	China	650.5	12.9
3	India	642.7	12.7
4	Mexico	448.2	8.9
5	US	298.7	5.9
6	Spain	261.8	5.2
7	Egypt	206.8	4.1
8	Poland	144.8	2.9
9	New Zealand	105.6	2.1
10	Peru	103.7	2.1
	Total	**4,037.4**	**79.9**

Source: WITS

4.4 Malaysia's international trade policy

Trade has been a key driver of growth for Malaysia. Indeed, Malaysia is one of the most globally integrated economies in the world – in 2023, the WTO ranked Malaysia 26th globally for both total merchandise exports and imports at USD312.8bn and USD265.7bn, respectively.[30]

4.4.1 Principles and objectives of Malaysia's international trade policy

The core principles of Malaysia's international trade policy revolve around liberalisation, diversification, and regional integration. The main objectives include:

Promoting export growth	Diversifying export markets and products	Enhancing regional and global trade relations
Malaysia's trade policy aims to boost export competitiveness, with government support directed towards sectors that significantly contribute to export earnings, including manufacturing, electronics, palm oil, and rubber products.	To reduce reliance on specific markets or products, Malaysia is working to diversify trade partners and expand into new markets. This includes promoting exports from non-traditional sectors such as services, HVCs, and Halal-certified products.	Malaysia is an active participant in regional and global trade agreements. It has a strong commitment to multilateral trade systems under the WTO, but it is also deeply integrated into regional trade networks within ASEAN and beyond.

4.4.2 Key elements of Malaysia's international trade policy[31]

Malaysia's international trade policy has evolved from being single-track, that is, focusing negotiations at the multilateral trading system of the WTO to multi-track, which also includes negotiations of free trade agreements (FTAs) at plurilateral, regional, and bilateral levels with like-minded trading partners.

Multilateral engagement and compliance with WTO: Malaysia has been a WTO member since 1995 and was previously part of the General Agreement on Tariffs and Trade (GATT) since 1957. As a WTO member, Malaysia is committed to reducing tariffs, elimination of NTBs, and complying with intellectual property rights agreements, in line with global trade rules.

Tariff reductions and trade liberalisation: Malaysia's WTO commitments have led to tariff reductions on many goods, boosting trade. However, sensitive sectors—especially agriculture—remain protected through market access measures including tariff and NTMs to safeguard local producers.

Dispute settlement and trade rules compliance: Malaysia is also engaged in WTO's dispute settlement mechanism to resolve trade disputes and ensure compliance with international trade rules, which helps in maintaining stable trade relations.

[30] *WTO (2024). WTO Stats Dashboard. at https://stats.wto.org/dashboard/merchandise_en.html*

[31] *For latest updates, please see: MITI (2024). Free Trade Agreement at: https://www.miti.gov.my/index.php/pages/view/1844*

Plurilateral, regional, and bilateral FTAs: Malaysia has been proactive in negotiating bilateral, regional, and multilateral trade agreements, which are crucial for expanding market access and strengthening trade relations. Key agreements include:

Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP): Malaysia is a member of the CPTPP, a 12-country trade pact that reduces tariffs and sets rules on trade, investment, labour, and the environment. It expands Malaysia's market access, particularly to Latin America and North America, boosting export potential.

Regional Comprehensive Economic Partnership (RCEP): The RCEP, one of the world's largest FTAs includes 15 countries: all 10 ASEAN Member States, China, Japan, South Korea, Australia, and New Zealand. It harmonises rules and standards, reduces tariffs, and simplifies customs. Malaysia's participation expands market access and lowers trade barriers with key partners.

Bilateral FTAs: Malaysia has signed several bilateral FTAs with key trading partners, including Australia, Chile, India, Japan, New Zealand, Pakistan, Türkiye, and United Arab Emirates (UAE). These agreements help enhance market access and promote investments between Malaysia and its partners by reducing tariffs and easing trade regulations, including behind-the-border measures.

Box 1: At-the-border versus behind-the-border measures

At-the-border measures directly regulate the flow of goods into and out of a country while behind-the-border measures focus on shaping the domestic market and regulatory environment. Both types of measures significantly influence international trade dynamics and are often interconnected, affecting market access, competitiveness, and trade policy outcomes.

Aspects	At-the-border measures	Behind-the-border measures
Application point	At the point of entry or exit of goods.	Within the domestic economy, affecting production and trade indirectly.
Focus	Controlling international trade flows.	Regulating domestic markets and industries.
Objectives	Revenue generation, trade regulation, and protectionism.	Ensuring quality, promoting competitiveness, and meeting societal objectives.
Impact on trade	Direct and visible impact on the cost and flow of goods.	Indirect impact through domestic regulations and market structure.
Examples	Tariffs, quotas, import bans, customs procedures.	Regulatory standards, subsidies, competition laws, IPR enforcement.

Illustrative example:

⇒ **At-the-border measure**: Malaysia imposes between 5% and 20% tariff on imported rice to protect local farmers from cheaper foreign rice.

⇒ **Behind-the-border measure**: Malaysia provides subsidies to local rice farmers to lower their production costs and remain competitive with imported rice.

4.5 Malaysia's international commitments and the agriculture sector[32]

Agriculture has long been a critical and complex area in international trade, reflecting its importance not only in economic terms but also for food security, rural livelihoods, and cultural significance across countries. Under the framework of the WTO and its predecessor, the GATT, agriculture has historically been treated differently from other sectors. This differential treatment has been due to the sector's sensitivity and the extensive use of subsidies, tariffs, and trade barriers by countries to protect their domestic agriculture.

4.5.1 Agriculture under the GATT: Pre-WTO Era

Before the formation of the WTO in 1995, international trade was governed by the GATT agreements established in 1947. The GATT was aimed at reducing tariffs and other trade barriers, fostering a rules-based global trading system. However, agriculture was exempted from many of the liberalisation efforts seen in other sectors. Key reasons for this included:

Domestic sensitivity: Many countries have deep-seated interests in protecting their agricultural sectors due to the role they play in rural employment, cultural traditions, and national food security. As a result, there was heavy use of trade barriers like tariffs, quotas, and subsidies to shield domestic farmers from foreign competition.

Strategic importance: Agriculture is also seen as a strategic sector because of its direct link to food security. Ensuring stable food supplies and safeguarding farmers' incomes have been important policy goals for many countries, justifying the use of protectionist measures.

Lack of comprehensive rules: The GATT framework initially did not impose strict rules on agricultural subsidies and NTBs, leading to widespread use of QRs, export subsidies, and other forms of protectionism.

During the GATT era, agriculture was largely exempted from the general rules that discouraged QRs (as laid out in GATT Article XI) and the use of subsidies. Countries were allowed to maintain import quotas, export subsidies, and domestic support programmes, leading to a distorted global agricultural market.

[32] *For latest updates, please see: WTO (2024). Agriculture at: https://www.wto.org/english/tratop_e/agric_e/agric_e.htm*

4.5.2 Transition to the WTO and the Agreement on Agriculture (AoA)

The creation of the WTO in 1995 marked a significant shift in how agricultural trade was regulated globally. As part of the Uruguay Round (1986-1994) negotiations, the AoA was established, bringing agriculture under a more structured set of international trade rules for the first time. The AoA aimed to address the imbalances and trade distortions caused by heavy subsidies and trade barriers by introducing key reforms:

Market access

One of the main objectives of the AoA was to improve market access for agricultural products by reducing tariffs and other barriers:

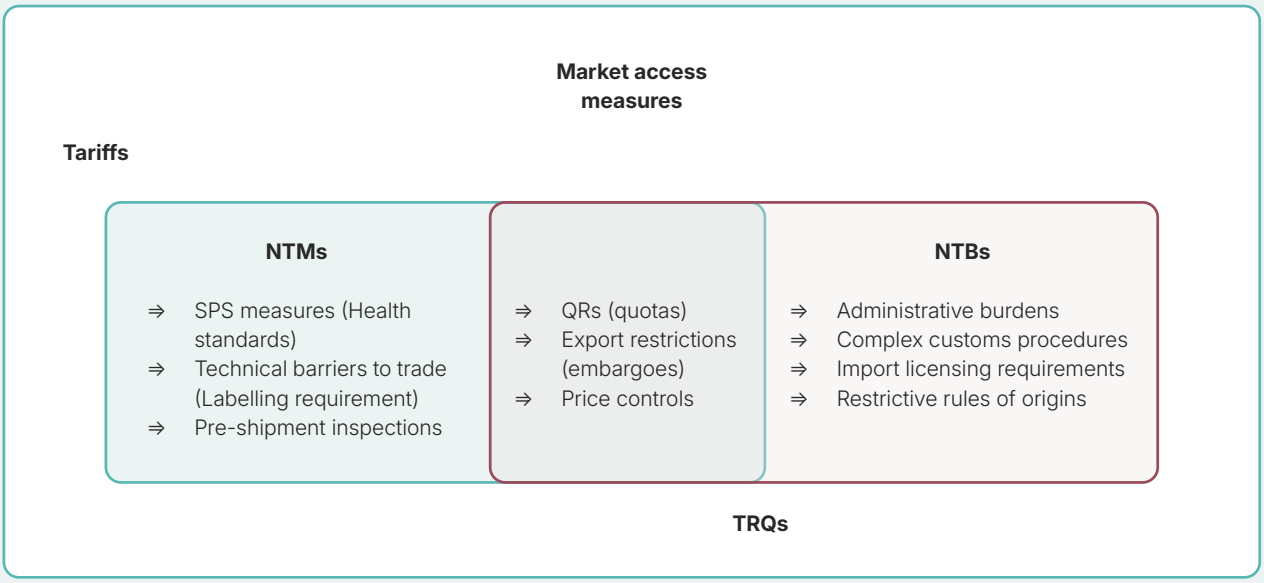
Tariffication	Tariff reduction commitments	Tariff-rate quotas (TRQs)
Countries were required to convert their existing NTBs including QRs, such as import quotas and licences, into tariffs, a process known as tariffication. This made trade measures more transparent and predictable.	Developed countries agreed to reduce their tariffs on agricultural products by an average of 36% over six years, while developing countries committed to a 24% reduction over ten years. Least developed countries (LDCs) were not required to make such cuts.	To ensure a minimum level of market access, countries could use TRQs, which allow a specific quantity of imports to enter at a lower tariff rate, while higher tariffs apply beyond this quota. This mechanism helped balance the need for liberalisation with the protection of sensitive domestic markets.

Box 2: Market access measures

Market access measures play a central role in international trade by regulating the conditions under which goods enter a market. These measures include tariffs, NTMs, NTBs, and TRQs, each with distinct mechanisms and implications for trade. While these instruments are designed to achieve various policy goals, their application can sometimes lead to distortions in competition and challenges under WTO rules.

Market access measures	Details	Compliance with WTO rules
Tariffs	Tariffs are taxes imposed on imported goods, typically calculated as a percentage of the product's value (ad valorem) or based on quantity (specific tariffs). Generate revenue for the government and protect domestic industries by raising the cost of imported goods.	Regulated under the GATT, tariffs must comply with bound rates and be applied uniformly to all WTO members (most-favoured nation principle).

Market access measures	Details	Compliance with WTO rules
NTMs	NTMs are regulatory and procedural measures other than tariffs that impact trade, including technical standards, labelling requirements, SPS measures, and import licensing. Address legitimate policy goals such as health, safety, and environmental protection.	NTMs must adhere to principles of non-discrimination, scientific justification, and necessity under agreements such as the WTO SPS and WTO TBT Agreements.
NTBs	NTBs are NTMs that have become unnecessarily trade-restrictive or discriminatory, acting as barriers to market access.	NTBs are generally inconsistent with WTO rules unless justified under exceptions such as health or environmental protection (e.g., GATT Article XX).
Tariff rate quotas (TRQs)	TRQs combine elements of tariffs and quotas by allowing a specified quantity of imports at a lower tariff rate, with higher tariffs applied to volumes exceeding the quota. Provide controlled market access while protecting domestic industries.	TRQs are permissible under WTO agreements as long as they are transparently managed and non-discriminatory.



While distinct, tariffs, NTMs, NTBs, and TRQs are interconnected tools of import policy:

Tariffs and TRQs

TRQs incorporate tariffs but differentiate between in-quota (within limit) and out-of-quota (outside limit) rates, blending volume restrictions with pricing mechanisms.

NTMs and NTBs

NTMs are broad, encompassing measures aimed at legitimate policy goals. However, when NTMs become overly restrictive, discriminatory, or lack justification, they transform into NTBs.

Tariffs and NTMs

Governments may use NTMs as alternatives to tariffs in regulated sectors such as food safety or environmental protection.

Although NTMs are legitimate tools for addressing health, safety, and environmental concerns, they can become NTBs under certain conditions:

Discrimination

NTMs that apply stricter standards to imported goods than to domestic products create an uneven playing field. Example: Requiring additional inspections for imported meat while exempting domestic suppliers.

Lack of scientific justification

NTMs must be based on scientific evidence under WTO rules. Measures lacking such justification are considered arbitrary. Example: Banning genetically modified organisms (GMOs) without evidence of harm.

Procedural barriers

Complex licensing requirements, delays in approvals, or non-transparent procedures can restrict market access. Example: Lengthy testing processes for imported fruits that render them unmarketable due to perishability.

Excessive stringency

Setting standards that are far more restrictive than international norms create unnecessary barriers. Example: Requiring zero pesticide residues when international standards allow minimal levels.

Inequity in access

Can disproportionately affect low-income households by increasing prices for staple goods, exacerbating food insecurity and inequality.

Domestic support

The AoA sought to discipline the use of domestic subsidies, which were classified into three categories known as "boxes":

Amber Box: This includes trade-distorting subsidies that must be reduced. These are directly linked to production and can cause overproduction and market distortion. Developed countries committed to reduce these subsidies by 20% over six years, while developing countries by 13% over ten years.

Blue Box: These are subsidies that are considered less trade-distorting because they involve production-limiting programmes. Payments are allowed as long as they are tied to fixed areas or yields or set to a specific number of animals. The Blue Box was introduced as a compromise, primarily to accommodate the EU Common Agricultural Policy (CAP).

Green Box: Green Box subsidies are those that have minimal or no trade-distorting effects. These include programmes such as agricultural research, pest and disease control, and infrastructure development. Green Box subsidies are allowed without limits, as long as they do not distort trade. Examples include subsidies for environmental protection or food aid programmes.

Export competition

The AoA also aimed to reduce trade distortions caused by export subsidies, which were heavily used by developed countries, especially in the EU and the US. These subsidies allowed products to be sold internationally at prices lower than their production cost, which undermined the competitiveness of farmers in developing countries.

Commitments to reduce export subsidies

Developed countries agreed to reduce the volume of subsidised exports by 21% and the value of export subsidies by 36% over six years. Developing countries were granted longer timelines and smaller reduction commitments. The aim was to eliminate export subsidies entirely, a commitment reaffirmed in the 2015 Nairobi Ministerial Declaration, where WTO members agreed to end all remaining agricultural export subsidies.

Special and Differential Treatment (SDT) for developing countries

Recognising that developing countries have different needs and challenges, the AoA provides for SDT. This means that developing and least developed countries (LDCs) are given greater flexibility and longer time frames to meet the commitments:

Lower reduction commitments: Developing countries have to make lower percentage reductions over longer periods compared to developed countries.

Special Safeguards (SSG): Developing countries can apply special safeguards to protect their domestic markets from sudden import surges or price declines, even if they do not have existing tariffs that allow such actions.

Support for food security and rural development: Developing countries are permitted to use subsidies and measures that support domestic food security and promote rural development without being subject to strict reductions.

Exceptions under GATT for Agriculture (Article XI.2 and AoA Provisions)[33]

Although QRs are generally prohibited under GATT Article XI, exceptions are allowed in the context of agriculture, particularly when they serve specific policy goals:

Article XI.2(c) for Agricultural and Fishery Products: This allows countries to use QRs to implement government measures that limit the quantities of agricultural or fishery products, provided these are part of a programme influencing production or marketing. Examples include policies aimed at price stability or stock management within broader agricultural policies.

WTO AoA Provisions: The AoA permits countries to use certain restrictions to ensure food security and stabilise domestic markets, but these must be consistent with agreed commitments. For example, a developing country may impose temporary import restrictions to protect local farmers from a surge in cheap imports that could disrupt the domestic market.

[33] *WTO (1995). Agreement on Agriculture at: https://www.wto.org/english/docs_e/legal_e/14-ag_01_e.htm*

4.5.3 WTO Agreement on the Application of Sanitary and Phytosanitary Measures[34]

The Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement) under the WTO governs how countries apply health and safety measures in international trade. It aims to balance trade liberalisation with the right to protect human, animal, and plant health, emphasising scientific justification, harmonised standards, transparency, and non-discrimination.

Countries may enforce such measures if scientifically supported, covering areas like food safety, animal health, and plant protection. The agreement also seeks to prevent these measures from becoming disguised trade barriers—health-related import restrictions citing health concerns must be based on credible risk assessments and not arbitrarily target specific countries or products.

Harmonisation and international standards

To minimise trade disruptions, the SPS Agreement (Article 3) encourages members to align measures with international standards. Key standard-setting bodies include the Codex Alimentarius Commission (food safety), the World Organisation for Animal Health (WOAH), and the International Plant Protection Convention (IPPC). Countries may adopt stricter standards, but these must be scientifically justified, not used as protectionist tools.

Equivalence and regional adaptation

The principle of equivalence, outlined in Article 4, allows countries to recognise alternative measures by trading partners if they achieve the same level of health protection. For instance, an exporter's unique method of disease control could be deemed acceptable, provided it ensures comparable safety outcomes.

Additionally, Article 6 emphasises adaptation to regional conditions, such as disease-free zones or pest-free areas. Blanket restrictions on imports must consider variations in risks across different regions, promoting more targeted and fair regulations.

Scientific justification and risk assessment

Central to the SPS Agreement is the requirement for measures to be based on scientific principles. Article 5 mandates that members conduct risk assessments to evaluate potential threats to health, using scientific data as the foundation for any restrictions. Additionally, countries are allowed to establish their Appropriate Level of Protection (ALOP) to manage risks, though they must aim to minimise negative trade impacts.

In cases of uncertainty, Article 5.7 permits the adoption of provisional measures based on available scientific information. These measures must be reviewed as new evidence becomes available, ensuring that temporary actions remain justifiable.

[34] *Text of the SPS Agreement can be accessed at: https://www.wto.org/english/tratop_e/sps_e/spsagr_e.htm*

Transparency and notification

Under Article 7 and Annex B, countries must promptly notify the WTO of new or amended SPS measures that may affect trade. They are also required to provide opportunities for stakeholders to comment on proposed changes. Each member must establish a national inquiry point to respond to information requests, fostering openness and collaboration in trade-related health policies.

Control and inspection procedures

Fair and efficient control procedures are critical to trade facilitation. Article 8 and Annex C require countries to conduct testing, inspection, and approval processes without undue delays or discrimination. These provisions ensure that regulatory procedures do not become de facto trade barriers.

Implementation and dispute resolution

The SPS Agreement includes robust mechanisms for resolving disputes, which often arise from disagreements over the scientific basis or necessity of specific measures. The WTO's dispute settlement process allows members to challenge SPS measures they believe to be unjustified, with input from scientific and technical experts when necessary. This ensures that disputes are resolved fairly and transparently.

4.5.4 WTO Agreement on Technical Barriers to Trade[35]

The Agreement on Technical Barriers to Trade (TBT Agreement) is an agreement under the WTO that regulates unnecessary obstacles to trade while allowing countries to implement legitimate technical regulations and standards. It plays a critical role in ensuring that technical measures related to products are non-discriminatory, transparent, and consistent with global trade rules.

Objectives

The primary objectives of the WTO TBT Agreement are:

Preventing unnecessary trade barriers ensures that technical regulations, standards, and conformity assessment procedures do not create unjustifiable obstacles to international trade.

Protecting legitimate policy interests recognises members' rights to adopt measures to protect health, safety, the environment, and other societal interests, provided these measures are not unnecessarily trade restrictive.

Harmonising standards encourages the adoption of internationally recognised standards to facilitate trade and reduce compliance burdens.

Enhancing transparency promotes clarity and predictability in the development and application of technical regulations and standards.

[35] *Text of the TBT Agreement can be accessed at: https://www.wto.org/english/docs_e/legal_e/tbt_e.htm*

Scope

The WTO TBT Agreement applies to:

Technical regulations:	Standards:	Conformity assessment procedures:
mandatory requirements for product characteristics, such as performance, labelling, or packaging. Examples: food labelling requirements such as organic certification (EU Organic), Halal certification, and Fair-Trade certification.	voluntary guidelines that set out product characteristics or production processes. Examples: geographical indication (GI) verification and Codex Standards for food safety labelling.[36]	procedures to ensure products meet specified requirements, including testing, inspection, and certification. Example: Good Agricultural Practices (GAP) for farming.

The WTO TBT Agreement does not cover measures that fall under the WTO SPS Agreement, which specifically addresses food safety and animal/plant health standards.

4.5.5 The Codex Alimentarius Commission (CAC)[37]

The Codex Alimentarius Commission (CAC) is an international body that develops food standards to protect public health and facilitate global trade. Established in 1963 by the Food and Agriculture Organization (FAO) and the World Health Organization (WHO), it provides a harmonised framework to address food safety and quality while reducing trade barriers.

Objectives

The CAC operates with two overarching objectives: protecting consumer health and ensuring fair practices in food trade. It achieves these by establishing science-based standards that prevent foodborne illnesses and contaminants while harmonising international food safety measures.

Protecting consumer health: The Codex is instrumental in setting safety limits for harmful substances, such as pesticide residues, veterinary drugs, and contaminants in food. By providing clear guidelines for food hygiene, labelling, and composition, the CAC enhances public health protections globally.

Ensuring fair trade: Food safety standards vary between countries, creating potential trade disputes and barriers. The Codex addresses this by developing uniform benchmarks, enabling countries to recognise and trust each other's food safety systems, thereby facilitating smoother trade.

Codex Standards in international trade

The WTO SPS Agreement recognises Codex standards as the benchmark for food safety measures. National policies based on Codex guidelines are presumed to comply with the SPS requirements, making them less susceptible to trade challenges. These standards allow exporters and importers to operate under common food safety expectations, fostering confidence in cross-border transactions. In disputes, Codex standards provide critical evidence to determine the validity of contested measures. By harmonising food safety regulations, the Codex also prevents countries from using inconsistent safety standards as disguised trade barriers.

[36] *For more details, see UN FAO and WTO (2017). Trade and Food Standards at: https://www.wto.org/english/res_e/booksp_e/tradefoodfao17_e.pdf*

[37] *For more details, see: https://www.fao.org/fao-who-codexalimentarius/home/en/*

The CAC's role in defining the Halal Standards

The CAC has extended its influence into diverse food safety and quality issues, including the development of standards for Halal food. The global Halal food market was valued at USD2.45tn in 2023 and is forecast to grow at a CAGR of 9.3% to USD4.57tn in 2030.[38] This makes having a harmonised Halal standard essential for international trade. The CAC has addressed Halal food standards to ensure consistency and harmonisation, facilitating trade and protecting consumer interests. It published the Codex Guidelines for Halal in 1997[39], which outlines the general principles for defining and certifying Halal foods. Key features include:

Scope The guidelines apply to the use of the term Halal in food labelling and advertising.

Requirements Halal food must comply with Islamic dietary laws. The slaughter methods, ingredient sources, and processing conditions must align with the Halal principles.

Certification Halal certification requires inspection by an authorised body to ensure compliance with guidelines.

Labelling The term "Halal" must be clearly and accurately displayed, avoiding misleading claims.

The Codex Halal guidelines provide a baseline for consistency across countries with varying interpretations of Halal requirements. They reduce trade barriers by offering clarity on acceptable practices, particularly in non-Muslim-majority countries producing Halal products for export. There have been discussions and proposals for new work to update the Codex Halal guidelines, especially to address all issues related to the international trade of Halal food products.[40]

Box 3: Halal Certification: an SPS or a TBT matter?[41]

The classification of Halal certification as a TBT or a SPS measure depends on the specific nature and objective of the certification.

	Why	Examples of issues
Halal certification as a TBT matter	Halal certification is typically classified under the WTO TBT Agreement because it pertains to product labelling, quality standards, and consumer preferences. Halal certification is often required to meet religious requirements, not health or safety concerns. The WTO TBT Agreement covers labelling, packaging, and marketing standards, which apply to Halal certification.	⇒ Labelling requirements indicating a product is Halal. ⇒ Certification from an authorised Islamic body. ⇒ Standards for processing, packaging, or transporting Halal goods.

[38] *Halal World Institute (2024). Halal Food Market, Size, Global Forecast 2024: A $4,569.69 Billion Industry by 2030 - Key Trends, Share, Growth, Insight, Impact of Inflation, Company Analysis.*

[39] *CAC (1997). General Guidelines for Use of the Term "Halal". CAC/GL 24-1997.*

[40] *CAC (2019). Discussion Paper on the Development of a Standard for Halal Products. CX/NE 19/10/15.*

[41] *For more details, see: Eva Johan and Hanna Schebesta (2022). Religious Regulation Meets International Trade Law: Halal Measures, a Trade Obstacle? Evidence from the SPS and TBT Committees. Journal of International Economic Law. Volume 25. Issue 1. March 2022. Pages 61–73.*

	Why		Examples of issues
Halal certification as an SPS matter	In some cases, Halal certification may overlap with the WTO SPS Agreement if it involves food safety, animal health, or hygiene concerns.	⇒	Standards for slaughtering animals in a hygienic manner to prevent disease.
	Halal requirements may include guidelines for slaughtering animals, which could intersect with health and hygiene standards.	⇒	Restrictions on certain substances (alcohol, pork) for health and safety purposes.
	If Halal certification ensures compliance with health regulations (e.g., preventing contamination), it could be viewed as an SPS measure.		

4.5.6 The World Organisation for Animal Health (WOAH)[42]

World Organisation for Animal Health

WOAH is an intergovernmental organisation with 183 member countries, providing transparent animal health data and promoting international standards for the safe trade of live animals and animal products. It works to enhance animal health, protect animal welfare, and strengthen veterinary services, including recognising disease-free zones. As a WTO-recognised standard-setting body under the SPS Agreement, WOAH plays a key role in aligning science and trade policy. Its standards serve as a global benchmark for health-related trade measures, supporting both animal health protection and safe international trade.

Standard-setting role

The WOAH provides the WTO with technical expertise and scientifically developed standards. Its Terrestrial and Aquatic Animal Health Codes[43] are used to:

Define sanitary measures for preventing the spread of animal diseases through trade.

Recommend practices for the safe importation of animals and animal products.

Offer guidance on disease surveillance, eradication, and notification.

[42] *For more details, see: https://www.woah.org/en/home/*

[43] *For more details, see: https://www.woah.org/en/what-we-do/standards/codes-and-manuals/terrestrial-code-online-access/*

Scientific basis for SPS measures

Under the WTO SPS Agreement, WTO members are encouraged to base their measures on international standards, such as those developed by the WOAH. If a country adopts stricter measures, it must provide scientific justification, often using WOAH resources as reference points. Indeed, WOAH plays a critical role in monitoring and notifying global animal disease outbreaks, which directly impacts trade decisions.

The WOAH maintains a World Animal Health Information System (WAHIS), which alerts WTO members to disease risks and supports risk assessments for trade. In turn, WOAH members are obligated to report animal disease events through WAHIS.

The WOAH provides guidelines during disease outbreaks like avian influenza or FMD to help countries respond appropriately while following WTO rules. In the case of FMD, trade can continue from disease-free zones without nationwide bans, and importing countries often depend on WOAH certification to judge product safety. While members are not required to report outbreaks, doing so is recommended, as failure to report could harm trade relationships.

Dispute resolution

The WTO's dispute settlement system often relies on the WOAH standards to resolve conflicts involving animal health. For example, if a country's import ban on animal products is challenged, the WOAH's scientific guidelines provide critical evidence in determining the validity of the measure. Hence, a country implementing trade restrictions based on WOAH standards is more likely to withstand challenges under the WTO's dispute settlement process. Conversely, countries imposing stricter measures must provide scientific evidence beyond the WOAH's guidelines to justify their actions.

Source: MyCC

4.5.7 The International Plant Protection Convention (IPPC)[44]

The International Plant Protection Convention (IPPC), established in 1952 under the UN FAO, aims to protect global plant resources from pests while promoting safe trade in plants and plant products. With 185 contracting parties, it develops and promotes International Standards for Phytosanitary Measures (ISPMs). ISPMs ensure that plant health measures are scientifically justified, support fair trade, and are not used as unjustified trade barriers, helping to safeguard food security, trade, and the environment.

Objectives

The IPPC's overarching goal is to protect cultivated and wild plant species from the spread and introduction of pests across borders. Its specific objectives include:

Preventing pest spread: Minimising the introduction and spread of harmful plant pests, including insects, diseases, and invasive plants.

Facilitating safe trade: Establishing a framework for phytosanitary (plant health) standards that enables safe and efficient international trade.

Protecting biodiversity: Safeguarding ecosystems from pests that threaten native flora and agricultural systems.

[44] *For details, see: https://www.ippc.int/en/about/overview/*

IPPC and international trade

Under Article 3 of the WTO SPS Agreement, the IPPC is the recognised authority for phytosanitary standards, giving its ISPMs legal weight in trade disputes. These standards support scientific pest risks analysis, and any stricter measures must be scientifically justified (Article 5). ISPMs harmonise plant health measures, reducing trade barriers from inconsistent regulations—ISPM 4, for instance, sets criteria for pest-free areas. The IPPC also promotes transparency by requiring countries to report pest outbreaks and phytosanitary measures, aligning with Article 7. Its Electronic Phytosanitary Certification (e-Phyto) initiative enhances trade efficiency by digitising certifications, reducing delays, and supporting compliance. Together, the IPPC and SPS Agreement ensure plant health measures are effective, transparent, and minimally trade restrictive, balancing safe trade with ecosystem protection.[45]

4.5.8 Specific cases involving agricultural QRs in the WTO

The application of QRs in agriculture has been the subject of numerous disputes and cases under the WTO, which have helped clarify the rules and set precedents. Here are a few notable examples in Table 10:

Table 10: Cases involving agricultural QRs in the WTO

No.	Case	Details
1	Korea – Measures Affecting Imports of Fresh, Chilled and Frozen Beef (1999)[46]	⇒ **Background**: South Korea imposed a dual retail system that restricted the sale of imported beef to specific outlets while reserving the majority of the market for domestic beef. This effectively acted as a QR, as it limited the market access for imported beef. ⇒ **WTO ruling**: The WTO ruled that Korea's measures violated its trade commitments by acting as a de facto quantitative restriction. The system was not transparent and hindered fair competition. Korea was required to dismantle the dual retail system and allow imported beef to be sold more freely. ⇒ **Lesson learned**: The ruling reinforced that measures limiting the market accessibility of imported goods can be considered as QRs, even if they do not explicitly set quotas. The case highlighted the need for fair competition and market openness, as prescribed by the WTO rules.

[45] *For details, see: https://www.ippc.int/en/ephyto/*

[46] *WTO (2000). Korea – Measures Affecting Imports of Fresh, Chilled, and Frozen Beef. WT/DS161/AB/R.*

No.	Case	Details
2	Japan – Restrictions on Imports of Certain Agricultural Products (1988)[47]	⇒ **Background**: Japan maintained a long-standing ban on rice imports, effectively a QR, to protect its domestic rice industry, which was culturally significant and crucial for food security. The US and other countries pushed for greater access to the Japanese rice market. ⇒ **WTO ruling** (Pre-Uruguay Round Agreement): Japan was forced to negotiate market access as part of the Uruguay Round, leading to the tariffication of its rice import restrictions and the introduction of minimum access quotas. Japan agreed to allow a set amount of rice imports each year at lower tariff rates, while higher tariffs were imposed on additional quantities. ⇒ **Lesson learned**: This case demonstrated that even deeply entrenched agricultural protections could be subject to trade liberalisation. It also highlighted how TRQs can serve as a compromise, providing limited market access while allowing countries to maintain some degree of protection.
3	Case 3: European Union – Regime for the Importation, Sale and Distribution of Bananas (1997)[48]	⇒ **Background**: The EU imposed a complex system of import quotas, licences, and preferences that effectively restricted the importation of bananas from certain countries while favouring former European colonies in the Caribbean. ⇒ **WTO ruling**: The WTO found the EU's system to be discriminatory and inconsistent with its trade obligations, as it distorted trade flows and restricted market access. The ruling forced the EU to reform its import regime to be more transparent and compliant with the WTO rules. ⇒ **Lesson learned**: The case emphasised the importance of non-discrimination in applying import restrictions. Even when protecting domestic or regional interests, the application of QRs must not unfairly disadvantage particular trading partners.

Source: MyCC analysis

4.5.9 Implications for Malaysia and its agricultural sector

With the abolition of APs for most agricultural products, Malaysia's policy shift can be seen in the context of these global norms and cases:

Tariff-based regulation instead of QRs: This aligns with the AoA by replacing licensing controls with tariffs, creating a more transparent and predictable system.

Ensuring compliance with international rules: Reducing NTBs lowers the risk of disputes and supports Malaysia's commitments under trade agreements like RCEP and CPTPP.

Use of TRQs for sensitive products: For products needing protection, Malaysia can apply TRQs—allowing limited low-tariff imports while shielding domestic producers. This approach is already in use for the imports of pigs and poultry.

[47] *WTO (1988). Japan – Restrictions on Imports of Certain Agricultural Products. L/6253 – 35S/163.*

[48] *Latest document: WTO (2012). European Union – Regime for the Importation, Sale and Distribution of Bananas. WT/DS27/98 G/L/63/Add.1 G/LIC/D/2/Add.1 S/L/17/Add.1 G/AG/W/18/Add.1 G/TRIMS/4/Add.1.*

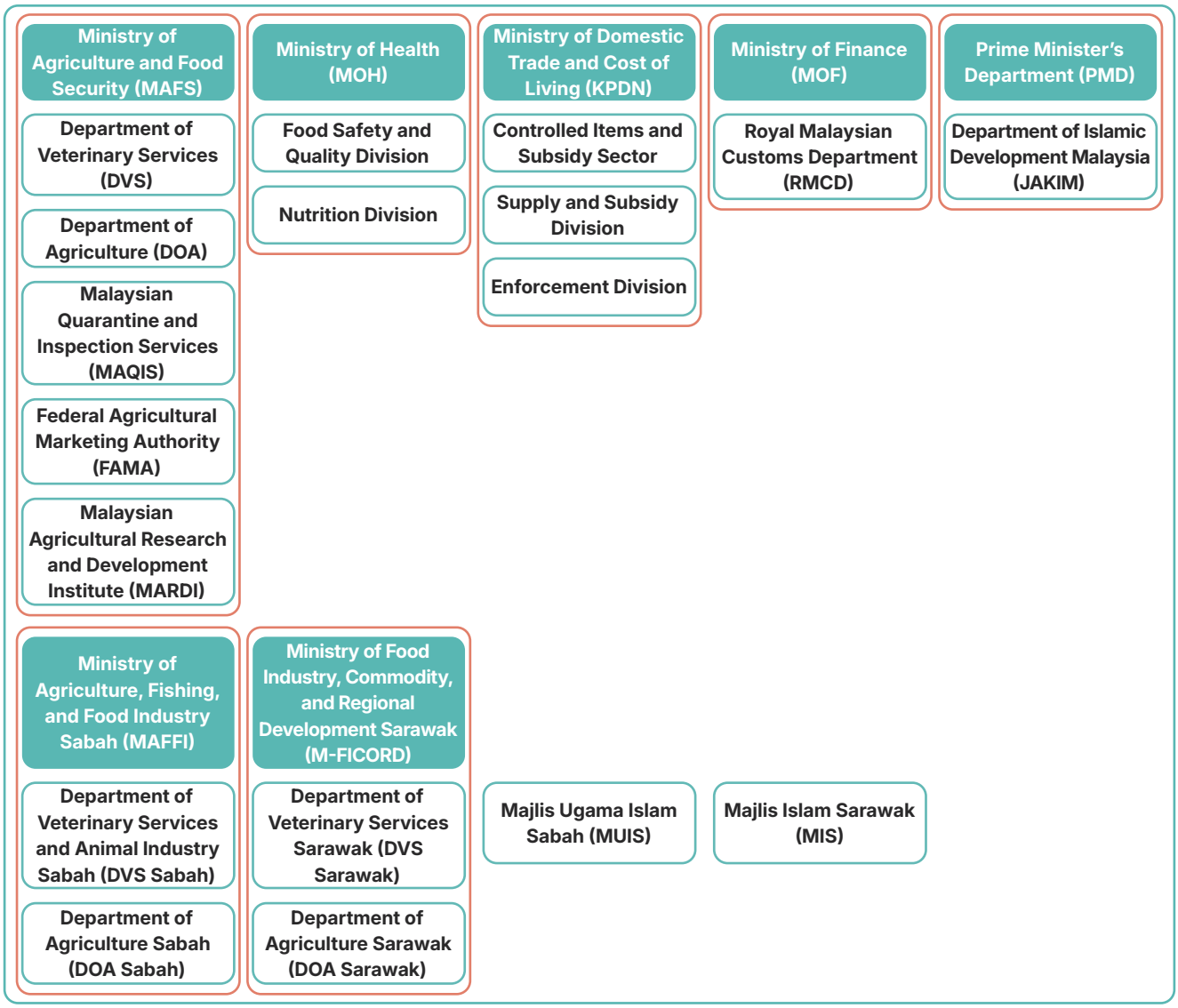
5.0 Governance Structure for the Beef, Coconut, and Onion Markets

The beef, coconut, and onion markets in Malaysia operate within a complex governance framework involving multiple ministries, agencies, regulators, and private sector stakeholders. Each plays a role in policy formulation, enforcement, and supply chain management. This structure aims to balance food security and biodiversity goals while promoting competitiveness in domestic markets.

5.1 Key government stakeholders in food importation into Malaysia

Ensuring safe, affordable, and quality food products in Malaysia requires coordinated oversight from multiple stakeholders. Federal and state ministries and agencies play distinct roles in regulating, monitoring, and facilitating food imports. Malaysia also collaborates with international bodies such as the WTO, CAC, WOAH, and IPPC to align import practices with global standards, promote sustainable trade, and strengthen food security. A summary of the key government ministries and international actors involved in governing the beef, coconut, and onion sectors is presented in Figure 2.

Figure 2: Key government stakeholders for the food sector in Malaysia



Source: MyCC analysis

5.2 Relevant policies, legislation, and regulations

These various government ministries and agencies are the enforcement bodies for a diverse range of key policies, legislation and regulations related to the food sector in, as well as its importation into Malaysia – see Table 11 for a summary.

Table 11: Relevant acts and policies for the food sector in Malaysia

Enforcement agency	Key policies/regulations	Relevant sub-sectors
MAFS	National Agro-Food Policy, 2021 - 2030	All food
	Federal Agricultural Marketing Authority (FAMA) Act 1965 [Act 141]	Vegetables and fruits
	Federal Agricultural Marketing Authority (FAMA) Regulations 2008 PU(A) 274	Vegetables and fruits
	Malaysian Agricultural Research and Development Institute Act 1969 [Act 11]	All food (except oil palm and cocoa)
	Plant Quarantine Act 1976 [Act 167]	Coconuts
	Animals Act 1953 [Act 647]	Meat products
	Animals Rules 1962 L.N. 323	Meat products
	Animal Importation Order 1962	Meat products
	Federal Animals Quarantine Station (Management and Maintenance) By-Law 1984 PU(A) 397	Meat products
	Animals (Control of Slaughter) Rules 2009 PU(A) 213/2009	Meat products
MOH	Food Act 1983 [Act 281]	All food
	Food Regulation 1985 PU(A) 437/85	All food
KPDN	Price Control and Anti-Profiteering Act 2011 [Act 723]	All food
	Consumer Protection Act 1999 [Act 599]	All food
	Trade Descriptions Act 2011 [Act 730]	All food
	Control of Supplies Act 1961 [Act 122]	All food
	Control of Supplies Regulations 1974 PU(A) 103/1974	All food
	Competition Act 2010 [Act 712]	All food
MAQIS	Malaysian Quarantine and Inspection Services Act 2011 [Act 728]	All food
	Malaysian Quarantine and Inspection Services Regulations 2013 and 2019 PU(A) 114 and PU(A) 120	All food
JAKIM	Malaysia Halal Certification Scheme	Meat products
	Trade Descriptions (Definition of Halal) Order 2011	All food
	Trade Description (Certification and Marking of Halal) Order 2011	All food
MUIS	Halal Certification	Meat products
MIS	Halal Certification	Meat products
RMCD	Customs Act 1967 [Act 235]	All food

Enforcement agency	Key policies/regulations	Relevant sub-sectors
DVS Sabah	Animal Welfare Enactment 2015	Meat and milk products
DVS Sarawak	Veterinary Public Health Ordinance 1999	Meat and milk products
DOA Sabah	Plant Quarantine Regulations 1981	Vegetables and fruits
DOA Sarawak	Plant Quarantine Regulations 1981	Vegetables and fruits

Source: MyCC analysis

5.3 The AP procedures

As highlighted earlier, Malaysia's agricultural imports have been guided by a QR policy, implemented via the AP system, to manage key food imports and safeguard domestic market stability. Now limited to rice, the AP system—governed by MAFS—ensures imports align with national food security goals, local production priorities, and international trade obligations. This sub-section reviews the background and evolution of the AP system, including its administration by MAFS and integration with the Agrotrade System, a single platform for import and export for agricultural products. It also examines the impact of abolishing QRs, the irreversibility of such policy shifts, and the emerging competition issues tied to the QR system. The analysis offers a comprehensive understanding of the AP procedures, its impact on market dynamics, and the challenges for fair competition in agricultural imports.

5.3.1 Background

As mentioned earlier, an AP is an import and export licence given by a PIA under the Customs Act 1967 [Act 235].[49] From an international law perspective, an AP is a form of QR or NTB – see Box 4 for a discussion. There are several PIAs including:

- ⇒ Ministry of Investment, Trade, and Industry (MITI)
- ⇒ Ministry of Primary Industries (MPI)
- ⇒ Ministry of Agriculture and Food Security (MAFS)
- ⇒ Ministry of Works (KKR)
- ⇒ Ministry of Home Affairs (KDN)
- ⇒ Ministry of Health (MOH)
- ⇒ Ministry of Science and Technology (MOSTI)
- ⇒ Ministry of Housing and Local Government (KPKT)
- ⇒ Ministry of Natural Resources and Environment and Environmental Sustainability (MNRES)
- ⇒ Ministry of Communications (KK)
- ⇒ Ministry of Domestic Trade and Cost of Living (KPDN)
- ⇒ Ministry of Agriculture, Fisheries, and Food Industry (MAFFI)
- ⇒ Ministry of Food Industry, Commodity, and Regional Development, Sarawak (M-FICORD)
- ⇒ Ministry of Natural Resources and Urban Development, Sarawak (MUDeNR)

Malaysia's AP system is a regulatory tool to control imports in sectors such as automotive, agricultural, and construction. Introduced under the New Economic Policy (NEP) in the 1970s, it aimed to promote Bumiputera business participation. Functioning as a trade barrier, the AP system protects local industries by limiting import competition through a quota mechanism, granting selected companies the permission to import specific goods like agriculture produce and heavy machinery.

[49] *MITI (2024). Approved Permit.*

Box 4: Forms of QRs

QRs or import quotas are trade policy tools used to limit the volume or value of goods that can be imported into a country during a specific period. They are typically implemented to protect domestic industries, manage balance of payments, or ensure food security. Below are some of the various forms of QRs or import quotas:

Forms	Details	Countries
Absolute quotas	A fixed limit on the quantity of a specific good that can be imported during a set period (e.g., annually). Once the limit is reached, no further imports of that good are allowed until the next period.	The US: non-food items – e.g. steel products from certain countries
Tariff rate quotas (TRQs)	Combines quotas and tariffs. A lower tariff rate is applied to imports within the set quota, while imports exceeding the quota are subject to a significantly higher tariff rate. This is common in agricultural trade policies.	EU: beef, poultry, sugar Japan: rice Malaysia: swine and poultry
Seasonal quotas	Limits the importation of certain goods during specific seasons or times of the year, often to protect domestic producers during harvest periods or to align with seasonal demand fluctuations.	India: onions Mexico: tomatoes
Voluntary export restraints (VERs)	An agreement between the exporting country and the importing country, where the exporter voluntarily limits the quantity of goods shipped to the importer. This form of QR is often negotiated to avoid stricter trade restrictions.	Japan and the US (historical examples) – specific fruits
Licence-linked quotas	Requires importers to obtain licences, which specify the allowable quantity of a particular good they can bring into the country. Licensing can be discretionary or based on specific criteria.	Indonesia: beef, garlic
Quota-based safeguards	Temporary QRs introduced as safeguard measures to protect domestic industries from sudden surges in imports that threaten to cause serious injury.	South Africa: poultry

There are various administrative mechanisms for quotas such as:

⇒ **First-come, first-served (FCFS)**: Quotas are distributed until the limit is reached, without prioritising specific importers or stakeholders.

⇒ **Auctioning**: Import quotas are allocated through competitive bidding among importers, ensuring market-driven allocation but potentially increasing costs.

⇒ **Historical allocation**: Based on past import records, where quotas are allocated to importers with a history of handling the specified goods.

⇒ **Proportional allocation**: Quotas are distributed proportionally among eligible applicants based on specific criteria, such as their market share, production capacity, or past import volumes.

