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Project: Reimagining collaboration in the Australian and Vietnam beef cattle sectors

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REPORT

Preliminary evidence and policy implications of rapid transformations in beef and cattle trading and consumption in Vietnam

Hanoi, July 2024

Australian Government
Department of Human Services

Prepared by:
AGROINFO

This activity received grant funding from the Department of Foreign Affairs and Trade under the Australia-Vietnam Enhanced Economic Engagement Grant Program

Table of Contents

List of figures and tables

I. INTRODUCTION

1.1. Background

Over the past decade the Vietnamese beef sector has witnessed significant change. A growing population of around 100 million people and a 35% upsurge in domestic demand for beef products over the last 5 years together with increasing consumer awareness and demand for increased hygiene, food safety and nutrition present both opportunities as well as challenges for the sector.

Increased demand has led to a change in supply patterns for beef in Vietnam. From a position of self-sufficiency in the early 2010's, Vietnam now supplies around half of beef demand from domestically produced cattle with the balance coming from a variety of sources, including beef produced from cattle imported from Myanmar, Thailand and Australia; beef imported from Australia, USA, Brazil and Argentina; and frozen buffalo meat from India.

The rapid changes in sources of beef accompanied by increases in demand and unstable international trading conditions mean that the policy implications of the future pathways for Vietnam to meet its beef demand are not yet well understood. Policymakers need to consider many factors when developing strategies for the beef sector, including imports of fodder and feed grains, changes in cold chain availability, the impact of increased competition with China for animal protein and implications for Vietnam's GHG emission targets.

IPSARD conducted a study to gain insights and evidence about drivers and implications of rapid transformations in trading patterns of beef and cattle in Vietnam and to propose potential policy implications of these transformations

1.2. Methodology

The research was undertaken using a mixed-methods approach, combining: (i) desk research to review pertinent documents and analyse secondary data on domestic beef production and international trade in cattle and beef; and ii) in-depth interviews with representatives across the supply chain to gather insights into current and future trends in Vietnam's beef supply and demand, and to discuss possible policy responses to meet challenges and support the sector. Secondary data was collected from main sources including statistical yearbooks of the provinces, annual data of the General Statistics Office, import-export data of the General Department of Customs and other data, reports and specialized statistics of the Ministry of Agriculture and Rural Development.

Key Informant Interviews (KII) of stakeholders were undertaken in major livestock production provinces representing 3 regions of Vietnam:

- North: Ha Noi city *(experts, abattoirs)*, Phu Tho, Thai Binh *(trader, feed lotters/ livestock breeder)* and Ha Nam *(feed lotters/ livestock breeder)* provinces
- Central + Central Highlands: Gia Lai province
- South: Ben Tre and Tra Vinh provinces

The primary information gathering was organized as a two step process. The first step was interviewing key players in the cattle/beef value chain in Vietnam, including meat and cattle importers, feed lotters/ livestock breeder (household level), abattoirs, and traders. These interviews generated information on the current situation of demand, supply and trade in the sector as well as highlighting key policy questions.

The expected number of value chain actors participating in the first step is as follows:

Table 1: *First Step KII target stakeholders*

Stakeholder	North	Central	South	Total
Importers (beef and cattle)	2	2	2	6
Feed lotters/ livestock breeder				
Abattoirs	1	1	1	3
Traders	1	1	1	3
Supermarket/retailers	1	1	1	3
Total	**18**			

The second step was to consolidate the information from the value chain actor KIIs and use that as a basis for discussions with policy makers and key national stakeholders. These discussions aimed at outlining some key policy implications and potential policy developments to address the rapid development of the industry and the key issues raised in the value chain actor KIIs.

Table 2: *Second Step KII/discussion target stakeholders*

Stakeholder Type	Organizations	Number
Policy makers	- Department of Livestock; - Department of Animal Health; - Department of Quality, Processing and Market Development; Etc.	10
Other stakeholders	- Animal Husbandry Association of Vietnam (AHAV) - Vietnam Ruminant Husbandry Association (VINARUHA) - Experts in beef and cattle sector	

II. OVERVIEW OF POLICIES RELATING TO CATTLE SECTOR DEVELOPMENT IN VIET NAM

Over the past ten years, Vietnam has issued laws, strategies, and policies to guide the development of the livestock industry. Table 3 highlights some of the major policy initiatives and the key features impacting the cattle and beef sector.