⇒ **Lottery or random allocation**: Quotas are allocated through a lottery system among pre-qualified applicants who meet certain eligibility criteria.

⇒ **Performance-based allocation**: Quotas are awarded based on the performance of applicants, such as their ability to meet domestic production goals, maintain price stability, or adhere to government priorities.

⇒ **Needs-based allocation**: Quotas are distributed based on specific needs, such as shortages in particular regions, market demand, or socio-economic priorities.

⇒ **Hybrid allocation**: Combines multiple mechanisms (e.g., part auction-based, part performance-based) to balance efficiency, fairness, and policy alignment.

Impact of QRs:

- ⇒ **Distortion of market dynamics**: Artificially limiting the availability of goods, which often leads to inefficiencies, such as price inflation and restricted access to essential commodities.
- ⇒ **Domestic protection**: Shields local industries from foreign competition but may reduce efficiency, cost competitiveness, and innovation.
- ⇒ **Inflationary pressures**: Can lead to supply shortages, driving up prices for consumers and industries dependent on the restricted goods.
- ⇒ **Loss of fiscal revenue opportunities**: Unlike tariffs, which generate government revenue, QRs do not directly contribute to fiscal income unless linked to auction-based quota systems.
- ⇒ **Inequity in access**: Can disproportionately affect low-income households by increasing prices for staple goods, exacerbating food insecurity and inequality.
- ⇒ **Supply chain disruptions**: Often reduce the diversity of supply sources, making countries more vulnerable to external shocks such as geopolitical conflicts or global supply chain disruptions.
- ⇒ **Corruption risks**: The allocation of quotas under QRs, particularly in opaque systems, can create opportunities for favouritism, bribery, or corruption.
- ⇒ **Complex implementation**: Ensuring compliance with QR systems requires robust institutional capacity, which may strain government resources.
- ⇒ **Global trade**: Can lead to trade disputes and retaliatory measures, as they contradict the WTO's emphasis on free trade, except under specific exceptions.

5.3.2 AP system under MAFS

As one of the PIAs, MAFS used to have an AP system in place to control the importation of agricultural products into Malaysia. The AP system was enforced on certain agricultural commodities, namely, beef, cabbage, coconut, liquid milk, chicken (whole part or pieces), and rice.[50] In May 2022, the Government abolished the AP requirement for these products, except rice, to control escalating prices.[51] This decision was viewed positively given the AP system's flaws, which primarily facilitate rent-seeking and only benefit a small group of well-connected individuals, resulting in higher costs for consumers.[52]

Upon the abolition of AP for food products by MAFS, the importation of coconut no longer requires an AP. Nevertheless, IP remains mandatory for all food and agricultural products for biosecurity control at the country's entry points.

5.3.3 AP system under M-FICORD

M-FICORD still implements AP for the importation of buffalo meat from India into the Sarawak market. The DVS Sarawak administers this AP system. In 2023, eight companies were allowed to import buffalo meat from India, exclusively from two approved abattoirs or processing plants in that country.

[50] *The AP for sugar is under the purview of KPDN.*

[51] *MAFS (2022). Removal of Approved Permit (AP) for Agrofood Commodities, Press release; and The Rakyat Post (2022). No More AP Requirement To Import Food, Says Ismail Sabri, which confirmed the AP removal for beef and live cattle.*

[52] *The Edge Weekly (2022). Frankly Speaking: Abolish APs and put more money into people's hands.*

5.3.4 Abolished QR system including the AP cannot be reversed

Once a country liberalises its trade regime by abolishing QRs or other NTBs, including APs in Malaysia's case, reversing this action typically entails significant consequences, both under the WTO framework and within the commitments of existing FTAs. According to GATT Article XI, QRs on imports or exports are prohibited, except under specific, well-defined circumstances (for example, to address critical shortages or to meet SPS standards). When a country commits to removing such barriers, reinstating them would violate its obligations under WTO rules. If a member attempts to reintroduce QRs or restrictive NTBs after liberalisation, it risks facing dispute settlement proceedings and potential trade retaliation from other member countries. However, the WTO allows some flexibility through safeguard measures (GATT Article XIX) or exceptions (under GATT Article XX for health, safety, and other concerns), but these measures are temporary and must be clearly justified. As such, countries are cautious in liberalising NTBs, as reversing these decisions can damage trade relations and lead to disputes within the multilateral trading system.

5.4 The IP procedures

Unlike the broader AP system, the IP system focuses on the operational procedures and multi-agency coordination to manage the entry of imports effectively to ensure compliance with national standards for food safety, animal and plant health, and Halal certification. This sub-section provides an overview of the background and procedures associated with IP issuance and enforcement, detailing the roles of key regulatory agencies, including RMCD, MAQIS, DVS, MOH, JAKIM, DOA, and FAMA. By outlining the contributions of each agency, this sub-section highlights the interconnected processes required to ensure that imports meet Malaysia's regulatory, SPS, health, and Halal standards, as well as the challenges and inefficiencies that may arise in the implementation of IP procedures.

5.4.1 Background

An IP is required for all transactions involving the importation of agricultural products into Malaysia, aimed at maintaining biosecurity control, including ensuring Halal compliance. However, the Malaysian government has exempted certain low-risk agricultural products from the IP requirements, thereby facilitating trade while maintaining necessary controls. Companies seeking to import these products must apply for an IP through MAQIS and comply with additional conditions established by RMCD, FAMA, DOA, DOA Sabah, DOA Sarawak, DVS, DVS Sabah, DVS Sarawak, MOH, and JAKIM. Import conditions imposed under the IP regime are explained in Table 12.

Table 12: Food product, importing regions, and import conditions, 2023

No.	Food product	Importing region	Import conditions
1	Beef[53]	Peninsular Malaysia and Labuan	1. IP issued by MAQIS under the Malaysian Quarantine and Inspection Services Act 2011 [Act 728]. 2. Subject to inspection and approval by MAQIS.
		Sabah	1. Import licence issued by DVS Sabah under the Animal Welfare Enactment 2015 [Sabah No. 9 of 2015]. 2. Subject to inspection and approval by DVS Sabah.
		Sarawak	1. IP issued by DVS Sarawak under the Veterinary Public Health Ordinance 1999 [Sarawak Chapter 32]. 2. Subject to inspection and approval by DVS Sarawak.
2	Coconut	Peninsular Malaysia and Labuan	1. The import is accompanied by a Certificate of Conformity of Agricultural Produce (COC) or Letter of Exemption (LOE) issued by MAQIS. 2. Subject to inspection and approval by MAQIS.
		Sabah	1. The import is accompanied by a COC or LOE issued by FAMA. 2. Subject to inspection and approval by FAMA.
		Sarawak	
3	Onion	Peninsular Malaysia and Labuan	1. The import is accompanied by a COC or LOE issued by MAQIS. 2. Subject to inspection and approval by MAQIS.
		Sabah	1. The import is accompanied by a COC or LOE issued by FAMA. 2. Subject to inspection and approval by FAMA.
		Sarawak	

Source: Customs (Prohibition of Imports) Order 2023

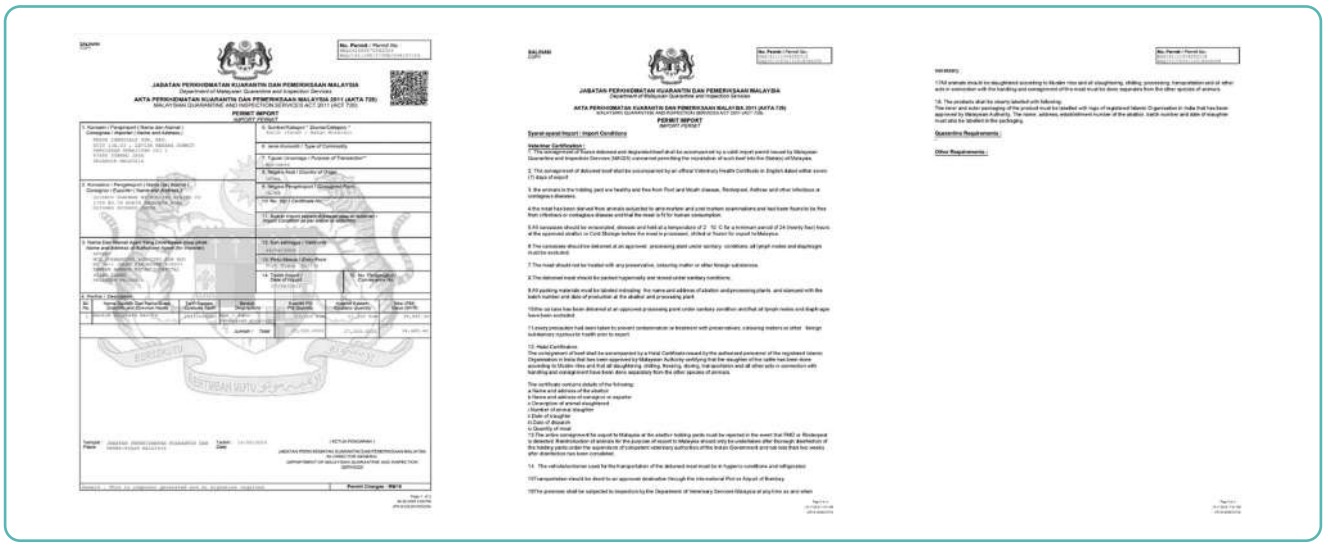
[53] *In 2017, the government established a minimum import quota of 30% for Bumiputera importers to support their market entry.*

The IP procedures differ between Peninsular Malaysia and Labuan versus Sabah and Sarawak, due to distinct regulatory frameworks. MAQIS oversees imports in Peninsular Malaysia and Labuan but has no authority over Sabah and Sarawak, which operate under their own laws and regulations. In Peninsular Malaysia and Labuan, MAQIS regulates beef, coconut, and onion imports in coordination with the DVS, DOA, and FAMA.

While the Customs (Prohibition of Imports) Order 2017 designates FAMA as the regulator for coconut and onion imports under the 3P FAMA Regulations, in practice, DOA Sabah and DOA Sarawak handle these roles in their states. For beef imports, DVS Sabah and DVS Sarawak are responsible for inspection and approval, reflecting Sabah's and Sarawak's autonomy in managing agricultural imports.

Figure 3 shows an IP issued by MAQIS. As highlighted in Table 12, MAQIS issues IPs for the importation of live cattle, beef, and coconut into Peninsular Malaysia.

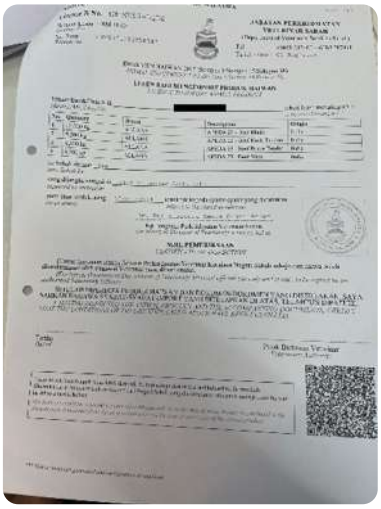
Figure 3: Example of an IP issued by MAQIS



Source: MAQIS

Figure 4 shows an example of an import licence issued by DVS Sabah to import live cattle and beef. DVS Sarawak also issues IPs for the importation of live cattle and beef into the state.

Figure 4: Example of an import licence issued by DVS Sabah



Source: MyCC

5.4.2 IP procedures under RMCD and other government agencies

Royal Malaysian Customs Department (RMCD)

Import and export control

The RMCD is responsible for regulating imports and exports to ensure compliance with trade regulations. Before importing goods into Malaysia, importers must refer to the Customs (Prohibition of Imports) Order 2023 to determine whether the intended goods are subject to any prohibitions or restrictions. Importers are then required to submit a customs declaration containing detailed information about the imported goods, including their nature, origin, value, and intended use. To verify the accuracy of the declaration, customs officers may perform inspections and examinations, if necessary.

When applicable, importers must pay customs duties and taxes, which are determined based on the Harmonized System (HS) classification and the value of the imported goods. The importation of coconuts incurs an import duty of 5%.

Importers submit their declaration via the eDeclare system, which feeds into the Customs Information System (SMK). Approvals from other relevant agencies, facilitated through the IP system, are processed in the Malaysia OGA System (MyOGA). The data from MyOGA is integrated into the SMK, enabling RMCD to verify all necessary approvals. Imported goods are released only after these approvals have been confirmed and the declared information has been validated.

Certification of origin

The certification of origin (CO) specifically pertains to import tariffs regulated by the RMCD – see Figure 5.

Figure 5: Example of Certification of Origin

Source: MyCC

The RMCD defines CO as a document certifying the origin of a product's content. This certification is a declaration by exporters to qualify for preferential tariff treatment—a reduced tariff rate agreed upon in a trade agreement between Malaysia and another country or group of countries. The CO is issued by the designated authority in the exporting country, which is a signatory to the trade agreement. This authority is responsible for ensuring that exporters and producers comply with rules of origin. The CO is then submitted to customs authorities in the importing country to secure preferential tariff rates. In Malaysia, exporters submit the CO to the RMCD.

Forwarding agents

Forwarding agents, also known as freight forwarders or customs agents, are companies that specialise in arranging and managing the transportation and logistics of goods from one location to another. They act as intermediaries between shippers, importers, and exporters, ensuring that goods are transported efficiently, legally, and cost-effectively.

Forwarding agents assess the specific needs of shippers, considering factors such as the destination, delivery period, cargo type, and budget. Based on these requirements, they identify the appropriate shipping companies to ensure efficient movement of goods. They leverage their extensive networks with shipping lines to secure cargo space at competitive rates.

They also handle all necessary customs documentation to ensure compliance with international trade regulations. This includes managing customs examinations, duty assessments, and the payment of duties on behalf of their clients. Forwarding agents keep their clients updated on the status and location of their goods throughout the shipping process.

Forwarding agents in Malaysia are regulated by the RMCD under the Customs Act 1967 [Act 235]. Under section 90 of Act 235, there are three types of forwarding agents:

⇒ **Forwarding agent**:[54] Manage the declaration and clearance of goods from customs control.

⇒ **Shipping agent**: Handle matters related to the entry or departure of vessels.

⇒ **Freight forwarder**: Manage the declaration of sea and air manifests.

To register with RMCD as shipping agents and freight forwarders, the applicant is required to nominate at least two representatives[55] to attend the Shipping Agents and Freight Forwarders Course. This course is organised by the Royal Customs Academy (AKMAL) in collaboration with Universiti Utara Malaysia (UUM) and Universiti Teknikal Malaysia (UTeM). The nominated representatives must pass the examination conducted after the course. Additionally, the representatives must attend an interview session with RMCD as part of the registration process. If a representative resigns from the company, a replacement must be appointed within six months.

For new applications, the registration is valid for one year. For renewals, the validity period extends to either two or five years, subject to RMCD's conditions. Furthermore, importers are restricted to appointing a maximum of three forwarding agents in every state. As per the latest list dated 5 March 2019 published by the RMCD, there are 1,263 registered forwarding agents, shipping agents, and freight forwarders.

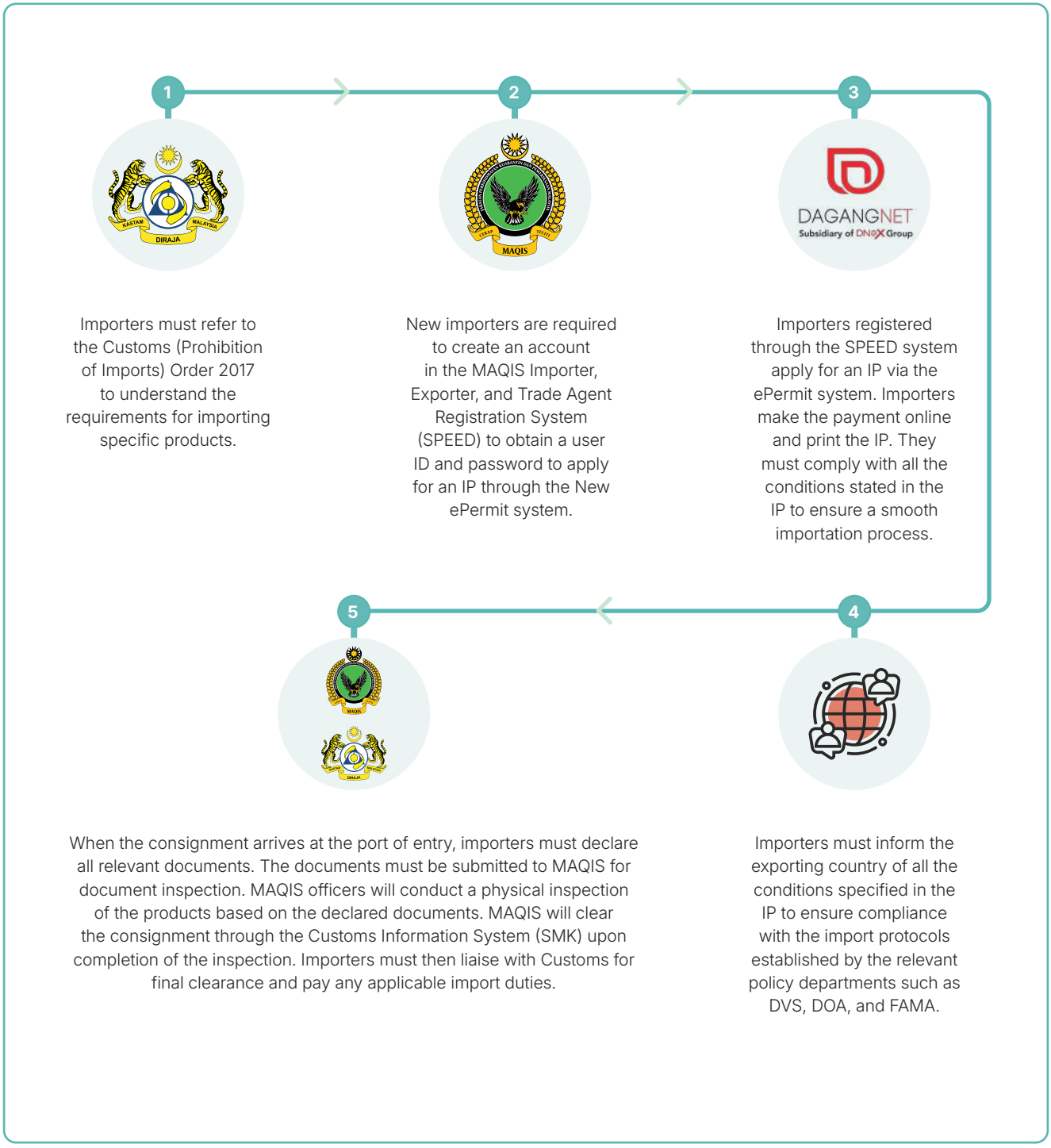
[54] *The Cabinet has imposed a freeze on new applications for forwarding agents effective 10 October 2007.*

[55] *One member of board of directors and a staff or two members of board of directors.*

MAQIS' procedures to import beef, coconut, and onion

To import products into Malaysia, importers must follow a structured process to comply with regulatory requirements. This process includes understanding the import restrictions, registering with relevant systems, obtaining necessary permits, and ensuring compliance with the stipulated conditions. Additionally, importers must prepare and submit the required documentation and undergo inspections at the point of entry. The steps outlined in Figure 6 provide an overview of the importation process.

Figure 6: IP Application Process



Source: MAQIS

As a starting point, importers are required to consult the Customs (Prohibition of Imports) Order 2023 to understand the regulations governing the importation of specific products. For new importers, they must create and register new accounts with MAQIS via the SPEED system as the registration allows them to apply for an IP through the ePermit system. MAQIS does not charge any fee for/in the SPEED system. The ePermit system is provided by DagangNet. Table 13 shows the charges to use the ePermit system.

Table 13: ePermit system charges by DagangNet, 2024

Subscription type	Fee (RM)	Type of company	Remarks
One-time registration fee	200	SME	The one-time registration fee is waived if the company pays annual access fee of RM200 for ePermit.
	500	Non-SME	
Transaction fee	5	All	The fee is charged for every successful transaction. Rejected permit application is not chargeable. The quoted fee excludes sales and services tax (SST).

Source: MAQIS and DagangNet

Once the application is submitted, MAQIS officers will review and approve the IP. After that, the importer must inform the exporting country of all the conditions in the IP to ensure compliance with the import protocols developed by relevant policy departments such as the DOA, DVS, and FAMA. Compliance with all conditions specified in the IP is crucial to facilitate a smooth importation process. Upon the arrival of the consignment at the entry point, importers are required to submit all relevant documents for declaration. (see Table 14):

Table 14: Example of relevant documents required to import beef, coconut, and onion

No.	Name	Document	No.	Name	Document
1	Phytosanitary certificate (for coconuts and onions)		3	Halal certificate (for beef)	
2	Health certificate (for live cattle and beef)		4	Customs form K1	

No.	Name	Document
5	Invoice	
6	Bill of lading	

Source: MAQIS and DagangNet

These documents must be submitted to the MAQIS office for document verification. MAQIS officers at the entry point will also conduct a physical inspection of the products based on the declared documents. Upon the successful completion of inspection, the consignment will be cleared by RMCD through the SMK and released at the entry point. The RMCD may direct the importer to settle any applicable import duties. As part of the importation process, apart from using the ePermit module (as shown in Figure 6), importers also need to use eDeclare and ePayment modules.

⇒ **eDeclare** – for importers to submit customs declaration to RMCD and RMCD to review the submissions and provide approvals

⇒ **ePayment** – for importers to pay customs duties and SST to RMCD and IP fees to MAQIS

Importers can also subscribe to the eDeclare and ePayment for an annual fee of RM200, respectively. Similar to the ePermit module subscription, importers do not have to pay any one-time registration fee by subscribing to the respective modules. IP fees and other charges imposed by MAQIS are in Table 15.

Table 15: MAQIS' fees and charges

No.	Item	Fees and charges
IP fee		
1	Cattle and buffalo	RM5.00 per animal
2	Beef	RM10.00 per 100 kg
3	Coconut	RM15.00 per IP
Inspection charges		
1	Cattle and buffalo	RM1.00 per animal
2	Coconut	⇒ RM2.00 for the first 1,000 coconuts or part thereof ⇒ RM4.00 for the first 1,000 coconuts or part thereof (weekends or public holidays)
		⇒ RM1.00 for every additional 1,000 coconuts or part thereof ⇒ RM2.00 for every additional 1,000 coconuts or part thereof (weekends or public holidays)
3	Onion	⇒ RM1.00 for the first 1,000 kg or part thereof ⇒ RM2.00 for the first 1,000 kg or part thereof (weekends or public holidays)
		⇒ RM0.50 for every additional 1,000 kg or part thereof ⇒ RM1.00 for every additional 1,000 kg or part thereof (weekends or public holidays)

No.	Item	Fees and charges
Quarantine charges		
1	Cattle and buffalo	⇒ Confinement or storage: RM2.00 per animal per day ⇒ Quarantine certificate: RM2.00 per animal
2	Coconut	⇒ RM25.00 per 1,000 kg or part thereof per day
3	Onion	⇒ RM25.00 per 1,000 kg or part thereof per day
Quarantine procedures charges		
1	Mileage of quarantine procedure including delivery or escort	RM1.00/km
2	Supervision of quarantine procedure including delivery or escort	RM10.00/hour
3	Parking in MAQIS compound for storage of products	RM10.00/day
4	Disposal of products	RM2.00/kg
5	Cold room storage	RM100.00 per 1,000 kg or part thereof per day

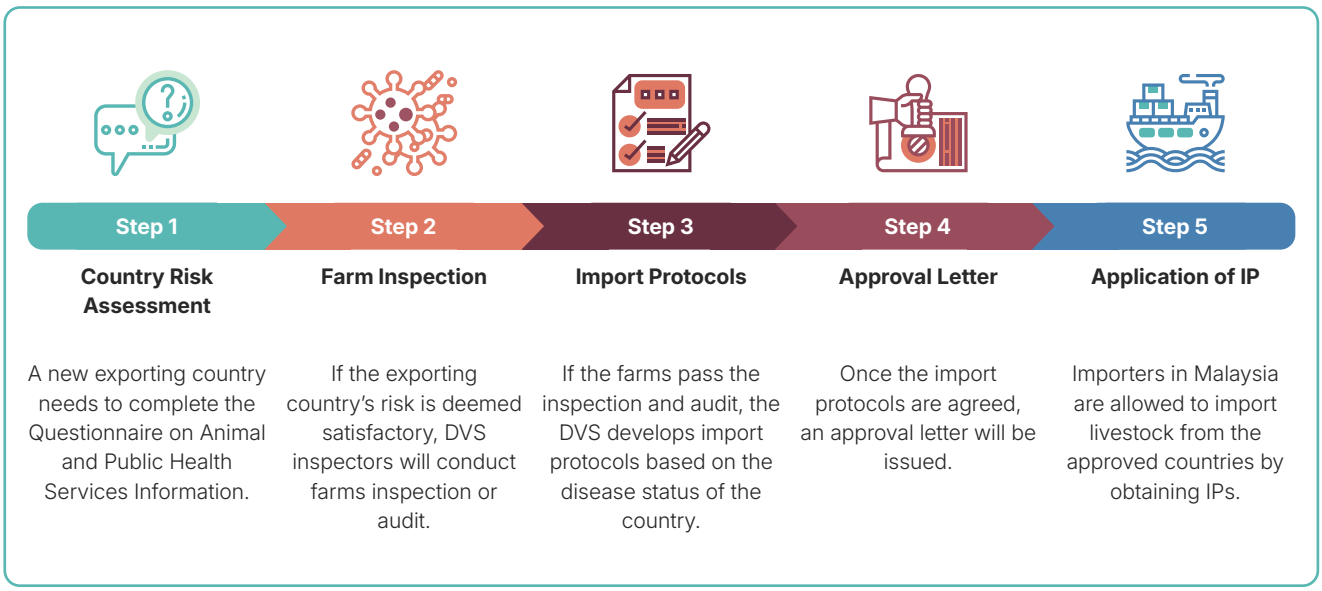
Source: Malaysian Quarantine and Inspection Services (Fees and Charges) Regulations 2013

DVS' procedures to import live cattle and beef

Approval for country of export

A country wishing to export live cattle and beef into Malaysia must complete the Questionnaire on Animal and Public Health Services Information. This questionnaire enables the DVS to conduct a risk assessment of that country. The information provided in the questionnaire will be reviewed and evaluated to determine the level of risk. The outcome of the risk assessment will be communicated to the veterinary or competent authority of the respective country. Figure 7 summarises the approval process for an exporting country to bring live cattle to Malaysia.

Figure 7: Approval for country of import for live cattle



Source: DVS

For the importation of live cattle, if the DVS determines that the exporting country's risk is satisfactory, it will conduct an audit and inspection on the livestock farms. For the importation of beef, the DVS must assess the exporting country's disease risk status as low and satisfactory. Additionally, the abattoir or processing plant intending to export beef to Malaysia must complete the following before DVS and JAKIM conduct an adequacy audit (document audit) on the facility:

⇒ **Application for Export of Meat, Poultry, Milk, and Egg Products to Malaysia – DVS**

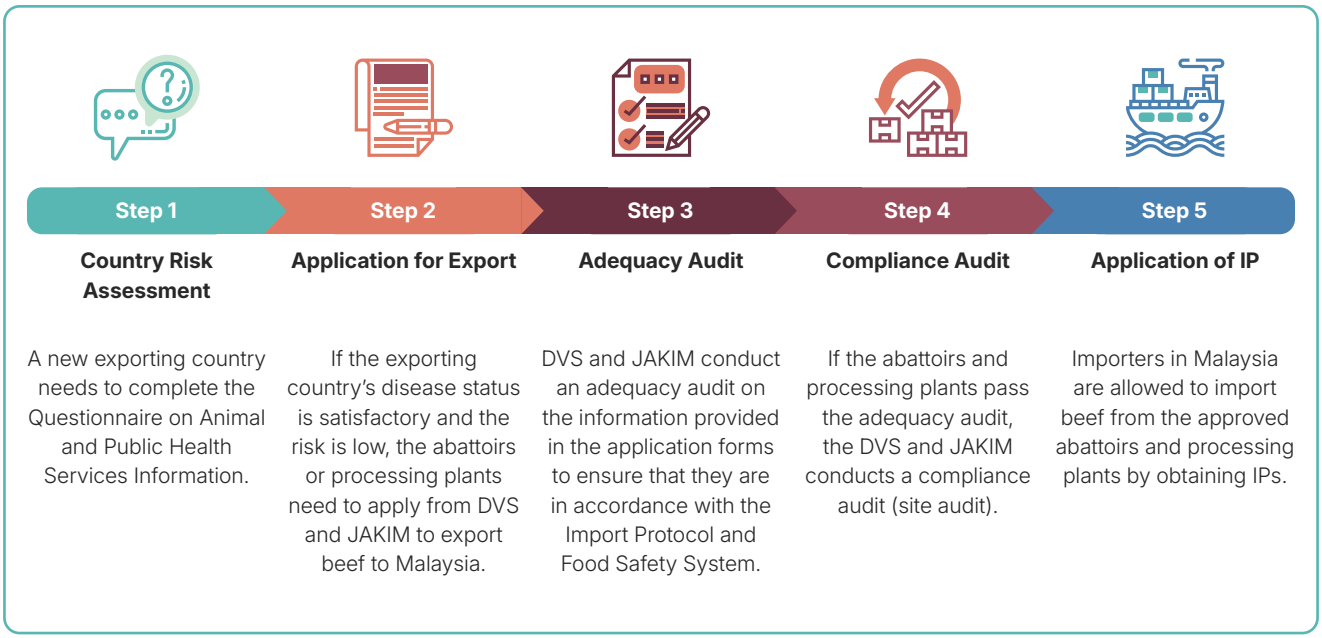
⇒ **Halal Application Form (for the processing establishment) – JAKIM**

⇒ **Halal Application Form (for the abattoir) – JAKIM**

The outcome of the adequacy audit will be communicated to the veterinary or competent authority of the respective country. Figure 8 summarises the process to obtain approvals to export beef to Malaysia.

Once the DVS approves the import of the livestock, it will develop import protocols based on the disease status of the exporting country. A draft of the import protocols will be sent to the veterinary or competent authority of the respective country for review, comments, and acceptance.

Figure 8: Approval for abattoirs and processing plants for beef



Source: DVS

For beef imports, once the adequacy audit by DVS and JAKIM is completed, a compliance audit (site audit) is conducted on the processing plant or abattoir. The results are then communicated to the veterinary or competent authority of the exporting country. Meat can only be imported from facilities approved by both DVS and JAKIM, with the approved list published on the DVS website. Currently, 62 abattoirs or processing plants from eight countries are approved (see Table 16). In India, 27 facilities are approved—four operated by Fair Exports and three by Allanasons Pvt Ltd. All foreign facilities must comply with the following Malaysia Standards (MS):[56]

⇒ **MS 1480:2019** – Food safety according to Hazard Analysis Critical Control Point (HACCP) system: Second Revision

⇒ **MS 1514:2019** – Good Manufacturing Practice (GMP) for food: First Revision

⇒ **Code of Veterinary Practice for Meat Processing Plant (CoVP)**

[56] *DVS (2024). Implementation of Inspection Services at Foreign Abattoirs and Processing Plants for Export of Meat and Products of Animal Origin to Malaysia.*

Table 16: List of country, number of abattoirs, and processing plants approved by DVS, 2024

No.	Country	Number of approved abattoirs and processing plants for beef	Remarks
1	Australia	8	
2	Argentina	1	
3	Brazil	17	
4	India	27	
5	Japan	2	
6	New Zealand	3	
7	Pakistan	3	
8	South Africa	1	Suspended from 21 July 2022[57]
	Total	**62**	

Source: DVS

Once the import protocols for the importation of livestock are agreed upon by both countries, an official letter will be sent to the competent veterinary authority of the exporting country to notify them of the approval for the export of the livestock to Malaysia.

Although South Africa remains suspended from exporting beef to Malaysia due to an FMD outbreak, the DVS allows imports from countries such as India and Pakistan, despite their lack of FMD-free status or recognised FMD-free regions by WOAH. While FMD-free status is a key consideration, the DVS evaluates and approves foreign abattoirs and processing plants through the process detailed in Figure 6. Additionally, specific import conditions for buffalo meat from India enable its importation, even though India is not classified as FMD-free.

Veterinary health certificate

For the importation of animal products, each consignment must be accompanied by a Veterinary Health Certificate (SKV) confirming that the product is free from disease. The SKV must be issued by the competent authorities in the exporting countries. Meat products also have to comply with the requirements set by DVS. These conditions also include the requirement for a Halal certificate.

[57] *According to DVS, South Africa is suspended due to the risk of FMD outbreak in the country.*

MOH's beef import procedures

Importation of food

The importation of food requires approval from the Food Safety and Quality Programme (PKKM) under the MOH, which covers items such as beef, coconuts, and onions. Importers must first declare the imported food through the eDeclare system, where the submitted information is integrated into the SMK. Using the Food Safety Information System of Malaysia (FoSIM), importers or their agents can update the warehouse details in the Customs K1 Form or submit the form to the designated port of entry. The FoSIM system also indicates whether the imported food has been approved for entry into Malaysia.

PKKM officers inspect both the required documentation and the food products themselves, together with MAQIS officers. The food products are categorised according to their risk levels (see Figure 9). According to PKKM, if the same exporter from the same country is found to be non-compliant more than five times, it will automatically be assigned to Level 6 (rejection). Once PKKM grants approval, the status is updated in FoSIM and reflected in SMK. The RMCD then releases the food products upon confirmation of the necessary approvals and payment of applicable duties and taxes.

Figure 9: PKKM's risk-based control indicators

Level 1 Auto Release / Green Lane	⇒ Fast release of low risk consignments ⇒ Food recognised through official arrangements
Level 2 Specific Requirement	⇒ Foods that require specific documentation e.g. Health Certificate, Certificate of Analysis, etc.
Level 3 Monitoring	⇒ The consignment will be released after the inspection of documents and/or a physical inspection. Additionally, samples may be taken for analysis under the Annual National Monitoring Programme for Imported Foods (ANMPIF)
Level 4 Surveillance	⇒ The product must undergo inspection and sampling. The consignment will be released once the sample has been collected
Level 5 High Risk Food	⇒ The consignment will be held for inspection and sampling under "Hold, Test & Release" procedure
Level 6 Rejection	⇒ The affected food products will be rejected for import

Source: PKKM

JAKIM's Halal Certification Procedures

Approval of abattoirs and processing plants

For JAKIM to approve an importing country, along with its abattoirs and processing plants, it must first recognise the Halal certification bodies within that country. These certification bodies are required to submit application forms and supporting documents to JAKIM, which then reviews and evaluates the submissions. This process includes evaluation visits and compliance audits to ensure adherence to Halal standards.

Following the audit process, JAKIM compiles an audit report, which is reviewed by the Evaluation Committee of the International Halal Recognition and subsequently by the Verification Committee of the International Halal Recognition. JAKIM is the secretariat for these two committees. Subsequently, the findings are presented to the Technical Committee Meeting for Recognition of Foreign Abattoir/Processing Establishments, and finally to the Import and Export Control Committee for Selected Agriculture Products for final approval. The DVS is the secretariat for these two committees, which are chaired by the MAFS Secretary-General and the MAFS, respectively.

Once all approvals are secured, JAKIM issues an appointment letter to the Halal certification body. As of now, JAKIM recognises 88 authorised Halal certification bodies across 49 countries (see Table 17).

Table 17: List of country and number of Halal certification bodies, 2024

No.	Country & number of authorised Halal certification body
1	Australia (1)
2	Austria (1)
3	Argentina (1)
4	Bangladesh (1)
5	Bosnia & Herzegovina (1)
6	Brazil (3)
7	Brunei (1)
8	Canada (2)
9	China (6)
10	Chile (1)
11	Croatia (2)
12	Egypt (1)
13	France (1)
14	Germany (1)
15	India (3)
16	Indonesia (1)
17	Iran (1)
18	Ireland (1)
19	Italy (2)
20	Kazakhstan (2)
21	Kenya (1)
22	Japan (6)
23	Kingdom of Saudi Arabia (1)
24	Lithuania (1)
25	Maldives (1)
26	Mongolia (1)
27	Morocco (1)
28	New Zealand (2)
29	Netherlands (3)
30	Pakistan (2)
31	Philippines (3)
32	Poland (2)
33	Portugal (1)
34	Russia (2)
35	Singapore (1)
36	South Africa (3)
37	South Korea (2)
38	Spain (2)
39	Sri Lanka (1)
40	Switzerland (1)
41	Taiwan (1)
42	Thailand (1)
43	Tunisia (1)
44	Türkiye (2)
45	Ukraine (1)
46	UK (2)
47	USA (3)
48	Uruguay (1)
49	Vietnam (1)

Source: JAKIM

The foreign abattoirs and processing plants have to adhere to the following Malaysia Standards (MS):

⇒ **The Malaysian Protocol for the Halal Meat & Poultry Productions**

⇒ **MS 1500:2009** – Halal Food – Production, Preparation, Handling and storage – General Guidelines: Second Revision

Halal certification

All imported beef must be accompanied by a Halal Certificate issued by a Halal certification body in the exporting country that is recognised by JAKIM. The certification of Halal certification bodies in the exporting country can only be done by JAKIM. The certification confirms that the slaughter of the animal was conducted in accordance with Muslim rites and that all processes, including slaughtering, deboning, chilling, freezing, storing, transportation, and other related handling and consignment activities, were performed separately from those involving other animal species. The Halal certificate must contain the following details:

⇒ Name and address of the abattoir

⇒ Name and address of the exporter

⇒ Description of the animals slaughtered:

- Number of animals slaughtered
- Date of slaughter
- Date of dispatch
- Quantity of meat

Figure 10: Labelling from Australia

Source: MyCC

Some of the information contained in the Halal certificate is also displayed in the product labelling (see Figure 10).

Source: MyCC

DOA's procedures to import coconut and onion

Agrotrade system

MAFS launched the Agrotrade system on 30 March 2023 to facilitate the import and export of agricultural commodities. This platform simplifies trade processes by consolidating permits, certifications, and documentation into a single system. Importers use the Agrotrade system to submit expected annual import volumes, with coconut importers allowed to revise their projections twice a year, while beef importers must maintain their initial figures. Onion importers are exempt from using the Agrotrade system.

Although there are no direct charges for using the Agrotrade system, importers must also access the ePermit and 3P FAMA systems, managed by DagangNet Technologies Sdn Bhd, which involve usage fees. Agricultural commodities that require an application via the Agrotrade system are as follows:

Plants, plant products, and controlled articles

Microorganisms and organic materials (organic fertilisers)

Round cabbage

Mature Coconut

Whole chicken/chicken parts

Meat and offal of cow/buffalo/goat/sheep

Pork meat/suckling pig

Liquid ultra-high temperature (UHT) or pasteurised milk

Flavoured liquid milk

Live animals (cow/buffalo/goat/sheep)

Pest risk analysis

For the importation of beef and coconuts, importers must first submit their applications through the Agrotrade system before applying for IPs in the ePermit system. The process for importing plant products like coconuts and onions begins with a Pest Risk Analysis (PRA). This analysis is conducted either for a new exporting country or a new agricultural commodity.

During the PRA, the DOA evaluates factors such as the commodity, its mode of transportation and storage, the identification of pests or plant diseases, and the policies and regulations of the exporting country.

If the analysis determines the risk to be low or medium, the findings are submitted to the PRA Committee for approval. However, if the risk is deemed high, the matter is referred to the High-Risk Import Application Committee (JKPPBT) for further evaluation. The JKPPBT decides whether a physical inspection of the exporting country's quarantine process—referred to as Verification of Compliance (VOC)—is necessary. The results of the VOC are then presented to the PRA Committee for final approval.

Once the PRA Committee approves the exporting country, the importation conditions are incorporated into the new ePermit system, enabling importers to proceed with their IP applications.

Phytosanitary certificate

Exporting countries issue phytosanitary certificates (PCs) to meet importing countries' requirements, as obligated under the FAO IPPC, in effect since 1951. The PC aims to prevent the spread of plant pests and diseases through international trade in plants, plant products, and controlled articles. The issuance follows the International Standard Phytosanitary Measures No. 12 (ISPM 12) as outlined in Article V of the Convention.

FAMA's procedures to import coconuts and onions

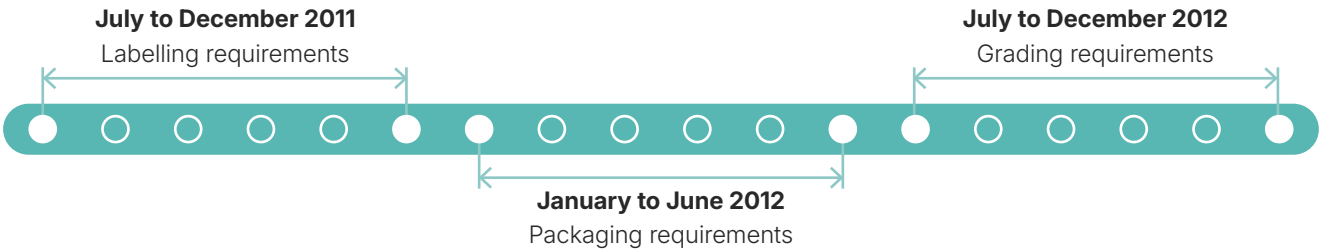
eSijil 3P

To import coconuts and onions, importers must first register with FAMA's eSijil 3P system. Once registered, they can apply for the COC. For Peninsular Malaysia and Labuan, MAQIS processes and approves the COC. For Sabah and Sarawak, approvals are handled by FAMA. For coconut imports, which require IPs, importers must submit data from the eSijil 3P system into the ePermit system to apply for the IPs.

At the point of entry, MAQIS and FAMA, or DOA Sabah and DOA Sarawak, conduct document and, if needed, physical inspections. Upon compliance with the Grading, Packaging, and Labelling of Agricultural Produce Regulations 2008 (commonly known as the 3P FAMA Regulations), the COC is issued.

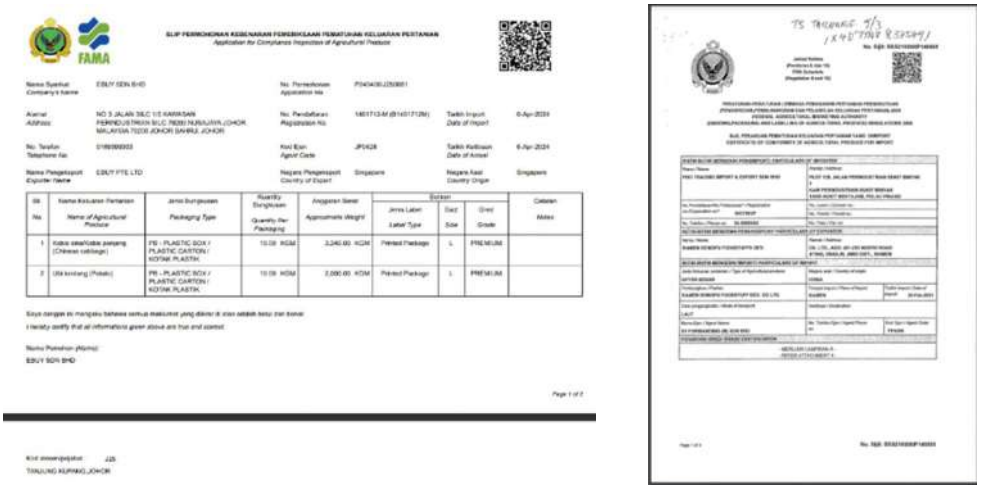
Certificate of Conformity of Agricultural Produce

The COC is issued by FAMA to certify that the agricultural products meet the requirements set forth in the 3P FAMA Regulations. The 3P FAMA Regulations was implemented in phases:



Currently, the COC requirement is only applicable to onions.[58] To obtain the COC, the product must first receive an Inspection Slip 3P (see Figure 11), which verifies that the product complies with the 3P FAMA Regulations.

Figure 11: Examples of Inspection Slip 3P and COC



Source: MAQIS

[58] *The COC requirement for coconuts has been temporarily suspended by FAMA.*

FAMA is currently assessing the practicality of enforcing the COC requirement for imported coconuts. Imported coconuts from Indonesia are often transported directly by barges from plantations to Malaysia (Figure 12). These plantations typically lack the infrastructure for grading, packaging, and labelling, creating challenges in meeting the requirements outlined in the 3P FAMA Regulations (see Table 18).

Figure 12: Coconuts arrived at Batu Pahat Minyak Beku Ferry Terminal

Source: MyCC

Table 18: Grading, packaging, and labelling, 2024

Aspect	Requirements
Grading	1. All agricultural produce must be graded according to established standards. 2. Agricultural products intended for sale must be graded based on the specifications set by the Malaysian Standard (MS). 3. If an MS specification is unavailable, the produce should follow grading standards issued by FAMA or, alternatively, the grading standards of the country of origin. 4. Each agricultural product is categorised into three grades namely, premium grade, grade 1, and grade 2. 5. The grading system emphasises five main characteristics: uniform maturity, freshness, absence of defects, freedom from damage, and consistency in size.
Packaging	1. Packaging should be appropriately sized for the quantity of agricultural produce being packed, contain produce of the same type and quality, and not exceed 30 kg. 2. The packaging should also meet standards of quality, cleanliness, and durability to provide maximum protection against any damage to the agricultural produce during handling and transportation. 3. It should be made from materials that do not negatively affect the agricultural produce inside. 4. If a package has been previously marked or labelled and is intended for reuse, any previous markings or labels must be removed or erased before reuse.
Labelling	1. Label size must be at least 11 cm × 7 cm. 2. It should be neatly marked or affixed on the top or side of the package, ensuring it is easily visible. 3. The label should include name and address of the importer, common name of the produce, grade, size, country of origin, and weight. 4. The details should be easy to read and durable, in font size not smaller than 20 points, and in the Malay Language for imported produce.