Table 3: *Major policy initiatives and key features impacting the cattle and beef sector*

Policies, strategies	Brief description and key features related to cattle and beef sector
Production policy	
Law on Animal Husbandry 2018	• The most important legal document, orienting the development of livestock production aimed at improving productivity, quality, efficiency and competitiveness of the livestock industry
Animal husbandry development strategy for 2021 – 2030 and vision for 2045	• Outlines the strategy for beef cattle farming to develop towards biosecurity, food safety, increased added value, and sustainable development • Development orientations: - By 2030: Size of the beef cattle herd to increase from 6.5 to 6.6 million, with 30% being raised on farms; the buffalo herds from 2.4 to 2.6 million, with 20% being raised on farms; meat output of all kinds reaches from 6 to 6.5 million tons, of which grass-fed livestock ranges from 10 to 11%; the proportion of cattle slaughtered in a concentrated and industrial manner reaches 70%; the proportion of processed cattle meat over total amount of meat is from 40% to 50% - By 2045: 100% of livestock meat is provided from concentrated and industrial slaughterhouses; >70% of primary animal husbandry products are preliminarily processed, industrially processed while 30% is under deep processing.
Livestock breed support policy	• Decision No. 50/2014/QD-TTg on subsidies for improvements in farmer household animal husbandry in 2015 – 2020 period: Support 100% of the annual cost of artificial breeding supplies for breeding of female cattle; one-time support of up to 50% of the value of breeding cattle for households in difficult/extremely difficult areas • Decision No. 703/2020/QD-TTg enhances research and production capacity for livestock breeding. The state budget supports the cost of raising original livestock breeds; expenses for production of original breeds, etc. • Decision No. 1741/QD-TTg provides solutions for applying advanced technology and biotechnology to improve the capacity to produce high-yield and high-quality livestock breeds

Policies, strategies	Brief description and key features related to cattle and beef sector
Land and infrastructure support policies	• Preferential land policies such as exemption or reduction of land and water surface rents, and subsidies for land concentration for businesses, cooperatives, farms, and livestock households • Land Law 2024 has clarified the concept of concentrated livestock land as "land for building livestock farms in separate areas according to the provisions of the law on livestock", assisting livestock farmers feel secure in investment when the Law takes effect on January 1, 2025 • Decision No. 1520/QD-TTg provides a solution to convert most of the area in suitable places and a part of low-effective agricultural land to intensive cultivation of grass and animal feed crops. The total land area of all types for this need ranges from 0.5 to 1 million hectares. • Decree No. 57/2018/ND-CP stipulates those enterprises with projects to produce livestock breeds with high economic value are supported with 70% of the funding for infrastructure construction, equipment, and environmental treatment (not more than 3 billion VND/project) (Article 9); enterprises investing in beef cattle farms are supported with 5 billion VND/project to build waste treatment systems, traffic, electricity and water systems, factories and purchase necessary equipment (Article 12).
Credit policy	• Decree No. 55/2015/ND-CP and Decree No. 116/2018/ND-CP: individuals, households, cooperative groups, business households, cooperatives, and farm owners enjoy preferential loans without collateral. Agricultural projects applying high technology, or in high-tech agricultural zones/regions, are considered for loans without collateral up to a maximum of 70% of the value of that project. • The State Bank has issued Decision No. 813/QD-NHNN to require commercial banks to provide loans to customers with projects that meet the criteria for high-tech agriculture and clean agriculture specified in the Decree No. 738/ QD-BNN-KHCN with interest rates 0.5-1.5%/year lower than normal lending interest rates of commercial banks.
Tax policy	Tax policies has been revised towards simplicity and transparency; modernization of the tax management; reform of tax administrative procedures to improve business environment. Related tax policies include: • Corporate income tax (CIT): Incomes of enterprises from livestock and processing of livestock products are entitled to tax exemption, preferential CIT rates (10%, 15% < the standard 20%). (Integrated document No. 14/ VBHN-VPQH Law on CIT) • Import tax: Some animal feed ingredients enjoy preferential import tax rates lower than normal tax rates. Import tax exemption for animal breeds that cannot be produced domestically (Import-Export Tax Law) • Value added tax - VAT: Livestock products which have not yet been processed into other products or have been just preliminarily processed; animal feed; specialized machinery and equipment serving agricultural production are not subject to VAT (Law No. 71/2014/QH13; Law No. 106/2016/QH13). • Agricultural land use tax: all areas of grassland land used for livestock that are allocated by the State are exempt from agricultural land use tax (Resolution 28/2016/QH14).

Policies, strategies	Brief description and key features related to cattle and beef sector
Policy to support centralized processing and slaughtering	• Decree No.57/2018/ND-CP stipulates that enterprises with slaughterhouse investment projects are supported by the state budget with 60% of the investment cost and no more than 15 billion VND/project. • Decree 52/2018/ND-CP provides a maximum support level of 50% and no more than 500 million VND/project for livestock processing projects. • Decision No. 1625/QD-TTg prioritizes projects aimed at improving technology in industrial animal feed production, developing supplementary feed production industry, developing production, processing, and preservation of agricultural and industrial by-products for animal feed, and expanding raw material production areas for animal feed. • Decision No. 1740/QD-TTg has regulations on supporting research and development of new processed products and high value-added products, building an electronic traceability system for exported livestock products.
Policy to support research and technology transfer	• Law on Technology Transfer 2017 making adjustments aimed at encouraging and supporting businesses further in science and technology activities, improving competitiveness. The most prominent are the regulations on ownership rights, use rights, and other rights arising from the results of scientific research and technological development. The Law stipulates "arranging investment resources for technology transfer activities in agriculture and rural areas" to support technology transfer activities in agriculture. • Decision No. 575/QD-TTg dated May 4, 2015 approving the Master Plan of high-tech agricultural zones and areas until 2020, with a vision to 2030. • Resolution No. 30/NQ-CP dated March 7, 2017 on key solutions to promote the development of high-tech agriculture • Decree 83/2018/ND-CP on Agricultural Extension, which specifically stipulates many support policies for technology transfer activities in agriculture, including animal husbandry. • Decision 3246/QD-BNN-KHCN in 2012 approving the science and technology development strategy for the agricultural sector and rural development for the period 2013-2020; • Decision No. 5171/QD-BNN-KHCN dated December 11, 2017 approving the plan to promote research and technology transfer to serve the restructuring of the agricultural sector associated with new rural construction for the period 2018-2025 with many key tasks on scientific research • High-tech agricultural development program under the National High-tech Development Program until 2020; • Key program for developing and applying biotechnology in the field of agriculture and rural development • Policies to support the application of Good Agricultural Practices (VietGAP) in agriculture, forestry and fisheries.
Trade policy	
Policies on imports of live bovine animals and meat of bovine animals	• Law on Animal Husbandry 2018: imported bovine animals and their meat must meet requirements of origin, quality, food safety, and disease safety (Article 78) • Circular No. 38/2015/TT-BTC and Circular No. 39/2018/TT-BTC, stipulate customs procedures, customs inspection and supervision related to the import of live bovine animals and their meat into Vietnam.