Source: FAMA

5.4.3 Comparison of IP procedures in Indonesia, Thailand, Singapore, and Vietnam

Malaysia's import permit (IP) procedures are similar to those in Indonesia, Thailand, and Vietnam, involving multiple agencies and complex sanitary and phytosanitary (SPS) requirements that make the process lengthy. Halal certification, especially for beef, adds further complexity in Malaysia and Indonesia. Coordination among various ministries is often required.

In contrast, Singapore stands out with a more efficient system. Its Singapore Food Agency (SFA) provides a centralised portal with all relevant import information, making the process clearer and more user-friendly. Though formal applications still go through Singapore Customs and TradeNet, the SFA portal simplifies access to regulations and procedures.

6.0 Beef, Coconut, and Onion Markets in Malaysia

This section provides a comprehensive analysis of the beef, coconut, and onion markets in Malaysia, focusing on, among others, their supply chains and production flows, domestic production and consumption trends, types or varieties of each commodity, and their respective market structures.

For each commodity, the section discusses:

Supply chain and production flows

Detailed exploration of the processes involved in bringing the product to market with particular emphasis on the importation segment, the stakeholders driving these processes, and the challenges that impact efficiency, competitiveness, and market access. Note that this study revisited the supply chains and production flows for the beef and vegetables sub-sectors from the 2019 MyCC Market Review. These provided the foundational understanding of the supply chains and production flows for beef, coconut, and onion markets in Malaysia. However, these have since been revised and updated to reflect feedback and inputs from the stakeholder engagement sessions undertaken for the study.

Domestic production and consumption

While Malaysia produces coconuts and beef, its dependency on imports remains substantial, particularly for beef. For onions, the situation is more extreme, with 100% of Malaysia's supply being imported, reflecting a total reliance on external sources.

Types and varieties

Examination of the key types or varieties of each commodity present in the market, shaped by both local preferences and international trade flows.

Market structures in the import segment

Focused analysis of the importation segment, including key players and market concentration in Peninsular Malaysia, Sabah and Sarawak. This section does not delve into the market structures of other segments in the value chain, aligning with the study's emphasis on the import dimension.

By targeting the importation aspects of these commodities, this section aims to uncover the challenges, dynamics, and competition issues tied to Malaysia's reliance on global supply chains for beef, coconut, and onion.

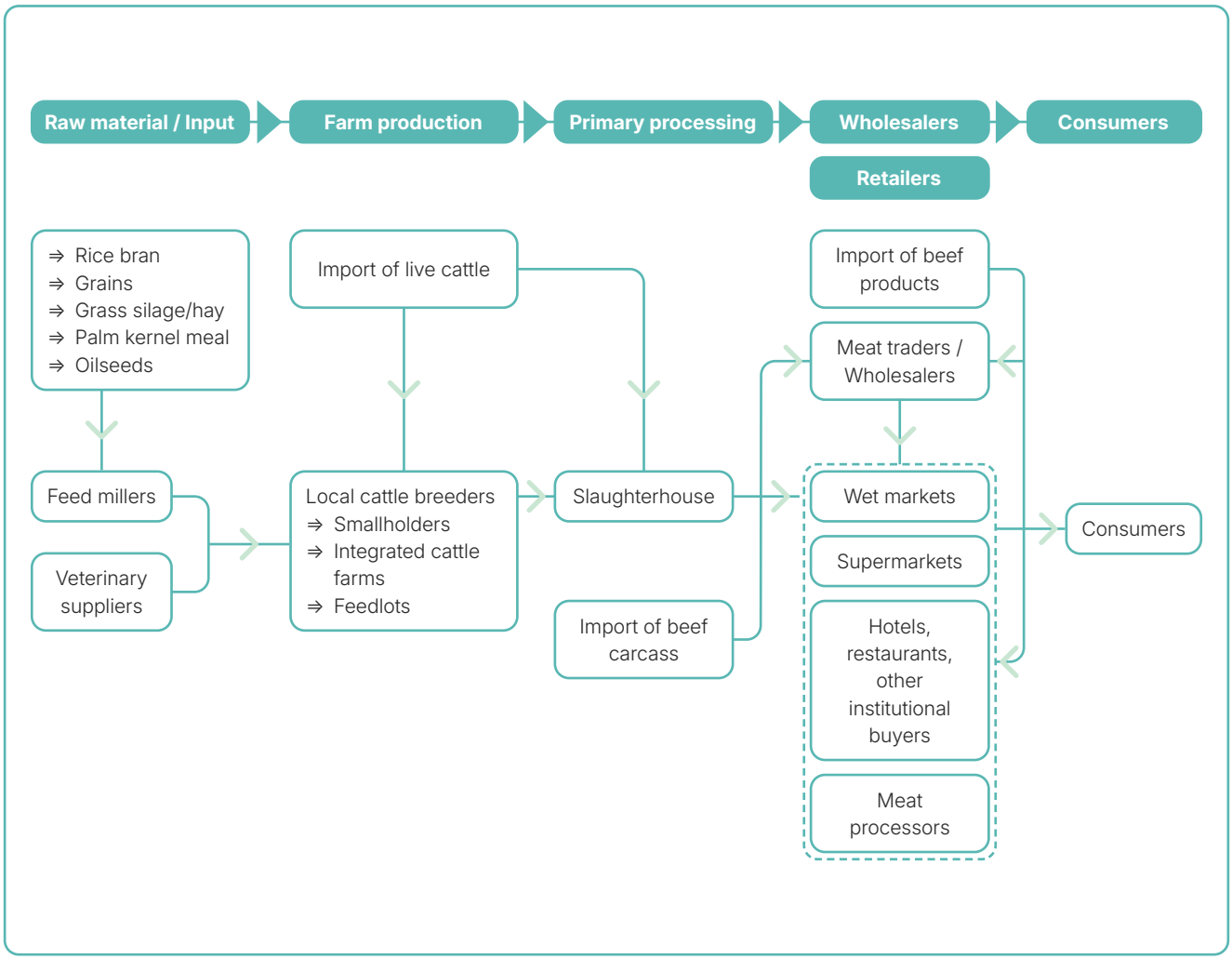
6.1 Beef market

6.1.1 Supply chain and production flow

The beef value chain in Malaysia comprises interconnected stages of production, processing, and distribution that ensure beef products move efficiently from farm to table. This value chain is influenced by domestic and international actors, with additional layers of regulatory oversight in areas such as imports, processing, and retail distribution.

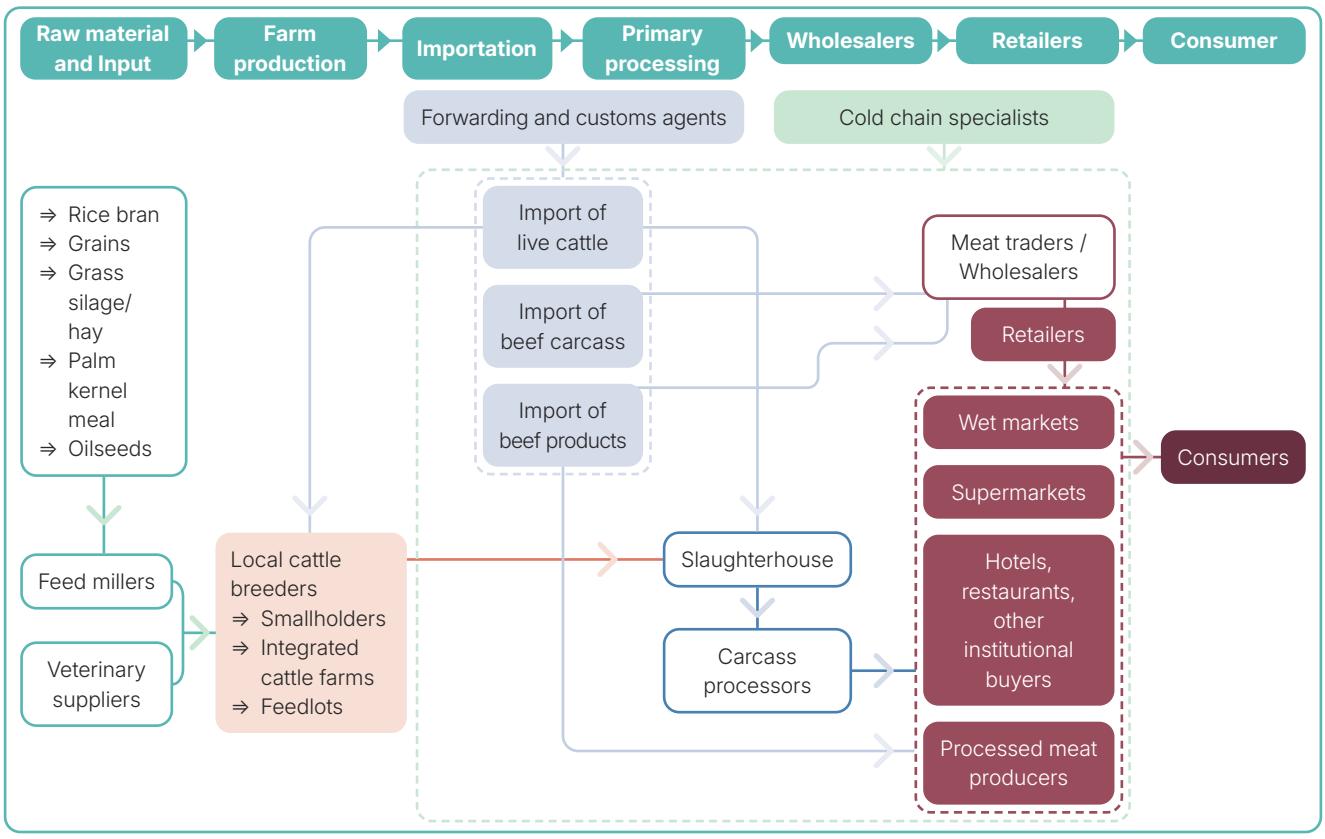
Figure 13 replicates the supply chain and production flow from the 2019 MyCC Market Review, while Figure 14 revises the previous diagram to reflect further analysis work, as well as the feedback and inputs received from the stakeholder engagement sessions.

Figure 13: Beef supply chain and production flow from 2019 MyCC Market Review



Source: MyCC (2019)

Figure 14: Revised and updated beef supply chain and production flow



Source: MyCC analysis

Raw material/Input

Raw material/input is the foundational segment of the beef value chain, where the key inputs required for cattle production are sourced and managed. This stage supports the production of live cattle, which will later enter the farming, processing, and distribution stages (see Table 19).

Table 19: Linkages with other downstream segments in the value chain

Downstream segment	Impact of raw material and cultivation segment
Farm production	Raw material inputs, such as live cattle, feed, and veterinary services, are essential for raising and fattening cattle for slaughter. Imported feed ingredients like corn and soybean meal contribute significantly to farming costs and productivity.
Primary processing	Healthy, market-ready cattle from the farm production stage, supported by quality inputs, are supplied to licensed abattoirs for slaughtering and processing.
Importation	Imported live cattle, sourced in the raw material/input segment, are integrated into the value chain, supplementing domestic cattle supplies.
Wholesaling and retailing	The availability and quality of raw inputs directly influence the supply of processed beef products distributed by wholesalers and sold to retailers.
Consumers	The quality of inputs, such as feed and veterinary care, impacts the final beef quality and price, influencing consumer preferences and satisfaction.

Source: MyCC analysis

Processes

Cattle sourcing

Cattle are either bred locally (through smallholder farms or commercial operations) or imported live from countries such as Australia, Thailand, and Indonesia.

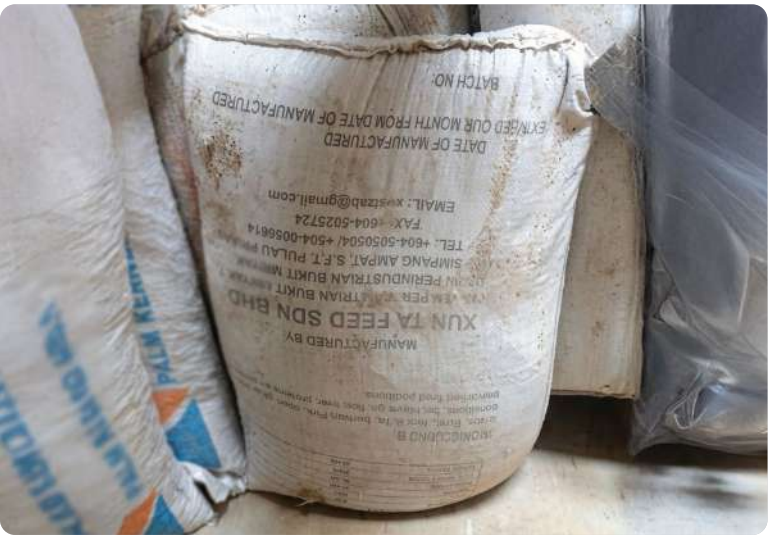
Feed supply

Farmers purchase feed (grass, concentrates, and supplements) to support cattle growth and fattening (see Figure 15). A significant portion of feed is imported, contributing to high production costs. Imported feed ingredients include corn, soybean meal, and other grains.

Veterinary care

Vaccination, disease prevention, and cattle health monitoring services are provided to maintain herd productivity and meet food safety standards. Also, artificial insemination (AI) and genetic selection are used to improve herd quality and productivity.

Figure 15: Examples of cattle feed



Source: MyCC

Key stakeholders

Feed suppliers

Companies supplying animal feed and supplements to farms. Also, feed importers handle importation of high-quality feed ingredients, essential for commercial feedlot operations.

Veterinary services

Government agencies (e.g., DVS) and private veterinarians ensure cattle health.

Agricultural cooperatives

Cooperatives such as PPK provide support and resources to smallholder farmers, including access to inputs like feed, veterinary care, and breeding stock; as well as facilitate collective marketing and capacity building.

Importers of live cattle

Licensed importers manage the procurement of live cattle from international suppliers.

Challenges

Low domestic production: Companies supplying animal feed and supplements to farms (see Figure 16).

Limited resources for veterinary services: Need to manage disease control, ensure compliance with health and Halal standards, and maintain traceability across the supply chain.

Figure 16: A cattle farm in Sabah grows corns to be turned into animal feed

Source: MyCC

Farm production

Farm production represents the phase where cattle are raised, bred, and fattened for eventual slaughter or further processing. This segment transforms raw material inputs—such as feed, land, and veterinary care—into healthy, market-ready cattle. While there is overlap with the raw materials and input stage, farm production focuses more on the operational activities and management of cattle rearing.

Processes

Breeding

Farmers rear calves from breeding herds to replenish stock or sell to feedlots.

Rearing and fattening

Smallholder farming predominantly uses free-grazing systems, where cattle are allowed to graze on natural forage. Commercial feedlots use intensive feeding systems where cattle are fed high-energy concentrates to achieve faster growth and consistent meat quality. Feedlots typically house imported cattle and focus on fattening them before sale to abattoirs.

Disease control

Farmers are responsible for maintaining the health of their livestock by ensuring vaccinations and treatments to prevent diseases like FMD and Lumpy Skin Disease (LSD).

Livestock trading

Farmers sell cattle to traders, agents, or directly to slaughterhouses.

Grazing and feed management

Smallholder farms rely heavily on natural forage, which is cost-effective but subject to seasonal availability. Commercial feedlots use imported concentrates to ensure consistent weight gain and meat quality. Some farms incorporate agro-pastoral systems, combining crop cultivation and cattle farming to optimise resource use (see Figure 17).

Figure 17: Integrated livestock farming in Perak and a feedlot in Sabah

Source: MyCC

Key stakeholders

Smallholder farmers

The majority of local beef production comes from small-scale farms with limited resources. In 2023, the number of cattle farmers in Malaysia was 24,831.[59]

Commercial feedlot operators

Larger, well-capitalised farms focus on intensive production for higher yields.

Input suppliers

Providers of cattle feed, supplements, and veterinary supplies play a critical role in supporting farm operations.

Agricultural cooperatives

Assist smallholder farmers with training, collective marketing, and access to inputs and services.

Livestock traders

Act as intermediaries, purchasing cattle from farmers and selling them to processors or slaughterhouses.

Table 20 summarises the key characteristics of smallholder farms and commercial feedlots.

Table 20: Smallholder farms versus commercial feedlots

Aspect	Smallholder farms	Commercial feedlots
Scale of operation	Small-scale, often subsistence	Large-scale, intensive systems
Feeding system	Natural grazing	High-energy concentrates
Productivity	Low, slow growth rates	High, rapid weight gain
Challenges	Land access, limited resources	High feed costs, import dependency
Contribution	Majority of domestic supply	Fattening for premium markets

Source: MyCC analysis

[59] *MAFS (2024). Malaysia Agrofood in Figures 2023.*

Challenges

Low productivity: Smallholder farms face resource constraints as they lack access to sufficient grazing land, capital, and modern technologies leading to lower cattle yields and limiting their productivity.

Limited land availability: Insufficient grazing land limits the expansion of cattle farming.

Cost pressures: Rising costs for feed, labour, and veterinary care impact profitability.

Disease management: Maintaining cattle health and Sabah's and Sarawak's FMD-free status requires significant investment in veterinary infrastructure and monitoring.

Climate vulnerabilities: Seasonal fluctuations in forage availability due to droughts or floods impact smallholder farms reliant on natural grazing.

Primary processing

The primary processing segment plays a crucial role in the transformation of live cattle into marketable beef products, thus linking farm production and the distribution of beef products to consumers. This segment involves slaughtering, carcass processing, packaging, and by-product utilisation, with key stakeholders including abattoirs, Halal certification bodies, regulatory agencies, and logistics providers (see Table 21).

Table 21: Primary processing linkages with other segments in the beef value chain

Upstream segment	Downstream segment
Input: Provides feed and veterinary care to healthy cattle.	**Cold chain providers**: Ensures beef quality during transport and storage.
Farm production: Supplies live cattle for slaughter.	**Wholesalers and retailers**: Receives processed beef cuts for distribution to consumers.

Source: MyCC analysis

Processes

Slaughtering

Cattle are slaughtered in licensed abattoirs, with adherence to Halal certification standards enforced by JAKIM. Animals are inspected pre-slaughter by veterinary officials to ensure they are disease-free and meet health requirements.

Carcass processing

After slaughter, the carcasses are skinned, eviscerated, and divided into primal cuts (e.g., chuck, rib, loin, brisket) and secondary cuts (e.g., minced meat). By-products, such as hides, bones, and offal, are collected for further processing into value-added products like leather, gelatine, animal feed, or pet food. Carcasses are graded based on factors such as fat content, muscle marbling, and weight to determine market value.

Packaging and cold storage

Processed cuts are vacuum-packed or chilled in temperature-controlled environments to preserve freshness. Products are labelled with information about weight, grade, origin, and Halal certification. Cold chain systems provide refrigeration and freezing to ensure that the quality and safety of beef products are maintained during storage and transportation.

Quality inspection

Regulatory inspections are carried out to ensure the beef complies with SPS standards, Halal certification, and food safety regulations.

Key stakeholders

Local abattoirs

Licensed slaughterhouses handle the processing of domestic cattle.

Approved overseas abattoirs

Facilities in countries like Argentina, Australia, Brazil, India, and New Zealand are approved to export Halal-certified beef to Malaysia.

Processors and meat cutting facilities

Perform cutting, deboning, packaging, and labelling of beef products. Prepare beef for specific consumer markets, including fresh beef for traditional markets and frozen beef for supermarkets or industrial buyers.

Cold chain logistics providers

Maintain temperature-controlled storage and transportation to wholesalers and retailers.

By-product processors

Handle the by-products of slaughtering-for example, tanneries (processing hides into leather) and animal feed companies (repurposing bones and offal into animal feed ingredients).

Halal certification authorities

JAKIM certifies domestic abattoirs and recognises foreign certification bodies and collaborates with approved foreign Halal authorities to verify Halal compliance in exporting countries.

Veterinary and food safety authorities

DVS conducts inspections pre- and post-slaughter to ensure compliance with health regulations. MAQIS inspects imported carcasses and beef cuts to ensure they meet SPS standards. MOH verifies food safety and hygiene standards during processing.

Challenges

Capacity constraints: Local abattoirs often lack modern facilities, leading to inefficiencies. Also, smaller, fragmented abattoirs struggle to achieve economies of scale, making them less competitive compared to large international facilities.

Import reliance: The majority of Malaysia's beef demand is met through imported frozen or chilled beef, reducing reliance on local processing.

Compliance with Halal standards: Ensuring that slaughtering meets strict Halal requirements can be resource-intensive, particularly for smaller facilities.

Health and safety regulations: The reliance on imported beef places additional pressure on regulatory agencies to ensure compliance with both SPS standards and Halal certification.

Cold chain limitations: Gaps in cold chain infrastructure, particularly in rural or less-developed regions, can compromise the quality of processed beef.

Importation

The importation segment of the beef value chain in Malaysia is a critical component due to the country's heavy reliance on imported beef to meet domestic demand. This segment involves the processes, stakeholders, and regulatory mechanisms that ensure the flow of imported beef or live cattle complies with Malaysia's stringent standards for food safety, Halal certification, and animal health (see Table 22).

Table 22: Importation linkages with other segments in the beef value chain

Upstream segment	Downstream segment
Foreign exporters and abattoirs: Supply beef and cattle to Malaysia.	**Primary processing**: Processes imported live cattle in local abattoirs.
Shipping and logistics providers: Transport beef to Malaysia.	**Wholesalers and retailers**: Distribute imported beef to consumers.

Source: MyCC analysis

Processes

Procurement and export

Malaysia imports beef and live cattle from countries with approved abattoirs and certifications, such as Australia, Brazil, India, and New Zealand. Imported beef may be frozen, chilled, or in the form of live cattle for slaughter in domestic abattoirs. Exporting countries must comply with Malaysia's requirements for Halal certification, food safety, and animal health. Approved foreign abattoirs must follow Halal slaughtering standards verified by JAKIM and local Islamic bodies.

Import permits and documentation

Importers must obtain IPs from MAQIS for beef and live cattle. IPs require supporting documents such as veterinary health certificates, Halal certifications, and compliance with SPS measures.

Customs clearance

Handling import documentation and approvals, including permits from MAQIS for plant and animal health inspections, DVS for veterinary checks and compliance, MOH for labelling requirement, and JAKIM for Halal certification verification for imported beef.

Logistics coordination

Agents manage the transportation of beef products or live cattle to wholesalers or slaughterhouses.

Cold chain management

Imported frozen or chilled beef is transferred to temperature-controlled storage facilities at ports to maintain freshness and quality during customs clearance and transport.

Quarantine and inspections

Live cattle undergo quarantine and health checks to ensure they are disease-free before being released into the supply chain. Chilled or frozen beef is tested for contaminants, pathogens, and adherence to Halal standards.

Key stakeholders

Exporters and foreign abattoirs

Ensure products meet standards set by Malaysian regulators and coordinate with Malaysian importers to meet Malaysian regulatory and shipping timelines.

Importing companies

Source and manage procurement contracts for live cattle or beef from approved suppliers in exporting countries.

Shipping and logistics companies

Coordinate sea or air freight logistics; ensure proper cold chain management for frozen or chilled beef products; and manage transportation for live cattle.

Port authorities and quarantine stations

Provide facilities for veterinary and quarantine inspections and ensure imported products do not pose risks to domestic livestock or public health.

Customs agents

Facilitate documentation and inspection processes at ports.

Forwarding agents

Manage logistics, including transport and warehousing.

Regulators

MAQIS, JAKIM, DVS, and MOH play critical roles in ensuring compliance.

Challenges

Regulatory complexity: The importation process involves multiple agencies, documentation, and inspections, which can lead to delays and higher costs for importers.

Potential lengthy procedures: Delays in quarantine or permit approvals can disrupt the supply chain. For example, if facilities are limited or overwhelmed, quarantine for live cattle can be delayed.

Compliance costs: Importers incur additional costs to meet health, safety, and Halal requirements.

Cold chain limitations: Inadequate cold storage facilities at ports can compromise the quality of chilled and frozen beef.

Global supply chain disruptions: Dependence on imports makes Malaysia vulnerable to global supply chain disruptions, such as shipping delays or trade restrictions in exporting countries.

Wholesaling and retailing

The wholesaling and retailing segment is the final stage in the beef value chain, connecting processed beef products to end consumers. This segment plays a pivotal role in the distribution and availability of beef, ensuring that it reaches various market channels such as supermarkets, butcher shops, and traditional wet markets (see Table 23).

Source: MyCC

Table 23: Linkages with other segments in the value chain

Segments	Linkage with wholesaling and retailing segment
Raw material/input	The availability and quality of raw materials, such as live cattle or imported beef, determine the supply and price points for wholesalers and retailers.
Farm production	Wholesalers rely on steady supplies of live cattle from farms, which ultimately affect the variety and volume of beef available for retail.
Primary processing	Processed beef products from abattoirs are distributed by wholesalers to retail outlets, forming a direct supply link between processors and end consumers.
Importation	Imported beef products are a key source for wholesalers, especially during domestic supply shortages, ensuring consistent availability for retail markets.
Consumers	Wholesalers and retailers play a crucial role in meeting consumer demand for fresh, frozen, or processed beef, influencing pricing, accessibility, and product quality.

Source: MyCC analysis

Processes

Wholesale distribution

Wholesalers purchase bulk or large quantities of beef, either from domestic processors or as imported chilled/frozen beef, and redistribute it to retailers, food service providers, and institutional buyers (e.g., restaurants and caterers). They maintain refrigerated storage facilities to preserve beef quality and prevent spoilage. They also set prices based on procurement costs, market demand, and operational expenses. They manage the logistics of delivering beef to retailers and other buyers.

Retail sales

Beef is sold through various channels, including supermarkets and hypermarkets, which offer imported beef and high-quality cuts; traditional wet markets and farmers' markets, which focus on fresh, locally slaughtered beef; and butcheries, which provide customised cuts for consumers (see Figure 18). Increasingly, beef is sold online through platforms that offer home delivery. Retailers emphasise product labelling, including information on Halal certification, origin, and quality, to attract buyers.

Figure 18: Examples of retail beef products

Source: MyCC

Key stakeholders

Cold chain providers

Provides temperature-controlled vehicles and storage units for wholesalers and retailers to ensure that beef remains fresh during transportation and storage (see Figure 19).

Wholesalers

Large distribution companies handle the bulk of imported beef, while smaller wholesalers focus on domestic beef.

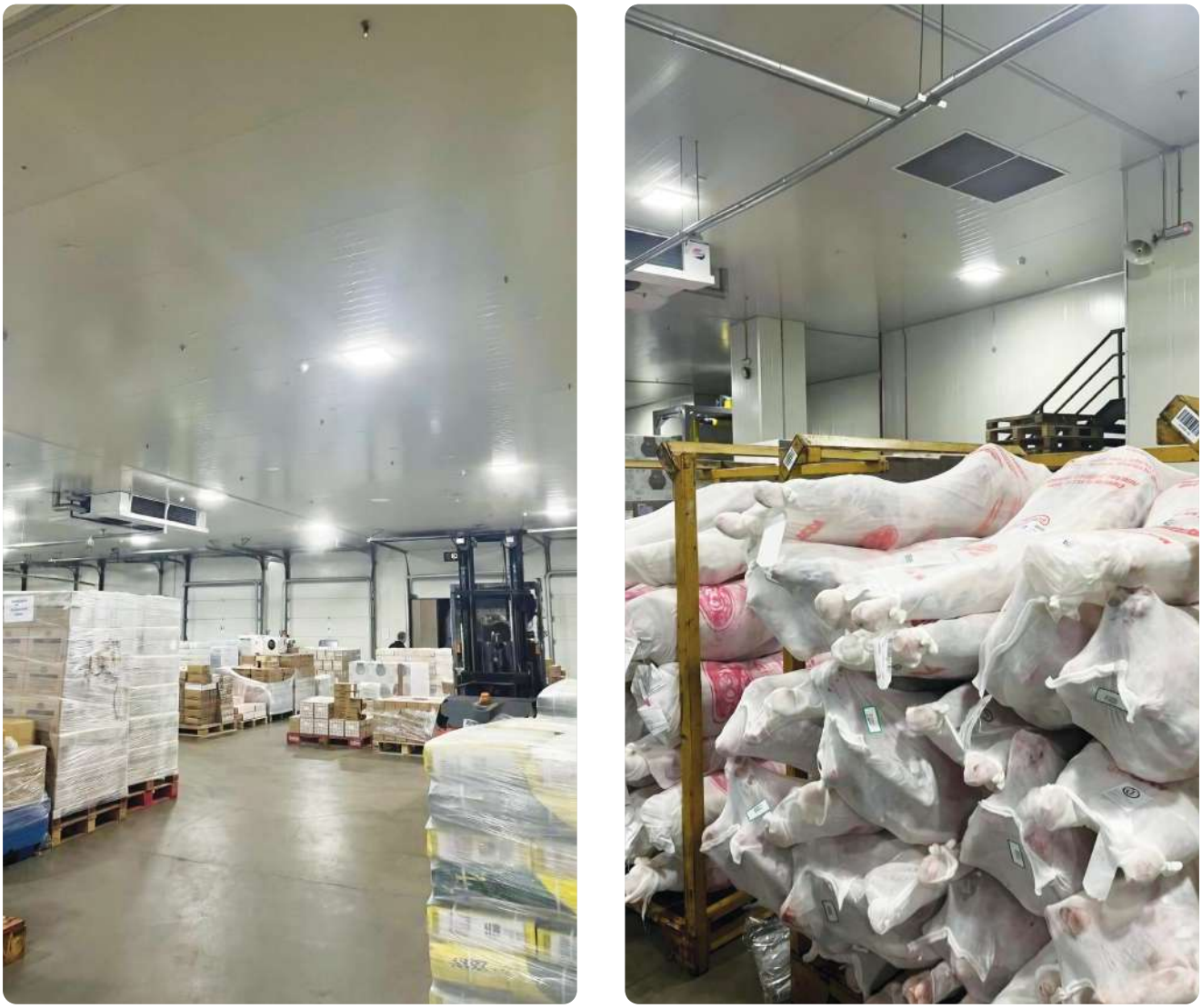
Retailers

Supermarkets and hypermarkets; traditional wet markets and farmers' markets; and butcheries.

Food processors

Restaurants, catering services, and food manufacturers purchase beef for value-added production.

Figure 19: Cold storage facility of a beef importer



Source: MyCC

Challenges

Price volatility: Imported beef prices are influenced by global market trends and exchange rates. Wholesalers and retailers face fluctuating prices due to changes in import costs, seasonal demand, and global supply disruptions.

Cold chain gaps: Insufficient cold storage infrastructure, especially in rural areas, can lead to quality degradation and food waste.

Market fragmentation: The coexistence of modern retail chains and traditional wet markets creates a fragmented retail environment with differing standards and consumer preferences.

Access issues: Consumers in rural or remote areas face higher prices due to transportation costs.

Consumers

Consumers are the final segment of the value chain, driving demand for beef products (see Table 24).

Table 24: Linkages with other segments in the value chain

Segments	Linkage with consumer segment
Raw material/input	The quality and cost of raw materials, such as live cattle, feed, and veterinary services, directly affect the price, quality, and availability of beef for consumers.
Farm production	Consumer preferences for specific beef cuts, quality grades, or production methods (e.g., organic or grass-fed) influence farming practices and production decisions.
Primary processing	Consumer demand for safety, traceability, and quality standards impacts processing practices, such as hygiene measures and product labelling.
Importation	Consumers indirectly drive the importation of specific beef products to meet demand for affordability, variety, or specialty items unavailable locally.
Wholesaling and retailing	Retailers and wholesalers adapt their offerings to meet consumer preferences for fresh, frozen, or processed beef products, shaping supply chain dynamics.

Source: MyCC analysis

Consumption trends

Demand for beef spikes during festive seasons (e.g., Hari Raya Aidilfitri and Aidiladha), which requires wholesalers and retailers to manage inventory carefully.

Imported beef, particularly from India and Australia, is often preferred due to its lower price, quality, and availability.

Urban consumers prefer imported beef due to perceived quality and availability in supermarkets. Rural consumers favour fresh, locally slaughtered beef, often sourced from wet markets or butcher shops.

Challenges

Affordability: High production costs and import reliance keep beef prices elevated.

Consumer preferences: Demand for fresh, locally slaughtered beef persists, particularly in rural communities, domestic production, consumption, and importation.

Generally, the consumption of beef mainly comes from cattle and buffalo meat. The local production for beef has been on a steady downtrend from 44,024 mt in 2019 to 35,934mt in 2022, but this trend reversed in 2023 as the beef production went up to 38,667mt (see Table 25). Although encouraging, the production level in 2023 was still well below the 2019 production level. To supplement the declining local production, beef imports have shown a substantial increase, rising from 146,415 mt in 2019 and to 205,247mt in 2023, representing a 40.2% growth over this period. Beef is imported either fresh, frozen, or chilled into the country. As a result, the SSL for beef declined from 23.2% in 2019 to 15.9% in 2023, and IDR increased from 77.1% to 84.5% during the same period.

Table 25: Production, export, import, per capita consumption of beef, 2019 – 2023

Item	2019	2020	2021	2022	2023
Population of cattle	657,407	699,424	717,431	728,107	726,206
Population of buffaloes	101,695	64,250	66,550	70,734	72,565
Production (mt)	44,024	41,379	36,801	35,934	38,667
Export (mt)	654	513	1,015	926	1,108
Import (mt)	146,415	153,291	159,189	208,868	205,247
Per capita consumption (kg)	5.4	5.5	5.5	6.9	6.7
SSL (%)	23.2	21.3	18.9	14.7	15.9
IDR (%)	77.1	79.0	81.6	85.6	84.5

Source: DOSM and MAFS

6.1.2 Cattle breeds

The DVS provides information on the various breeds of cattle raised in the country. Malaysia's cattle industry encompasses a variety of breeds, selected and managed to optimise meat and milk production in a tropical climate. This section will explore the unique characteristics, advantages, and adaptability of each breed. From indigenous breeds to popular imports, understanding these cattle varieties is crucial for stakeholders in Malaysia's agricultural landscape, where breed selection can significantly influence productivity and sustainability.

In Malaysia and Indonesia, the terms *lembu* and *sapi* are often used to describe cattle, but they carry distinct meanings based on local context. The Dewan Bahasa Dan Pustaka defines *lembu* and *sapi* as follows:

***Lembu*:** A type of livestock raised for its milk and meat. This generally refers to *Bos longifrons* and *Bos brachyceros*.

***Sapi*:** A type of animal resembling a cow and black in colour. This generally refers to *Bos indicus*. Additionally, sapi is also the usual word for cattle in Indonesia, more specifically, Sumatera.[60]

[60] *Wilkinson, R. J. (1932). A Malay – English Dictionary (Romanised). Mytilene. Salavopoulos and Kinderlis.*

Tables 26 to 34 provide information on cattle breeds.

Table 26: Kedah-Kelantan (KK) Cattle

Information on KK Cattle	
	
Breed	KK Cattle
Origin	This breed is native to Malaysia, particularly in the states of Kedah and Kelantan.
Characteristics	• They are small to medium in size. • Their coat colour typically varies from light to dark brown, sometimes with a darker shade on the back. • They have a high degree of disease resistance and adaptability to harsh weather conditions. • They are generally hardy, able to thrive on low quality-forage, and can sustain themselves in extensive grazing systems. • They are primarily raised for meat, with relatively low milk production. • Their growth rate and meat yield are modest compared to imported breeds, limiting their use in high-intensity commercial farming.
Birth weight	• Male: 15kg • Female: 14kg
Mature weight	• Male: 300 – 312kg • Female: 219 – 240kg
Mature age	• Male: 30 months • Female: 30 months
Gestation period	280 days (About 9 months)

Source: Kumpulan Ladang-Ladang Perbadanan Kedah Sdn Bhd, Islam, et al (2021), and Fuad, Amin & Rusli (2014)

Table 27: Bali Cattle

Information on Bali Cattle

Breed	Bali Cattle
Origin	This breed originates from Indonesia. It is considered the native cattle of Indonesia.
Characteristics	• It has a medium body frame. • This breed has white colouring on the lower legs and belly, resembling socks. • It is resilient to diseases and hot weather and has a high fertility rate. • The meat yield is around 40% – 45% of bodyweight. • A drawback of the Bali Cattle is that it cannot be crossbred with other breeds, as offspring from such crossbreeding are infertile.
Birth weight	• Male: 22kg • Female: 18kg
Mature weight	• Male: 500 – 700kg • Female: 400 – 500kg
Mature age	• Male: 12 – 18 months • Female: 12 – 18 months
Gestation period	260 – 280 days (approximately 8 – 9 months)

Source: DVS and agrimag.my

Table 28: Jersey Cattle

Information on Jersey Cattle	

Breed	Jersey Cattle
Origin	This breed originates from the Channel Islands, Jersey, UK. It is one of the earliest dairy breeds to be domesticated by humans.
Characteristics	• It has a medium body frame. • It has the ability to produce a large amount of milk. • The breed has short fur, with a light brown or dark brown colour. • It is known for its gentle temperament. • It adapts well to various weather conditions. • The milk produced is of very high quality, containing over 18% protein, 20% calcium, and 25% fat, compared to milk from other cattle breeds.
Birth weight	• Male: 25kg • Female: 20kg
Mature weight	• Male: 400 – 500kg • Female: 300 – 400kg
Mature age	• Male: 18 – 24 months • Female: 12 – 18 months
Gestation period	260 – 280 days (approximately 8 – 9 months)

Source: DVS and decorexpro.com

Table 29: Brahman Cattle

Information on Brahman Cattle	

Breed	Brahman Cattle
Origin	This breed originates from India. It is often subjected to crossbreeding processes worldwide.
Characteristics	• It has a large body frame. • It has excellent weight gain capabilities. • The breed has short fur with various colour variations, although white is the most common. • It has a hump on its back. • It is resilient to diseases and hot weather. • Female Brahman cattle have excellent maternal instincts. They are highly protective of their calves and ensure that the calves receive consistent care and adequate nourishment.
Birth weight	• Male: 33kg • Female: 30kg
Mature weight	• Male: 800 – 1,100kg • Female: 500 – 700kg
Mature age	• Male: 18 – 24 months • Female: 12 – 18 months
Gestation period	260 – 280 days (approximately 8 – 9 months)

Source: DVS and Colla Cattle Farm

Table 30: Murrah Buffalo

Information on Murrah Buffalo

Breed	Murrah Buffalo
Origin	This breed originates from the Punjab and Haryana regions in India, as well as the Punjab province in Pakistan. It is part of the river/water buffalo group.
Characteristics	• It has a large body frame. • This breed is jet black in colour, with occasional white markings on the face and legs. • It is resilient to diseases and hot weather. • The breed is dual-purpose, providing both milk and meat. • The meat produced accounts for around 50% of its body weight. • The milk produced has a high butterfat content, approximately 16%, which is essential for making the famous mozzarella cheese worldwide. • It is capable of producing 1,500 to 1,800 litres of milk per lactation while the calf is nursing from its mother. • This breed has 50 pairs of chromosomes (typical number of chromosomes is 48 – 50).
Birth weight	• Male: 35kg • Female: 29kg
Mature weight	• Male: 500 – 600kg • Female: 400 – 500kg
Mature age	• Male: 30 months • Female: 36 months
Gestation period	Approximately 11 months

Source: DVS and Colla Cattle Farm

Table 31: Nili Ravi Buffalo

Information on Nili Ravi Buffalo

Breed	Nili Ravi Buffalo
Origin	This breed originates from the Punjab region in Pakistan. It is the native buffalo of Pakistan and belongs to the river/water buffalo group.
Characteristics	• It has a large body frame. • This breed is jet black with some white markings on the heads, legs, and tail. • It is resilient to diseases and hot weather. • The breed is dual-purpose, providing both milk and meat, and is known for its docile temperament. • The meat produced accounts for around 50% of its body weight. • It is capable of producing between 8 to 15 litres of milk per day. • Known as the "Black Gold of Asia". • This breed has 50 pairs of chromosomes (typical number of chromosomes is 48 – 50).
Birth weight	• Male: 41kg • Female: 30kg
Mature weight	• Male: 700 – 800kg • Female: 450 – 550kg
Mature age	• Male: 30 months • Female: 36 months
Gestation period	Approximately 11 months

Source: DVS and Republica

Table 32: Swamp Buffalo

Information on Swamp Buffalo

Breed	Swamp Buffalo
Origin	This breed originates from Southeast Asia (the Philippines and Indonesia) and China.
Characteristics	• It has a moderately sized body frame. • This breed is black and dark brown with a distinctive white line on the neck. • It has good disease resistance but is not tolerant of hot weather, requiring access to wallowing areas. • It is dual-purpose, providing both milk and meat, though milk production is relatively low. • The meat yield is about 50% of its body weight. • It has large, wide horns that curve backward, resembling a crescent. • This breed has 48 pairs of chromosomes.
Birth weight	• Male: 22kg • Female: 18kg
Mature weight	• Male: 350 – 450kg • Female: 250 – 350kg
Mature age	• Male: 30 months • Female: 36 months
Gestation period	Approximately 11 months

Source: DVS and Cara Beternak

Table 33: Friesian-Sahiwal

Information on Friesian-Sahiwal

Breed	Friesian-Sahiwal
Origin	This crossbreed combines the Holstein Friesian, a high-yield dairy breed from the Netherlands, with the Sahiwal, a heat-tolerant dairy breed from Pakistan and India.
Characteristics	• It has a medium-to-large body frame, inheriting the larger frame of the Holstein Friesian and the robustness of the Sahiwal. • Its colour varies. It can exhibit the black and white pattern of the Holstein Friesian or the reddish-brown of the Sahiwal, or a combination. • It is primarily raised for milk production, benefiting from the high yield of the Holstein Friesian and the heat tolerance of the Sahiwal.
Birth weight	• Male: 25 – 30kg • Female: 20 – 25kg
Mature weight	• Male: 500 – 700kg • Female: 400 – 600kg
Mature age	• Male: 24 – 36 months • Female: 24 – 36 months
Gestation period	Approximately 9 months

Source: Trail and Gregory (1981) and Biggest Bulls of the World

Table 34: Brangus

Information on Brangus

Breed	Brangus
Origin	This is a cross between the Brahman breed (originating from India) and the Angus (from Scotland). Developed in the US, this crossbreed combines the hardiness of the Brahman with the superior meat quality of the Angus.
Characteristics	• It has a medium-to-large body frame, with a muscular build. • It is predominantly solid black or red, inheriting the colouration from the Angus parent. • It is primarily raised for beef production, combining the Brahman's adaptability to heat and resistance to pests with the Angus' marbling and meat quality
Birth weight	• Male: 30 – 35kg • Female: 25 – 30kg
Mature weight	• Male: 800 – 900kg • Female: 500 – 700kg
Mature age	• Male: 24 months • Female: 24 months
Gestation period	Approximately 9 months

Source: The Cattle Site, Beef Cattle Handbook, and Breedslist.com

6.1.3 Live cattle and buffalo import market

Peninsular Malaysia's live cattle imports market

In 2023, there were 87 live cattle importers in Peninsular Malaysia, where 99.5% of the imports were for live cattle (live cattle represented more than 90% of imports between 2020 and 2023). The live cattle import market exhibited a highly concentrated structure (see Table 35). As shown in the table, with the exception of the year 2022, the HHI values consistently exceeded 2,500, while the CRs remained above 70%. These metrics underscore the significant market dominance and limited competition within this sector. The current market structure is quite similar to the market structure exhibited in the 2019 MyCC Market Review.

Table 35: Live cattle and buffaloes importers' market concentration metrics in Peninsular Malaysia, 2020 – 2023

Market concentration metrics	Value			
	2020	2021	2022	2023
HHI	2,962.2	3,169.9	811.5	5,604.4
CR4 (%)	74.5	74.8	47.2	87.1
CR10 (%)	87.2	88.3	78.6	95.1

Note:

HHI below 1,500 indicates a competitive market; HHI between 1,500 and 2,500 indicates a moderately concentrated market; HHI above 2,500 indicates a highly concentrated market (potential monopoly and oligopoly). CR below 40% suggests a competitive market; CR between 40% and 60% suggests a moderately concentrated market; CR above 60% suggests a highly concentrated market (potential monopoly and oligopoly).

Source: RMCD and MyCC analysis

From 2020 to 2021, Australia was Malaysia's main source of imported cattle and buffalo. By 2023, however, 94.7% of imports came from Thailand, driven by lower costs (see Table 36). Importers prioritise affordability, with Thailand offering cheaper cattle. To reduce costs from Australia, importers often selected older cattle (over three years old) instead of the ideal 18-month-old stock for breeding—reflecting trade-offs between cost and breeding quality. From 4 August 2023 to 6 September 2023, the DVS imposed a temporary ban on live from Australia due to potential LSD outbreak concerns raised by Indonesia's Directorate General of Livestock and Animal Health Services (PKH), which likely accelerated the shift to Thai imports.