Policies, strategies	Brief description and key features related to cattle and beef sector
	• Import tax rates for live bovine animals and their meat entering Vietnam: - *Ordinary import tax rates:* ✓ 5% for pure-bred breeding bovine animals, 7.5% for other bovine animals. ✓ Meat of bovine animals shall be subject to much higher tax rates ▪ Fresh/Chilled Meat: 21%, 30%, or 45% ▪ Frozen Meat: 21% or 30% ▪ Processed or Preserved Meat (HS code 160250): 52.5% This is the reason why businesses import live bovine animals for slaughter to reduce the amount of tax payable. - *Preferential import tax rates* apply to imports from countries or territories that accord Vietnam most-favoured nation treatment (MFN) - *Special preferential rates* apply to imports from countries or territories that have an agreement on special preferential import duties with Vietnam.
Imported products quality management	• Law on Animal Husbandry 2018 prohibits "Importing of livestock products with prohibited substances; importing, trading and processing products made from animals that die due to disease or unknown causes; illegally importing, raising, and using genetically modified animals and products thereof" (Article 12). • Law on Veterinary Medicine 2015 requires quarantining live bovine animals and their meat imported into Vietnam. Live animals must be healthy, from disease-free zones, have a quarantine certificate issued by a competent authority of the exporting country. Their meat must be from animals that meet the aforementioned regulations; have a quarantine certificate issued by the competent authority of the exporting country; be slaughtered, prepared and/or processed at establishments that have registered for exporting to Vietnam (Article 44). • Decision No. 1632/QD-TTg and Decision No. 1814/QD-TTg stipulate the need to implement quarantine of officially imported live bovine animals and their products, ensuring that foot-and-mouth disease and lumpy skin disease do not enter Vietnam from abroad.
Regulations on transportation, food hygiene and safety for imported products	• Decision No. 1632/QD-TTg, Decision No. 1814/QD-TTg, and Document No. 8239/BNN-TY emphasized the control of buffalo and cow transportation across the border to promptly detect and strictly handle smuggling, illegal transportation. • Decree No. 46/2022/ND-CP stipulates that border checkpoints that receive live livestock imported to Vietnam • Decree No. 15/2018/ND-CP stipulates that imported buffalo and beef products undergo food safety inspections, employing three methods: reduced inspection for compliant products meeting international standards, normal inspection involving document inspection, and tightened inspection including document examination and sampling. • National Standard for Chilled Meat – Part 2: Beef and Buffalo Meat (TCVN 12429-2:2020) regulates post-slaughter chilling, maintaining optimal temperatures during storage and transportation for quality and hygiene.

Policies, strategies	Brief description and key features related to cattle and beef sector
Trade agreements of Viet Nam[1]	• Vietnam has participated in 19 bilateral and multilateral free trade agreements (FTAs), of which, 16 FTAs have been signed and implemented, 3 FTAs are in the negotiation process. Vietnam has FTAs with 60 economies, and it is the only country that has signed FTAs with all major economic partners such as Japan, the European Union (EU), and Australia. • The largest exporters of live bovine animals and their meat to Vietnam are Australia, India, Canada, and the United States of America (USA). Among them, Vietnam and Australia are both members of the most FTAs with 3 FTAs. The USA and Vietnam do not have a joint FTA. • Agreement on import tax rates: - In AANZFTA, AIFTA, CPTPP and RCEP, Vietnam's commitments to special preferential import tariffs for live bovine animals and meat of bovine animals consists of two groups: (i) immediate elimination of import tariffs upon FTA comes into effect; and (ii) eliminate import tariffs over 2 to 16 years from the effective date of the FTA (see Annex 2) - Australia is the biggest beneficiary of special preferential import tariffs (from 2019: 0% tax rate for most HS codes, except for HS code 160250, which has a tariff rate gradually reduced from 20% to 5% under AANZFTA). - The USA faces higher import tariff rates for live bovine animals and their products in Vietnam compared to Australia, Canada and India. - Since the CPTPP came into effect, Canada has gained competitive advantages over India in terms of preferential tariffs for bovine meat entering Vietnam. • Rules of origin (ROO) - To enjoy tariff preferences under a specific FTA, live bovine animals and their meat imported into Vietnam must comply with the rules of origin specified in that agreement. - The origin criteria for live bovine animals (HS code 0102) under AANZFTA and RCEP are the strictest with "WO[2]," while under CPTPP, the goods must have a "CC[3]." Under AIFTA, the goods must satisfy the regional value content[4]: 35% minimum (RVC (35)) or CTSH. - For bovine meats (HS codes 0201, 0202, and 0206), AANZFTA, CPTPP, and RCEP all stipulate that the meats must meet the CC, but AIFTA only stipulates either the RVC (35) or CTSH. - For meat and meat by-products from bovine animals (HS code 160250), the origin criteria are CC under RCEP, it's RVC (45) or CC under CPTPP, it's RVC (40) or CC under AANZFTA. AIFTA specifies the loosest origin criterion with RVC (35) or CTSH.