Table 36: Sources of imported live cattle and buffaloes by country in Peninsular Malaysia, 2020 – 2024

No.	Country	Market share (%)			
		2020	2021	2022	2023
1	Thailand	35.8	33.9	65.6	94.7
2	Australia	62.8	65.9	31.6	5.0
	Sub-total	**98.6**	**99.8**	**97.3**	**99.6**
	Others[61]	1.4	0.2	2.7	0.4
	Total	**100.0**	**100.0**	**100.0**	**100.0**

Source: RMCD and MyCC analysis

[61] *RMCD data shows that Malaysia imported live cattle and buffaloes from eight other countries including US, China, Philippines, Singapore, Hungary, Germany, Japan, and South Korea.*

Sabah live cattle imports market

Between 2020 and 2023, all live cattle imports into Sabah came exclusively from Australia, with four importers active in the market. DVS Sabah manages the state's livestock development programme through annual tenders, inviting private companies to bid for import rights. Imported cattle are then distributed to various beneficiaries, including smallholder farmers and large players like Sawit Kinabalu Sdn Bhd, supporting the growth of livestock farming in Sabah.

Sawit Kinabalu Sdn Bhd plays a key role in cattle farming in Sabah

Sawit Kinabalu Sdn Bhd, a Sabah government investment arm, plays a key role in the state's cattle farming through its subsidiary, Sawit Kinabalu Farm Products Sdn Bhd. Since 2004, it has practiced integrated cattle farming by breeding Brahman cattle within palm oil plantations (see Figure 20). This model enhances resource efficiency, enables biological weed control, and supports sustainable beef production by reducing reliance on chemical herbicides.

To strengthen beef self-sufficiency in Sabah. The company developed a RM47mn integrated cattle breeding centre in Balung, Tawau in 2022, to grow the cattle population from 15,000 to 50,000.[62]

Figure 20: Sawit Kinabalu Sdn Bhd's integrated livestock farm in Tawau

Source: Sawit Kinabalu Sdn Bhd

[62] *The Borneo Post (2022). Sawit Kinabalu expects cattle farming project to boost Sabah's beef self-sufficiency level.*

Sarawak live cattle imports market

According to RMCD, only one company imported live cattle into Sarawak from 2020 to 2023. PPES Ternak Sdn Bhd, a subsidiary of Sarawak Economic Development Corporation (SEDC). Established to strengthen Sarawak's livestock industry, PPES Ternak Sdn Bhd operates the Karabungan Farm in Miri (see Figure 21). Spanning 234.7ha, the farm has the capacity to house up to 1,000 head of cattle. Karabungan Farm has received Halal certification from MIS and complies with the Australian Exporter Supply Chain Assurance System (ESCAS).

In addition to the Karabungan Farm, PPES Ternak Sdn Bhd manages the Siburan Halal Abattoir, located in Kuching. The facility occupies an 8.1ha site and has a daily slaughtering capacity of 100 cattle, 50 goats, and 50 deer. Like the Karabungan Farm, the abattoir is certified by MIS and complies with ESCAS' standards.

Figure 21: Karabungan Farm, Miri, Sarawak

Source: PPES Ternak Sdn Bhd

6.1.4 Beef import market structure

Peninsular Malaysia's beef imports market

Between 2020 and 2023, the 20 largest beef importers in Malaysia accounted for 80.4% to 88.9% of the market share. This mirrors a trend noted in the 2019 MyCC Market Review. In 2023, the top seven importers focused exclusively on beef imports without further processing. Notably, buffalo meat accounted for 82.7% to 84.5% of imported beef during this period.

The beef import market in Peninsular Malaysia is considered competitive to moderately concentrated. From 2020 to 2023, HHI values ranged between 605.4 and 921.4, suggesting a competitive market, while CR4 values between 48.1% and 56.2% indicate moderate concentration (see Table 37). The top four importers control nearly half the market and may influence pricing. However, industry players still view the market as competitive due to the number of participants and the variety of products offered.

Table 37: Beef importers' market concentration metrics in Peninsular Malaysia, 2020 – 2023

Market concentration metrics	Value			
	2020	2021	2022	2023
HHI	957.3	1,083.4	884.5	768.1
CR4 (%)	53.5	56.2	51.9	48.1
CR10 (%)	77.7	78.8	75.1	71.8

Note:
HHI below 1,500 indicates a competitive market; HHI between 1,500 and 2,500 indicates a moderately concentrated market; HHI above 2,500 indicates a highly concentrated market (potential monopoly and oligopoly). CR below 40% suggests a competitive market; CR between 40% and 60% suggests a moderately concentrated market; CR above 60% suggests a highly concentrated market (potential monopoly and oligopoly).

Source: RMCD and MyCC analysis

According to RMCD, the majority of imported beef into Malaysia came from India at 84.4% share of the market in 2023 (see Table 38). Brazil was the second largest supplier at 6.5%, followed by Australia at 6.4%. Together these three countries account for over 95% of Peninsular Malaysia's beef imports, indicating a strong dependence on a few primary sources. This shows that Malaysia relies heavily on India for its beef imports, and this poses a potential risk. Any disruptions in India's beef supply or changes in export policies could significantly impact Malaysia's beef market. While Brazil and Australia provide alternative sources, the remaining countries make up minimal percentages, indicating limited diversity in supply sources.

Table 38: Sources of imported beef by country in Peninsular Malaysia, 2020 – 2024

No.	Country	Market share (%)			
		2020	2021	2022	2023
1	India	82.7	84.5	84.2	84.4
2	Brazil	3.7	4.3	6.6	6.5
3	Australia	8.5	7.9	6.2	6.4
4	New Zealand	4.1	1.1	1.6	1.5
5	Argentina	0.1	1.6	1.1	1.2
6	Japan	0.1	0.1	0.1	0.1
	Sub-total	**99.2**	**99.6**	**99.8**	**99.9**
	Others[63]	0.8	0.4	0.2	0.1
	Total	**100.0**	**100.0**	**100.0**	**100.0**

Source: RMCD and MyCC analysis

Beef imports from India consist of buffalo meat, whereas imports from other countries are beef from cattle. This reliance on Indian buffalo meat likely reflects cost considerations, as buffalo meat is generally less expensive than beef from cattle. Additionally, beef has been declared by KPDN as a controlled item under the Control of Supplies Act 1961 [Act 122]. Act 122 safeguards the supply of beef in the market by ensuring no parties hoard the beef supplies.

[63] *RMCD data shows that Peninsular Malaysia imports beef from other 18 countries including Pakistan, Spain, US, South Korea, Indonesia, Uruguay, Russia, Thailand, UK, Belize, South Africa, Singapore, Denmark, Italy, Norway, China, Germany, and the Netherlands. Spain, US, South Korea, Indonesia, Uruguay, Russia, Thailand, UK, Belize, Singapore, Denmark, Italy, Norway, and China do not have DVS-approved abattoirs and processing plants. The DVS suspended imports of beef from South Africa from 21 July 2022.*

Sabah's beef imports market

The largest importers in Sabah experienced a decline in market share between 2020 and 2023. Their market shares were gradually overtaken by emerging players. The beef import market in Sabah is moderately to highly concentrated, with the top four companies accounting for 59.8% of the market share in 2023 (see Table 39). This marks a significant decline from 69.3% in 2020. Similarly, the HHI decreased from 1,733.9 in 2020 to 1,291.9 in 2023, indicating a reduction in market concentration over the period.

Table 39: Beef importers' market concentration metrics in Sabah, 2020 – 2023

Market concentration metrics	Value			
	2020	2021	2022	2023
HHI	1,733.9	1,404.8	1,421.3	1,291.9
CR4 (%)	69.3	66.1	62.2	59.8
CR10 (%)	94.1	88.5	89.2	89.5

Note:
HHI below 1,500 indicates a competitive market; HHI between 1,500 and 2,500 indicates a moderately concentrated market; HHI above 2,500 indicates a highly concentrated market (potential monopoly and oligopoly). CR below 40% suggests a competitive market; CR between 40% and 60% suggests a moderately concentrated market; CR above 60% suggests a highly concentrated market (potential monopoly and oligopoly).

Source: RMCD and MyCC analysis

Similar to Peninsular Malaysia, Sabah relies heavily on buffalo meat imports from India. From 2021 to 2023, buffalo meat consistently accounted for more than 80% of Sabah's imported beef (see Table 40). While DVS Sabah permits beef imports only from FMD-free countries or regions without vaccination, an exception is made for India. Despite not being FMD-free, DVS Sabah allows the export buffalo meat to Sabah exclusively from a single abattoir or processing plant in that country.

Table 40: Sources of Sabah's imported beef by country, 2020 – 2024

No.	Country	Market share (%)			
		2020	2021	2022	2023
1	India	72.8	83.9	83.6	83.0
2	Australia	16.1	12.4	11.3	10.7
3	New Zealand	10.6	3.2	4.9	5.6
4	Indonesia	0.4	0.4	0.0	0.3
5	Thailand	0.0	0.0	0.0	0.2
6	China	0.0	0.1	0.1	0.1
	Sub-total	**99.9**	**100.0**	**100.0**	**100.0**
	Others[64]	0.1	0.0	0.0	0.1
	Grand Total	**100.0**	**100.0**	**100.0**	**100.0**

Source: RMCD and MyCC analysis

[64] *RMCD data shows that Sabah imports beef from four other countries including Japan, Spain, US, and Saint Kitts and Nevis. Spain, US, and Saint Kitts and Nevis do not have DVS-approved abattoirs and processing plants.*

Sarawak's beef imports market

According to RMCD, 21 beef importers operated in Sarawak. Buffalo meat accounted for approximately 80% of Sarawak's imported beef. The key players in the Sarawak beef market have remained consistent over the years, with the top five importers controlling 86.5% of the market in 2023.

The beef import market in Sarawak is moderately to highly concentrated. The HHI values ranged between 1,690.6 in 2020 and 2,511.3 in 2023, indicating varying degrees of market concentration over the years. Similarly, the CR4 ratios ranged from 72.5% in 2020 to 76.3% in 2023 (see Table 41).

Table 41: Sarawak beef importers' market concentration metrics, 2024

Market concentration metrics	Value			
	2020	2021	2022	2023
HHI	1,878.7	2,511.3	2,108.4	1,690.6
CR4 (%)	72.5	82.5	87.6	76.3
CR10 (%)	96.2	99.3	99.4	98.6

Note:
HHI below 1,500 indicates a competitive market; HHI between 1,500 and 2,500 indicates a moderately concentrated market; HHI above 2,500 indicates a highly concentrated market (potential monopoly and oligopoly). CR below 40% suggests a competitive market; CR between 40% and 60% suggests a moderately concentrated market; CR above 60% suggests a highly concentrated market (potential monopoly and oligopoly).

Source: RMCD and MyCC analysis

As with DVS Sabah, DVS Sarawak permits the importation of beef only from countries or regions declared free from FMD without vaccination. While importers are allowed to source beef from various countries, imports from India are restricted to a selected number of companies. As noted earlier, Sarawak relies heavily on beef imports from India, with the share of Indian buffalo meat increasing from 64.3% in 2020 to 84.9% in 2023 (see Table 42).

Table 42: Sources of Sarawak's imported beef by country, 2020 – 2024

No.	Country	Market share (%)			
		2020	2021	2022	2023
1	India	64.3	76.8	86.3	84.9
2	Australia	17.9	15.7	8.7	9.1
3	New Zealand	17.8	7.5	5.0	5.9
	Sub-total	**100.0**	**100.0**	**100.0**	**99.9**
	Others[65]	0.0	0.0	0.0	0.1
	Grand Total	**100.0**	**100.0**	**100.0**	**100.0**

Source: RMCD and MyCC analysis

[65] *RMCD data shows that Sarawak imports beef from three other countries such as Belgium, Spain, and Japan. These countries do not have DVS-approved abattoirs and processing plants.*

6.1.5 Price trend

The price trend analysis considers the wholesale and retail prices for both beef and buffalo:

Supply chain dynamics

Malaysia imports a significant portion of its beef from India, which is in effect, buffalo meat. As such, the inclusion of buffalo price trends allows us to assess how international supply chain dynamics, such as exchange rates, import restrictions, or global demand shifts, impact local market conditions.

Economic substitution effect

Buffalo meat serves as a lower-cost alternative to beef for consumers. Tracking its prices provides insights into how shifts in beef prices may affect consumer behaviour and substitution patterns, especially among price-sensitive households. For example, a sharp increase in beef prices could lead to a corresponding rise in buffalo meat demand, potentially driving up its prices as well.

Food security considerations

Buffalo meat is often consumed by lower-income groups due to its affordability. Tracking its price trends is vital for understanding affordability issues and ensuring stable access to protein sources for economically vulnerable populations.

Beef prices

Figure 22 highlights the trends for wholesale and retail prices for beef:

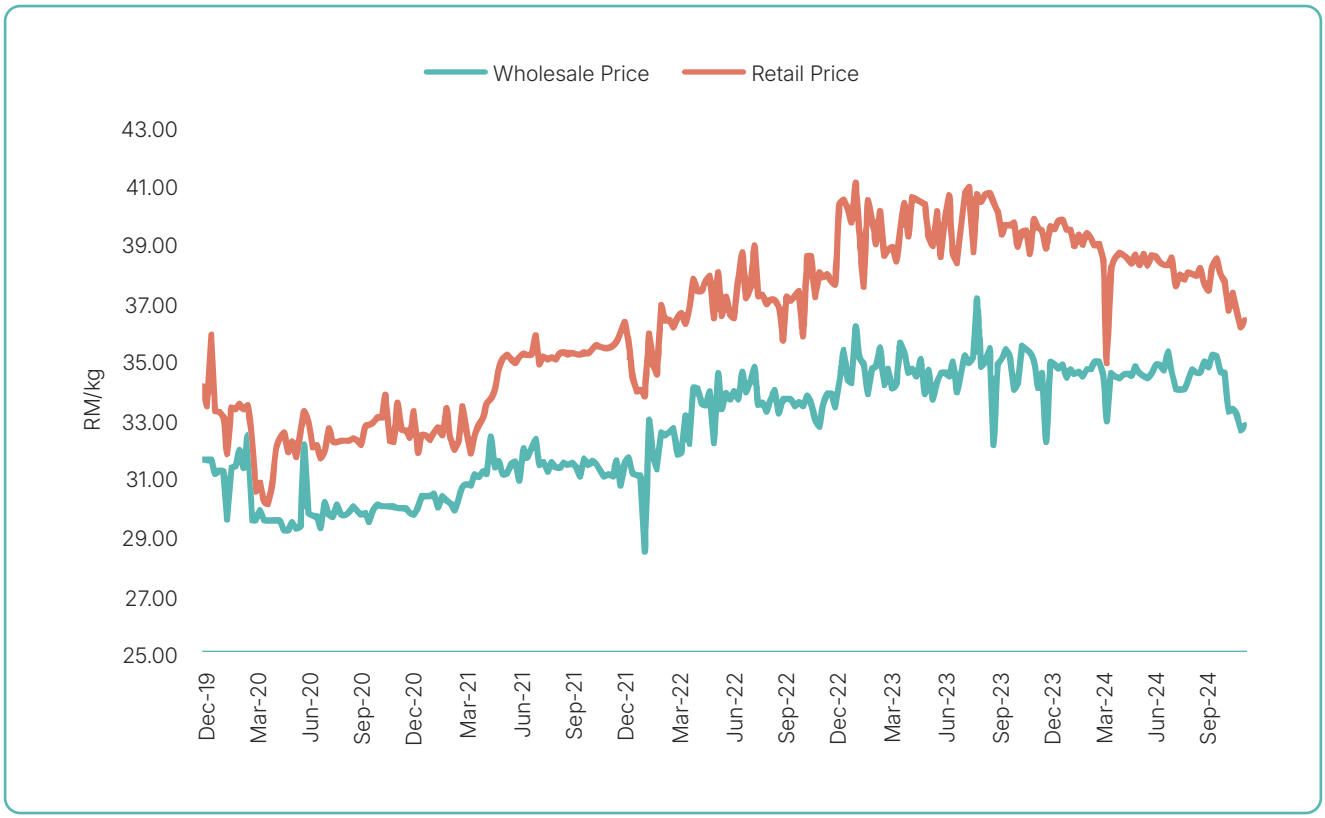
Wholesale price

Wholesale prices for beef exhibited a steady increase from 2019 to late 2022, fluctuating between RM27/kg and RM37/kg. This reflected the supply chain pressures, including increased import costs and disruptions caused by the COVID-19 pandemic. After peaking in late 2022, prices gradually declined starting in 2023, likely due to improved supply conditions or reduced demand. However, the fluctuations during this period (e.g., sharp dips) suggest periodic disruptions or short-term interventions, such as import policies or seasonal shifts in demand.

Retail price

Retail price of beef ranged from RM30/kg to a peak of approximately RM41/kg between 2019 and 2024. It followed a similar trend to wholesale prices, with increases from 2019 to late 2022 and a subsequent plateau, followed by a gradual decline from 2023 onward. However, the retail prices displayed more volatility compared to wholesale prices. For instance, the gap between retail and wholesale prices widened significantly during 2021–2022, which may indicate rising intermediary or processing costs, or potentially inefficient distribution systems.

Figure 22: Wholesale and retail prices of beef, 2020 – 2024



Source: FAMA

Buffalo prices

Figure 23 highlights the trends for wholesale and retail prices for buffalo:

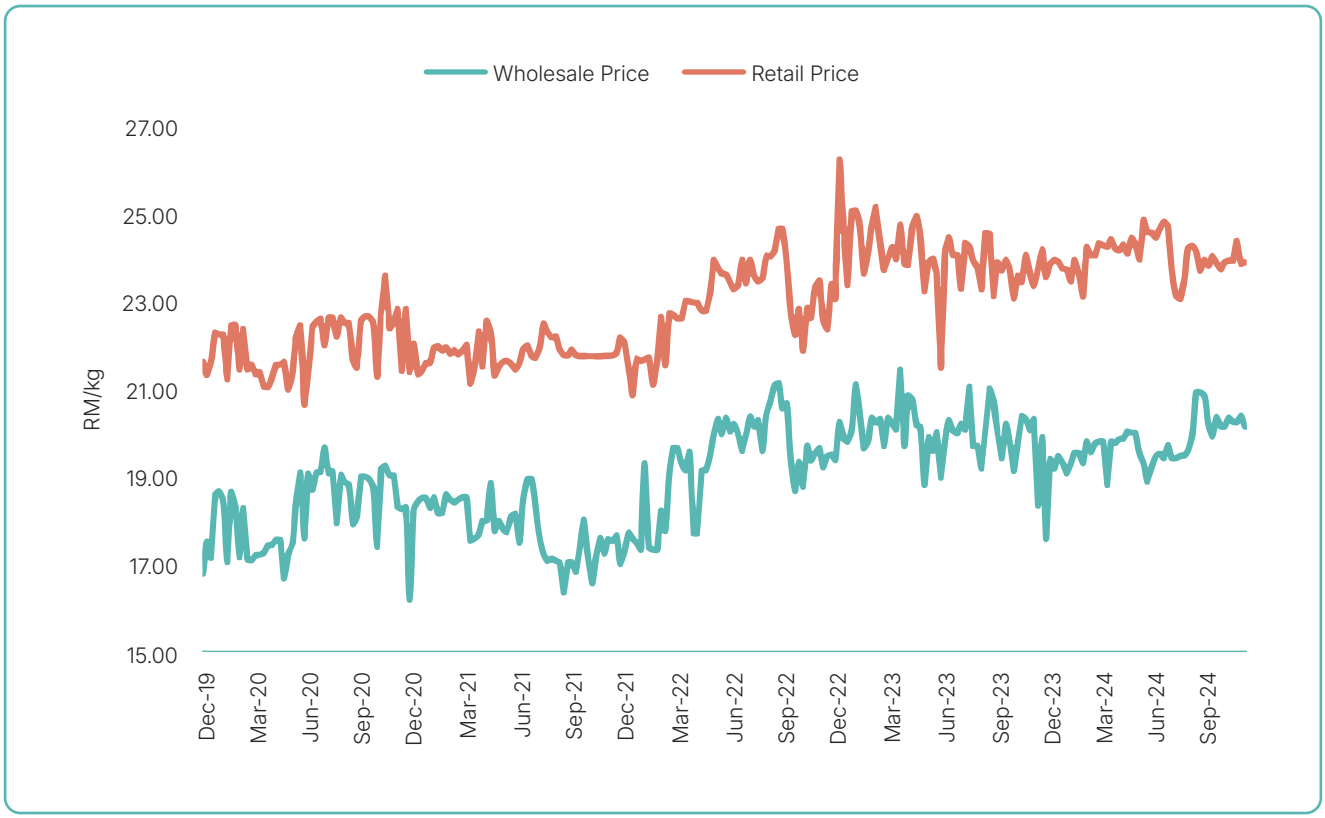
Wholesale price

Wholesale prices for buffalo meat showed moderate growth from 2019 to 2022, with much less volatility than beef prices. From 2023 onward, prices remained relatively stable, fluctuating narrowly between RM15/kg and RM23/kg. This stability may reflect the availability of consistent import supplies from India and buffalo meat's position as a staple, less influenced by luxury-driven demand spikes.

Retail price

Retail prices for buffalo meat showed moderate upward trends from 2019 to 2022 and then stabilised after late 2022. Retail prices ranged between RM20/kg and RM26/kg. Compared to beef, the retail price for buffalo meat showed minimal fluctuations, suggesting lower profit margins or markups by retailers, possibly reflecting its role as an essential commodity with stable consumer demand.

Figure 23: Wholesale and retail prices of buffalo meat from India



Source: FAMA

Comparative insights

Price levels
Beef is consistently more expensive than buffalo meat, with a price difference of approximately RM10–15/kg at retail levels.

Trends and volatility
While both meats followed similar upward trends until late 2022, beef prices showed greater volatility and a subsequent decline, whereas buffalo meat prices stabilised post-2022.

Consumer behaviour
The more stable pricing of buffalo meat suggests its role as an essential commodity for cost-conscious consumers, while beef caters to higher-end or festive demand.

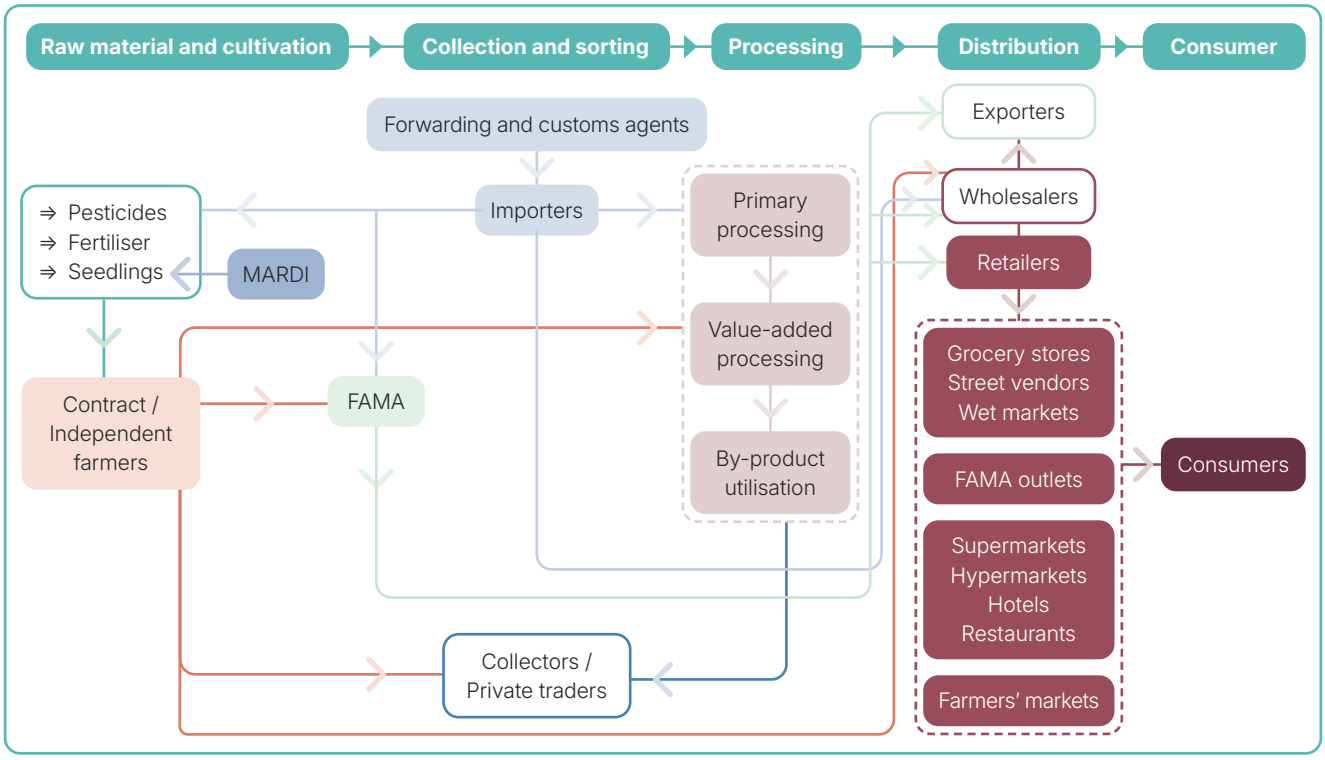
6.2 Coconut market

6.2.1 Supply chain and production flow

Coconuts are a versatile commodity, used to produce copra, coconut oil, milk, cream, powder, desiccated and shredded coconut, flakes, and by-products like fibre and charcoal. The value chain includes smallholder farmers, commercial plantations, collectors, processors, and retailers, all essential in bringing coconut-based products to market. Due to high domestic demand, especially from the food and beverage sector, the value chain relies on both local production and imported supplies.

Unlike for the beef market, the 2019 MyCC Market Review did not specifically analyse the coconut market. Therefore, the supply chain and production flow diagram in Figure 24 is newly developed based on stakeholder feedback.

Figure 24: Coconut supply chain and production flow



Source: MyCC analysis

Raw material and cultivation

The raw material and cultivation segment forms the foundational layer of the coconut supply chain. This stage is crucial as it provides the primary input—coconuts—for all downstream activities, including processing and distribution (see Table 43).

Table 43: Linkages with other downstream segments in the value chain

Downstream segment	Impact of raw material and cultivation segment
Collection and sorting	• Quality at the farm level determines sorting outcomes, with higher-quality coconuts commanding premium prices. • Inconsistent quality or size variability can create inefficiencies and higher rejection rates at sorting centres.
Importers	• Insufficient supply of domestic coconuts due to issues like ageing trees or low yields increases reliance on imported raw materials, raising costs. • Poor synchronisation between local harvest schedules and import arrivals may lead to delays or interruptions in processing operations, affecting the overall efficiency and reliability of the supply chain.
Primary processing	• Consistent supply and quality of raw coconuts are critical for efficient processing. • Low-quality raw material leads to reduced processing yields (e.g., oil extraction) and higher production costs.
Value-added processing	• High-quality raw coconuts improve the efficiency and quality of value-added products. • Delayed supply or spoilage of raw material disrupts production schedules and affects product quality.
By-product utilisation	• Adequate raw material availability enhances by-product industries. • Lack of by-product utilisation at the farm level results in waste and underutilisation of resources that could add value downstream.
Distribution	• The efficiency of raw material handling (e.g., pre-harvest or during harvesting) affects the freshness and transportability of products for distribution. • Shortages in raw supply cause inconsistencies in the distribution of processed products.
Retailing	• Irregularities in raw material supply result in higher retail prices and potential shortages for end consumers. • High post-harvest losses (e.g., during transport from farms) translate to reduced availability at retail points.
Consumers	• The quality of raw coconuts affects the taste, freshness, and usability of products consumed directly (e.g., coconut water, fresh coconuts). • Supply shortages in raw material affect product prices, reducing affordability for consumers.

Source: MyCC analysis

Processes

Land preparation

Farmers prepare land for planting by clearing vegetation, levelling fields, and ensuring soil fertility through the application of organic compost or fertilisers. Ideal soil conditions for coconut cultivation include sandy or loamy soil with good drainage.

Seedling selection and planting

Farmers choose coconut varieties based on intended market use and climatic conditions. Farmers may integrate intercropping practices, planting cocoa, coffee, or fruit crops alongside coconuts to maximise land use.[66]

Nurturing and maintenance

Regular watering is crucial, especially during early growth, with drip irrigation recommended in drought-prone areas. Fertilisers high nitrogen, potassium, and magnesium support healthy growth and fruiting. Farmers manage pests like the rhinoceros beetles and red palm weevils using biological or chemical treatments.[67] Lethal yellowing disease (LYD) is controlled through sanitation and planting resistant varieties.[68]

Initial sorting

Harvested coconuts are sorted and graded. High-grade coconuts are allocated for fresh consumption or processing into premium products. Lower-grade coconuts are used for by-products such as coir, charcoal, or animal feed.

Harvesting

This is done either manually or mechanically. Manual methods include climbing or using poles with sickles, while larger plantations may use hydraulic lifts and tools for greater efficiency. Harvesting occurs every 45–60 days, depending on tree maturity and market demand (young coconuts for water or mature coconuts for processing).

Key stakeholders

Input suppliers

Supply fertilisers, pesticides, and hybrid seedlings to farmers. These include government agencies, cooperatives, and private suppliers.

R&D institutions

Institutions like MARDI, DOA, and Universiti Putra Malaysia (UPM) play a key role in developing high-yield, disease-resistant coconut varieties. In 2023, MARDI introduced four new hybrid varieties—Mylag, Marleca, Carena, and Careni. These are low-maintenance, easy to harvest, disease-resistant, and capable of producing over 25,000 nuts per hectare annually.[69]

Agricultural extension services

These officers provide training and technical assistance on best practices for cultivation, pest control, and irrigation.

Farmers

Smallholder farmers dominate coconut cultivation in Malaysia, often employing traditional methods. The estimated number of coconut farmers in 2023 was 60,620 (2019: 64,139).[70] There are also commercial farms, which are larger-scale plantations focused on producing coconuts for industrial use.

[66] *Then Kek Hoe (2018). The Current Scenario and Development of the Coconut Industry. 94(1108): 413-426. The Planter.*

[67] *ASEAN FAW Action Plan (2021). Palm Pests & Diseases.*

[68] *N. Nejat, K. Sijam, S.N.A. Abdullah, G. Vadamalai, and M. Dickinson (2009). Phytoplasmas associated with disease of coconut in Malaysia: phylogenetic groups and host plant species. 58: 1152-1160. Plant Pathology.*

[69] *The Star (2023). Mardi introduces four types of high-yield hybrid coconuts.*

[70] *MAFS (2024). Malaysia Agrofood in Figures 2023.*

Challenges

Seedlings: Farmers frequently report variability in the performance of seedlings, leading to uneven growth and fruiting. Farmers often face shortages of high-quality hybrid seedlings that are essential for improving yields. Also, the price of hybrid seedlings is prohibitive for many smallholders, limiting their adoption. And so, many farmers are still relying on ageing, low-yield traditional varieties.

Pest and disease infestation: Common threats such as rhinoceros beetles, red palm weevils, and LYD significantly reduce yields.

Aging coconut trees: A significant proportion of Malaysia's coconut trees are over 50 years old, resulting in declining productivity and increased susceptibility to pests and diseases.

Limited mechanisation: The reliance on manual labour for planting, maintenance, and harvesting limits scalability and increases costs.

Climate vulnerability: Changes in rainfall patterns, rising temperatures, and extreme weather events adversely impact coconut growth.

Collection and sorting

The collection and sorting segment is an intermediary stage between raw material and cultivation and the downstream processing (see Table 44). This segment ensures that coconuts harvested from farms are aggregated, sorted, and distributed to appropriate markets or processing facilities based on their quality and intended use.

Table 44: Linkages with other segments in the value chain

Upstream segment	Downstream segment
Raw material & cultivation: The quality and consistency of coconuts harvested directly impact the efficiency of the collection and sorting segment.	**Processing:** Well-sorted and graded coconuts reduce wastage and enhance productivity during processing, particularly for value-added products like oil and milk.
	Distribution and retail: Efficient sorting ensures that only high-quality coconuts reach retail outlets, meeting consumer expectations and maintaining market competitiveness.

Source: MyCC analysis

Processes

Aggregation

Farmers either deliver harvested coconuts to centralised collection centres or sell them to intermediaries. Agents or traders buy directly from farmers and resell them to collection centres or processors. These centres serve as hubs for initial processing or distribution, with larger producers often operating private facilities, while smallholders depend on cooperative or government-supported centres.

Sorting

Coconuts are graded by size, maturity, and quality. Higher grades go to premium markets for fresh consumption or high-value processing, while lower grades are used for by-products like coir and biochar. Key grading factors include freshness, weight, and shell intactness:[71] young coconuts are sold fresh for drinking or direct consumption, mature coconuts are processed into oil, milk, desiccated coconut, and other value-added products.

Post-sorting and pre-processing

After sorting, coconuts are transported to processors, wholesalers, or retailers. Efficient logistics are crucial to maintaining product quality and minimising losses.

Pre-processing

Some collection centres carry out basic pre-processing, including de-husking (removing the fibrous outer layer for easier transport or further processing) and washing and cleaning (removing dirt and contaminants to maintain quality standards).

Key stakeholders

Farmers

Smallholder farmers dominate coconut cultivation in Malaysia, often employing traditional methods. The estimated number of coconut farmers in 2023 was 60,620 (2019: 64,139).[72] There are also commercial farms, which are larger-scale plantations focused on producing coconuts for industrial use.

Collectors and private traders

Collectors and private traders aggregate coconuts from smallholder farmers, forming larger volumes for sale to processors, wholesalers, or exporters. They assist in sorting and grading by quality and size and manage logistics to ensure timely delivery to distribution hubs or processing facilities, helping reduce post-harvest losses.

Intermediaries

Intermediaries or agents play a key role in bridging the gap between farmers and larger buyers like processors or wholesalers.

Importers

Importers source raw coconuts (e.g., husked or de-husked) and semi-processed products like copra, primarily from coconut-producing countries such as Indonesia and the Philippines.

Collection centres

These facilities, managed by cooperatives, traders, or government agencies (e.g., FAMA), serve as aggregation and sorting hubs.

[71] *The International Coconut Community website provides grading parameters for the various coconut products. For details see: https://coconutcommunity.org/page-products/kernel-meat-based#*

[72] *MAFS (2024). Malaysia Agrofood in Figures 2023.*

Processors

Larger processors may establish direct collection systems to secure consistent supply and control quality.

Transporters

Transporters are responsible for moving coconuts from farms to collection centres and onward to downstream players.

Challenges

- **Fragmented supply chain:** The coconut market is highly fragmented, with many smallholders contributing small quantities, making efficient aggregation challenging.
- **Lack of standardisation:** Inconsistent grading standards result in inefficiencies and disputes over pricing at collection centres.
- **Post-harvest loss:** Improper handling during collection and transport leads to spoilage, particularly for fresh coconuts.
- **Limited access to market information:** Farmers and small intermediaries often lack information about market demand and pricing, resulting in suboptimal decision-making.

Processing

The processing segment encompasses all activities involved in transforming coconuts from their raw state into primary products, value-added products, and by-products. This segment adds economic value and ensures that the various parts of the coconut are utilised effectively, aligning with the "zero-waste" philosophy of coconut cultivation (see Table 45). Figure 25 shows the processing line to extract coconut water and its meat. Figure 26 shows the machine used to extract coconut milk.

Table 45: Linkages with other segments in the value chain

Upstream segment	Downstream segment
Raw material & cultivation: Processing depends heavily on the supply, quality, and consistency of raw coconuts.	**Distribution and retail**: The efficiency of processing directly impacts the availability, pricing, and quality of products reaching wholesalers and retailers.
	Consumer: Innovations in value-added processing provide consumers with a wider range of high-quality coconut products.

Source: MyCC analysis

Figure 25: The processing line to extract water and coconut meat

Source: MyCC

Processes

Primary processing: Primary processing refers to the initial steps that prepare raw coconuts for further refinement or direct use. This involves:

Husking

Removal of the fibrous husk to expose the coconut shell

Shelling

Breaking the hard shell to extract the coconut meat.

Peeling

Removing the brown skin of the coconut meat to prepare it for further processing.

Copra production

Drying coconut meat by using sun-drying, smoke-drying, or kiln-drying methods to produce copra, which is used for oil extraction.

Grating and pressing

Grating and pressing coconut meat to extract coconut milk or cream (see Figure 29).

Dry milling

Crushing dried coconut meat to produce oil or defatted coconut for further use.

Primary products include copra (dried coconut meat), fresh coconut water (collected during the husking/shelling process), and raw coconut meat (used directly or sent for value-added processing).

Figure 26: The machine used to extract coconut milk

Source: MyCC

Value-added processing: Value-added processing converts primary products into refined or specialised products for direct consumption or industrial use. This involves:

Refining

Extracting coconut oil (from copra), which then undergoes purification to produce refined coconut oil (RCO) or virgin coconut oil (VCO).

Producing milk and cream

Blending and pressing fresh coconut meat to produce coconut milk or cream. Coconut milk powder is made by spray-drying liquid coconut milk.

Cutting and shredding

Cutting or shredding fresh or processed coconut meat for use in culinary applications.

Producing flour

Grinding defatted coconut meat (after oil extraction) to produce flour.

Desiccating

Shredding coconut meat, which is then dried and packed as desiccated coconut flakes.

Value-added products include virgin and refined coconut oil; coconut milk, cream, and powder; desiccated coconut; and coconut flour, as well as grated/shredded coconut.

By-product processing: By-product processing utilises the leftover materials from primary and value-added processes, ensuring minimal waste and additional revenue streams.

Coir extraction

Processing fibrous husks to extract coir, used to make ropes, mats, brushes, and mattresses.

Charcoal and biochar production

Burning and processing coconut shells to produce charcoal or biochar, used as fuel, water filtration material, or soil conditioner.

Composting

Converting husk and shell residues into organic compost for agricultural use.

Shell powder production

Refining crushed shells into powder for use in cosmetics, abrasives, or adhesives.

Activated carbon

Treating shells to produce activated carbon for industrial applications, such as air purification and water filtration.

By-products include coir and coir-based products; charcoal and biochar; organic compost; coconut shell powder; and activated carbon.

Key stakeholders

Processors

Small-scale processors focus on producing primary or limited value-added products like grated coconut or coconut oil. Large-scale processors operate mechanised facilities to produce refined oil, milk powder, or industrial by-products. Cooperatives enable smallholders to access processing facilities collectively and benefit from economies of scale.

Exporters

Exporters export processed coconut products to international markets.

By-product industries

Companies specialising in coir, biochar, or shell-based products often source raw materials from primary processors.

Challenges

Inconsistent raw material supply: Seasonal variations and limited domestic production can cause supply shortages, affecting processing efficiency.

Quality issues: Poor handling or delays during the raw material stage can result in spoiled or low-quality coconuts, reducing processing yields.

High energy and production costs: Energy-intensive processes like copra drying or refining increase production costs, particularly for small-scale processors.

Limited by-product utilisation: Inadequate infrastructure or awareness results in many by-products (e.g., husks, shells) being discarded as waste instead of processed.

Distribution

The distribution segment in the coconut value chain ensures that processed coconut products, by-products, and raw materials reach retailers, wholesalers, or end-users in a timely and efficient manner. It involves logistical activities, warehousing, transportation, and market linkages that connect the supply of coconut products to demand. Distribution is critical for balancing supply and demand, ensuring availability, affordability, and quality (see Table 46).

Table 46: Linkages with other segments in the value chain

Upstream segment	Downstream segment
Processing: Distribution relies on consistent output from processing facilities. Delays or inefficiencies in processing directly affect product availability.	**Retail:** Distribution networks act as intermediaries between processors and retailers, ensuring a steady supply of products for consumer markets.
	Consumer: The effectiveness of the distribution segment affects the availability and affordability of coconut products in local and export markets.

Source: MyCC analysis

Processes

Transportation

Coconut products are transported from processing facilities, import points, or collection hubs to wholesalers, retailers, and export terminals. Trucks are primarily used to distribute fresh coconuts, processed products, and by-products within domestic markets.

Warehouse and storage

Processed coconut products like oil, milk powder, and desiccated coconut require proper storage facilities to maintain quality. By-products such as coir or biochar may be stored in bulk until dispatched to industrial users.

Market distribution

Wholesalers act as intermediaries by purchasing large quantities of coconut products from processors or importers and supplying smaller retailers. Retailers are final distribution points, and these include supermarkets, wet markets, farmers' markets, and FAMA outlets. Some of the coconuts are also exported by exporters who facilitate the distribution of coconut products to international markets by handling customs documentation and meeting export compliance standards, as well as coordinating logistics for global shipments.

Key stakeholders

Logistics providers

Logistics providers handle transportation and warehousing to ensure timely delivery of coconut products.

Wholesalers

Wholesalers play a vital role in bridging the gap between processors/importers and retailers. They often manage bulk storage and distribution to smaller buyers.

Retailers

Retailers include supermarkets, wet markets, farmers' markets, and FAMA outlets.

Exporters

Exporters distribute coconut products to international markets and negotiate with overseas buyers.

Challenges

Dependence on imports: Malaysia still relies on imported coconuts or semi-processed products, which creates vulnerabilities to supply chain disruptions (e.g., global trade restrictions, rising shipping costs).

Fragmentation: Distribution networks are often fragmented, with small-scale retailers and wholesalers facing difficulties in accessing large markets.

Inconsistent supply: Seasonal fluctuations in domestic production create supply gaps, leading to over-reliance on imports.

Consumers

The consumer segment represents the final destination of coconut products, ranging from raw to processed items. It is the endpoint of the supply chain and encompasses various types of end-users based on their preferences, needs, and consumption patterns (see Table 47).

Table 47: Linkages with other upstream segments in the value chain

Upstream segment	Impact of consumers to upstream segments
Raw material and cultivation	Farmers produce coconuts that eventually reach consumers as raw coconuts, grated coconut, or processed derivatives. Consumer demand for fresh coconuts influences farmers' production choices, especially for specific varieties or quality grades.
Collection and sorting	Collectors and traders aggregate raw coconuts for processing or direct sale to consumers. Sorting and grading cater to consumer preferences for size, quality, and freshness in wet markets or street vendors.
Importers	Importers bring in coconuts or coconut products to fill gaps in domestic supply for consumers. Consumer preferences for exotic or niche products (e.g., organic VCO) influence the import "portfolio".
Processing	Processors convert raw coconuts into consumer-ready products such as coconut milk, VCO, or desiccated coconut. Consumer demand for convenience (e.g., canned coconut milk) and health-conscious products (e.g., organic oil) drives processing innovation.
Distribution	Distributors supply processed and raw products to retailers (e.g., supermarkets, wet markets) for consumer access. Efficient distribution ensures product availability, particularly during peak demand periods like festive seasons.

Source: MyCC analysis

Consumer categories

Households

Raw coconuts: Purchased for home cooking or traditional uses, such as extracting fresh coconut milk for dishes like *nasi lemak* and *rendang*.

Processed products: Items like canned coconut milk, VCO, and desiccated coconut cater to convenience-focused household consumption.

By-products: Coconut shells or husks are occasionally repurposed by households for gardening or craft-making.

Food and beverage businesses

Restaurants and hotels: Use coconuts and their derivatives extensively in Malaysian cuisine, including curries, desserts, and beverages.

Bakeries and confectionaries: Utilise desiccated coconut, coconut milk, and oil in baked goods and sweets.

Street vendors: Rely on coconuts for popular drinks like coconut water or desserts such as *cendol*.

Beverage manufacturers: Produce packaged coconut water, a growing health drink segment.

Industrial consumers

Cosmetic industry: Uses coconut oil in products like moisturisers, hair care items, and soaps.

Pharmaceutical and nutraceutical companies: Demand VCO for its perceived health benefits.

Bioenergy and biomaterial industries: Utilise by-products like husks and shells for energy production or manufacturing coir-based products.

Access channels

Traditional retail outlets

Wet markets: Common for purchasing raw coconuts and locally produced coconut milk, preferred for their freshness.

Street vendors: Provide ready-to-consume coconut water or grated coconuts for immediate use.

Modern retail channels

Supermarkets and hypermarkets: Stock processed coconut products (e.g., canned coconut milk, VCO) catering to urban and convenience-focused consumers.

Farmers' markets: Offer fresh coconuts directly from producers, often perceived as fresher and more organic.

Specialty stores: Focus on organic or high-value products like VCO.

E-commerce platforms

Growing in popularity for consumers seeking convenience, especially for processed coconut products like oil and powdered milk. Online platforms often cater to niche markets (e.g., health-conscious consumers or expatriates).

Consumer tastes and preferences

Raw versus processed: Urban consumers prefer convenience-oriented processed products such as canned coconut milk or grated coconut. Meanwhile, rural consumers often prefer raw coconuts for self-processing due to traditional cooking practices and cost-effectiveness.

Health trends: Growing awareness of health benefits has increased demand for coconut water (natural hydrator) and VCO (nutritional and cosmetic uses).

Pricing sensitivity: Price is a key factor for most consumers in Malaysia, especially in traditional retail settings. Imported processed products like organic coconut oil are more appealing to affluent or health-conscious consumers despite higher costs.

Challenges

Fluctuating supply and prices: Variability in domestic coconut production and global market trends can lead to price hikes, affecting affordability for households and small businesses.

Quality concerns: Consumers may face inconsistencies in the quality of raw and processed coconuts.

Competition from substitutes: Alternatives like synthetic coconut milk or other plant-based oils can reduce demand for authentic coconut products.

Importers

Importers have multi-roles in the coconut market's supply chain and production flow in Malaysia. They play a crucial role across the value chain, from supporting farmers with planting materials to delivering finished goods to consumers. Their role shifts based on the segment, aligning with either upstream (e.g., seedling supply) or downstream activities (e.g., retail distribution). By importing goods across segments, they help stabilise supply, meet demand, and introduce global innovations to the Malaysian coconut industry (see Table 48).

Table 48: Linkages with players in other segments of the value chain

Segment	Role of importers
Raw material and cultivation	• **Seedling importation:** Importers source high-yield or hybrid coconut seedlings to address domestic shortages or introduce improved varieties. • **Inputs supply:** Facilitate the import of fertilisers, pesticides, or specialised agricultural tools required for coconut farming.
Collection and sorting	• **Raw coconut importation:** Import raw coconuts (husked or de husked) from producing countries to meet local demand for direct consumption or further processing. • **Aggregation support:** Provide bulk imports for local collectors or traders to distribute to processors.
Processing	• **Semi-processed imports**: Source copra, coconut water, or grated coconut for local processors unable to meet demand with domestic supply. • **Specialty inputs: Import** unique varieties of coconut for niche processing,such as tender coconuts for beverages or premium oil production. • **Technology transfer:** Import machinery or tools to enhance the efficiency of • by-product processing and utilisation locally.
Distribution	• **Processed product importation:** Import consumer-ready products like coconut milk, VCO, desiccated coconut, or activated charcoal for sale in retail and wholesale markets. • **Market expansion:** Help introduce global coconut products to the local market, increasing variety for consumers.
Consumers	• **Direct import for retail:** Provide niche products like organic or fair-trade coconut oil directly to health-conscious consumers through e-commerce or specialty stores. • **Stabilising supply:** Ensure the availability of coconut products during domestic shortages, stabilising prices for consumers.

Source: MyCC analysis

6.2.2 Domestic production, consumption, and importation

Unlike beef, the local production of coconut saw an increase from 536,606mt in 2019 to 623,663mt in 2023, showing that there could be efforts to boost domestic supply (see Table 49). In Malaysia, coconut farms are usually owned by smallholders (farm sizes of between 1.0ha and 2.5ha).[73] Figure 27 shows a coconut plantation in Perak. The most popular varieties of coconut planted in Malaysia are *Matag, Pandan,* the MYD, and the MRD.

Imports fluctuated slightly but remained high overall, rising from 253,622mt in 2019 to 271,733mt in 2023, indicating that imports continue to play a crucial role in meeting local demand. It was highlighted by DOA Sabah that Sabah does not import mature coconuts as the domestic production is able to meet domestic demand. Per capita consumption of coconuts increased moderately, from 22.7kg in 2019 to 24.9kg in 2023, showing a gradual rise in domestic demand. The SSL improved from 68.2% in 2019 to a peak of 71.6% in 2022, though it dipped slightly to 70.3% in 2023, suggesting growing domestic production yet still short of fully meeting demand. The IDR has remained around 30%, ending at 30.6% in 2023, indicating that while self-sufficiency has improved, Malaysia continues to rely significantly on coconut imports. Just like beef, coconut has also been declared by KPDN as a controlled item under the Control of Supplies Act 1961 [Act 122].

Table 49: Production, export, import, per capita consumption of coconut, 2019 – 2023

Key metrics	2019	2020	2021	2022	2023
Planted area (ha)	86,466	84,942	81,470	84,936	79,412
Production (mt)	536,606	560,984	557,354	604,428	623,663
Yield (mt/ha)	7.0	7.5	7.8	8.3	9.2
Export (mt)	3,328	4,659	11,025	12,581	8,498
Import (mt)	253,622	286,031	254,455	252,091	271,733
Per capita consumption (kg)	22.7	24.4	23.1	24.2	24.9
SSL (%)	68.2	66.6	69.6	71.6	70.3
IDR (%)	32.2	34.0	31.8	29.9	30.6

Source: MAFS and DOSM

[73] *Food and Fertilizer Technology Centre for the Asian and Pacific Region (2022). Business Potential of Coconut-based Products in the Global Markets.*

Figure 27: Coconut plantation in Perak

Source: MyCC

It was highlighted by stakeholders that Sabah currently does not import any coconuts because the domestic market is 100% self-sufficient. This was most probably due to the low demand for coconut milk in Sabah. As a result, there are no issues with spiked demand during festive seasons in the state, unlike in Peninsular Malaysia. However, in Sarawak, importation activities are not limited to mature coconuts but also include young coconuts and coconut seedlings. Imported coconut seedlings are typically expensive, increasing the overall cost of local coconut production.

6.2.3 Coconut varieties

There is a diverse range of coconut varieties, each uniquely suited to specific purposes, climates, and soil types. These varieties are cultivated across the country to meet the demands of various industries, from food and beverage production to agriculture and bio-products. The differences in characteristics such as size, shape, yield, and adaptability to local conditions make certain varieties more suitable for specific uses, such as producing coconut milk, copra, or coconut water. Tables 50 to 56 provide an overview of the key coconut varieties in Malaysia.

Table 50: *Matag* Coconut

Matag[74]	
	
Skin colour	Yellow, brown, and red
Weight	1.0 – 2.0kg
Gestation period	3.0 – 3.6 years
Number of nuts per bunch	15 – 20 nuts
Nuts production per stand per year	150 – 240 nuts
Water content per nut	360ml
White meat thickness	8 – 11mm

Source: MKIC and FAMA

Table 51: *Tacunan* Coconut

Tacunan	
	
Skin colour	Green
Weight	1.0 – 1.4kg
Gestation period	2.5 – 3.0 years
Number of nuts per bunch	15 – 25 nuts
Nuts production per stand per year	150 – 250 nuts
Water content per nut	320ml
White meat thickness	10 – 12mm

Source: MKIC

[74] *Matag coconut is a cross between Tagnanan coconut and either Malayan Red Dwarf (MRD) or Malayan Yellow Dwarf (MYD).*

Table 52: Vietnam Dwarf (*Gadong*) Coconut

Vietnam Dwarf (*Gadong*)

Skin colour	Green and bronze
Weight	1.0 – 1.5kg
Gestation period	3.0 – 3.6 years
Number of nuts per bunch	15 – 20 nuts
Nuts production per stand per year	150 – 240 nuts
Water content per nut	350ml
White meat thickness	8 – 10mm

Source: MKIC

Table 53: MYD & MRD (*Gading*) Coconut

MYD & MRD (*Gading*)

Skin colour	Yellow and red
Weight	1.0kg
Gestation period	3.0 – 4.0 years
Number of nuts per bunch	10 – 15 nuts
Nuts production per stand per year	80 – 120 nuts
Water content per nut	300ml
White meat thickness	5 – 10mm

Source: MKIC, Parachute Kalpavriksha.org, Midcap et al (1975), Palmpedia, Affendy, N (2019), Crop Genebank Knowledge Base, Coconut Handbook, Satyabalan, K (1999), and Coconut Development Board

Table 54: Malayan Tall Coconut

Malayan Tall

Skin colour	Green and yellow
Weight	1.5 – 2.0kg
Gestation period	6.0 – 10 years
Number of nuts per bunch	10 – 15 nuts
Nuts production per stand per year	80 – 120 nuts
Water content per nut	300 – 400ml
White meat thickness	10 – 15mm

Source: Parachute Kalpavriksha.org, Botany Live, Midcap et al (1975), and Jason Thein

Table 55: *Pandan* Coconut

Pandan

Skin colour	Green and yellow
Weight	1.0kg
Gestation period	3.0 – 5.0 years
Number of nuts per bunch	10 – 15 nuts
Nuts production per stand per year	100 nuts
Water content per nut	300 – 350ml
White meat thickness	5 – 10mm

Source: Carey's Premium Coconut, FGV Agri Services, Vihaba Co. Ltd., Sari Coconut, Gengan, G et al (2024), Coconut Handbook, and Aromatic Coconut

Table 56: *Mawa* Coconut

Mawa[75]

Skin colour	Brown and yellow
Weight	1.5kg
Gestation period	3.0 – 5.0 years
Number of nuts per bunch	8 – 12 nuts
Nuts production per stand per year	120 nuts
Water content per nut	300 – 400ml
White meat thickness	10 – 15mm

Source: Carey's Premium Coconut, FGV Agri Services, Vihaba Co. Ltd., Sari Coconut, Gengan, G et al (2024), Coconut Handbook, and Keepital

[75] *Mawa coconut is a cross between West African Tall coconut and either MRD or MYD.*

6.2.4 Coconut import market

Coconuts are imported into Peninsular Malaysia and Sarawak, but not into Sabah. According to stakeholders in Sabah, the local coconut production is sufficient to meet the state's demand. One significant factor contributing to this is the dietary preferences of Sabahans, which typically involve minimal use of coconut milk compared to cuisines of Peninsular Malaysia and Sarawak. This lower demand for coconut milk ensures that local production can adequately meet the needs of the population without requiring imports.

Peninsular Malaysia's coconut imports market

Most of the imported mature coconuts in Peninsular Malaysia are used as raw materials for coconut-related products such as coconut milk and coconut drinks. The largest importer produces a wide range of coconut-based products. Other importers also import mature coconuts, de-husk, and extract coconut water, on behalf of the largest importer. In addition to that, these importers distribute mature coconuts to wholesalers and retailers, where they are sold to end consumers for use as coconut milk or grated coconut.

The mature coconut import market in Peninsular Malaysia is competitive to moderately concentrated. Between 2020 and 2023, the HHI values ranged from 957.8 to 1,272.3, reflecting a competitive market (see Table 57). During the same period, the CR4 values ranged from 47.3% and 53.9%, indicating moderate concentration in the market.

Table 57: Coconut importers' market concentration metrics in Peninsular Malaysia, 2024

Market concentration metrics	Value			
	2020	2021	2022	2023
HHI	1,271.4	1,272.3	957.8	1,085.5
CR4 (%)	52.7	52.3	47.3	53.9
CR10 (%)	74.9	75.4	71.6	82.6

Note:
HHI below 1,500 indicates a competitive market; HHI between 1,500 and 2,500 indicates a moderately concentrated market; HHI above 2,500 indicates a highly concentrated market (potential monopoly and oligopoly). CR below 40% suggests a competitive market; CR between 40% and 60% suggests a moderately concentrated market; CR above 60% suggests a highly concentrated market (potential monopoly and oligopoly).

Source: RMCD and MyCC analysis

Most mature coconuts were imported from Indonesia (see Table 58). Although the RMCD data shows that there are other sources for mature coconuts, the volume from these countries is very low. This indicates Malaysia's reliance on a single country for its coconut imports.

Table 58: Sources of imported coconuts by country for Peninsular Malaysia, 2020 – 2024

No.	Country	Market share (%)			
		2020	2021	2022	2023
1	Indonesia	99.3	99.9	100.0	100.0
	Sub-total	**99.3**	**99.9**	**100.0**	**100.0**
	Others[76]	0.7	0.1	0.0	0.0
	Grand Total	**100.0**	**100.0**	**100.0**	**100.0**

Source: RMCD and MyCC analysis

[76] *RMCD data shows that Peninsular Malaysia imports mature coconuts from 15 other countries such as Thailand, Australia, Vietnam, Sri Lanka, Singapore, Germany, Taiwan, Bangladesh, Philippines, India, China, Brazil, US, Greece, and New Zealand.*

Sarawak's coconut imports market

The coconut import market in Sarawak is highly concentrated. Although the HHI values improved significantly, declining from 9,123.7 in 2020 to 3,362.9 in 2023, the market remains dominated by the top three companies. This dominance is reflected in a CR4 value of 99.1% in 2023 (see Table 59).

Table 59: Coconut importers' market concentration metrics in Sarawak, 2020 – 2023

Market concentration metrics	Value			
	2020	2021	2022	2023
HHI	9,123.7	9,854.4	3,213.9	3,362.9
CR4 (%)	100.0	100.0	100.0	99.1
CR10 (%)	100.0	100.0	100.0	100.0

Note:
HHI below 1,500 indicates a competitive market; HHI between 1,500 and 2,500 indicates a moderately concentrated market; HHI above 2,500 indicates a highly concentrated market (potential monopoly and oligopoly). CR below 40% suggests a competitive market; CR between 40% and 60% suggests a moderately concentrated market; CR above 60% suggests a highly concentrated market (potential monopoly and oligopoly).

Source: RMCD and MyCC analysis

Similar to Peninsular Malaysia, Sarawak primarily imports coconuts from Indonesia (see Table 60). Small volumes of coconuts were also imported from Australia, Vietnam, and Singapore in 2020 and 2021. However, Sarawak generally relies heavily on Indonesia for the majority of its coconut imports.

Table 60: Sources of imported coconuts by country in Sarawak, 2020 – 2024

No.	Country	Market share (%)			
		2020	2021	2022	2023
1	Indonesia	99.0	99.3	100.0	100.0
2	Australia	0.2	0.6	0.0	0.0
3	Vietnam	0.8	0.0	0.0	0.0
4	Singapore	0.0	0.1	0.0	0.0
	Grand Total	**100.0**	**100.0**	**100.0**	**100.0**

Source: RMCD and MyCC analysis

Source: MyCC

6.2.5 Price trend

Figure 28 highlights that the price trends for mature coconuts at the farm, wholesale, and retail levels remained relatively stable from 2020 until late 2024. However, a notable price escalation occurred after October 2024, with farm prices driving changes throughout the supply chain. The escalation in price has led to shortages and elevated costs in various regions, notably Kelantan, where coconut prices have risen from RM1.80/nut to RM3.20/nut, and coconut milk has increased from RM10/kg to RM16/kg.[77] The KPDN also highlighted that it has initiated investigations into these price hikes to identify and address the underlying causes. Stakeholder engagements revealed several contributing factors:

Increased competition from China:
China's heightened demand for coconuts has intensified, leading to higher prices and reduced availability for Malaysian importers.

Seasonal factors:
The melawas season, characterised by lower coconut yields, has further strained supply, exacerbating shortages and price increases.[78]

Weather conditions:
Adverse weather, including heavy rainfall and flooding, has negatively impacted local coconut production, contributing to the scarcity.

Despite these shifts, wholesalers faced a significant margin compression, while retailers managed to sustain their profit margins, suggesting potential inefficiencies or structural dynamics in the supply chain.

Farm-level prices:
Farm prices remained steady at an average of RM1.23/nut until October 2024. However, post-October 2024, farm prices rose sharply to an average of RM1.52/nut, representing a 23.6% increase. This sharp rise indicates a potential supply-side shock, such as weather-related disruptions, higher production costs, or increased demand.

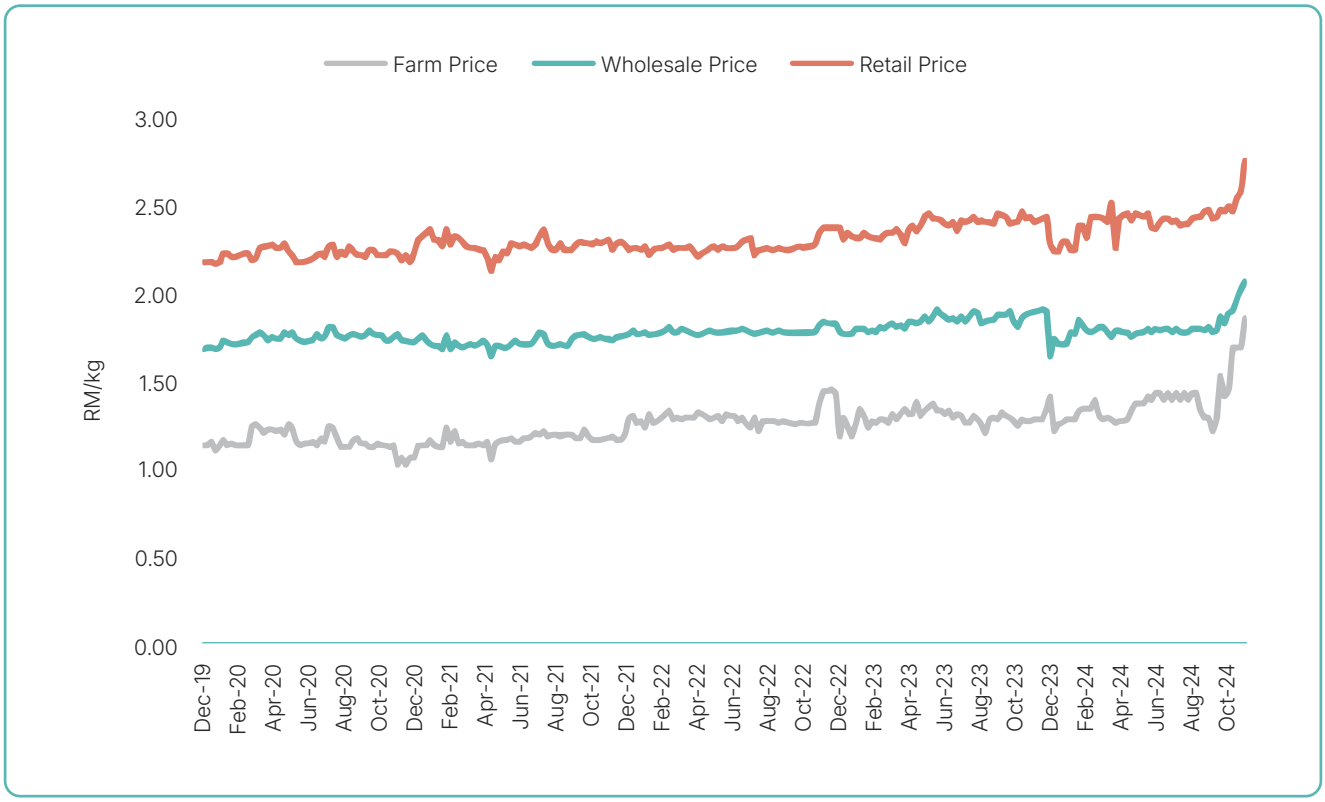
Wholesale prices:
Wholesale prices initially reflected the stability seen at the farm level, with only minor fluctuations. After October 2024, wholesale prices also increased but failed to maintain proportional margins. In November 2024, the average wholesale margin fell to RM0.30/nut (15.3%), compared to RM0.45/nut (24.9%) in September 2024. This significant margin compression suggests wholesalers absorbed much of the cost increase at the farm level, potentially due to competitive pressures or contractual obligations preventing them from passing costs fully downstream.

Retail prices:
Retail prices showed greater stability and consistency compared to wholesale prices, maintaining an average markup of RM0.60/nut (23.4%) even during November 2024. Unlike wholesalers, retailers were able to pass on higher costs to consumers without impacting their margins. This resilience suggests strong market power (of the retailers) or consumer acceptance of higher retail prices for mature coconuts.

[77] *Malay Mail (2024). Report: Coconut prices hit RM3.20 each, coconut milk now RM16 per kilo in Kelantan.*

[78] *Melawas season refers to a period during which coconut trees experience a natural decline in fruit production. This cyclical phenomenon typically occurs annually and is influenced by various factors, including environmental conditions and the trees' biological rhythms.*

Figure 28: Farm, wholesale and retail prices of mature coconuts, 2020 – 2024



Source: FAMA

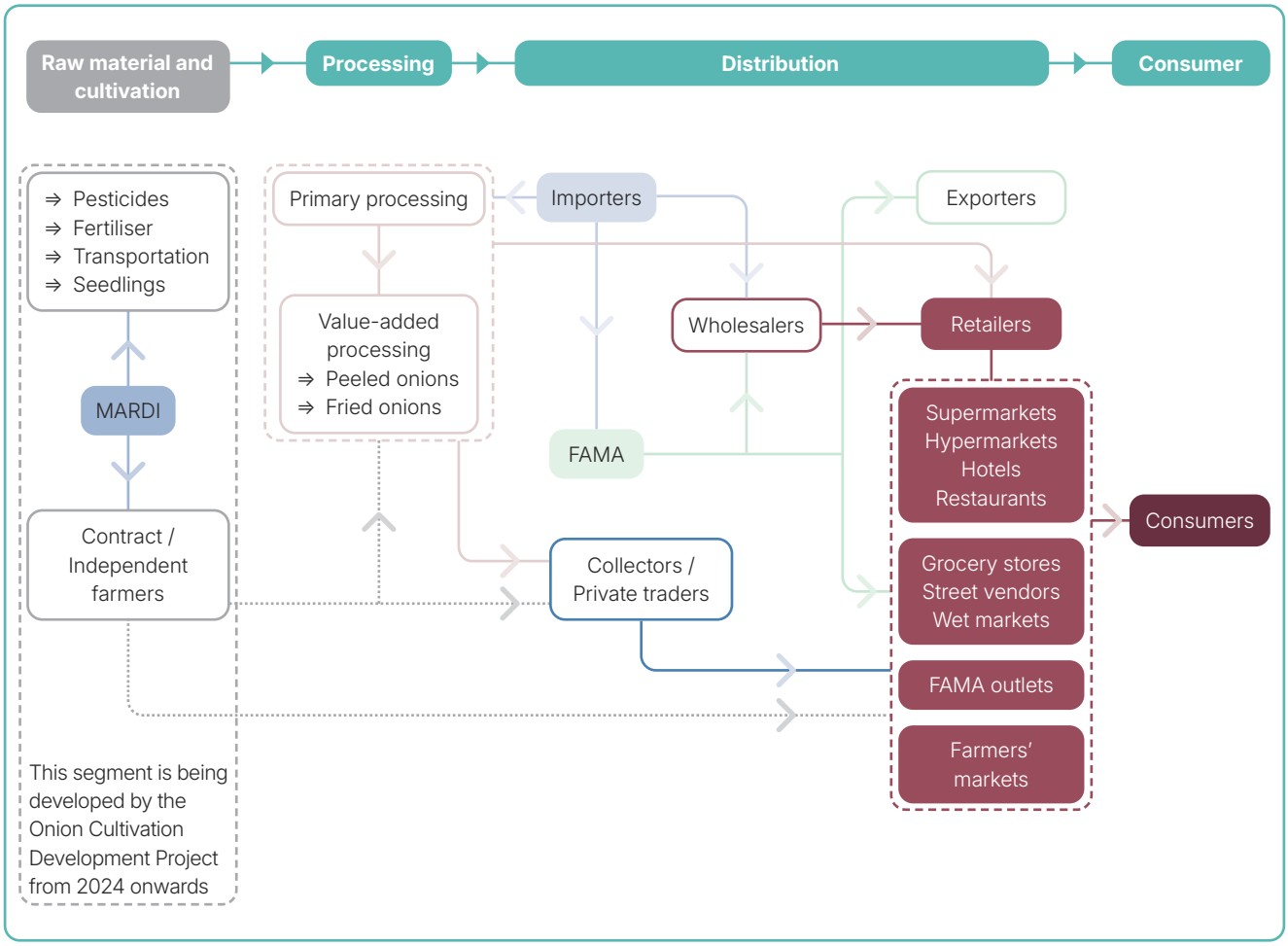
6.3 Onion market

6.3.1 Supply chain and production flow

As highlighted earlier, the onion market in Malaysia is heavily reliant on imports, with the country currently importing 100% of its onion supply to meet domestic demand. And so, the government launched the Onion Cultivation Development project in 2024, which aims to reduce Malaysia's IDR by 30% by 2030. Currently, the supply chain encompasses multiple interconnected segments, each playing a critical role in ensuring the availability and accessibility of onions to consumers. Strengthening local cultivation and integrating it seamlessly into the supply chain are central to achieving the programme's goals and ensuring long-term sustainability for Malaysia's onion market.

Unlike for the beef market, but as with the coconut market, the 2019 MyCC Market Review did not undertake specific analysis on the onion market in Malaysia. As such, the supply chain and production flow diagram in Figure 29 is new, based on the feedback and inputs from the stakeholder engagement throughout the study.

Figure 29: Onion supply chain and production flow



Source: MyCC analysis

Raw material and cultivation

Currently this segment is at a nascent stage as it is being developed by the government under the Onion Cultivation Development project in 2024. The project will be undertaken in three phases: seed development (2021 – 2030); pre-commercial sale (2024 – 2025); and commercial sale (2026 – 2030).[79] Already, the government has committed RM12mn for 2025 to develop the infrastructure including irrigation systems, storage and drying facilities that will support the entire onion supply chain in the country.[80] However, since onions are traditionally a winter crop, cultivating them in Malaysia's tropical climate requires identifying regions with suitable climate, temperature, and soil conditions to ensure optimal growth and productivity. For instance, in India, onions are predominantly grown during the "Rabi" (winter) season, with sowing occurring from November to December and harvesting between April and June, contributing to 50% of the country's total onion production.[81]

Once this segment is fully commercialised, it will feed into the subsequent segments in the value chain – see Table 61. The anticipated linkages between this segment and the rest of the downstream segments are summarised in the table below.

[79] *The Star (2024). RM12mil boost for onion supply.*
[80] *The Star (2024). RM12mil boost for onion supply.*
[81] *Tractor Karvan (2024). Onion Farming in India: A Profitable Horticulture Crop to Grow in India.*

Table 61: Linkages with other downstream segments in the value chain

Downstream segment	Impact of raw material and cultivation segment
Collection and sorting	• Relies on farmers for a consistent supply of harvested onions. Disease-free and high-quality onions are critical for downstream efficiency and to meet consumer demand.
Processing	• Quality of raw onions directly affects the usability and yield in processing activities such as peeling and frying.
Distribution	• Cultivation practices and yield impact the availability and stability of onion supply for distribution to markets.
Retail and consumers	• High production costs in this segment affect retail pricing, influencing consumer demand and perceptions of local onions.

Source: MyCC analysis

Key stakeholders

MARDI

MARDI is leading efforts in the Onion Cultivation Development project, which started in 2021. Its role includes researching onion varieties that can adapt to Malaysia's humid climate and producing seedlings for farmers. In 2023, it introduced three new shallot varieties, namely BAW-1, BAW-2 and BAW-3.[82] MARDI also works with the DOA and international experts to support pilot projects and provide technical guidance to improve farming practices. This work includes addressing challenges such as fungal diseases and insect attacks, refining cultivation techniques, producing high-quality shallot seedlings and promoting GAP to improve yields and reduce production costs. MARDI had aimed for a total shallot production of 30 tonnes per season on a 5ha cultivation area in 2024.[83]

DOA and farmers organisation

Both Federal and State DOAs, as well as the farmers organisation authority have been actively involved in supporting the Onion Cultivation Development project. For example, the DOA reported success of its pilot project covering 1ha in Kampung Kuala Bikam, which yielded 3.3 tonnes during its first harvest in April 2024. This has led to work on the second phase involving 4ha in the Batang Padang district and another 4ha in the Kinta district, with an estimated total production of 32 tonnes.[84]

Farmers and smallholders

Farmers have been working with MARDI and the DOA to be part of the project. Also, farmers' associations in states Perak and Selangor are actively participating in early-stage planting initiatives.

[82] *The Star (2024). Mardi to closely oversee all layers of shallot plan.*
[83] *The Star (2024). Mardi to closely oversee all layers of shallot plan.*
[84] *The Star (2024). Perak expands onion farming.*

Challenges

Dependence on imports: Inputs like fertilisers and pesticides are imported. Additionally, farmers also use seeds imported from Indonesia as Malaysia lacks commercial seed production capacity, although MARDI expects to produce commercial seed 2025 onwards. All these add to the production costs.

Labour-intensive: Onion farming requires significant manual labour, making local onions less price-competitive compared to imports.[85]

High humidity: High humidity increases the prevalence of fungal diseases, impacting yield and quality.

Limited expertise: Low levels of local farming knowledge necessitate external consultation from more experienced countries like Indonesia.

Processing

The processing segment involves transforming raw onions into intermediate or final products, adding value to meet the needs of consumers and businesses. It includes activities such as peeling, cutting, frying, and packaging (see Table 62).

Table 62: Linkages with other segments in the value chain

Segment	Impact of processing segment
Raw material and cultivation	• Relies on consistent supply of high-quality raw onions from farmers. Processors may influence cultivation practices by specifying required onion types or sizes.
Distribution	• Processed onion products, such as fried onions or onion flakes, are passed to distributors or wholesalers, and even directly to retailers. Processors depend on distributors to reach wider markets.
Retail	• Retailers are the primary channel for selling processed onion products to households and businesses. Retail insights help processors adapt to market trends.
Consumers	• Processed products meet consumer demands, preference, and trends for convenience, longer shelf life, and quality. Consumer tastes drive innovation in processing techniques. For example, for products like fried onions, consumers prefer options with less oil or healthier oil alternatives, prompting innovation in frying techniques.

Source: MyCC analysis

[85] *The Star (2023). Onions finally back in the ring.*

Processes

Primary processing

This involves cleaning of onions by removing dirt, debris, and outer skin layers. Then onions are mechanically or manually peeled for wholesale or retail sale. Finally, the grading and sorting work involves onions being separated by size, quality, and intended use.

Value-added processing

Onions can be further processed by frying to produce fried onions for retail and commercial use; dehydrating to produce onion powder or flakes for extended shelf life and convenience; and packaging peeled, fried, or powdered onions for sale to consumers or businesses.

Key stakeholders

Importers

Importers provide raw material (onions) as inputs to be processed.

Small-scale entrepreneurs

Small businesses or cooperatives involved in producing fried onions or other value-added products.

Processing facilities

Local or regional facilities handle large-scale onion processing for both domestic and export markets.

Retail chains

Purchase and sell processed onion products, such as peeled or packaged onions.

Challenges

Limited infrastructure: Inadequate facilities for large-scale peeling, frying, and packaging restrict the capacity for value addition.

Labour-dependence: Manual processing methods remain common, increasing costs and reducing efficiency.

Market competition: Imported processed products, such as dehydrated onions, compete with local producers.

Distribution

The distribution segment involves the movement of onions and onion products from processors, collectors, and importers to retailers and wholesalers. With the country currently importing 100% of its onions, this segment plays a pivotal role in ensuring a steady and efficient supply chain to meet domestic demand (see Table 63).

Table 63: Linkages with other segments in the value chain

Segment	Impact of processing segment
Raw material and cultivation	• Currently no direct linkage, as Malaysia imports 100% of its onions. Future linkage will emerge as domestic cultivation increases under the Onion Cultivation Development Programme.
Processing	• Processors depend on consistent supply from importers and distributors to produce value-added products like peeled or fried onions. Processors rely on distributors for broader market access.
Retail	• Retailers rely entirely on distributors and importers to stock their onion supply. Distributors must align with retailer demands for volume, quality, and packaging preferences.
Consumers	• Distribution efficiency directly affects the availability and pricing of onions for consumers. Feedback from consumers influences demand forecasts and distribution strategies.

Source: MyCC analysis

Processes

Importing

Importers procure onions from major producing countries like India, China, the Netherlands, Thailand, and Indonesia. They ensure the imported onions comply with Malaysia's import regulations, including food safety and SPS measures. Efficient handling at ports is crucial to minimise delays, especially for fresh onions that require quick distribution to maintain quality.

Logistics and transportation

Onions are transported in bulk from ports to regional distribution hubs or wholesale markets. Meanwhile, cold chain logistics may be required to ensure processed onions (peeled onions) maintain their freshness during transit.

Storage

Specialised facilities near ports or distribution hubs handle bulk imports, ensuring quality before distribution. Onions need storage with proper ventilation to reduce spoilage. Warehousing facilities across Malaysia support bulk storage and ensure onions are distributed efficiently to wholesalers and retailers.

Wholesaling

Bulk distribution of raw and processed onions to retailers, food service operators, and institutional buyers.

Retail distribution

Onions reach consumers through wet markets, street vendors, grocery stores, supermarkets, hypermarkets, and online platforms.

Key stakeholders

Importers

Importers source and manage imported onions. Major importing activities are concentrated imports with significant cold storage and logistics facilities.

Port operators and logistics providers

Ensure smooth unloading, storage, and transportation of imported onions.

Distributors and wholesalers

Act as intermediaries, bridging importers and retail outlets.

FAMA

Source and market onions.

Retail chains

Traditional wet markets, street vendors, supermarkets, hypermarkets, and e-commerce platforms depend on distributors for supply.

Challenges

Complete reliance on imports: Malaysia's dependence on imported onions makes the supply chain vulnerable to global price volatility and trade disruptions.

Logistics constraints: High dependency on imported onions means delays at ports or transportation bottlenecks can disrupt supply and affect quality.

Storage limitations: Inadequate cold storage facilities at ports and distribution hubs lead to quality degradation of imported onions (spoilage or sprouting).

Price volatility: Fluctuations in global onion prices and currency exchange rates affect the cost of imported onions, impacting downstream pricing.

Consumers

The consumer segment represents the final stage of the onion value chain, where onions are purchased and consumed in various forms. Consumers in Malaysia include households, food and beverage businesses, and industrial users, whose preferences, purchasing behaviour, and trends directly shape the dynamics of the upstream and downstream segments (see Table 64).

Table 64: Linkages with other segments in the value chain

Segment	Impact of processing segment
Raw material and cultivation	• Future consumer demand for local onions could incentivise domestic cultivation under development programmes.
Processing	• Rising demand for convenience influences the production of value-added products like peeled or fried onions. Health trends affect processing methods (e.g., low-oil frying).
Distribution	• Efficient distribution ensures timely availability and affordability of imported onions for consumers.
Consumers	• Delays or inefficiencies in this segment directly impact consumer access and satisfaction.

Source: MyCC analysis

Consumer categories

Households	Purchase onions primarily as a staple ingredient for cooking. Preferences lean toward affordable, fresh onions, typically sourced from wet markets, grocery stores, or supermarkets.
Food and beverage businesses	Include restaurants, hotels, street vendors, and catering services. Require bulk purchases of onions, often in processed forms like peeled or fried onions for convenience and efficiency.
Industrial consumers	Food manufacturers use onions as ingredients in packaged foods, sauces, or snacks. Demand processed products like onion powder, flakes, or paste to streamline production.

Source: MyCC

Consumer preferences and trends

Preference for small red rose onion (India): Malaysian consumers particularly favour Indian red onions due to their vibrant colour, strong flavour, and versatile use in traditional dishes.

Price sensitivity: Malaysian consumers, particularly households, are highly sensitive to price fluctuations due to the reliance on imported onions and global market volatility. Affordability often drives purchasing decisions, favouring cheaper imports.

Demand for freshness and quality: Fresh onions are preferred for home cooking and traditional dishes, emphasising quality, appearance, and minimal spoilage. Food service businesses also require high-quality onions for presentation and taste.

Convenience: Urban households and businesses increasingly seek processed onions, such as peeled or pre-chopped onions, to save time and effort.

Health and safety: Growing awareness of food safety and hygiene has heightened consumer expectations for clean, traceable, and contaminant-free onions.

Challenges

Price volatility: Fluctuating global prices of imported onions create uncertainty for consumers, particularly low-income households.

Limited access to domestic onions: The lack of a domestic supply chain limits options for consumers seeking locally grown products.

Quality inconsistencies: Variability in the quality of imported onions affects consumer satisfaction, especially for food and beverage businesses.

Source: MyCC

Importers

In Malaysia, where 100% of onions are imported, importers are critical stakeholders in the value chain. They serve as the primary link between international suppliers and the domestic market, ensuring a steady supply of onions to meet the country's demand. Their activities span sourcing, logistics, compliance, and distribution, making them integral to the onion supply chain's functionality and resilience (see Table 65).

Table 65: Linkages with players in other segments of the value chain

Segment	Role of importers
Raw material and cultivation	• **Seed importation:** Importers source onion seeds for pioneering onion farmers in Malaysia. • **Inputs supply:** In the future, importers may compete with domestic cultivation as local production grows.
Processing	• **Raw materials:** Supply raw onions to processors for value-added production, such as peeling or frying. Ensure consistent quality and volume to meet processor demands.
Distribution	• **Collaboration:** Collaborate with distributors and wholesalers to transport imported onions across the country, ensuring timely supply to retail and foodservice markets.
Consumers	• **Stable supply:** Provide a stable supply of onions to meet household, business, and industrial demand. Manage pricing and quality to align with consumer expectations.

Source: MyCC analysis

Challenges

Global price volatility: Fluctuations in global onion prices and currency exchange rates impact import costs and domestic pricing.

Dependence on exporting countries: Overreliance on a few key suppliers makes the market vulnerable to external disruptions, such as weather conditions or export restrictions.

Logistics bottleneck: Delays in shipping or congestion at ports can disrupt the supply chain, leading to shortages or quality degradation.

Compliance costs: Meeting stringent food safety and SPS measures adds to operational costs.

Market competition: Intense competition among importers can pressure profit margins while trying to keep prices competitive.

6.3.2 Domestic consumption and importation

Malaysia imports three main types of onions—large onions, shallots, and garlic. In 2023, these accounted for 69.0%, 5.2%, and 25.8%, respectively, of the country's total onion imports. As mentioned earlier, unlike beef and coconuts, Malaysia does not produce onions domestically and relies entirely on imports to meet demand. Over the years, onion and shallot imports have steadily increased, rising from 476,170mt to 524,788mt; and 24,437mt to 39,824mt respectively from 2019 to 2023, reflecting growing domestic consumption (see Table 66). Per capita consumption for both onion and shallot increased modestly by volume, from 14.6kg to 15.4kg and 0.8kg to 1.2kg, respectively from 2019 to 2023.

Table 66: Import and per capita consumption of onions and shallots, 2019 – 2023

Product	2019	2020	2021	2022	2023
Onion					
Import (mt)	476,170	435,972	445,069	485,127	524,788
Per capita consumption (kg)	14.6	13.4	13.7	14.8	15.4
IDR (%)	100.0	100.0	100.0	100.0	100.0
Shallot					
Import (mt)	24,438	40,602,	39,544	38,568	39,824
Per capita consumption (kg)	0.8	1.2	1.2	1.2	1.2
IDR (%)	100.0	100.0	100.0	100.0	100.0

Source: DOSM

Onions are also an item that has been declared by the KPDN as a controlled item under the Control of Supplies Act 1961 [Act 122]. At the same time, it has been included under the Control of Supplies Regulations 1974, which means the authority has an additional power to compel retailers or wholesalers to continue supplying onions in the market to avoid supply disruptions. The Control of Supplies Regulations 1974 also dictate that wholesalers and retailers of onions have to be licensed by the KPDN.

6.3.3 Onion varieties

There are numerous types of onions, each distinguished by unique characteristics such as size, colour, shape, and even the country of origin. These traits play a crucial role in determining their culinary uses and market preferences. KPDN indicated that generally, there are eight types of onions that are imported into the country in 2022. KPDN reported that Malaysian consumers prefer onions from India because of their vibrant red colour, superior taste, and lower water content. Figure 30 shows imported onions from India and Pakistan.

Figure 30: Imported onions from India (left) and Pakistan (right) in an onion importer's warehouse

Source: MyCC

Figure 31 shows examples of yellow onion, big onion, and shallot. The types of onions are as follows:

Small red rose onion (India) Medium round shape, slightly tapered, and pink colour	**Small red onion (China)** Medium round shape, slightly tapered, and pink colour	**Small red onion (Myanmar)** Medium round shape, slightly tapered, and orange colour	**Small red onion (Thailand)** Medium round shape, slightly tapered, consisting of 2 – 3 cloves in a single bulb, with pink colour
Yellow onion (Holland) Smooth, thin skin with a golden-yellow colour	**Big onion (India)** Round shape, thin skin, and red colour	**Red onion (China)** Large round shape, thin skin, and pink colour	**Small red onion (India)** Medium round shape, slightly tapered, and red colour

Figure 31: Examples of yellow onion, big onion, and shallot



Source: pxhere.com and pixabay.com

FAMA listed characteristics of four main types of onions that are generally available in the market (see Table 67).

Table 67: Types of onions

Onion (India)	Onion (China)	Onion (Indonesia)	Onion (Myanmar)
			
Crunchy texture	Soft texture	Crunchy texture	Crunchy texture
High water content	High water content	Low water content	Low water content
Light purple	Dark purple	Faded purple	Yellowish purple
Uniform in size	Sizes vary	Uniform in size	Almost uniform in sizes
40 – 55mm circumference	40 – 80mm circumference	15 – 25mm circumference	30 – 40mm circumference
Priced between RM10.00 – RM10.50/kg in 2023	Priced between RM5.50 – RM6.50/kg in 2023	Priced between RM10.00 – RM13.00/kg in 2023	Priced between RM8.00 – RM12.00/kg in 2023

Source: FAMA

6.3.4 Onion farms

Currently in Malaysia, MARDI and the DOA have started cultivating onions in three locations namely, Ladang Bikam (Perak) (see Figure 32), Bachok (Kelantan), and Kundasang (Sabah) (see Figure 33).

Figure 32: Onion farm in Ladang Bikam, Perak

Source: MyCC

Figure 33: Onion farm in Kundasang, Sabah

Source: MyCC

The three onion farms plant different varieties of onions developed by MARDI – see Table 68. These farms are focusing on different purposes as MARDI and DOA explore ways to increase local production of onions. For example, the farm in Bachok was used specifically to cultivate onion seeds. The soil in the area is a type of soil called bris (sandy). This type of soil is the most suitable to cultivate onions.

Table 68: Onion farms

Location	Ladang Bikam, Perak	Bachok, Kelantan	Kundasang, Sabah
Variety	BAW-1	SA02	BAW-2
Seed producer	MARDI	MARDI	MARDI
Size	25 – 35mm	Medium-sized bulbs	28 – 32mm
Colour	Vivid red	Dark red	Pink
Soil adaptability	Suitable for mineral and bris soils	Suitable for various soil types	Best for mineral and peat soils
Harvest time	• 60 to 75 days after planting	• Matures in approximately 75 days when planted as bulbs. • Seeds take about 105 days	• 60 to 75 days after planting
Area	1.0ha	1.0ha	0.78ha
Purpose	Focusing on producing onions with a quality comparable to imports	Focusing on cultivating seeds	Focusing on increasing local production and reducing imports

Source: MARDI and MyCC analysis

Cultivating onions in Malaysia presents several challenges due to the country's tropical climate, which is less conducive to onion farming compared to temperate regions. Onions require specific conditions, including well-drained soils, cooler temperatures during bulb formation, and low humidity to prevent diseases such as fungal infections. Additionally, the limited availability of high-quality seeds adapted to local conditions, coupled with inadequate technical support for farmers, exacerbates the difficulties.

6.3.5 Onion market structure

Peninsular Malaysia's onion imports market

According to data from RMCD, there were 671 onion importers in Peninsular Malaysia between 2020 and 2023. In 2023, the 20 largest onion importers collectively held a 51.6% market share. Most of these top importers operate in the trading business, serving both the wholesalers and retailers. Additionally, large retailers import onions directly from overseas suppliers and also engage in wholesaling activities.

Industry players perceive the onion-importing market to be highly competitive due to the large number of players. There are no industry-wide associations at the state level. Companies reported that they made their importing decisions independently.

The onion import market in Peninsular Malaysia can be characterised as competitive. Between 2020 and 2023, the HHI values ranged from 206.3 and 271.5, while both the CR4 and CR10 remained below 40% (see Table 69). These indicators suggest that the market is not concentrated.

Table 69: Market concentration metrics of onion importers in Peninsular Malaysia, 2020 – 2023

Market concentration metrics	Value			
	2020	2021	2022	2023
HHI	253.1	271.5	241.7	206.3
CR4 (%)	23.7	23.4	20.8	18.3
CR10 (%)	41.3	39.1	36.2	33.5

Note:

HHI below 1,500 indicates a competitive market; HHI between 1,500 and 2,500 indicates a moderately concentrated market; HHI above 2,500 indicates a highly concentrated market (potential monopoly and oligopoly). CR below 40% suggests a competitive market; CR between 40% and 60% suggests a moderately concentrated market; CR above 60% suggests a highly concentrated market (potential monopoly and oligopoly).

Source: RMCD and MyCC analysis

The RMCD data indicates that the majority of onions imported into Peninsular Malaysia came from India, China, Pakistan, and the Netherlands (see Table 70). In 2023, 57.0% of onions were imported from India, followed by China (21.3%), Pakistan (15.5%), and the Netherlands (2.4%). Together, these four countries accounted for over 90% of Peninsular Malaysia's onion imports. This distribution indicates Peninsular Malaysia's reliance on a few key countries for its onion imports.

Table 70: Countries of origin for onion imports into Peninsular Malaysia, 2020 – 2023

No.	Country	Market share (%)			
		2020	2021	2022	2023
1	India	39.1	34.0	64.0	57.0
2	China	15.3	5.5	9.0	21.3
3	Pakistan	19.9	38.6	8.6	15.5
4	Netherlands	14.3	10.1	12.6	2.4
5	Thailand	2.4	3.1	1.6	1.1
6	New Zealand	3.6	4.1	1.5	1.1
7	Egypt	1.7	0.9	1.6	0.7
8	Australia	0.6	1.0	0.1	0.5
9	Indonesia	0.3	0.0	0.0	0.1
10	Myanmar	1.4	1.0	0.5	0.1
	Subtotal	**98.6**	**98.5**	**99.7**	**99.9**
	Other 28 countries	1.4	1.5	0.3	0.1
	Grand Total	**100.0**	**100.0**	**100.0**	**100.0**

Source: RMCD and MyCC analysis

Sabah's onion imports market

Between 2020 and 2023, there were 61 onion importers in Sabah, according to data from RMCD. The market structure of onion importers in Sabah was moderately to highly concentrated between 2020 and 2023. The HHI values ranged between 1,500 and 2,500 (see Table 71), indicating moderate concentration. Additionally, the CR4 and CR10 values exceeded 60%, further confirming that the market was highly concentrated during this period.

Table 71: Market concentration metrics of onion importers in Sabah, 2020 – 2023

Market concentration metrics	Value			
	2020	2021	2022	2023
HHI	1,622.7	1,614.3	1,700.5	1,610.6
CR4 (%)	67.5	70.8	69.2	70.6
CR10 (%)	91.4	93.2	93.7	95.2

Note:
HHI below 1,500 indicates a competitive market; HHI between 1,500 and 2,500 indicates a moderately concentrated market; HHI above 2,500 indicates a highly concentrated market (potential monopoly and oligopoly). CR below 40% suggests a competitive market; CR between 40% and 60% suggests a moderately concentrated market; CR above 60% suggests a highly concentrated market (potential monopoly and oligopoly).

Source: RMCD, DOA Sabah, and MyCC analysis

In 2023, similar to Peninsular Malaysia, the majority of onions supplied to Sabah were imported from India, which accounted for 51.1% of total imports, according to RMCD data (refer to Table 72). Other significant contributors were the Netherlands (15.9%), China (15.6%), and New Zealand (6.9%), collectively making up 95.4% of Sabah's onion imports. This data highlights Sabah's dependence on a limited number of key countries for its onion supply, mirroring the challenges faced by Peninsular Malaysia.

Table 72: Countries of origin for onion imports into Sabah, 2020 – 2023

No.	Country	Market share (%)			
		2020	2021	2022	2023
1	India	38.1	35.7	47.3	51.1
2	Netherlands	31.5	30.0	33.6	15.9
3	China	14.7	12.2	9.8	15.6
4	New Zealand	9.5	4.3	6.2	6.9
5	Australia	0.9	3.9	0.4	5.9
6	Pakistan	1.9	7.3	1.5	4.1
7	Egypt	0.5	3.9	1.1	0.4
8	Thailand	1.4	0.0	0.0	0.1
	Sub-total	**98.5**	**97.2**	**99.9**	**100.0**
	Others	1.5	2.8	0.1	0.0
	Grand Total	**100.0**	**100.0**	**100.0**	**100.0**

Source: RMCD and MyCC analysis

Sarawak's onion imports market

Between 2020 and 2023, there were 83 onion importers in Sarawak, according to data from RMCD. The market structure of onion importers in Sarawak was competitive between 2020 and 2023. The HHI values ranged from 385.2 to 510.8 (see Table 73), indicating moderate concentration. Similarly, the CR4 values ranged from 23.6% to 33.4%, further supporting the conclusion that the market was competitive during this period.

Table 73: Market concentration metrics of onion importers in Sarawak, 2020 – 2023

Market concentration metrics	Value			
	2020	2021	2022	2023
HHI	488.3	506.0	385.2	510.8
CR4 (%)	28.7	32.7	23.6	33.4
CR10 (%)	59.8	63.3	51.6	61.5

Note:
HHI below 1,500 indicates a competitive market; HHI between 1,500 and 2,500 indicates a moderately concentrated market; HHI above 2,500 indicates a highly concentrated market (potential monopoly and oligopoly). CR below 40% suggests a competitive market; CR between 40% and 60% suggests a moderately concentrated market; CR above 60% suggests a highly concentrated market (potential monopoly and oligopoly).

Source: RMCD and MyCC analysis

In 2023, RMCD data revealed that India was the largest supplier of onions to Sarawak, contributing 39.8% of total imports (refer to Table 74). China followed with 23.9%, along with Thailand (15.4%) and the Netherlands (10.6%). Together, these four countries accounted for 89.7% of Sarawak's onion imports. Similar to Peninsular Malaysia and Sabah, Sarawak heavily relies on a few key countries to meet its onion supply needs, highlighting a shared vulnerability in the region's supply chain.

Table 74: Countries of origin for onion imports into Sarawak, 2020 – 2023

No.	Country	Market share (%)			
		2020	2021	2022	2023
1	India	29.1	30.4	36.2	39.8
2	China	12.0	11.4	8.3	23.9
3	Thailand	16.5	17.7	16.5	15.4
4	Netherlands	32.0	24.3	29.1	10.6
5	New Zealand	7.4	9.8	5.8	4.9
6	Australia	2.7	3.4	1.0	1.9
7	Pakistan	0.0	0.5	0.0	1.2
8	Egypt	0.1	1.7	2.7	1.0
9	Syria	0.0	0.0	0.0	0.6
10	Belgium	0.0	0.0	0.0	0.2
	Subtotal	**99.9**	**99.3**	**99.6**	**99.5**
	Other 9 countries	0.1	0.7	0.4	0.5
	Grand Total	**100.0**	**100.0**	**100.0**	**100.0**

Source: RMCD, DOA Sarawak, and MyCC analysis

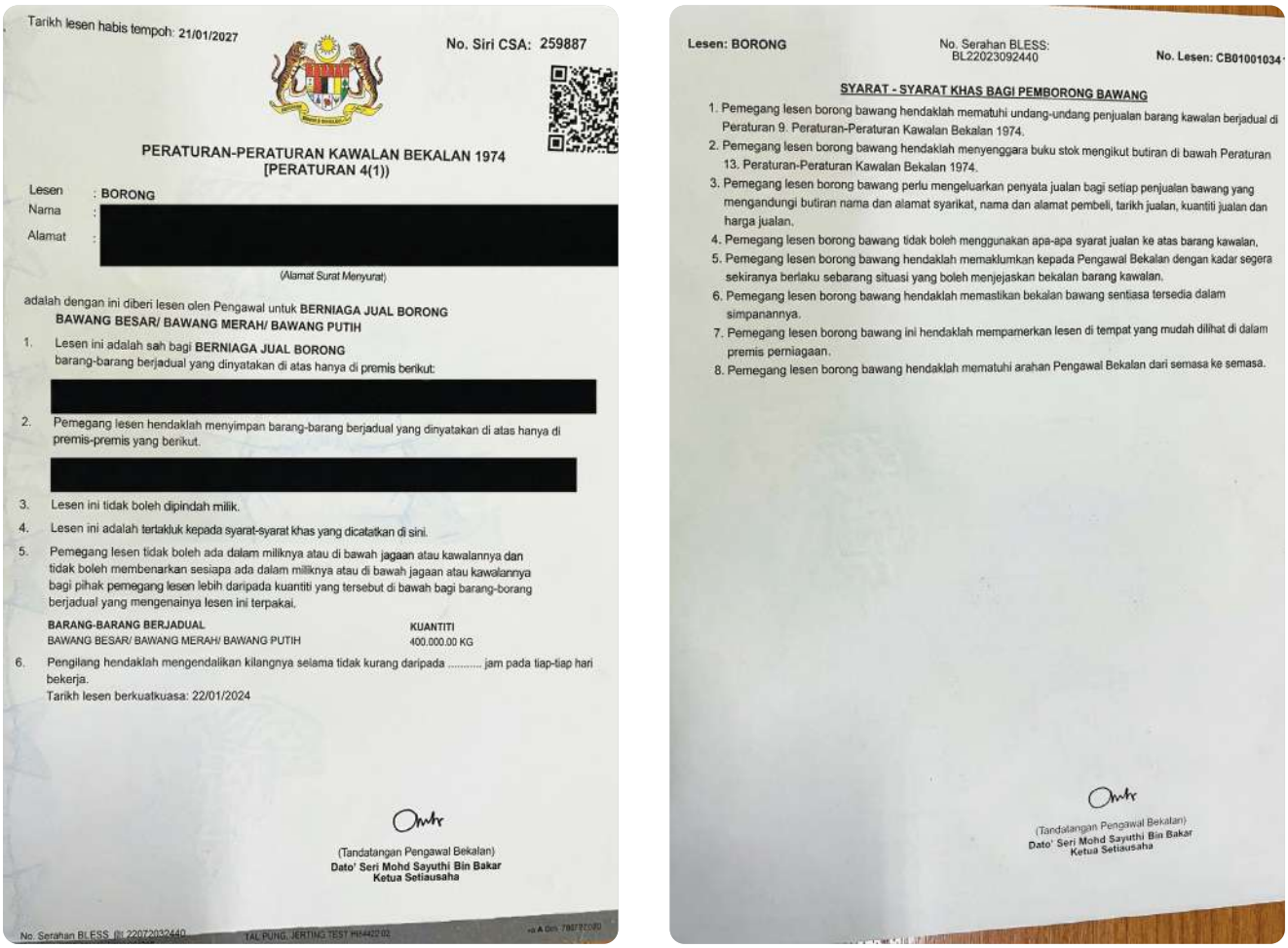
KPDN's licence to conduct onion wholesale activities

As previously mentioned, onions are classified as a controlled item under the Control of Supplies Act 1961 [Act 122] and further regulated by the Control of Supplies Regulations 1974. In 2022, the government implemented a licensing regime for onion wholesalers under these regulations. For this purpose, KPDN identifies onion importers as wholesalers. This move followed a market shortage caused by an export ban on onions imposed by the Indian government.

The licensing regime aims to achieve two key objectives. Firstly, to gather comprehensive data on onion inventories in the market—particularly those originating from India—and to eliminate operators who function solely as traders. Previously, onion inventory data was available only through MAQIS, which limited its oversight to Peninsular Malaysia. Additionally, the licence also imposes a storage limit of 20 mt of onions at any given time to prevent hoarding of onions by the wholesalers.

To secure a licence, wholesalers (importers) must provide evidence of their onion supply sources from exporters in the country of origin. The licence is valid for a maximum of five years and costs RM25/year. Applications can be submitted through the Business Licensing Electronic Support System (BLESS), with processing typically taking seven working days. According to KPDN, there are currently 67 licensed wholesalers. Figure 34 shows a sample of the licence.

Figure 34: Licence to wholesale onions



Tarikh lesen habis tempoh: 21/01/2027

No. Siri CSA: 259887

PERATURAN-PERATURAN KAWALAN BEKALAN 1974
[PERATURAN 4(1))

Lesen : BORONG
Nama : [redacted]
Alamat : [redacted]
(Alamat Surat Menyurat)

adalah dengan ini diberi lesen olen Pengawal untuk **BERNIAGA JUAL BORONG BAWANG BESAR/ BAWANG MERAH/ BAWANG PUTIH**

1. Lesen ini adalah sah bagi **BERNIAGA JUAL BORONG** barang-barang berjadual yang dinyatakan di atas hanya di premis berikut: [redacted]
2. Pemegang lesen hendaklah menyimpan barang-barang berjadual yang dinyatakan di atas hanya di premis-premis yang berikut. [redacted]
3. Lesen ini tidak boleh dipindah milik.
4. Lesen ini adalah tertakluk kepada syarat-syarat khas yang dicatatkan di sini.
5. Pemegang lesen tidak boleh ada dalam miliknya atau di bawah jagaan atau kawalannya dan tidak boleh membenarkan sesiapa ada dalam miliknya atau di bawah jagaan atau kawalannya bagi pihak pemegang lesen lebih daripada kuantiti yang tersebut di bawah bagi barang-borang berjadual yang mengenainya lesen ini terpakai.

BARANG-BARANG BERJADUAL	KUANTITI
BAWANG BESAR/ BAWANG MERAH/ BAWANG PUTIH	400,000.00 KG

6. Pengilang hendaklah mengendalikan kilangnya selama tidak kurang daripada ..... jam pada tiap-tiap hari bekerja.

Tarikh lesen berkuatkuasa: 22/01/2024

(Tandatangan Pengawal Bekalan)
Dato' Seri Mohd Sayuthi Bin Bakar
Ketua Setiausaha

No. Serahan BLESS: BL22023092440 TAL PUNG, JERTING TEST

Lesen: BORONG

No. Serahan BLESS: BL22023092440

No. Lesen: CB01001034

SYARAT - SYARAT KHAS BAGI PEMBORONG BAWANG

1. Pemegang lesen borong bawang hendaklah mematuhi undang-undang penjualan barang kawalan berjadual di Peraturan 9. Peraturan-Peraturan Kawalan Bekalan 1974.
2. Pemegang lesen borong bawang hendaklah menyenggara buku stok mengikut butiran di bawah Peraturan 13. Peraturan-Peraturan Kawalan Bekalan 1974.
3. Pemegang lesen borong bawang perlu mengeluarkan penyata jualan bagi setiap penjualan bawang yang mengandungi butiran nama dan alamat syarikat, nama dan alamat pembeli, tarikh jualan, kuantiti jualan dan harga jualan.
4. Pemegang lesen borong bawang tidak boleh menggunakan apa-apa syarat jualan ke atas barang kawalan.
5. Pemegang lesen borong bawang hendaklah memaklumkan kepada Pengawal Bekalan dengan kadar segera sekiranya berlaku sebarang situasi yang boleh menjejaskan bekalan barang kawalan.
6. Pemegang lesen borong bawang hendaklah memastikan bekalan bawang sentiasa tersedia dalam simpanannya.
7. Pemegang lesen borong bawang ini hendaklah mempamerkan lesen di tempat yang mudah dilihat di dalam premis perniagaan.
8. Pemegang lesen borong bawang hendaklah mematuhi arahan Pengawal Bekalan dari semasa ke semasa.

(Tandatangan Pengawal Bekalan)
Dato' Seri Mohd Sayuthi Bin Bakar
Ketua Setiausaha

Source: MyCC

6.3.6 Price trend

Figures 35 to 38 display trends for the wholesale and retail prices of four varieties of onions: big onions and shallots, both imported from India, as well as shallots and rose shallots, both imported from Thailand. Unlike the relatively stable prices of beef and coconuts between 2020 and 2024, onion prices have fluctuated significantly. Key details are summarised in Table 75.

Table 75: Comparative price analysis

Exporting countries	India		Thailand	
Onion variety	Big	Small red	Small red	Red rose
Price volatility	Low	High	Moderate	Moderate
Wholesale price peak	RM6.85	RM12.16	RM18.06	RM12.74
Retail price peak	RM8.80	RM14.87	RM21.78	RM17.46
Retail margin (RM/kg)	RM1.17 – 2.77	RM1.36 – 6.52	RM1.77 – 4.95	RM1.46 – 4.92
Retail margin %	~19 – 44%	~11 – 60%	~14 – 36%	~18 – 43%

Source: MyCC analysis

Big onion (India)

Price trends:

Wholesale and retail prices of big onions are the most stable among the four types. During 2020 to 2024, its wholesale prices fluctuated between RM2.02/kg and RM6.85/kg (average: RM3.50/kg), while its retail prices ranged between RM3.58/kg and RM8.80/kg (average: RM5.33/kg). Prices do not follow the seasonal trends observed for other onion varieties, indicating a more reliable and steady supply chain.

Margins:

Retail margins are the lowest of the four types in terms of value at between RM1.17/kg and RM2.77/kg but are still comparatively high in terms of percentage at between 19% and 44% (average: 34%). This suggests that this variety is highly demanded by consumers as retailers earn profits based on volume sold.

Market insights:

Sharp price spikes are observed for early 2020, late 2022, and early 2024, which aligned with supply disruptions from India due to export restrictions, as well as weather-related crop failures. Retail price spikes were most pronounced during supply disruptions, suggesting that costs were directly passed on to consumers with little absorption by retailers.

Figure 35: Wholesale and retail prices of big onion (India), 2020 – 2024

Source: FAMA

Small red onion (India)

Price trends:

Wholesale prices for Indian small red onions showed high volatility, with significant spikes in early 2020, late 2021, and early 2023. These spikes correspond to seasonal supply constraints and export restrictions. During 2020 to 2024, its wholesale prices fluctuated between RM2.83/kg and RM12.16/kg (average: RM5.28/kg), while its retail prices ranged between RM5.09/kg and RM14.87/kg (average: RM7.82/kg). This hints at the small red onions being prone to sharp price increases.

Margins:

Retail margins are the highest of the four types at between RM1.36/kg and RM6.52/kg (average: RM2.54/kg), as well as in terms of percentage at between 11% to 59% (average: 34%). Retailers face challenges during price spikes but benefit from wider margin flexibility during stable periods.

Market insights:

Sharp price spikes are observed for early 2020, late 2022, and early 2024, which aligned with supply disruptions from India due to export restrictions, as well as weather-related crop failures. Retail price spikes were most pronounced during supply disruptions. High variability in both wholesale and retail prices makes them less predictable for retailers and consumers.

Figure 36: Wholesale and retail prices of small red onion (India), 2020 – 2024

Source: FAMA

Small red onion (Thailand)

Price trends:

Wholesale prices of Thai small red onions showed moderate volatility, with significant spikes observed in four periods – late 2020/early 2021; early 2022; late 2022; and late 2023. Between these spikes, wholesale prices stabilised, fluctuating in the range of RM8/kg to RM10/kg, indicating a relatively steady supply chain compared to Indian small red onions. Meanwhile, retail prices consistently surpassed wholesale prices, with significant markups reflecting premium positioning. Its retail price peak of RM21.78/kg surpassed the prices of the other three varieties. Stabilisation periods between peaks showed retail prices hovering around RM15/kg to RM18/kg (average: RM12.71/kg), indicating sustained consumer demand despite the high pricing.

Margins:

Absolute retail margins (RM1.77/kg–RM4.95/kg) are higher than the Indian small red onions, but percentage retail margins (~14%–36%) are more moderate, which could indicate their premium positioning. Meanwhile, the retail percentage margins were between 14% and 36%, slightly lower than Indian small red onions, indicating that higher wholesale costs for Thai onions reduce percentage profitability.

Market insights:

Thai small red onions follow seasonal production cycles, with supply tightness typically occurring between January and March due to logistical bottlenecks and increased domestic consumption in Thailand. Unfortunately, seasonal peaks often coincide with festive periods in Malaysia, increasing demand and driving price spikes. Despite the higher prices, demand remains stable, indicating less price sensitivity compared to the Indian onions.

Figure 37: Wholesale and retail prices of small red onion (Thailand), 2020 – 2024

Source: FAMA

Red rose onion (Thailand)

Price trends:

Wholesale prices of Thai red rose onions showed moderate volatility, with five distinct peak periods: early 2020; late 2020/early 2021; late 2021 to early 2022; late 2022 to early 2023; and early 2024. Between peaks, wholesale prices stabilised within a range of RM6–RM10/kg, indicating relatively steady supply during non-peak periods. Meanwhile, the retail prices consistently tracked higher than wholesale prices, with key retail price peaks corresponding to the wholesale price surges.

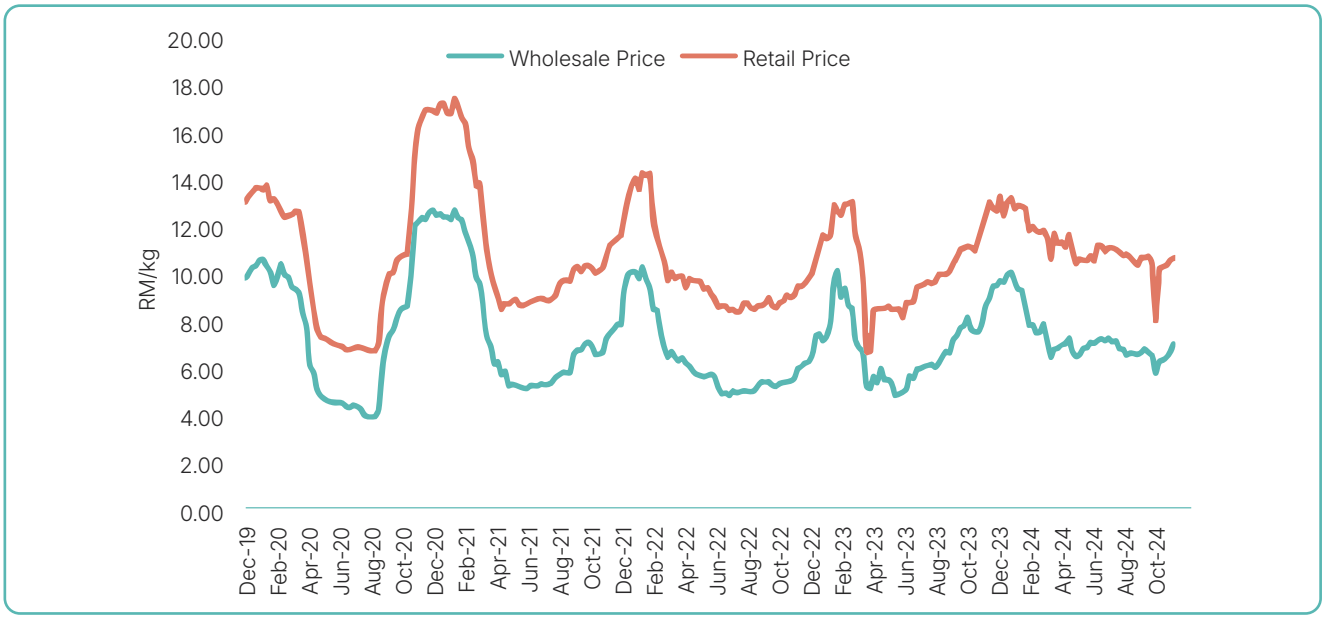
Margins:

Absolute retail margins ranged from RM1.46–RM4.92/kg, making Thai red rose onions one of the highest-margin onion varieties. Retailers were able to maintain high margins even during peak periods, leveraging on consumer willingness to pay a premium. In terms of percentage margins, they fluctuated between 18% and 43%, remaining relatively stable across peak and non-peak periods. The consistency in percentage margins highlights the robust demand for this premium product, even during high price periods.

Market insights:

As with Thai small red onions, Thai red rose onions follow seasonal production cycles, with supply tightness typically occurring between January and March due to logistical bottlenecks and increased domestic consumption in Thailand. Unfortunately, seasonal peaks often coincide with festive periods in Malaysia, increasing demand and driving price spikes. Despite the higher prices, demand remains stable, indicating less price sensitivity compared to the Indian onions.

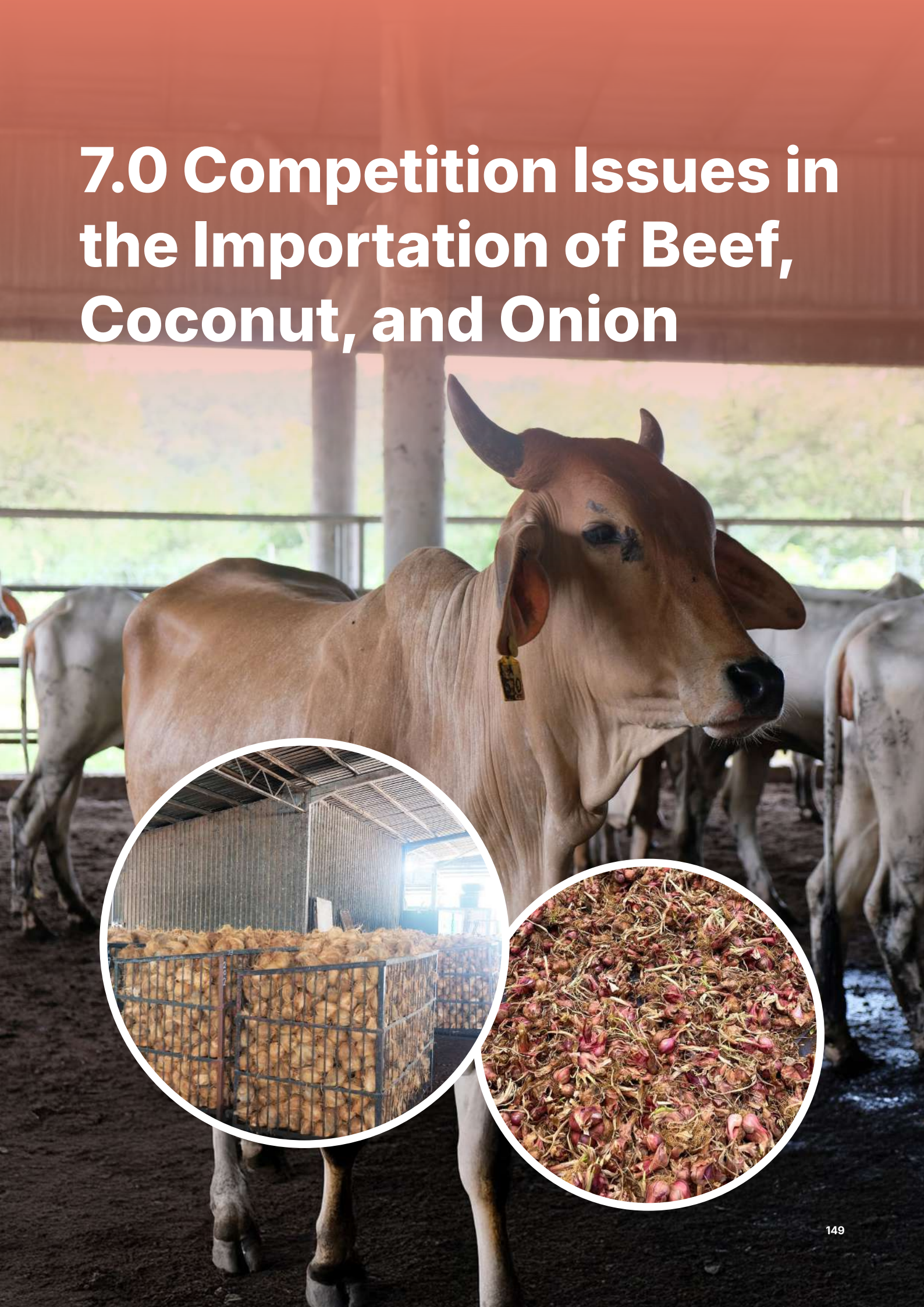
Figure 38: Wholesale and retail prices of small red rose onion (Thailand), 2020 – 2024



Source: FAMA

Big onions from India dominate the affordable staple segment with low volatility and margins, while small red and red rose onions from Thailand cater to premium markets with higher prices and margins. Small red onions from India fall in between, providing affordability but with high volatility. Addressing import dependency and improving supply chain resilience will be critical for stabilising Malaysia's onion market in the future.

7.0 Competition Issues in the Importation of Beef, Coconut, and Onion



Food imports are vital for ensuring food security, stabilising prices, and complementing domestic production. However, the import process is vulnerable to anti-competitive behaviour, market distortions, and consumer harm. This section examines competition issues in the importation of beef, coconut, and onion, focusing on market access measures and their implementation. By analysing international competition cases, Malaysia's import policies and procedures, and lessons learned, it offers a comprehensive view of the challenges and opportunities in regulating food import access.

7.1 International trade and competition laws[86]

The development of a global competition regime has been gradual and fragmented, unlike the WTO's comprehensive trade framework. There is currently no centralised international body or treaty governing competition law. Efforts began with the Havana Charter for the proposed International Trade Organization (ITO) in 1948, which included rules on anti-competitive practices in trade. However, the charter was never ratified, and the ITO was replaced by GATT, which focused exclusively on trade, not competition.

7.1.1 Challenges to a global competition law

Efforts to establish a unified global competition regime face several hurdles:

Sovereignty and diversity: Countries have different legal systems, economic conditions, and priorities, making harmonisation challenging.

Conflict of interests: Developing countries often focus on market access and protection of nascent industries, while developed countries emphasise strict enforcement.

Lack of political will: Many states are hesitant to cede authority to a supranational competition body.

Complexity of competition law: Unlike trade, which can be codified into tariffs and quotas, competition issues often involve nuanced assessments (e.g., market power, consumer welfare).

7.1.2 De facto international competition regime

Countries include competition-related provisions in FTAs at the plurilateral, regional, and bilateral levels. These are often soft-law measures focused on cooperation rather than binding obligations. Nonetheless, such arrangements facilitate cross-border collaboration, allowing countries to share information, coordinate enforcement, and address cross-border investigations.

[86] *For more details, see: OECD (2001). Trade and Competition Policies: Options for a Greater Coherence; Robert D. Anderson, William E. Kovacic, Anna Caroline Müller and Nadezhda Sporysheva (2018). Competition policy, trade and the global economy: Existing WTO elements, commitments in regional trade agreements, current challenges and issues for reflection; and AS Verghese (2023). Trade and Competition Policy, in The Elgar Companion to the World Trade Organization.*

7.1.3 Importance of robust national competition laws

In the absence of a global competition regime like the WTO for trade, national competition laws play a crucial role in regulating domestic markets and supporting global enforcement efforts. Strong regimes establish enforcement benchmarks, align with international norms, and foster regulatory convergence. Jurisdictions like the EU and the US have set influential models, shaping international best practices, providing models for others to emulate. Robust national laws also enable effective enforcement within regional or bilateral frameworks. For instance, ASEAN Member States, under the ASEAN Economic Community (AEC) Blueprint 2025, are progressively adopting and strengthening competition laws to support regional economic integration—efforts that depend on solid national legal frameworks.

7.1.4 Addressing anti-competitive practices in agricultural markets

Agricultural markets are often characterised by significant imbalances in power between market participants. Farmers, typically the most vulnerable actors in the supply chain, often face challenges posed by:

⇒ **Monopsonistic buyers**: In some countries, large processors or exporters dominate the purchase of agricultural products, reducing farmers' bargaining power.

⇒ **Cartels in input markets**: Suppliers of seeds, fertilisers, and pesticides may engage in price-fixing or market-sharing agreements, inflating input costs.

⇒ **Vertical integration**: Companies that own multiple stages of the supply chain, from production to retail, can engage in exclusionary practices to disadvantage competitors.

Food security is a central concern for all countries, and strong competition laws are essential to ensure affordable and accessible food. Anti-competitive practices in agriculture can directly impact food prices, production incentives, and distribution efficiency. For example:

⇒ **Price collusion**: If large grain exporters or distributors collude to set export prices, it can lead to inflated costs for importing countries, reducing affordability for consumers.

⇒ **Supply chain bottlenecks**: Dominance by a few players in processing or transportation can create inefficiencies, leading to higher prices and wastage.

National competition regimes such as the MyCC address these risks by:

⇒ **Monitoring price-fixing and market allocation**: Enforcing laws against cartels ensures that agricultural prices reflect market conditions rather than artificial manipulation.

⇒ **Promoting competitive supply chains**: Preventing abuse of dominance and ensuring fair access to essential infrastructure like storage and logistics.

Also, global agricultural trade is influenced by subsidies, tariffs, and the market power of multinational corporations. In the absence of international competition laws, robust national competition laws help mitigate cross-border anti-competitive practices, such as:

⇒ **Export cartels**: Some exporting countries allow or tacitly support cartels in agricultural commodities, distorting global markets.

⇒ **Unfair trade practices**: Dumping of subsidised agricultural products can harm local farmers in importing countries, requiring domestic competition and trade policies to work in tandem.

7.2 Competition issues in market access measures

Sections 4 and 5 outlined the role of market access measures—including tariffs, NTMs, NTBs, and TRQs—within the framework of international trade law, referencing the GATT, AoA, SPS Agreement, and TBT Agreement. This section shifts the focus to the competition issues that arise not just from the design of these measures, but also their implementation and procedures.

The abolition of most APs (a form of QR and NTB) for agricultural products in Malaysia marks a positive step toward a more competitive, transparent, and efficient market. This reform aligns Malaysia's agricultural trade policy with international best practices, enhancing its reputation as a fair and open economy, while boosting market resilience and competition, particularly in the beef, coconut, and onion sectors. While the analysis below focuses on competition concerns linked to AP implementation, it also recognises issues stemming from the broader application of market access measures. See Box 5 for an overview of potential competition issues in quota allocation mechanism.

7.2.1 Monopolistic or oligopolistic behaviour

Firms operating in markets dominated by APs often engage in monopolistic or oligopolistic practices. With little competition, these firms can manipulate prices, limit supply, or engage in anti-competitive behaviours such as price fixing or collusion. The lack of competitive pressure allows them to prioritise profit maximisation over consumer welfare or market efficiency.

In a market with only a few quota holders, these firms may collude to maintain artificially high prices or restrict supply to increase scarcity. Prices are determined not by market forces but by the actions of a few dominant firms.

7.2.2 Artificial supply constraints and inflated prices

APs impose caps on the quantity of goods that can be imported, creating artificial scarcity. This reduction in supply restricts market access for imported products, often leading to insufficient quantities to meet consumer demand. The result is skewed price signals that reflect not the actual cost of production or global market dynamics, but instead the effects of artificially limited competition. This artificial scarcity leads to inflated consumer prices as fewer imports create competitive pressure; domestic suppliers face little incentive to offer cost-effective products. For instance, in markets like onions, seasonal shortages exacerbated by APs often drive-up prices, as domestic producers alone cannot meet the surge in demand. This creates a scenario where consumers bear the burden of higher costs while receiving fewer choices in terms of product variety or quality.

7.2.3 Protection of inefficient producers

Another significant distortion caused by APs is the protection of inefficient domestic producers. By limiting foreign competition, QRs and NTBs shield local firms from the pressures of innovation and cost optimisation. This creates a situation where resources are misallocated to less productive sectors, resulting in lost opportunities for economic growth. For example, in the coconut industry, local farmers may lack the motivation to adopt high-yield varieties or sustainable practices if foreign competition is limited by import quotas. Over time, this stagnation weakens the overall competitiveness of the industry.

Moreover, the reliance on APs to protect inefficient producers can lead to complacency, as firms enjoy guaranteed market share without the need to modernise. This reduces the incentive to adopt advanced technologies, improve product quality, or lower costs—practices that are essential for long-term growth and competitiveness in global markets.

7.2.4 Disrupted supply chains and downstream impacts

APs also create distortions within supply chains by disrupting the flow of inputs and finished goods. When import restrictions limit the availability of essential raw materials, downstream industries face higher costs and supply shortages. For example, restrictions on mature coconut imports can constrain the production of processed products such as coconut milk or oil. This leads to increased costs for food processors and reduced availability of these products for consumers.

Furthermore, APs exacerbate supply chain volatility by making it difficult to respond to demand fluctuations. During festive seasons, for instance, demand for beef often spikes. APs prevent sufficient imports to address this temporary surge, resulting in price hikes and supply shortages. Such disruptions ripple through the supply chain, affecting not only producers and processors but also retailers and consumers.

7.2.5 Preferential treatment

A primary way APs foster monopolistic or oligopolistic structures is through the allocation process or any other discriminatory practices that favour domestic players or specific trading partners, which undermine the principles of fairness and non-discrimination. For example, quotas are often distributed by governments to select importers, producers, or traders, and the criteria for allocation are frequently opaque or subjective. This lack of transparency allows established firms, politically connected businesses, or large corporations to dominate the quota system, leaving smaller players at a disadvantage.

When a small number of firms hold the majority of the quota allocation, they gain significant control over the market supply of the restricted goods. This leads to the consolidation of market power, enabling these firms to influence prices and supply levels with minimal competition. In such cases, smaller or newer firms find it challenging to enter the market, further entrenching the dominance of the few firms that control the quota.

7.2.6 Restricted market entry

APs act as a significant barrier to entry for new or smaller firms, limiting their ability to compete in the market. Since only firms with quota allocations are allowed to import or trade restricted goods, businesses without access to quotas are effectively excluded from participating. This barrier not only reduces competition but also consolidates the market in favour of established players.

In the past, in industries like the beef market, import quotas can restrict smaller traders or new entrants from sourcing affordable imports, leaving them reliant on expensive domestic supply. Over time, this discourages innovation and investment from smaller firms, further concentrating market power among a few dominant players.

7.2.7 Encouragement of informal or underground economies

The monopolistic or oligopolistic structures created by APs often drive demand toward informal or illegal markets. Consumers and businesses seeking more affordable or accessible alternatives may turn to smuggled goods or unregulated suppliers. This informal trade further distorts the market by creating a parallel supply chain that operates outside the bounds of regulation and accountability.

For instance, tight restrictions on imports through APs can encourage smuggling, as consumers seek cheaper food items from neighbouring countries. These informal channels undermine legal businesses and deprive the government of valuable revenue from tariffs and taxes.

7.2.8 Procedural complexity and uncertainty

Complex administrative procedures associated with APs create uncertainty and inefficiency in trade. Common issues include lengthy approval processes for import licences or certifications; opaque rules for quota allocation under TRQs; and non-transparent or arbitrary enforcement of technical standards.

These procedural barriers increase compliance costs, discourage foreign firms, and create opportunities for corruption or favouritism. Uncertainty in trade rules further exacerbates these issues, deterring investment and long-term planning by businesses.

7.2.9 Price volatility and limited consumer choice

APs contribute to price volatility by preventing markets from adjusting quickly to changes in supply or demand. Domestic production, often subject to seasonal variations or disruptions, cannot always fill the gap left by restricted imports. This leads to sudden spikes in prices, particularly during periods of high demand or poor harvests. For example, in the beef market, APs may restrict the import of foreign beef during times of domestic supply shortages, resulting in inflated prices that disproportionately affect low-income consumers.

Moreover, APs limit consumer choices by reducing the variety of available products. Consumers who prefer imported goods for their quality or suitability may find themselves with fewer options, leading to dissatisfaction and inefficiencies in meeting market needs.

Box 5: Competition issues in quota allocation mechanism

As highlighted in Box 4, there are various methods for quota allocation. Quota allocation mechanisms play a critical role in shaping the dynamics of markets where supply is deliberately restricted, such as in import regulation, natural resource allocation, or agricultural production controls.[87] From a competition and antitrust perspective, the method by which quotas are allocated can significantly impact market efficiency, fairness, and the behaviour of market participants. Inefficient or poorly designed mechanisms can lead to monopolistic practices, distort competition, and harm consumers, while well-designed systems can promote fairness, inclusivity, and optimal resource utilisation.

Currently, the DVS allocates TRQs for many agricultural products such as swine and poultry on a First-Come, First-Served (FCFS) basis. Under this method, quotas are allocated to applicants in the order they apply, until the total quota quantity is exhausted. Malaysia is not the only country that allocates its quotas via the FCFS basis – many other countries are also doing the same:

⇒ **The US** issues its beef quotas for Australian beef on a FCFS basis and this runs over a calendar year. If Australia exports more than 85% of the quota amount before 1 October each year, the remaining 15% of the quota is allocated proportionally based on an exporter's record of shipment to the US, averaged over the previous 2 years.[88]

⇒ **The EU** issues its grain-beef quota for Argentina, Australia, Canada, New Zealand, and Uruguay via a FCFS basis on arrival in the EU. Exporting country issued TRQ certificates are required, but as access to this quota is managed by the EU, access to it cannot be guaranteed even with a TRQ certificate. The grain-fed quota is administered by the EU on a quarterly basis (July-September, October-December, January-March, April-June). For the 2023-24 quota year there is 4,300t of quota available for the July-September and October-December quarters and 3,700t available for the January-March and April-June quarters.[89]

[87] *For a discussion of the various quota allocation mechanism, see: USDA (2001), Economics of Tariff-Rate Quota Administration, TB-1893.*
[88] *For details, see https://www.agriculture.gov.au/biosecurity-trade/export/from-australia/quota/us-quotas/us-beef-quotas*
[89] *For details, see https://www.agriculture.gov.au/biosecurity-trade/export/from-australia/quota/eu-hqb-and-grain-fed-beef-quotas*

The FCFS system is easy to administer and understand, with minimal bureaucracy complexity. All applicants theoretically have an equal chance to access the quota, depending on their ability to act quickly. However, beneath its apparent fairness, this approach can create significant competition issues that distort markets and undermine efficiency:

⇒ **Advantage for resourceful and well-prepared firms**: One of the primary competition issues with FCFS mechanisms is that they disproportionately favour resourceful and well-prepared firms. Larger businesses or firms with advanced systems and logistical capabilities are better positioned to act quickly when quotas become available. They often have the financial resources, staffing, and technology to monitor application processes, prepare documentation in advance, and submit applications at the earliest possible moment.

This inherent advantage creates an uneven playing field, where smaller businesses or less-organised firms struggle to compete. For example, small-scale importers or producers may lack the infrastructure to respond swiftly, leaving them unable to secure quotas despite having the capacity to use them effectively. Over time, this disparity can consolidate market power among larger firms, reducing competition and innovation.

⇒ **Encouragement of speculative behaviour**: The FCFS system often incentivises speculative behaviour, as opportunistic players can exploit the mechanism to secure quotas without intending to use them efficiently. Firms or individuals may rush to acquire quotas purely for profit, reselling them at higher prices rather than utilising them in productive activities. This speculative activity distorts market dynamics, as quotas are no longer allocated to those who genuinely need them or can maximise their economic value.

Such behaviour not only undermines the intended purpose of quotas but also increases costs for downstream industries and consumers. For instance, in the agricultural sector, speculative practices can lead to inflated prices for imported goods, as processors and retailers must purchase quotas or products at a premium from intermediaries. This reduces market efficiency and fairness, harming stakeholders across the supply chain.

⇒ **Administrative inefficiencies and logistical challenges**: The FCFS system is particularly vulnerable to administrative inefficiencies, especially in markets with high demand for limited quotas. When applications open, the system may be overwhelmed by a flood of submissions, leading to delays, errors, or disputes. In some cases, poorly designed or under-resourced systems fail to process applications fairly, resulting in favouritism or arbitrary allocation.

For example, online FCFS systems may experience technical glitches or crashes due to heavy traffic, disadvantageous for applicants who are unable to resubmit their requests quickly. Manual systems are equally prone to errors, with delays in processing applications creating uncertainty and mistrust among participants. These challenges erode confidence in the allocation process and reduce its perceived fairness.

⇒ **Reduced market efficiency**: By prioritising speed over merit or capacity, FCFS systems often result in quotas being allocated to firms that may not use them most efficiently. Firms that act quickly to secure quotas may lack the operational capability, market access, or infrastructure to fully utilise them, leading to suboptimal outcomes. Meanwhile, more capable firms that miss quotas are left under-resourced, reducing overall market efficiency.

This inefficiency is particularly problematic in sectors with perishable goods, such as agricultural products, where timely and efficient utilisation of quotas is critical. Misallocation can lead to wasted resources, disrupted supply chains, and higher costs for consumers.

⇒ **Short-term focus at the expense of long-term planning**: The urgency inherent in FCFS systems encourages firms to focus on immediate opportunities rather than long-term planning. Businesses may rush to secure quotas without fully considering their operational needs or capacity to utilise them effectively. This short-termism reduces strategic investment in innovation, efficiency, and market development, undermining the broader goals of economic growth and sustainability.

Moreover, the unpredictable nature of FCFS allocations makes it difficult for firms to plan their operations, leading to inefficiencies and instability in the market. Firms that rely on quotas for their core operations may face significant disruptions if they fail to secure allocations in a particular cycle.

7.3 Lessons from the international cases

Competition issues arising from market access measures are not merely theoretical concerns—they manifest in real-world trade practices, as illustrated by the competition investigations conducted by the NCAs in the Philippines and Indonesia in the importation of onion, as well as beef and garlic, respectively. These issues often stem from the interplay between market access restrictions, procedural inefficiencies, and deliberate anti-competitive practices by dominant players, all of which have subsequent effects of distorting markets and harming consumers.

7.3.1 Collusion and cartel behaviour restrict competition

Collusion was a defining characteristic in all three cases, with dominant players coordinating their actions to manipulate supply, control prices, and restrict market access. Cartel members exploited regulatory inefficiencies to consolidate power and exclude competitors.

Philippines (2024 onion import cartel)

The collusion among 12 entities involved pre-arranged allocation of SPSICs, with evidence included monitoring sheets and correspondence that detailed how the cartel divided import volumes to restrict market competition. The manipulation of SPSICs allowed the cartel to create artificial scarcity, which drove retail onion prices to PHP600–700/kg in late 2022, even as farmgate prices remained low. Consumers faced inflated prices, while smaller competitors were excluded from the market.

Indonesia (2015 beef import cartel)

The cartel of 32 importers in the JABODETABEK region delayed imports during peak demand periods (e.g., Ramadan) to create shortages. This resulted in domestic beef prices that were nearly double the global average, placing a heavy burden on consumers. Quota hoarding and price-fixing agreements were facilitated through industry associations, where cartel members coordinated actions to eliminate price competition.

Indonesia (2013 garlic import cartel)

19 importers divided quotas, coordinated shipment schedules, and hoarded stock to inflate prices. Prices surged to Rp80,000-100,000/kg, during the cartel operations. The companies used shared agents to influence regulatory approvals, ensuring that their group retained the largest import quotas while excluding smaller importers.

Collusion across these cases not only distorted market prices but also stifled competition. By acting as unified blocs, cartel members eliminated price competition, imposed artificial supply constraints, and deprived consumers of affordable options.

7.3.2 Market power concentration

Market power was concentrated among a small number of firms in all three cases, enabling them to dominate supply chains and exclude competitors. This concentration was often a result of the restrictive allocation of import quotas and permits.

Philippines (2024 onion import cartel)

The allocation of SPSICs heavily favoured the cartel of 12 entities, which controlled over 50% of the market share. By controlling more than half of the imported onion supply, these firms could dictate market conditions, manipulate supply chains, and maintain inflated prices.

Indonesia (2015 beef import cartel)

Quotas were disproportionately allocated to 32 importers, collectively controlling 65% of beef imports in key demand areas such as JABODETABEK. This concentration allowed the cartel to manipulate market dynamics effectively, limiting competition from smaller importers.

Indonesia (2013 garlic import cartel)

The cartel of 19 importers divided into three groups, controlled over 81.38% of garlic imports. Their dominance excluded smaller players and enabled coordinated price manipulation, further entrenching their control over the market.

By concentrating market power in the hands of a few players, these regulatory systems undermined the competitive landscape and enabled anti-competitive practices such as price manipulation and market exclusion.

Source: MyCC

7.3.3 Procedural complexity and lack of transparency enable manipulation

The licensing and permit processes in all three cases were complex and non-transparent, creating opportunities for manipulation. These inefficiencies disproportionately impacted smaller firms, limiting their ability to compete effectively.

Philippines (2024 onion import cartel)

The process for issuing SPSICs lacked transparency, with criteria for approvals often unclear. Evidence showed that import clearances were pre-arranged among cartel members, sidelining smaller competitors and reducing competition.

Indonesia (2015 beef import cartel)

The import licensing process required multiple formal documents, taking over 30 days to complete. This procedural burden made it difficult for smaller importers to respond to market demands quickly, allowing dominant firms to exploit their established positions. Regulations also discriminated against private importers by limiting beef imports from certain countries to SOEs, further reducing competition.

Indonesia (2013 garlic import cartel)

The introduction of RIPH certificates added bureaucratic hurdles. Delays in issuing these certificates disproportionately affected smaller importers, while dominant firms secured favourable treatment through shared agents and intermediaries.

Complex and opaque procedures facilitated favouritism and regulatory capture, enabling dominant firms to manipulate the system to their advantage.

7.3.4 Barriers to entry

Across the Philippines and Indonesia, barriers to entry were a recurring theme in their NCAs' investigations. Import licensing systems and quotas served as primary tools for restricting market access, favouring entrenched players over new entrants. These practices align with broader competition issues in market access measures:

Philippines (2024 onion import cartel)

Smaller importers struggled to navigate the costly and burdensome process of obtaining SPSICs. The dominance of the cartel excluded new entrants, reducing market diversity and innovation.

Indonesia (2015 beef import cartel)

The import licensing process required multiple formal documents, taking over 30 days to complete. This procedural burden made it difficult for smaller importers to respond to market demands quickly, allowing dominant firms to exploit their established positions. Regulations also discriminated against private importers by limiting beef imports from certain countries to SOEs, further reducing competition.

Indonesia (2013 garlic import cartel)

The introduction of RIPH certificates added bureaucratic hurdles. Delays in issuing these certificates disproportionately affected smaller importers, while dominant firms secured favourable treatment through shared agents and intermediaries. Smaller importers were also disadvantaged by the local cultivation requirement tied to RIPH certification. This requirement was inconsistently enforced, with larger players benefiting from favourable treatment.

These barriers are emblematic of the procedural and structural issues inherent in NTMs and TRQs, where opaque processes and restrictive conditions concentrate market power among a select few, stifling competition and innovation.

7.3.5 Price distortions and consumer harm

Both PCC and KPPU identified significant price distortions resulting from anti-competitive practices in importation processes. Artificially restricted supply and collusive behaviour among dominant players led to inflated prices, directly harming consumers.

Philippines (2024 onion import cartel)

Retail onion prices soared to PHP600–PHP700/kg, forcing many consumers to reduce their consumption of this staple ingredient. Low-income households were disproportionately affected, as the artificially inflated prices strained household budgets.

Indonesia (2015 beef import cartel)

Beef prices in Indonesia, already high, surged further during peak demand periods due to the cartel's manipulation of supply. This made it difficult for lower-income households to afford protein, exacerbating malnutrition.

Indonesia (2013 garlic import cartel)

The garlic price surge to Rp80,000–Rp100,000/kg directly impacted consumers, particularly those in rural and low-income areas. Scarcity also disrupted industries reliant on garlic as a key ingredient, further amplifying economic harm.

These outcomes reflect broader issues tied to NTBs and TRQs, where limited competition and restricted imports allow dominant players to manipulate prices, reducing affordability and access for consumers.

Source: MyCC

7.3.6 Regulatory capture by dominant firms in markets

Regulatory capture, where dominant firms influence policy implementation to serve their interests, was evident in all three cases. This capture undermined the integrity of regulatory systems and perpetuated market inefficiencies.

Philippines (2024 onion import cartel)

The allocation of SPSICs was reportedly influenced by cartel members, who used their relationships with regulators to secure favourable treatment. This allowed them to maintain control over the market and manipulate supply chains.

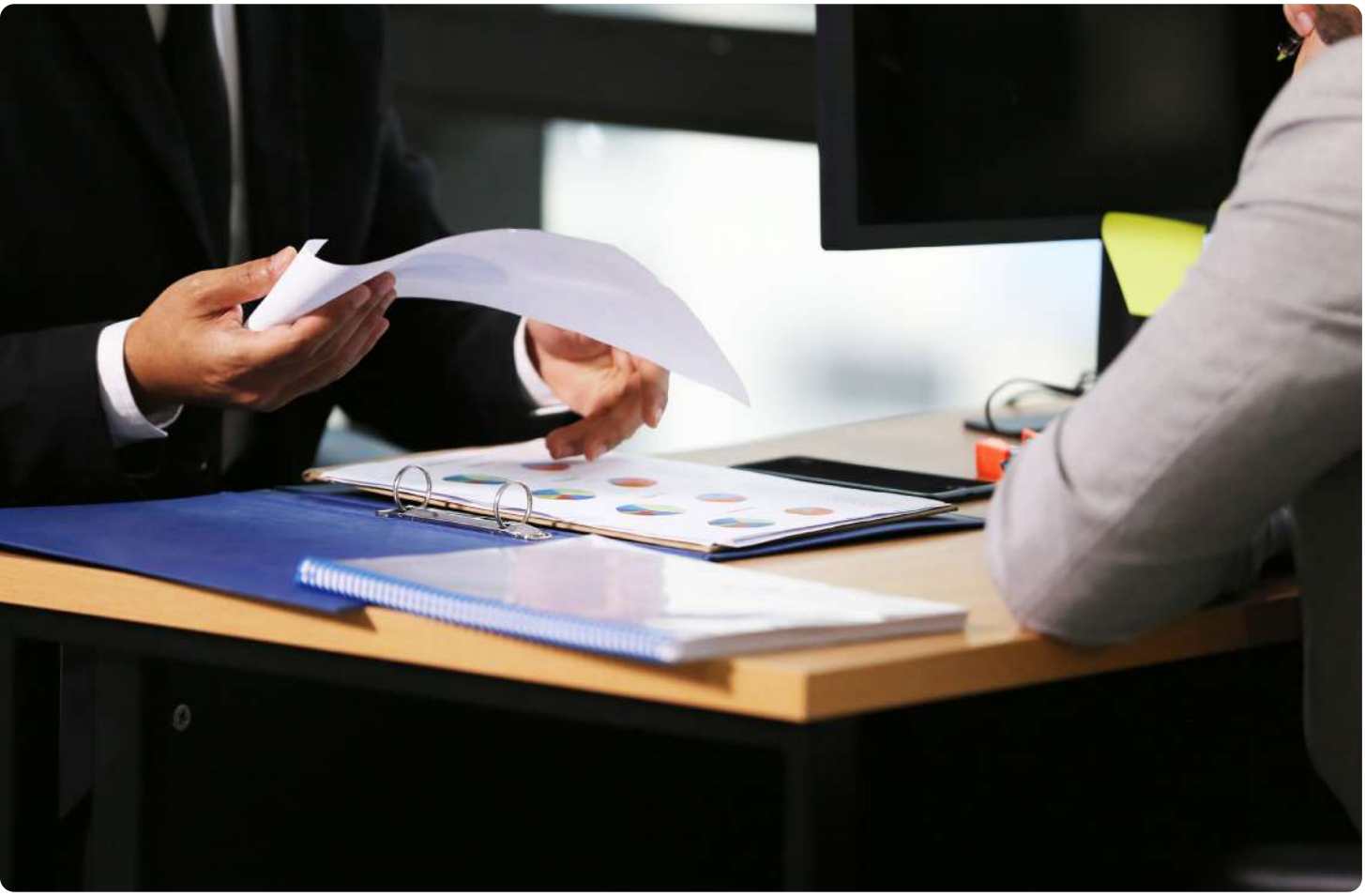
Indonesia (2015 beef import cartel)

Politically connected firms received preferential treatment in quota allocations, sidelining smaller competitors. The discriminatory regulations favouring SOEs further reduced market fairness.

Indonesia (2013 garlic import cartel)

Dominant importers collaborated with government officials to secure favourable treatment in RIPH and SPI issuance. Smaller competitors were excluded due to delays and inconsistencies in the approval process.

Regulatory capture distorts competition and undermines public trust in governance.



7.3.7 Shared agents and intermediaries as enablers of collusion

Shared agents and intermediaries acted as facilitators of collusion in all three cases by serving as a central point of coordination for importers. These entities helped cartel members navigate regulatory frameworks, influencing the issuance of import permits and quotas to favour dominant players.

Philippines (2024 onion import cartel)

Evidence uncovered during the investigation revealed that shared agents played a role in pre-arranging the allocation of SPSICs. These agents coordinated with cartel members to ensure that import clearances were distributed exclusively among the group, sidelining smaller importers. Shared intermediaries were also implicated in the strategic manipulation of SPSIC issuance timelines. By influencing the timing of approvals, they enabled the cartel to create artificial shortages or surpluses, further manipulating market supply and prices.

Indonesia (2015 beef import cartel)

Shared intermediaries facilitated the complex licensing process for cartel members, ensuring that dominant firms received quotas while excluding smaller competitors. These agents used their established relationships with regulatory authorities to expedite approvals for certain companies while delaying or obstructing others. Intermediaries were also instrumental in coordinating price-fixing strategies. Meetings organised through industry associations, often with the involvement of intermediaries, provided a platform for cartel members to align supply and pricing strategies.

Indonesia (2013 garlic import cartel)

Shared agents, acting as intermediaries between importers and government regulators, played a critical role in securing RIPH certificates and SPI for dominant firms. These agents facilitated preferential treatment for certain companies by lobbying officials and bypassing standard procedural requirements. Some intermediaries managed import activities for multiple companies, effectively centralising decision-making and aligning the actions of cartel members.

By acting as a common link among cartel members, shared agents streamlined coordination, making it easier for firms to engage in anti-competitive practices such as supply manipulation and price fixing. Also, intermediaries' influence over regulatory processes increased the likelihood of favouritism and reduced the effectiveness of oversight mechanisms.

7.3.8 Common ownership and affiliations as a structural issue

Common ownership and affiliations among firms amplified the potential for anti-competitive behaviour by enabling coordinated actions across related entities. Shared ownership structures blurred the lines between independent companies, allowing them to act as a unified bloc.

Philippines (2024 onion import cartel)

Several entities implicated in the cartel, such as Philippine Vieva Group, Golden Shine, and Tian Long Corp., were linked through shared executives and ownership structures. For instance, key individuals held multiple positions across different companies, enabling unified strategic actions within the cartel. This common ownership facilitated the coordinated allocation of SPSICs, ensuring that only affiliated entities controlled significant volumes of imported onions.

Indonesia (2015 beef import cartel)

The investigation revealed common ownership links among some of the 32 cartel members. For example, PT Austasia Stockfeed and PT Santosa Agrindo shared the same address, while PT Pasir Tengah and PT Widodo Makmur Perkasa had overlapping directors and commissioners. These affiliations allowed related companies to consolidate control over quotas and supply chains, making it easier to restrict imports and fix prices.

Indonesia (2013 garlic import cartel)

Many of the 19 garlic importers were found to be affiliated through shared ownership or management. For example, PT Karya Utama Persada Bersama and PT Maju Sukses Bersama are suspected of being affiliated companies based on a typo in the SPI extension application document.

Common ownership simplified communication and coordination, allowing affiliated companies to align their strategies on supply, pricing, and quota allocation. Affiliated firms collectively controlled significant portions of the market, reducing competition and increasing the potential for monopolistic practices. The lack of clear oversight on ownership structures made it difficult for regulators to identify and address coordinated behaviour among affiliated entities.

Treatment of common ownership and affiliations in Malaysia

In Malaysia, section 4(1) of Act 712 states that, *"a horizontal or vertical agreement between enterprises is prohibited insofar as the agreement has the object or effect of significantly preventing, restricting or distorting competition in any market for goods or services"*. However, this section does not apply to agreements between two or more legal persons that form a single economic entity.[90] Since they comprise a single enterprise collectively, there is no agreement between enterprises. Section 2 of Act 712 states that,"" *enterprises" means any entity carrying on commercial activities relating to goods or services, and for the purposes of this Act, a parent and subsidiary company shall be regarded as a single enterprise if, despite their separate legal entity, they form a single economic unit within which the subsidiaries do not enjoy real autonomy in determining their actions on the market"*.

[90] *Richard Whish and David Bailey (2024). Competition Law. Oxford University Press.*

Companies under common ownership or having common directors may not constitute as being separate enterprises if they are effectively controlled by a parent company. In such cases, agreements between these companies, even if they seem like agreements between independent companies, may not be considered anti-competitive as they are part of the same economic entity. Additionally, if a common director has significant influence over strategic decisions across multiple companies, they are likely to be seen as part of a single economic unit.

A critical application of the single economic entity principle is in imposing parent company liability for anti-competitive conduct. If a subsidiary is found to have engaged in anti-competitive practices, the parent company can also be held liable, as they are considered a single entity. This means penalties can be imposed on the group as a whole, even if the parent company was not directly involved in the illegal behaviour. This can result in larger fines, as the financial strength of the whole group is considered, thus increasing the deterrent effect. While this may be viewed as an overreach, it also ensures that the enforcement of competition law is not undermined by complex corporate structures. This helps prevent companies from avoiding liability by "dispersing" the anti-competitive conduct across subsidiaries.

Companies with common ownership in the beef, coconut, and onion markets in Malaysia may argue for the applicability of the single economic entity doctrine that absolves them from being seen as undertaking anti-competitive conduct or agreements. However, they may need to learn from the cases investigated and decided by the MyCC previously that have the similar elements of enterprises having common ownership and directors. For example, in the 2022 Langkawi Ro-Ro case, MyCC found that companies with common ownership and directors were undertaking collusive activities of price fixing and so were fined RM2.2mn in total.[91]

7.3.9 Vertical arrangements across value chain

The Philippines' 2024 onion import cartel case highlights potential competition issues that could arise from vertical arrangements across the value chain. In this case, dominant importers also manage or own cold storage facilities and collude with freight forwarding services companies.

Cold storage facilities are critical infrastructure for preserving onions, which are perishable and susceptible to spoilage under unfavourable conditions. Dominant players strategically stored imported onions in cold storage facilities to control the timing and volume of supply released into the market. Evidence from the case suggests that these firms delayed releases to coincide with periods of peak demand to create artificial shortages and price spikes in the market.

Freight forwarding services are essential for coordinating the transportation and delivery of imported onions. Shared freight forwarding services among cartel members facilitated coordination of supply strategies. By aligning shipment schedules and distribution plans, cartel members could synchronise their market actions, reinforcing collusion.

The combination of cold storage and freight forwarding control created a vertically integrated supply chain that gave cartel members unparalleled influence over the onion market. By integrating transportation and storage, dominant players could effectively manage every stage of the supply chain, from importation to market release. Meanwhile, smaller competitors, lacking access to either cold storage or cost-effective freight forwarding, were systematically excluded from the market. Finally, the integration of logistics and storage provided additional avenues for coordination among cartel members, reinforcing their collective dominance.

[91] *MyCC (2022). Decision on Case No. 700-1/3/1/2019.*

8.0 Issues and Challenges

This section discusses the key issues and challenges currently facing the beef, coconut, and onion markets, based on the stakeholders' engagements throughout the study. The issues and challenges raised reflect the experiences and concerns of importers, manufacturers, farmers, industry representatives, and government agencies.

8.1 General Issues

8.1.1 Challenges facing Malaysia's international trade policy

Despite its strengths, Malaysia's trade policy faces several challenges that it must address to sustain its economic growth:

Global trade tensions and economic uncertainty:
As a trade-dependent economy, Malaysia is vulnerable to global trade tensions, such as those between the US and China. Indeed, tariff wars, protectionism, and economic sanctions can disrupt Malaysia's supply chains and affect its export markets. And so, diversification of trade partners and products is crucial to mitigating these risks.

NTBs:
While Malaysia has reduced tariffs significantly, NTBs (including QRs) remain a concern, both in domestic policy and in accessing foreign markets. NTBs include technical standards, customs procedures, and licensing requirements, which can hinder the free flow of goods. Malaysia is working to streamline its NTBs and encourage similar actions from its trading partners to promote smoother trade.

Port inefficiency and congestion:
Malaysia's key ports, including Kota Kinabalu Port, Northport, and Penang Port, face logistical challenges such as congestion, limited capacity, and outdated infrastructure. These issues increase shipment delays and costs, affecting Malaysia's competitiveness as a trade hub. Efficient port operations are critical to sustaining Malaysia's role in regional and global supply chains.

Compliance with sustainability standards:
Malaysia faces increasing pressure to comply with sustainability standards, particularly in sectors like palm oil, rubber, and timber. International buyers, especially in Europe and North America, demand adherence to environmental, social, and governance (ESG) criteria. Malaysia's international trade policy includes measures to address these concerns through certifications and sustainable practices, but ensuring compliance across the board remains a challenge.

Enhancing competitiveness through innovation:
To remain competitive globally, Malaysia must enhance innovation and move up the value chain. This involves investing in R&D, supporting the development of high-tech industries, and improving skills training for the workforce. Malaysia's international trade policy must encourage innovation across sectors to ensure long-term economic resilience.

8.1.2 Smuggling

Smuggling is a persistent issue in Malaysia's agricultural markets, including for commodities like beef, onions, and coconuts. Meanwhile, the National Risk Assessment (NRA) 2023 by the Bank Negara Malaysia (BNM) revealed a growing inherent risk of smuggling activities in the country, exacerbated by the ineffectiveness of current control measures. Generally, the report highlighted that Malaysia's long coastline and numerous entry points expose the country to smuggling activities.

Such rampant smuggling activities can be due to the following reasons:

Price differentials and cost disparities

Cheaper imports from neighbouring countries

In countries like Thailand, Indonesia, or India, production and labour costs for beef, coconuts, and onions are often significantly lower than in Malaysia. This creates a price differential that incentivises smuggling as traders seek to bypass import tariffs and regulatory costs.

Domestic price controls

The government imposes price ceilings on essential commodities to protect consumers. But this can create discrepancies between the official market prices and those in the underground economy. Smugglers exploit this gap by offering goods at competitive, untaxed rates.

Regulatory burdens and trade restrictions

Stringent import permits and licensing systems

While APs have been abolished for most products, remnants of regulatory controls like IPs and other compliance requirements remain. These restrictions increase the cost and time for legal trade, pushing some traders toward illicit channels.

SPS standards

Strict quality and safety checks for agricultural imports can delay legal shipments or even lead to rejection, creating a loophole for smuggling activities where standards are bypassed entirely.

Supply chain gaps and domestic demand pressures

Demand-supply imbalance

As observed earlier, Malaysia is not self-sufficient in the production of beef, coconuts, and onions. Domestic production cannot meet demand, especially during festive seasons, leading to price spikes and incentivising illegal imports to meet market needs.

Seasonal dependence

Crops like onions are seasonally dependent, leading to periods of acute shortages. Smuggling becomes a quick solution to address temporary scarcities without navigating formal trade channels.

Geographical proximity

Porous borders

Malaysia shares extensive land and sea borders with neighbouring countries, making it challenging to monitor and control smuggling effectively. Smugglers exploit these weak points.

Close proximity to major exporters

Neighbouring countries like Indonesia and Thailand are major producers of coconuts, beef, and onions. The short transport distances facilitate smuggling through informal routes.

Market incentives and consumer preferences

Cheaper alternatives for consumers

Smuggled goods are often sold at lower prices, making them more attractive to cost-sensitive consumers.

Preference for imported products

Certain types of beef or onions from specific countries are perceived as higher quality or more suitable for local cuisine, creating a demand for these smuggled goods.

8.1.3 Other issues

Data limitations due to the different coverage of various government agencies

General data on the importation of beef, coconuts, and onions are published by DOSM in reports such as the Agrofood Statistics Report, Selected Agricultural Indicators, and Supply and Utilization Accounts: Selected Agricultural Commodities. Granular data, however, are collected by various agencies, including MAQIS, DOA Sabah, DOA Sarawak, DVS Sabah, DVS Sarawak, and RMCD.

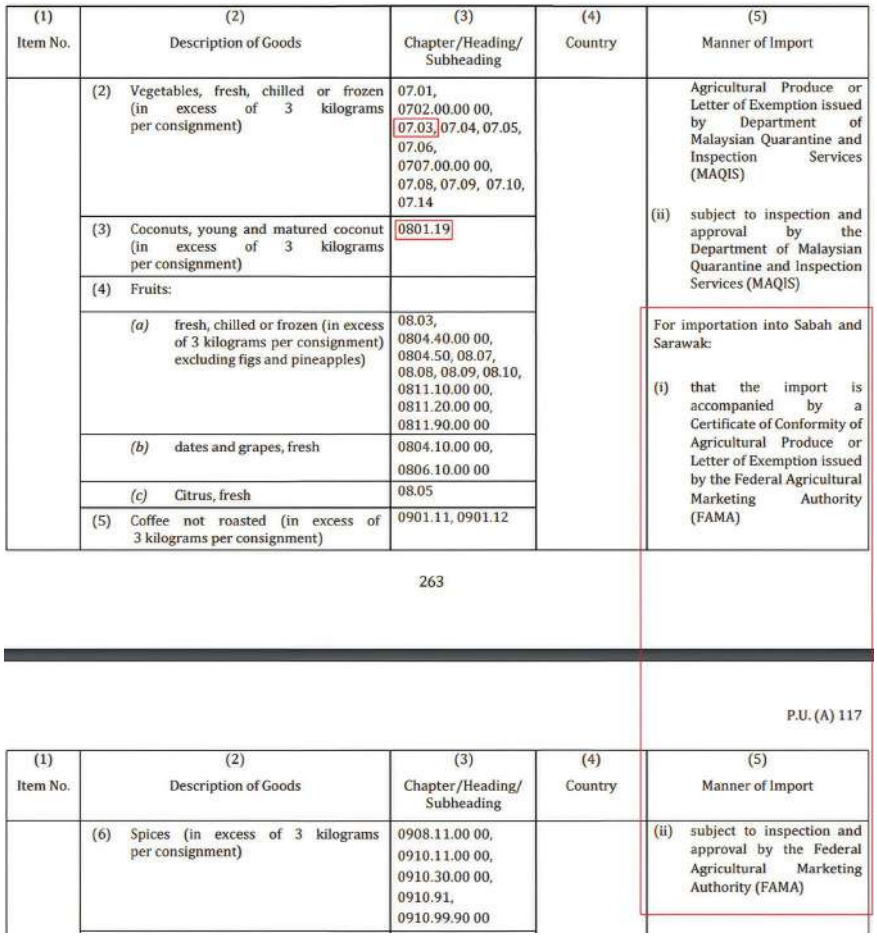
Discrepancies often arise between the data provided by these agencies due to differences in their respective jurisdictions. For instance, MAQIS' data is limited to imports into Peninsular Malaysia and Labuan. Similarly, data collected and monitored by DOA Sabah, DOA Sarawak, DVS Sabah, and DVS Sarawak may not align with the figures reported by RMCD, further highlighting the challenges in achieving consistency across datasets.

Multiple platforms and websites in the importation process

As mentioned earlier, importers need to familiarise themselves with multiple online portals to successfully import beef, coconuts, and onions into the country. These platforms are managed by various agencies, including RMCD, MAQIS, MOH, and DOA. Each platform requires specific data entry and documentation uploads. Failure to provide accurate information or complete these processes on time may result in delays or disruptions to the importation process.

Unclear process and procedures at the port of entry

Figure 39: Importation of coconuts and onions into Sabah and Sarawak



(1) Item No.	(2) Description of Goods	(3) Chapter/Heading/ Subheading	(4) Country	(5) Manner of Import
	(2) Vegetables, fresh, chilled or frozen (in excess of 3 kilograms per consignment)	07.01, 0702.00.00 00, 07.03, 07.04, 07.05, 07.06, 0707.00.00 00, 07.08, 07.09, 07.10, 07.14		Agricultural Produce or Letter of Exemption issued by Department of Malaysian Quarantine and Inspection Services (MAQIS) (ii) subject to inspection and approval by the Department of Malaysian Quarantine and Inspection Services (MAQIS)
	(3) Coconuts, young and matured coconut (in excess of 3 kilograms per consignment)	0801.19		
	(4) Fruits:			
	(a) fresh, chilled or frozen (in excess of 3 kilograms per consignment) excluding figs and pineapples)	08.03, 0804.40.00 00, 0804.50, 08.07, 08.08, 08.09, 08.10, 0811.10.00 00, 0811.20.00 00, 0811.90.00 00		For importation into Sabah and Sarawak: (i) that the import is accompanied by a Certificate of Conformity of Agricultural Produce or Letter of Exemption issued by the Federal Agricultural Marketing Authority (FAMA)
	(b) dates and grapes, fresh	0804.10.00 00, 0806.10.00 00		
	(c) Citrus, fresh	08.05		
	(5) Coffee not roasted (in excess of 3 kilograms per consignment)	0901.11, 0901.12		

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(1) Item No.	(2) Description of Goods	(3) Chapter/Heading/ Subheading	(4) Country	(5) Manner of Import
	(6) Spices (in excess of 3 kilograms per consignment)	0908.11.00 00, 0910.11.00 00, 0910.30.00 00, 0910.91, 0910.99.90 00		(ii) subject to inspection and approval by the Federal Agricultural Marketing Authority (FAMA)

Source: Customs (Prohibition of Imports) Order 2023

One of the primary reference points for importers is the Customs (Prohibition of Imports) Order 2023. According to this order, the importation of coconuts and onions into Sabah and Sarawak is subject to inspection and approval by FAMA (see Figure 39). However, the study revealed that inspections at the point of entry in Sabah and Sarawak are actually conducted by DOA Sabah and DOA Sarawak, rather than FAMA.

The government has recently announced the establishment of the Malaysian Border Control and Protection Agency (MBCA) to streamline operations and increase efficiencies at Malaysian borders. Box 6 highlights key functions of the MBCA.

Box 6: Malaysian Border Control and Protection Agency

The government announced that the MBCA is set to officially commence operations on 1 February 2025, taking over management and coordination responsibilities at 21 entry points across the country. This move is part of an effort to centralise and streamline border operations, which is currently managed by various agencies. The MBCA will oversee the functions of key government entities, including Royal Malaysia Police (RMP), Immigration Department of Malaysia (JIM), RMCD, MAQIS, MOH, and MOT. By unifying these operations under a single agency, the MBCA aims to enhance border security and operational efficiency while reducing bureaucratic delays and improving enforcement.

The agency's primary goal is to strengthen Malaysia's border security by streamlining processes and addressing inefficiencies in existing systems. It will focus on expediting operations at entry points, improving enforcement measures, and addressing cross-border crimes such as smuggling and illegal immigration. To support these efforts, the MBCA will implement new infrastructure, including the installation of closed-circuit television (CCTV) systems at checkpoints, to enhance surveillance and oversight. The agency will also take over control of immigration and quarantine procedures at the entry points, ensuring a more coordinated approach to border management.

The MBCA will assume control of key ports of entry, including airports in Kota Kinabalu International Airport, Kuching International Airport, Penang International Airport, Kuala Lumpur International Airport, Sandakan Airport, Tawau Airport, and Sibu Airport, as well as ports and wharves in Klang, Kota Kinabalu, Penang, Kuantan, Bintulu, and Pasir Gudang. Additionally, it will oversee operations at major land checkpoints such as the Immigration, Customs, and Quarantine (ICQ) complexes in Rantau Panjang, Johor Bahru, and Bukit Kayu Hitam. By integrating these entry points under its jurisdiction, the MBCA aims to facilitate legal trade, reduce opportunities for corruption, and improve the overall efficiency of border operations.

The establishment of the MBCA is seen as a significant step in strengthening Malaysia's border security framework and enhancing its economic and logistical capabilities. By unifying the roles of multiple agencies under one umbrella, the agency aims to provide a more effective response to border-related challenges, support tourism, and foster economic growth.

Source: New Straits Times (2025)[92]

8.2 Beef

8.2.1 Increasing cost of cattle feed

The escalating cost of cattle feed has emerged as a significant challenge for cattle breeders in Malaysia. As a major input in cattle farming, feed constitutes between 60% and 80% of production costs,[93] and its rising prices have profound implications for breeders, consumers, and the overall agricultural sector. It was reported that farmers are paying up to RM80 for a 50kg bag of cattle feed in 2023 compared to RM45 in January 2022, as livestock feed materials are increasingly imported.[94] This issue is driven by a combination of global economic pressures, local structural weaknesses, and inefficiencies within the supply chain, all of which require urgent attention to safeguard the viability of the industry.

[92] *New Straits Times (2025). 21 entry points to come under MBCA from Feb 1.*
[93] *UN FAO (2023). FAO opens Global Forum for Animal Feed and Feed Regulators.*
[94] *MIDA (2024). Animal Feed – A Critical Component in The Global Food Chain*

On a global scale, feed costs are heavily influenced by fluctuations in the prices of key commodities such as maize, soybeans, and wheat. Prices and production of these commodities are subject to volatility arising from various factors, including adverse weather events, geopolitical tensions, and shifting trade policies. Droughts and floods in major exporting nations can reduce crop yields, driving up prices worldwide. Similarly, trade disruptions, such as export restrictions or tariffs, further constrain supply. Increased global demand for livestock products exacerbates the situation, as expanding livestock sectors in emerging economies compete for limited feed resources. As Malaysia depends heavily on imported feed ingredients, these global dynamics significantly impact local breeders.

Locally, the high dependency on feed imports exposes Malaysia to additional vulnerabilities. Any weakening of the Malaysian ringgit against stronger currencies will increase the cost of imported goods, making animal feed expensive. Rising transportation and logistics costs further inflate feed prices, particularly for imported ingredients shipped over long distances. Compounding these challenges is Malaysia's limited domestic production of feed crops. The country's reliance on foreign suppliers leaves breeders at the mercy of external market fluctuations, adding unpredictability to their operational costs. Furthermore, although there are local sources of feed ingredients, such as PKC, the largest producer in Malaysia, FGV, exports 97% of their products in 2019—they committed to allocate 60% of their production by 2024.[95] This practice is driven by the more attractive pricing offered by international buyers, leaving local breeders with limited access to affordable domestic feed options and exacerbating the high cost of animal feed.

Structural inefficiencies within Malaysia's feed production and distribution systems further worsen the situation. Fragmented supply chains and high levels of wastage increase costs for end-users. In addition, competition for raw materials with other industries, such as biofuel production, drives up prices. Seasonal variations also play a role, as feed prices tend to spike during dry seasons or periods of high demand, such as festive seasons, when cattle breeding activities are intensified.

The rising cost of feed has a direct and adverse impact on cattle breeders. Profit margins are squeezed, especially for SME operations that lack the economies of scale to absorb higher input costs. Some breeders are forced to resort to suboptimal feeding practices, such as using lower-quality or alternative feed options, which can compromise livestock health and productivity. The financial pressure also increases the risk of insolvency, particularly for those who are unable to manage cash flow effectively during prolonged periods of high feed prices. These challenges ripple through the value chain, as higher feed costs lead to increased beef prices, affecting consumer affordability and demand.

Beyond its immediate effects on breeders, the rising cost of animal feed poses broader risks to Malaysia's agricultural sector and food security. Domestic cattle breeders struggle to compete with imported beef from countries with lower feed costs or more efficient production systems, leading to a reliance on imports to meet local demand.

8.2.2 Limited choices for importing countries

In 2024, Malaysia imports beef from eight countries, with strict regulations ensuring that all imported beef meets the Halal requirements. The DVS only approves a supplier or country after JAKIM grants Halal certification. According to several beef importers, this process limits their sourcing options and intensifies competition among local importers, forcing them to bid at higher prices to secure supplies from the exporters. Consequently, the restricted supply choices contribute to higher prices, as importers compete to secure adequate beef supplies. Currently, DVS has approved beef imports from eight countries, with only Brazil and India being the only countries that have more than 10 approved abattoirs and processing plants (see Table 76).

[95] *FGV (2019). FGV and DVS Signs MoU to Cooperate in the Development of Palm Kernel Cake (PKC) Animal Feed for the Ruminant Industry; and FGV (2021). FGV Launches Highly Nutritious Animal Feed Brand, ALMA.*

Table 76: List of country, number of abattoirs, and processing plants approved by DVS, 2024

No.	Country	Number of approved abattoirs and processing plants for beef	Remarks
1	Australia	8	
2	Argentina	1	
3	Brazil	17	
4	India	27	
5	Japan	2	
6	New Zealand	3	
7	Pakistan	3	
8	South Africa	1	Suspended from 21 July 2022[96]
Total		**62**	

Source: DVS

As previously mentioned, South Africa has been suspended from exporting beef to Malaysia due to an FMD outbreak. In contrast, the DVS continues to allow beef imports from countries like India and Pakistan, despite these countries not having FMD-free status or WOAH-recognised FMD-free zones. It was noted earlier that while FMD-free status is an important consideration, the DVS evaluates and approves foreign abattoirs and processing plants based on the criteria outlined in Figure 6. Additionally, the DVS has established specific import conditions for buffalo meat from India, which facilitate meat imports from India even though the country is not classified as FMD-free. Therefore, the decision by DVS to continue to suspend South Africa illustrates an inconsistency in policy by DVS with regards to import procedures or protocol.

8.2.3 Mislabelling of meat products – an example of food fraud

The mislabelling of meat products is a concern in Malaysia, with implications for consumer rights, public health, religious practices, and food industry integrity. A 2016 study[97] reported a 78.3% rate of mislabelling in prepacked meat products sold in Malaysia. A substantial portion of products labelled as "beef" were found to contain buffalo meat instead, with 69% of beef samples testing positive for buffalo DNA. Furthermore, cross-contamination during processing led to the presence of undeclared species in poultry products. These findings indicate systemic issues in the meat supply chain, including intentional substitution and unintentional contamination:

Intentional substitution:
Economic motives drove the substitution of buffalo meat for cattle beef, as buffalo meat is significantly cheaper to produce and process.

Unintentional cross-contamination:
Inadequate cleaning of equipment in multi-species processing facilities resulted in DNA transfer between species, highlighting poor hygiene practices in the industry.

[96] *According to DVS, South Africa is suspended due to the risk of FMD outbreak in the country.*

[97] *Li-Oon Chuah, Xiao Bin He, Mohd Esah Effarizah, Zainal Abidin Syahariza, Ahamed Kamal Shamila-Syuhada, Gulam Rusul (2016). Mislabelling of beef and poultry products sold in Malaysia. Food Control. 157 – 164.*

The study identified a critical regulatory gap in Malaysia's Food Regulations 1985, which lacks a clear definition of "beef". This ambiguity allows buffalo meat to be marketed as beef, misleading consumers and fostering unethical practices. Without clear and enforceable standards, manufacturers have little accountability for accurate labelling. Mislabelling raises significant religious and cultural concerns in Malaysia, a multireligious country with diverse dietary practices:

Halal integrity:
While non-shariah compliant meats were detected, cross-contamination and undeclared species raise doubts about the adherence to Halal certification standards.

Cultural sensitivities:
Communities with dietary restrictions, such as Hindus avoiding beef, could inadvertently consume mislabelled products, violating their cultural and religious beliefs.

The prevalence of mislabelling erodes public trust in food systems and regulatory authorities. Consumers rely on accurate labelling to make informed dietary choices, and widespread violations compromise confidence in the industry.

8.2.4 Lack of awareness on the enforcement of labelling requirements delay clearance process at ports

Under the P.U. (A) 437/85 Food Regulations 1985, it is compulsory for an imported food to have a label on the product that shows the name and business address of the importer. Regulation 11 (j) highlights:

"in the case of food locally manufactured or packed, the name and business address of the manufacturer or packer, or the owner of the rights of manufacture or packing or the agent of any of them; and ***in the case of imported food, the name and business address of manufacture, or the agent of any of them, and the name and business address of the importer in Malaysia and the name of the country of origin of the food;"***

Source: MyCC

This issue is particularly pronounced for beef imported from Australia. As Malaysia is a relatively small market compared to larger importers like China, Australian abattoirs and processing plants are often reluctant to adopt Malaysia's specific requirements due to the added costs involved. This reluctance has caused delays, as shipments are held at the port until the issues are resolved. Additionally, the MOH conducts inspections separately from MAQIS and imposes fines for non-compliance, further increasing the cost of beef importation. These delays not only disrupt supply chains but also lead to additional charges as containers accumulate storage fees while remaining at the port.

To address this, the Food Safety and Quality Division of MOH allows importers to bring containers to their warehouses, where the required labelling can be applied in Malaysia to avoid port delays and associated charges. However, a lack of awareness among importers and forwarding agents about this flexibility has contributed to ongoing delays and increased costs.

8.2.5 Halal requirements are perceived as trade obstacles

Malaysia is recognised as a global leader in the Halal industry, with JAKIM's standards considered among the most stringent worldwide. While these requirements uphold consumer confidence in Halal products, exporters have raised concerns about the disproportionate compliance costs they impose. Critics argue that these standards sometimes act as NTBs, creating unnecessary trade obstacles, favouring domestic products, and lacking transparency. These perceptions have led to disputes and discussions in trade negotiations, particularly with countries affected by the strict certification requirements.

8.2.6 Allanasons Pvt Ltd established a company in Malaysia to import buffalo meat from India

Allanasons Pvt Ltd (Allana) is India's largest exporter of buffalo meat, commanding approximately 35% of the market share in 2022.[98] The company operates seven processing plants with an annual capacity to process and export 600,000mt of buffalo meat. Recently, the company established its wholly-owned subsidiary in Malaysia—Allana Malaysia Foods Sdn Bhd—aimed to become a direct importer for the Malaysian market. Figure 40 shows Allana's branded buffalo meat.

Figure 40: Imported buffalo meat from Allanasons Pvt Ltd

Source: MyCC

This development raises potential competition concerns, as it could significantly increase market concentration. If Allana successfully redirects its Malaysian customers to the new subsidiary, this could raise the market concentration, thereby altering the competitive landscape.

[98] *Euromeatnews.com (2024). Allana establishes itself as a globally cherished brand in the protein meat business.*

8.3 Coconut

8.3.1 Reliance on a single importing country

As mentioned earlier, the majority of Malaysia's imported coconuts are sourced from Indonesia. In the past, coconut imports also came from Thailand and Vietnam. However, Thailand has since stopped exporting coconuts and now imports them from Indonesia, while Vietnam has shifted its export focus towards China.[99] Coconut importers and farmers in Malaysia have highlighted that domestic coconut production is largely directed toward the fresh drink market (young coconuts), rather than mature coconuts.

This focus on young coconuts exacerbates Malaysia's dependence on imported mature coconuts to meet local demand, leaving the country vulnerable to potential policy shifts by the Indonesian government. Similar risks have been highlighted by recent examples when India restricted its rice exports between July 2023 and September 2024 and imposed a ban on onion exports from December 2023 to May 2024. Both these events caused significant disruptions in regional supply chains. Box 7 highlights an initiative by Linaco Manufacturing (M) Sdn Bhd to mitigate against such risk.

According to KPDN, which is in the process of finalising its general study on the coconut market, the Indonesian government is considering a proposal to focus on exclusively exporting value-added coconut products. If implemented, this could lead to a potential ban on raw coconut exports in the future.

Moreover, as Thailand and China also procure coconuts from Indonesia, Malaysian importers face increased competition for supply, particularly in terms of pricing. This heightened competition drives up the costs of importing coconuts into Malaysia.

Box 7: Linaco Manufacturing (M) Sdn Bhd Established a Coconut Processing Plant in Indonesia

Linaco Manufacturing (M) Sdn Bhd expanded its operations internationally by establishing PT Kalimantan Kelapa Jaya in Kalimantan, Indonesia, in 2019. This facility spans 20 acres and has a daily processing capacity of up to 400mt of coconuts.

The rationale behind this expansion includes:

- **Securing raw material supply:** Since the company depends on Indonesia for its supply of mature coconuts, establishing a processing plant within the country ensures a consistent and abundant supply of this essential raw material. This strategic move reduces reliance on external suppliers and enhances operational efficiency.
- **Hedging against the risk of policy shifts:** The company recognises the potential risk of the Indonesian government implementing policy changes to protect local supplies of mature coconuts. Such changes could involve restricting the export of raw mature coconuts and allowing only coconut-related products to be exported. Establishing a processing plant in Indonesia enables the company to mitigate the risk by ensuring its ability to process coconuts locally and remain competitive in the market.

This strategic move reflects Linaco Manufacturing (M) Sdn Bhd's commitment to strengthening its supply chain and meeting the growing demand for coconut-based products, both under its in-house brands and for its clients such as Ayam Brand.

[99] *Xinhua (2024). Vietnam's coconut exports to reach 1 bln USD in 2024.*

8.3.2 Availability of coconut seedlings

Currently, farmers can purchase coconut seedlings from the DOA, as well as licensed companies (palm oil plantation companies). These companies sell the *Matag* variety, which is high yielding and early to mature.[100] Several palm oil plantation companies had also converted a small portion of their palm oil plantations to coconut cultivation and began placing orders for coconut seedlings in preparation for future planting.

However, coconut importers and farmers have highlighted the difficulty in sourcing the current variety of coconut seedlings for producing mature coconuts suitable for coconut milk. They emphasised that the varieties of coconuts used for fresh drinks are different from those used for coconut milk. For instance, the *Pandan* variety is ideal as drinks, while *Tacunan* is best for producing coconut milk. Figure 41 shows coconut seedlings cultivated by a plantation in Sabah.

Figure 41: Coconut seedlings cultivated by a coconut plantation in Sabah

Source: MyCC

Additionally, the DOA does not recognise all coconut seedlings. The DOA currently recognises seedlings for *Matag, Pandan*, MYD, and MRD varieties, as well as the Vietnam Dwarf (*Gadong*) variety. To encourage the cultivation of high yield and high-quality coconuts, farmers are eligible for government subsidies only if they plant these approved varieties.

However, due to the limited availability of certified coconut seedlings, farmers often resort to purchasing seedlings—for example, the Vietnam Dwarf (*Gadong*) variety—from online platforms. These imported seedlings bypass the official certification process and may pose SPS issues. As a result, farmers who purchase these uncertified seedlings are ineligible for government subsidies and face risks, including poor tree growth or substandard fruit quality.[101]

[100] *Feedback received from FGD#3, Kuala Lumpur (2024).*

[101] *Feedback received from FGD#3, Kuala Lumpur (2024).*

8.3.3 Changes in consumption trends[102]

The supply of mature or old coconuts in Malaysia has been notably impacted by the shifting consumption trends, particularly the increasing demand for coconut water and other coconut-based beverages. The trend toward consuming coconut water has led to a higher demand for young, green coconuts, which are harvested earlier than mature coconuts. These tender coconuts are specifically grown for their water, which is marketed as a healthy, natural alternative to sugary beverages. As a result, more farmers are shifting their focus to cultivating and harvesting young coconuts to meet this demand.

The preference for coconut water has not only affected the types of coconuts being harvested but has also led to a decline in domestic production of mature coconuts. Malaysia's coconut industry, which already faces challenges such as ageing trees, limited land for expansion, and competition from other crops, now has to contend with the diversion of resources towards producing young coconuts. The reduction in the availability of mature coconuts has had a direct impact on processing industries that rely on coconut meat, oil, and other by-products.

8.3.4 Coconut farmers are moving towards planting palm oil

Farmers are increasingly drawn to planting palm oil trees rather than coconut trees due to the more attractive economic returns offered by palm oil cultivation. Industry players in Batu Pahat highlighted that some existing coconut plantation owners have opted to convert their crops to palm oil trees, driven by the higher profitability associated with palm oil. The price of palm oil has consistently been more lucrative compared to coconuts, providing a stronger financial incentive for farmers. Furthermore, palm oil has a well-established global demand and market stability, which ensures more predictable income streams for growers. This plays a significant role in shaping farmers' decisions to switch to palm oil cultivation, even at the expense of reducing coconut production in the country.

8.3.5 Coconut husks wastage management in Sabah

A significant challenge faced by coconut farms focusing on selling mature coconuts is the issue of husk waste management (see Figure 42). As mature coconuts need to be sold dehusked, farms must handle the large volume of husks generated as a byproduct. While coconut husks can be repurposed as organic compost for agricultural use, the demand for husks varies regionally. In Peninsular Malaysia, there is a steady demand for husks, but in Sabah, this demand is considerably lower, leading to reduced prices. Compounding the problem is the high transportation cost for buyers due to Sabah's geographical landscape. Husk transportation is inefficient because husks are not dense and occupy significant space in lorries without contributing much to the load's weight. Since husk pricing is determined by weight, farms could just earn minimal returns from husk sales, making this a financially unviable option. To address this issue, one farm in Sabah is gradually shifting part of its focus to young coconut production, which generates less husk waste. However, this shift may come at the expense of mature coconut production, potentially affecting the farm's overall output and revenue.

Figure 42: Coconut husks waste in Sabah

Source: MyCC

[102] *Feedback received from FGD#3, Kuala Lumpur (2024).*

8.3.6 Allegations of incorrect coconut varieties planted at plantation level

A coconut-based product manufacturer has raised concerns about the suitability of coconuts planted by major plantation companies, for industrial use. The manufacturer alleges that the varieties cultivated by these companies are not suitable for producing coconut milk and coconut water. For example, it was alleged that the coconut varieties planted by those companies are from the MRD and MYD varieties, but the preferred varieties are *Tacunan* and *Pandan*. As a result, despite the commendable efforts to increase coconut cultivation locally, these varieties fail to meet the industry's specific requirements. This mismatch forces the manufacturer to continue sourcing coconuts from Indonesia.

8.4 Onion

8.4.1 Reliance on imports

The Malaysian onion market faced significant disruptions due to India's onion export ban from December 2023 to May 2024. With no local production of onions, Malaysia relies entirely on imports. Although Malaysia imports onions from 17 countries, the shift in India's export policy heavily impacted the country's supply. To compensate, Malaysian importers redirected their orders to China and Pakistan, which led to higher onion prices in the domestic markets. Additionally, declining yields in India's onion production contributed to the price surge in 2023 (see Table 77). For example, during India's agricultural fiscal year 2024 (July 2023 – June 2024), onion production dropped to 25.5mn mt (2023: 30.2mn mt; 2022: 31.7mn mt).[103] This production decrease pushed prices up and ultimately led to the export ban by the Indian government.

Table 77: Type of onions and prices, 2020 – 2023

No.	Variety	Price (RM/kg)			
		2020	2021	2022	2023
1	Holland	4.42	4.64	4.91	5.93
2	India	5.35	4.70	4.71	4.68

Source: DOSM

[103] *Business Standard. (2024). Onion potato production could decrease in 2023-24 tomato seen tad up.*

8.4.2 Consumer tastes and preferences

While Malaysia's current total dependency on imports for onions present significant challenges, consumer preferences for specific types of onions further complicate the market dynamics. These preferences have a direct impact on import diversification efforts and supply chain management, affecting both market efficiency and price stability.

Malaysian consumers exhibit strong preferences for Indian and Thai onions, particularly the small red onions, which are favoured for their taste, aroma, and compatibility with local cuisine. These onions are integral to traditional Malaysian dishes such as *sambal*, curries, and stir-fries, where their specific flavour profiles are considered irreplaceable. This preference creates a dichotomy in the market. In contrast, onions imported from China, while available in the market, are often perceived as less desirable due to differences in taste, texture, and size. Even when alternative sources provide ample supply, consumer demand remains skewed toward Indian and Thai onions, leading to the following issues:

Price pressures: The limited availability of Indian and Thai onions during supply disruptions causes price surges, as consumers continue to favour these varieties despite higher costs.

Market imbalances: Surplus stocks of onions from other sources, such as China, may accumulate due to lower consumer demand, leading to inefficiencies in the supply chain and potential wastage.

Resistance to import diversification: Efforts to reduce dependency on a single source, such as India, are undermined by the entrenched consumer preference for Indian onions, discouraging retailers and importers from fully utilising alternative supplies.

Additionally, Malaysia's diverse population includes a significant number of foreign workers, particularly from South Asia, who contribute to the strong demand for Indian and Thai onions. For these workers, such onions are integral to their traditional diets, aligning with their cultural and culinary practices. This additional demand amplifies the pressure on Indian and Thai onion imports, especially during periods of supply disruption.

Consumer preferences not only affect pricing and availability but also hinder efforts to build a more resilient onion market. By limiting demand for onions from diversified sources, Malaysia remains vulnerable to external shocks affecting Indian and Thai supplies. Furthermore, this reliance on a few preferred types of onions may perpetuate monopolistic tendencies in the supply chain, where dominant exporters can leverage their position to dictate terms, raising costs for Malaysian importers and consumers.

8.4.3 Difficult to grow locally – seeds will continue to be imported

MARDI is currently leading efforts in researching onion varieties that can adapt to Malaysia's humid climate and producing seedlings for farmers. In 2023, it introduced three new shallot varieties, namely BAW-1, BAW-2 and BAW-3. MARDI has been providing selected farmers in the pilot farms in Kuala Bikam with free seedlings as it is still at the pre-commercial phase.[104] However, development and growing of seedlings are still at nascent stage as MARDI is still working to address challenges to produce high-quality shallot seedlings. And so, any onion farmers will still have to rely on imported seedlings for now. Indonesia is the identified exporting country for seedlings (see Figure 43).[105]

Figure 43: Imported onion seedlings from Indonesia that are used at the onion farm in Ladang Bikam, Perak

Source: MyCC

8.4.4 Storage challenges

Onions are perishable and storage requirements for imported onions are specific and demanding. Improper storage can lead to spoilage, affecting the quality and availability of onions in the market. Some of the imported onions may sprout during the lengthy import and storage process, rendering them unsuitable for sale as fresh onions. Furthermore, maintaining a balance between import volumes and storage capacity is critical to avoid either overstocking or undersupply. Large stocks can strain storage facilities, while under-importing can lead to shortages and price increases.

8.4.5 Lack of support from the DOA Sabah

The lack of initial support from the DOA Sabah for onion cultivation in the state is evident from the case of the onion farm in Kundasang, Sabah. The farmer had to independently procure onion seeds from MARDI in Peninsular Malaysia to initiate the project. Despite the farmer's proactive efforts to pioneer onion farming in the region, the study revealed that DOA Sabah did not provide any assistance or support during the project's early stages.

[104] *The Star (2024). Mardi to closely oversee all layers of shallot plan.*

[105] *The Sun (2024). Husband and wife in Pahang make over RM30,000 in three months from harvesting red onions.*

9.0 Conclusion and Recommendations

9.0 Conclusion and Recommendations

The recommendations and conclusions of this study focus on addressing any competition issues within Malaysia's beef, coconut, and onion markets in the context of post-AP abolition for most agricultural products. This significant policy shift has not only eliminated QRs but also introduced new challenges and opportunities for market competition. As observed, reinstating such restrictions is not feasible without severe trade implications, placing greater importance on fostering a competitive, transparent, and resilient marketplace. This section outlines both general strategies to enhance fair competition and market efficiency under the revised trade framework, as well as tailored recommendations for each sector. By identifying and addressing anti-competitive practices, market inefficiencies, and structural challenges, the proposed recommendations aim to balance domestic interests, consumer welfare, and Malaysia's broader trade commitments in a post-AP landscape.

9.1 Malaysia's future international trade policy for agricultural products

Malaysia's international trade policy for agricultural products, particularly beef, coconut, and onion, should balance domestic economic interests, food security, and global trade commitments. The following recommendations aimed to enhance competitiveness, ensure sustainable market development, and meet consumer demands effectively:

9.1.1 Promote diversification of import sources

Issue:
Malaysia tends to import from a single or a limited number of exporting countries for its beef, coconuts, and onions, which makes it vulnerable to supply disruptions, price volatility, and potential market manipulation.

Recommendations:

Reduce dependency on key suppliers: Diversify import sources for beef, coconuts, and onions to mitigate risks of supply disruption and price volatility. For example:

Countries like Brazil, Argentina, and South Africa have well-established beef production industries that are globally recognised for their quality and scale. By establishing trade relationships with beef suppliers in these countries, Malaysia can mitigate risks associated with over-reliance on current suppliers like Australia and New Zealand.

Establish import agreements with emerging coconut-exporting countries.

Organise consumer education programmes on the quality and usability of onions from other sources to help shift preferences and reduce reliance on specific imports.

Leverage FTAs: Utilise agreements such as RCEP and CPTPP to secure favourable terms from regional partners.

Suggested Stakeholders

- Lead – MAFS
- Support – M-FICORD, MAFFI, MITI, KPDN, DVS, DOA

9.1.2 Adopt market-oriented trade policies

Issue:
QRs such as APs distort markets through quota manipulation, barriers to market entry, and artificial supply constraints.

Recommendations:

Phase out remaining APs: Replace any remaining import quotas or licensing requirements with tariff-based measures that align with WTO principles. It must be noted that Sabah does not require AP for the importation of beef, coconut, and onion into the State. Despite this, importation of coconut into the State is discouraged in view of the significant supply in the local market. As for Sarawak, the state still requires AP for the importation of buffalo meat from India.

Encourage new market entrants: Facilitate greater involvement of private sector importers in agricultural trade through transparent, market-driven policies to ensure competitive pricing and efficient supply chains.

Suggested Stakeholders

- Lead – MITI
- Support – MAFS, M-FICORD, MAFFI

9.1.3 Support domestic agricultural competitiveness

Issue:
Malaysia's domestic agricultural sector faces challenges in productivity, efficiency, and competition with imports.

Recommendations:

Modernise domestic production: Undertake public-private partnerships (PPPs) to invest in technology, infrastructure, and training to improve the productivity and efficiency of local farmers and ranchers. For example, Syarikat P.J. Nagus Sdn Bhd is collaborating with MARDI to establish a coconut seed bank at P.J. Nagus' coconut plantation in Tawau.

Promote HVCs: Promote HVC such as processed coconut oil for export markets, enhancing Malaysia's agricultural trade profile. Additionally, the government should encourage local farmers to focus on producing mature coconuts, which are essential for value added processing, rather than prioritising young coconuts.

Encourage knowledge sharing: Partner with private and reputable firms to enhance local beef production through better breeding programmes and infrastructure development. For example, working with Sawit Kinabalu Sdn Bhd and PPES Ternak Sdn Bhd for knowledge sharing sessions with industry players.

Suggested Stakeholders

- Lead – MAFS
- Support – M-FICORD, MAFFI, DVS, DOA

9.1.4 Improve port efficiency in terms of facility and technology

Issue:
Key Malaysian ports face challenges such as inefficiencies, congestion, and logistical bottlenecks. These issues increase shipment delays, raise costs, and reduce Malaysia's attractiveness as a trading hub.

Recommendations:

Improve inter-agency coordination: Foster better collaboration between customs, port authorities, and logistics operators to streamline clearance processes and reduce backlogs.

Upgrade port infrastructure: Port operators to invest in expanding capacity, modernising equipment, and improving connectivity to hinterland areas. A key aspect of modernisation involves adopting advanced scanning technologies to boost efficiency and security.

Streamline port processes: Simplify customs processes and reduce border delays for perishable agricultural products.

Suggested Stakeholders

- Lead – Port authorities, MPC
- Support – RMCD

9.1.5 Focus on food security in trade agreements

Issue:
Global trade disruptions, such as export bans or crises, threaten Malaysia's access to essential agricultural goods.

Recommendations:

Incorporate food security clauses in trade deals: Negotiate agreements that prioritise Malaysia's access to essential agricultural goods during crises or export bans, which may include binding commitments to deliver agreed quantities of food commodities under specific conditions, even during global supply chain disruptions or changes in exporting countries' policies. An example of such food security clauses in an FTA is Chapter 7: Food Supply in the Japan-Australia Economic Partnership Agreement (JAEPA).

Develop mutual exchange frameworks: Implement mutual exchange frameworks with diverse export offerings beyond palm oil to include other high-demand products, to ensure resilience to market fluctuations. These frameworks should be structured as multi-year agreements with key food-producing partners like India and China, focusing on fair value commodity swaps (e.g., palm oil for essential food products). To ensure compliance with WTO rules and mitigate risks, the agreements should emphasise sustainability, transparency, and alignment with long-term trade policies. Robust logistical planning and infrastructure investment will be critical for the efficient execution of these arrangements. Box 8 discusses such arrangements as a form of counter trade.

Suggested Stakeholders

- Lead – MITI
- Support – MAFS, RMCD

Box 8: Counter trade[106]

The mutual exchange framework proposed is consistent with the principles and mechanisms of counter trade as it involves the exchange of goods or services rather than relying solely on monetary payments. The aim is to address trade imbalances, foreign exchange shortages, or other economic constraints. Here are the primary types of counter trade:

- **Barter:** The direct exchange of goods or services between two parties without involving cash. Often used historically during times of economic crises, it is a single contract with no cash involved. While it is simple and straightforward, it is limited to commodities of mutually agreed value, thus may not be as flexible as anticipated.
- **Counter purchase:** The seller of goods commits to buying a specific amount of goods from the buyer within a set period under a separate contract. It often involves unrelated goods, agreed upon under two separate contracts (one for the initial sale and one for the counter purchase). While it allows countries to sell their surplus products, managing unrelated goods can be complex and costly.
- **Buyback:** The seller of machinery or technology agrees to accept a portion of the output produced by the machinery as payment. It involves long-term agreements and is often used in capital-intensive industries like mining and manufacturing. While it guarantees a market for the buyer's output, there are challenges in managing the quality and sale of returned goods over a long period.
- **Offset:** The seller agrees to invest in the buyer's economy or use local components in the production of goods being sold. Mostly for defence, aerospace, or high-tech sectors, it promotes local industry and technology transfer but can be costly and difficult in fulfilling the obligations.
- **Clearing agreements:** Two countries agree to trade goods and services using a clearing account where trade balances are maintained without cash transfers. They reduce reliance on foreign exchange reserves, but imbalances may lead to disputes or undervalued goods.

Counter trade, if not designed and enforced properly, can have the unintended consequence of being anti-competitive:

- **Market concentration:** Such arrangements often involve exclusive deals between specific trading partners, which can lead to market concentration and the emergence of monopolistic or oligopolistic structures. In the case of Malaysia, reliance on a single supplier country for buffalo meat or onions could entrench monopolistic practices, stifling competition.
- **Barriers to entry:** Such arrangements can create high barriers to entry for new players in the market by favouring established participants with significant resources and access to counter-trade networks. New exporters may lack the capacity to meet the reciprocal obligations typically associated with counter trade agreements.
- **Exclusive dealing arrangements:** Such arrangements often involve exclusive purchasing or reciprocal trade requirements, which can restrict market competition. Importers or exporters tied to counter trade agreements may block alternative suppliers or distributors, reducing choice and competition.

Many developing countries such as China, India, Indonesia, and even Malaysia, are still practising counter trading as they view such arrangements as a strategic tool to trade and financing barriers and support economic growth, build infrastructure, and enhance resource security.[107] This compares to the developed countries, many of which have moved away from supporting such arrangements as they view this as the "second-best" solution to address trade challenges, reflecting their preference for monetary-based transactions.

[106] *Jack L. Harvey (1989). Countertrade—counterproductive?, Economic Perspectives, Vol.13, No. 1, Federal Reserve Bank of Chicago; Amanda J. Perry (1996). Legal Implications of Countertrade in an Economic Context, SOAS Law Department; and Export-Import Bank of India (2022). Countertrade Strategy for India: Strengthening Development Partnerships, Diversifying Exports and Achieving Resource Security.*

[107] *Cabinet Secretariat of the Republic of Indonesia (2019). Indonesia, India Agree on Palm Oil, Sugar, Rice Trade; and Reuters (2019). China in barter deal for 200,000 tonnes of Malaysian palm oil: report*

9.1.6 Address NTBs

Issue:
Complex SPS standards and bureaucratic import procedures relating to Halal requirements create trade inefficiencies and discourage legal imports.

Recommendations:

Harmonise SPS standards: Review Malaysia's food safety and quality standards and Halal requirements, as highlighted in section 8.2.5, to ensure they are aligned with international norms to minimise trade disruptions.

Suggested Stakeholders

- Lead – MPC
- Support – MAFS, MOH, MITI, DVS, PKKM, JAKIM

9.1.7 Establish trade monitoring and analytics

Issue:
Limited monitoring and analysis of global trade trends that affect agricultural supply chain risks proactive policymaking. While significant data is already collected, it has not been fully utilised or effectively analysed to prepare the industry for future trends and potential market disruptions. This underutilisation of existing data prevents the development of forward-looking strategies, leaving government policies and actions largely reactive. As a result, the focus remains on addressing immediate crises rather than formulating resilient medium-to-long-term policies and strategies to mitigate future risks and ensure supply chain stability.

Recommendations:

Create an agricultural trade observatory: Monitor and analyse global market trends, supply chain risks, and price movements for beef, coconuts, and onions, allowing for proactive policy adjustments.

Leverage technology in trade oversight: Use data analytics and AI tools to detect smuggling trends and forecast demand fluctuations.

Suggested Stakeholders

- Lead – Ministry of Economy (KE), DOSM
- Support – Ministry of Digital (KD), MOH, MAFS, KPDN

9.2 Fostering collaboration across stakeholders

Collaboration among stakeholders ensures a holistic approach to addressing challenges in Malaysia's agricultural sector, generally, and for the beef, coconut, and onion markets specifically.

9.2.1 Establish a single multi-stakeholder platform

Issue:
Fragmentation and lack of coordination among stakeholders in the agricultural sector hinder the development and implementation of effective solutions to systemic challenges, such as supply chain inefficiencies, rising production costs, and anti-competitive practices. For example, weak coordination among OGAs and industry players, and religious authorities hinders the development of robust solutions to mislabelling.

Recommendations:

Encourage public-private partnerships (PPPs): Facilitate partnerships where the public sector provides regulatory and financial support, while the private sector contributes innovation, expertise, and operational efficiency. This includes encouraging the exchange of information, best practices, and innovations among stakeholders to foster mutual learning and cooperation.

Enhance inter-agency coordination: Develop mechanisms for regular communication and collaboration between agencies such as MAFS, MyCC, MOH, and KPDN to align policies and avoid regulatory overlaps or gaps.

Leverage technology for innovation: Utilise digital platforms to enhance communication, track progress on shared goals, and ensure accountability among stakeholders. By leveraging these platforms, industry players can foster a more collaborative environment, encouraging the sharing of information and innovations that drive collective progress and benefit the entire industry.

Suggested Stakeholders

- Lead – MAFS
- Support – KPDN, DVS, DVS Sabah, DVS Sarawak, MOH, M-FICORD, MAFFI, JAKIM, GLCs, farmer cooperatives, industry associations

9.2.2 Establish a Circular Economy Hub for coconut processing in Sabah

Issue:
Some companies in Sabah are facing problems in managing their coconut husk wastage from processing mature coconuts. One of their solutions is to harvest young coconuts instead, which would also meet the demand for coconut water. However, this only creates a vicious cycle in which supply for mature coconuts and their products (e.g. *santan*) could be affected in the long run.

Recommendations:

Establish a centralised processing facility: Build a high capacity, centrally located processing facility in Sabah that handles all coconut components. Employ advanced technologies to process husks into by-products.

Market-driven partnership: Collaborate with private investors and local farmers to fund and manage the hub. The State government can provide regulatory support to attract investment without requiring subsidies.

Expand export opportunities: Identify and expand export markets for mature coconut products. Higher global demand will increase the local price for mature coconuts, making them a more attractive option for farmers.

Suggested Stakeholders

- Lead – MAFFI and DOA Sabah
- Support – Farmer cooperatives, industry players

9.2.3 Manage consumer preferences and supply chain vulnerabilities for onions

Issue:
Malaysia's reliance on Indian and Thai onions, particularly small red onions, exacerbates price pressures, market imbalances, and resistance to import diversification.

Recommendations:

Promote acceptance of alternative onion varieties: Organise public awareness campaigns emphasising the quality and utility of onions from alternative sources, such as China. Highlight these onions' suitability for local cuisines through collaborations with chefs, food bloggers, and culinary schools. Altering consumer preferences requires consistency with a multi-year campaign to reinforce messaging and maintain engagement.

Encourage processed onion products: Develop and market onion pastes, powders, and pre-chopped options using diversified imports to meet consumer needs while reducing dependency on specific varieties. Provide support for SMEs to innovate in onion processing and packaging.

Strengthen supply chain management: Industry players should take the lead in investing in storage and logistics to maintain the quality of onions from diverse origins, ensuring they remain appealing to consumers. This includes upgrading storage facilities and transportation systems to preserve freshness and prevent spoilage. Additionally, industry players should optimise distribution systems to address regional supply-demand disparities and minimise wastage. The government can play a supporting role by providing incentives, policy frameworks, and technical guidance to encourage these investments and ensure their effective implementation.

Suggested Stakeholders

- Lead – MAFS
- Support – KPDN, MATRADE

9.3 Addressing smuggling activities

Addressing smuggling activities involving beef, coconuts, and onions in Malaysia requires a combination of policy reforms, enhanced enforcement, and market adjustments.

9.3.1 Streamline import procedures and reduce regulatory burdens

Issue:
Complex, costly, and time-intensive import procedures create barriers for legitimate traders, incentivising smuggling as a quicker and less expensive alternative. Also, current penalties may not be stringent enough to deter individuals and organised networks engaged in smuggling activities.

Recommendations:

Simplify and digitise the IP process: Establish a unified, centralised digital platform to oversee the entire importation process, integrating the requirements of multiple government agencies. This platform should simplify procedures, enhance the enforcement of SPS measures, reduce the complexity, cost, and time involved in obtaining IPs. By eliminating the need to navigate multiple interconnected systems and addressing bureaucratic inefficiencies, the platform can encourage legal trade, deter smuggling, and minimise opportunities for corruption.

Harsher punishments for smugglers: Impose stricter penalties, including higher fines and longer prison terms, to deter individuals and organised networks involved in smuggling.

Suggested Stakeholders

- Lead – MAFS, RMCD
- Support – MOH, M-FICORD, MAFFI, MOF

9.3.2 Enhance border enforcement and surveillance

Issue:
Ineffective enforcement and surveillance at border checkpoints allow smuggling to persist, undermining the effectiveness of legal trade channels. Also, traditional enforcement methods lack the efficiency and predictive capabilities required to counter smuggling effectively.

Recommendations:

Increase resources for MAQIS and customs: Invest in advanced monitoring technology, such as drones, surveillance cameras, and automated tracking systems, to improve oversight at ports and border checkpoints. Additionally, the government has announced the establishment of the MBCA to facilitate legal trade, reduce opportunities for corruption, and improve the overall efficiency of border operations.

Strengthen inter-agency coordination: Foster collaboration between MAQIS, customs, police, and maritime enforcement agencies to streamline intelligence sharing and enforcement efforts.

Deploy advanced screening technologies: Use AI-driven systems to detect anomalies in cargo shipments, ensuring that contraband is identified efficiently.

Suggested Stakeholders

- Lead – KDN
- Support – MOF, KPDN, MAFS, RMCD, Malaysian Maritime Enforcement Agency, Malaysia National Security Council

As discussed in Box 6, the government has established the MBCA to facilitate legal trade, reduce opportunities for corruption, and improve the overall efficiency of border operations.

9.3.3 Address domestic supply shortfalls

Issue:
Insufficient domestic production and reliance on limited import sources create shortages that incentivise smuggling. The issue of limited import sources is further compounded by the fact that future shortages are imminent due to an increasingly constrained supply from exporting countries. This constrained supply arises from heightened competition among importing nations vying for the same resources. Additionally, exporting countries are beginning to shift their policies, prioritising domestic needs over international trade. These policy changes may include restrictions on export quantities or outright bans on certain commodities, further reducing the availability of imports.

Recommendations:

Boost domestic production: Invest in initiatives to improve local production of beef, coconuts, and onions, such as targeted subsidies for farmers, better irrigation systems, as well as ensure the availability and authenticity of high-quality seeds and livestock.

Diversify supply sources: Encourage diversification of import sources to mitigate the risk of over-reliance on specific countries, reducing shortages that create smuggling incentives.

Suggested Stakeholders

- Lead – MAFS
- Support – M-FICORD, MAFFI, MARDI, DVS, DOA

9.4 Addressing the mislabelling of meat products

9.4.1 Strengthen labelling regulatory framework

Issue:
Inadequate legal definitions, inadequate labelling standards, and weak enforcement mechanisms enable the mislabelling of meat products, making it difficult to distinguish between beef and buffalo meat.

Recommendations:

Addressing mislabelling requires robust legal definitions and standards for meat labelling, as well as routine inspections to detect mislabelling:

Clear definitions: Establish explicit definitions for meat products, distinguishing between cattle-derived beef and buffalo meat.

Mandatory species disclosure: Require labelling to specify the species and origin of meat products to ensure transparency and consumer protection.

Stronger enforcement of food regulations: Update and enforce existing laws under the Food Regulations 1985 to mandate accurate and comprehensive labelling.

Routine audits: Conduct frequent audits of processing facilities to verify adherence to labelling standards and hygiene protocols.

Suggested Stakeholders

- Lead – KPDN
- Support – PKKM, DVS, DVS Sabah, DVS Sarawak

9.4.2 Strengthen Halal labelling regulatory framework

Issue:
The misuse or forgery of Halal logos undermines consumer trust and Malaysia's reputation as a producer of Halal-certified goods.

Recommendations:

Addressing the problem of fraudulent Halal labelling requires enhanced security, as well as routine inspections to unauthorised Halal labels:

Enhance Halal logo security: Introduce tamper-proof features for Halal certification, such as hologram stickers or QR codes, to prevent forgery and enable consumers to verify product authenticity through digital platforms.

Suggested Stakeholders

- Lead – JAKIM
- Support – KPDN

9.4.3 Enhance processing standards to align with international best practices

Issue:
Processing practices that do not align with international best practices increase the risk of cross-contamination between species, leading to mislabelling and compromising product integrity. This undermines consumer trust and limits the competitiveness of Malaysia's meat products in global markets.

Recommendations:

Stricter operational standards are necessary to prevent cross-contamination:

Hygiene protocols: Require thorough cleaning of equipment between the processing of different species to minimise DNA transfer.

Specialised processing facilities: Encourage single-species processing plants to maintain product purity and reduce contamination risks.

Suggested Stakeholders

- Lead – MOH, DVS
- Support – DVS Sabah, DVS Sarawak

9.4.4 Impose stiffer penalties

Issue:
Currently, minimal penalties imposed fail to deter intentional mislabelling and poor hygiene practices.

Recommendations:

Deterrence through legal and compound can curb intentional mislabelling:

Heavy penalties for violations: Impose heavy fines and introduce imprisonment for manufacturers and distributors found guilty of intentional mislabelling or poor hygiene practices.

Revocation of Certifications: Remove Halal certification and/or other trade licences to enforce compliance.

Suggested Stakeholders

- Lead – MAFS
- Support – MOH, DVS, DVS Sabah, DVS Sarawak, JAKIM, KPDN, MAQIS

9.5 Addressing the increasing cattle feed costs

In the 2019 Market Review, MyCC has called on the government to develop and implement a national animal feed policy to control the price of proteins in the market. This recommendation remains applicable and all the more urgent now as the rising costs of cattle feed in Malaysia demand a comprehensive approach.

9.5.1 Explore alternative feed sources

Issue:
The high cost of conventional cattle feed makes livestock farming increasingly unsustainable, limiting breeders' ability to compete in the market. This is further compounded by the fact that the largest producer of palm kernel cake (PKC) in Malaysia, FGV, exported 97% of their products in 2019.[108] Despite the availability of local sources for cattle feed, the overwhelming majority of these resources are exported.

Recommendations:

Utilise agricultural by-products: Provide incentives to by-product (e.g., palm kernel cake) producers to allocate a portion of their output for domestic use at prices affordable for local farmers. In 2021, FGV had committed to allocate 60% of its animal feed production to meet the demand of local farmers by 2024.[109]

Adopt non-traditional feed: Invest in research and pilot programmes to incorporate alternative feed sources, such as agricultural waste, brewery by-products, or insect-based proteins, into cattle diets.

Suggested Stakeholders

- Lead – MAFS
- Support – M-FICORD, MAFFI

9.5.2 Incentivise innovation in feed production

Issue:
Limited investment in research and technology for sustainable feed production contributes to high feed costs and environmental concerns.

Recommendations:

Support R&D in feed alternatives: Promote and facilitate research into sustainable and cost-effective feed solutions.

[108] *FGV (2019). FGV and DVS Signs MoU to Cooperate in the Development of Palm Kernel Cake (PKC) Animal Feed for the Ruminant Industry.*
[109] *FGV (2021). FGV Launches Highly Nutritious Animal Feed Brand, ALMA.*

Adopt sustainable practices through green technologies: Encourage feed manufacturers to integrate energy-efficient and eco-friendly production technologies as part of their environmental, social, and governance (ESG) strategies. By prioritising renewable energy sources, reducing waste, and minimising carbon emissions, manufacturers can lower production costs while aligning with global sustainability standards.

Suggested Stakeholders

- Lead – DVS
- Support – DVS Sabah, DVS Sarawak, MARDI

9.5.3 Strengthen trade policies for feed imports

Issue:
Over-reliance on a few suppliers and inefficient import procedures increase feed costs, making breeders vulnerable to supply disruptions and price volatility.

Recommendations:

Diversify import sources: Reduce dependency on a few countries for feed imports by diversifying suppliers, particularly those in regions less prone to climate disruptions or geopolitical instability.

Facilitate importation: Streamline import procedures to reduce delays and administrative costs, making feed imports more accessible to breeders.

Suggested Stakeholders

- Lead – DVS
- Support – DVS Sabah, DVS Sarawak

9.5.4 Promote awareness of dual-purpose cattle for milk and meat production

Issue:
Farmers often focus solely on beef cattle, which depend entirely on feed costs for profitability. Incorporating dairy cattle into livestock farming not only diversifies income streams but also enhances resilience against feed cost volatility. By promoting dual-purpose cattle, farmers can better manage costs while contributing to Malaysia's milk production, reducing reliance on imports.

Recommendations:

Raise awareness about dual-purpose breed: Educate farmers on the benefits of raising dual-purpose cattle breeds that are capable of producing both milk and meat.

Incentivise adoption of dairy cattle: Offer incentives to farmers who transition to or integrate dairy cattle into their operations.

Sharing of information on preferred breeds of cattle: Industry experts need to actively share information about the preferred breeds of cattle that are best suited for Malaysia's climate and environmental conditions. This helps farmers to avoid costly mistakes in choosing unsuitable breeds that might struggle to adapt, leading to poor growth rates, higher mortality, or lower productivity.

Suggested Stakeholders

- Lead – DVS
- Support – MARDI, MAFS, DVS Sabah, DVS Sarawak

9.5.5 Increase calving rates to boost productivity

Issue:
Low calving rates among cattle reduce the number of animals available for sale or further breeding, limiting profitability and the ability to offset rising feed costs. By improving calving rates, farmers can increase the number of calves produced per year, leading to greater productivity and profitability.

Recommendations:

Enhance breeding practices: Provide training and resources to farmers on best practices for breeding management, including proper timing of insemination, monitoring cattle health, and maintaining optimal nutrition for reproductive success. Encourage the increased use of artificial insemination as a cost-effective and efficient method to improve herd genetics, ensure timely breeding, and achieve higher fertility rates.

Access to quality genetics: Facilitate access to high quality semen with strong fertility traits to improve reproductive efficiency.

Incentivise high performance herds: Offer incentives to breeders who achieve and maintain higher calving rates, rewarding efficient and sustainable breeding practices.

Suggested Stakeholders

- Lead – DVS
- Support – DVS Sabah, DVS Sarawak

9.5.6 Enhance education and training

Issue:
Many cattle breeders lack the knowledge and skills to implement cost-effective feeding practices and manage feed efficiently.

Recommendations:

Capacity building for breeders: Provide training programmes for cattle breeders on cost-effective feeding practices, feed storage, and livestock nutrition management.

Promote knowledge sharing: Facilitate collaboration between researchers, extension services, and breeders to share best practices and innovations in feed management.

Suggested Stakeholders

- Lead – MAFS
- Support – DVS, DVS Sabah, DVS Sarawak, GLCs, industry players (small holders)

9.6 Addressing availability issues of seedlings and seeds

The availability of high-quality coconut seedlings and onion seeds is a critical issue affecting both industries in Malaysia. Coconut farmers face challenges in accessing certified seedlings suited for mature coconuts, while onion cultivation is constrained by limited seed varieties capable of thriving in Malaysia's climate. Addressing these issues is essential for ensuring sustainable production and reducing dependency on imports.

Issue:
Farmers often struggle to source high-quality coconut seedlings, especially for varieties suited for mature coconuts. Certified seedlings like *Matag* are limited, and uncertified varieties available through informal channels risk poor yields and SPS compliance issues. Meanwhile, onion farmers depend almost entirely on imported seeds, as local research into climate-adapted varieties is still in its infancy. This reliance not only increases costs but also makes the industry vulnerable to disruptions in seed supply from exporting countries like Indonesia.

Recommendations:

Scale up certified seedlings and seeds production: Undertake PPP to scale up production of certified coconut seedlings and onion seeds. Additionally, seek advice from industry experts, experienced farmers, and agriculture officers from Indonesia to share their insights on best practices for cultivating coconuts for seedlings. Their expertise can help improve local cultivation techniques, enhance productivity, and ensure the quality of seedlings.

Promote seed banks and breeding programmes: Create seed banks to store diverse coconut and onion germplasms to protect genetic resources and ensure long-term sustainability.

Ensure accessibility through farmer cooperatives: Encourage bulk purchases of certified seedlings via cooperatives to ensure affordability.

Introduce regional demonstration farms: Establish demonstration farms in key coconut and onion-growing regions to showcase the benefits of certified seedlings and seeds, fostering trust and adoption among farmers. Use these farms for training sessions on proper seedling and seed management.

Suggested Stakeholders

- Lead – MAFS
- Support – MARDI, PPK, private seedlings producers

9.7 Addressing the shifting away from coconut cultivation

The shift from coconut farming to palm oil cultivation in Malaysia poses a significant challenge to the sustainability of the coconut industry. Farmers are increasingly drawn to palm oil due to its higher profitability, market stability, and predictable income streams. Addressing this trend requires strategic interventions to make coconut farming economically competitive while supporting sustainable agricultural practices.

Issue:
Farmers in coconut-growing regions are converting coconut plantations into palm oil farms due to the better financial returns offered by palm oil. Palm oil prices are consistently higher, and its well-established global demand ensures income stability for growers. In contrast, coconut farming is perceived as less profitable, exacerbated by structural inefficiencies and limited market development for value-added coconut products. This trend threatens Malaysia's coconut supply, particularly for mature coconuts, and risks undermining the nation's agricultural diversity.

Recommendations:

Establish diversified markets for coconuts: Strengthen domestic and export markets for coconut products by collaborating with industries such as food and beverage, cosmetics, and renewable energy. Emphasise the eco-friendly and sustainable attributes of coconut-based products to tap into global green markets.

Facilitate and enhance cooperative models for farmers: Enhance existing cooperative models for farmer cooperatives to allow them to better share resources, improve access to processing infrastructure, and enhance bargaining power with buyers.

Introduce incentives for sustainable practices: Promote agroforestry and intercropping systems that integrate coconuts with other crops, such as bananas or spices, to diversify income sources. Discourage full conversion to palm oil by highlighting long-term risks to food security.

Suggested Stakeholders

- Lead – MAFS
- Support – Ministry of Entrepreneur and Cooperatives Development (KUSKOP), MOF, PPK

9.8 Addressing competition issues

The abolition of the AP system represents a critical step in addressing a significant competition issue in Malaysia's agricultural markets. By removing the AP system, which concentrated market power and restricted entry for new participants, the government has fostered a more inclusive and competitive environment. However, while this resolves one major barrier to competition, other systemic competition issues persist, such as market inefficiencies, anti-competitive practices, and limited transparency in supply chains.

An additional area of concern, based on lessons from Indonesia and the Philippines, is the potential role of shared agents or intermediaries, such as forwarding and customs agents, in facilitating collusion or anti-competitive behaviour. While there is no current evidence of such practices in Malaysia, these international cases with shared agents highlight the risks. Intermediaries, if not properly regulated, may act as conduits for the exchange of sensitive information or coordination among competitors, undermining market fairness.

Addressing these challenges requires targeted interventions to ensure that the market operates fairly and efficiently, fostering competition and protecting consumers from practices that could lead to artificial scarcity, inflated prices, or restricted market access.

9.8.1 Addressing competition issues from QR mechanism

M-FICORD can address the competition issues arising from DVS Sarawak's AP requirement for buffalo meat from India into Sarawak. These include ensuring fair access, preventing speculative behaviour, prioritising genuine market players, and maintaining market stability in the face of fluctuating demand and supply conditions.

Implement pre-qualification criteria

Issue:
The lack of eligibility screening allows speculative and unqualified applicants to access quotas, leading to underutilisation and inefficiencies in the system.

Recommendations:

Eligibility screening: Require applicants to demonstrate their capacity to use the quotas, such as evidence of operational infrastructure, financial stability, and prior performance in the sector, as well as provide proof of compliance with Sarawak's regulatory requirements.

Quota utilisation history: Allocate quotas preferentially to firms with proven track record of efficient utilisation and adherence to market requirements.

Suggested Stakeholders

- Lead – M-FICORD
- Support – DVS Sarawak

Increase transparency in the allocation process and monitor performance

Issue:
Import quotas often face criticism for lack of transparency, which can lead to perceived favouritism or inefficiencies, limits equal access to information, raises concerns over fairness, and reduces accountability in the distribution process.

Recommendations:

Public announcements and notifications: Ensure timely and widely publicised notifications about quota availability, application deadlines, and allocation criteria to provide equal access to information.

Real-time monitoring: Implement an online platform where applicants can track the progress of quota allocations in real time, and ensure compliance with Sarawak-specific market needs as demand can be volatile.

Audit and reporting: Conduct regular audits of the allocation process and publish reports detailing the distribution of quotas, including the identities of recipients and quantities allocated. This is to prohibit resale or transfer of quotas to third parties to ensure only genuine applicants benefit from the allocation. Post-audit, consider revoking future quota eligibility for firms that fail to utilise their allocated quotas effectively or engage in speculative behaviour.

Key performance indicators: Establish KPI for the system to measure effectiveness.

Suggested Stakeholders

- Lead – M-FICORD
- Support – DVS Sarawak

Align quota allocation with market demand

Issue:
Fixed import quotas may not always align with actual market needs, especially in dynamic markets like beef. For example, rigid quota allocations can exacerbate shortages during unexpected supply chain disruptions (e.g., trade restrictions or natural disasters). Continuous engagement may be required to address evolving challenges as a transparent and participatory system reduces information asymmetry, fostering a more competitive environment.

Recommendations:

Conduct regular market assessments: To adjust quotas based on projected demand, local production, and consumer trends in Sarawak.

Develop contingency plans: To allow for temporary quota adjustments or waivers during emergencies to stabilise the market.

Establish a regular consultation platform: For importers, processors, and distributors to provide feedback on the quota system and suggest improvements.

Suggested Stakeholders

- Lead – M-FICORD
- Support – DVS Sarawak

Prevent hoarding or speculative behaviour

Issue:
Importers may apply for quotas without the intention of utilising them, disrupting supply and market stability. Recommendations or solutions need to penalise non-utilisation or speculative quota applications that discourages unfair practices that block other importers from accessing quotas. This ensures that genuine market players with the capacity and intent to import and utilise quotas effectively are prioritised, promoting robust competition in the market.

Recommendations:

Implement stricter usage requirements: Use of deadlines for quota utilisation and penalties for non-compliance (e.g., reduction in future quota eligibility).

Suggested Stakeholders

- Lead – M-FICORD
- Support – DVS Sarawak

9.8.2 Enhance market effectiveness and efficiency

Issue:
Lack of visibility in supply chain operations, combined with the reluctance of industry players to report anti-competitive activities fosters behaviours, such as hoarding and creating artificial scarcity. These practices distort market outcomes, undermine fair competition, and reduce efficiency.

Recommendations:

Traceable supply chains: Implement digital systems to track the movement of goods from import to retail, reducing opportunities for hoarding and artificial scarcity.

Anonymous reporting platform: Establish a platform to allow stakeholders across the supply chain to confidentially report anti-competitive practices without fear of retaliation or reputational harm.

Suggested Stakeholders

- Lead – KPDN, MyCC
- Support – PKKM

9.8.3 Conduct training and advocacy for companies with common ownerships

Issue:
When firms are under common ownership, they may engage in behaviours that limit competition, such as price fixing, market allocation, or reducing output to maintain higher prices. Additionally, vertical integration allows a company to control multiple stages of the supply chain, potentially leading to exclusionary practices.

Recommendations:

Conduct training and advocacy programmes: Conduct training and advocacy programmes aiming at increasing awareness among companies about the risks associated with common ownership and vertical integration in relation to competition law. Such programmes will empower companies to adopt compliant business practices that promote fair competition.

Suggested Stakeholders

- Lead – MyCC
- Support – KPDN, MAFS

9.8.4 Develop oversight of intermediaries in the supply chain

Issue:
Shared agents can facilitate collusion by providing a channel for sharing sensitive information or coordinating market manipulation strategies. Without adequate oversight, this risk may grow as market pressures increase.

Recommendations:

Establish oversight mechanisms: Implement monitoring systems to ensure that logistics and customs intermediaries maintain confidentiality and neutrality in their operations.

Mandate transparency in intermediary operations: Require forwarding and customs agents to submit declarations affirming they do not share sensitive client information across competitors.

Periodic audits of intermediaries: Conduct regular audits of logistics and customs agents to identify any patterns that suggest collusion or coordination among importers.

Suggested Stakeholders

- Lead – RMCD
- Support – KPDN, MAFS, MyCC, industry associations for forwarding agents, shipping agents, and freight forwarders

9.8.5 Promote entry of new players

Issue:
High entry barriers for SMEs and new businesses, including complex licensing requirements and market dominance by a few large players, limit competition and innovation.

Recommendations:

Support for SMEs: Help smaller importers and wholesalers enter and compete in the market.

Simplify licensing requirements: Streamline and digitise licensing processes for businesses, reducing barriers for new entrants.

Suggested Stakeholders

- Lead – MAFS
- Support – KUSKOP

9.8.6 Address supply chain inefficiencies

Issue:
Inadequate infrastructure and centralised distribution systems create bottlenecks, increasing costs and limiting product accessibility in remote areas.

Recommendations:

Invest in infrastructure: Undertake PPP to develop cold storage, transportation, and logistics facilities to reduce wastage and ensure stable supply, particularly for perishable goods like onions.

Decentralise distribution: Establish regional distribution hubs to reduce the reliance on a few dominant players and make products accessible in remote areas.

Suggested Stakeholders

- Lead – MAFS, MPC
- Support – M-FICORD, MAFFI

9.8.7 Empower consumers

Issue:
Consumers often lack the knowledge or tools to recognise and report anti-competitive practices, limiting regulatory intervention and market accountability.

Recommendations:

Consumer awareness campaigns: Educate consumers about their rights and market practices to enable them to identify and report anti-competitive behaviour.

Feedback mechanisms: Establish channels for consumers to report irregularities such as price gouging or hoarding, enabling timely regulatory intervention.

Suggested Stakeholders

- Lead – KPDN
- Support – MyCC

Appendix

Appendix I: List of Stakeholders Engaged

Table A1-1: List of participants in the FGD 1 in Kota Kinabalu, Sabah, 26 June 2024

No.	Organisation	Type
1	KPDN Sabah	Ministry
2	MAFFI	Ministry
3	DVS Sabah	Government agency
4	DOA Sabah	Government agency
5	FAMA	Government agency
6	MARDI	Government agency
7	MPC	Government agency
8	RISDA	Government agency
9	RMCD	Government agency
10	LPP	Government agency
11	JAKIM	Government agency
12	Universiti Teknologi MARA (UiTM)	Academic institution

Source: MyCC

Table A1-2: List of participants in the FGD 2 in Kuching, Sarawak, 30 July 2024

No.	Organisation	Type
1	KPDN Sarawak	Ministry
2	M-FICORD	Ministry
3	DOA Sarawak	Government agency
4	DVS Sarawak	Government agency
5	FAMA	Government agency
6	Kuching Port Authority	Government agency
7	MIS	Government agency
8	MPC	Government agency
9	RMCD	Government agency
10	SEDC	Government agency
11	UiTM	Academic institution
12	Universiti Malaysia Sarawak (UNIMAS)	Academic institution
13	UPM	Academic institution

Source: MyCC

Table A1-3: List of participants in the FGD 3 in Kuala Lumpur, 3 September 2024

No.	Organisation	Type
1	KPDN	Ministry
2	MITI	Ministry
3	RMCD	Government agency
4	MAQIS	Government agency
5	MPC	Government agency
6	MARDI	Government agency
7	FAMA	Government agency
8	FAMA Selangor	Government agency
9	LPP	Government agency
10	JAKIM	Government agency
11	DOA	Government agency
12	DOSM	Government agency
13	Economic Planning Unit Selangor (UPEN Selangor)	Government agency
14	Perbadanan Kemajuan Pertanian Selangor (PKPS)	Government agency
15	Maritime Institute of Malaysia (MIMA)	Academic institution
16	UPM	Academic institution

Source: MyCC

Table A1-4: List of government ministries agencies during one-on-one engagement sessions

No.	Government ministry and agency	Location	Date
1	MPC	Kuala Lumpur	21 June 2024
2	MAFS	Putrajaya	4 July 2024
3	MAQIS	Putrajaya	10 July 2024
4	MAFS	Putrajaya	28 August 2024
5	MAFS	Putrajaya	27 September 2024
6	MAQIS Batu Pahat	Batu Pahat, Johor	16 October 2024
7	DVS Sabah	Kota Kinabalu, Sabah	5 November 2024
8	DOA Sabah	Kota Kinabalu, Sabah	5 November 2024
9	RMCD	Putrajaya	11 November 2024
10	MOH	Putrajaya	15 November 2024
11	KPDN	Putrajaya	18 November 2024
12	JAKIM	Putrajaya	20 November 2024
13	DVS	Putrajaya	25 November 2024
14	KPDN	Putrajaya	29 November 2024
15	WOAH (International organisation)	Online meeting	3 December 2024
16	KPDN	Putrajaya	4 December 2024
17	PCC (International organisation)	Online meeting	26 December 2024

Source: MyCC

MyCC
SURUHANJAYA PERSAINGAN MALAYSIA

Malaysia Competition Commission

Level 15, Menara SSM@Sentral, 7 Jalan Stesen Sentral 5,
Kuala Lumpur Sentral, 50623 Kuala Lumpur, Malaysia

T +603-3009 3009
W www.mycc.gov.my

@themycc

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