[1] See Annex 1 for a list of bilateral and multilateral free trade agreements (FTAs) between Vietnam and other countries.

[2] WO (Wholly obtained) means wholly obtained or produced in a Party of a certain FTA. For greater certainty, where the rule for a good is WO, the good can still meet the requirements to be treated as an originating good by being produced in a Party exclusively from originating materials from one or more of the parties in the FTA. WO is the strictest criterion compared to all the remaining criteria in the rules of origin system.

[3] CTC (Change in tariff classification) rule requires non-originating materials to have undergone a change in tariff classification on a required level in order to obtain originating status. The change in tariff classification can be required on a chapter (CC- Change in Chapter), heading (CTH- change in heading) or subheading (CTSH- change in Subheading) level HS classification. In which CC is the tightest level of CTC. CTH is moderate level. CTSH is the loosest level of CTC.

[4] RVC (Regional Value Content) is refers to the proportion of a product's final value that originates from within a specific region or country. It is a crucial measure in determining the degree of local sourcing and production in traded goods. A higher RVC signifies a larger share of local inputs and production processes, which often corresponds to increased economic benefits for the region. RVC (40) means that the good must have a regional value content of no less than 40%.

Key achievements and limitations in policies and policy implementation

Regarding production policies, the livestock industry in Vietnam operates under a comprehensive regulatory framework including laws like the Livestock Law, the Veterinary Law and the Land Law alongside policies and strategies aimed at sustainable growth of the whole value chain. While there is no specific strategic plan for beef cattle development, the Animal Husbandry Development strategy aims to industrialize, modernize, and improve competitiveness and sustainability of the animal husbandry sector (Dyer & Patching, 2024, p. 16). Three key projects aimed at implementing the Livestock Development Strategy for the period 2021-2030 and vision 2045 were initiated in December 2023 to enhance domestic production and processing capabilities to drive down prices and boost competitiveness.

Advancement in supporting policies on taxes, credit, land, science and technology have created an open and healthy business environment and attracted investment in livestock development. As a result, Vietnamese livestock farming is rapidly shifting orientation towards industrial farms, accounting for over 45% of farms nationwide producing more than 60% of the output. The number of livestock establishments applying VietGAHP, and equivalent standards reached 4,882 in 2023, more than double that in 2021. The number of industrial livestock processing establishments increased from 94 in 2017 to 112 in 2022. Furthermore, the transfer of frozen buffalo and cow semen has contributed to improving the productivity of Vietnamese buffalo and cow herds, increasing valuable products for society and improving the competitiveness of products.

However, policy contents and implementation still suffer from some limitations. Fragmented policies and slow implementation, limited land resources for operational expansion, difficulties in accessing financial support and credits and complexities in navigating tax regulations remain the major challenges facing the industry. The policies on land accumulation and concentration do not meet the needs of large-scale production in Vietnam. Due to insufficient supply, Vietnam still needs to import live bovine animals and meat.

Regarding support for breeding stock, the implementation process of Decision No. 50/2014/QD-TTg still faces some limitations. For example, the policy of post-investment support is not familiar to farmers or they have not made initial investments and are unable to access support. Complicated procedures and multiple requirements such as certifications and collateral make it difficult for farmers and businesses to access loans. Tax refunds have complex procedures. Under the 2016 amendment to Value Added Tax (VAT) laws (Article 1, Clause 1), farming, breeding, aquaculture products are exempt from VAT if they remain unprocessed or are only preliminarily processed when they are sold and imported. However, this regulation is causing difficulties in consuming domestically produced industrial products. For example, products that go through preliminary processing and industrial slaughter incur higher costs compared to manually slaughtered products as they are subject to a 5% VAT, and thereby, unable to compete with tax-exempt imports. There is also limited investment in modern, traceable slaughterhouse systems, while unlicensed slaughterhouses are common.

For trade policy, Vietnam's regulations on importing livestock products are not strict with many loopholes. Weak policy management and implementation contribute to lax control, quality management and low hygiene and safety, especially with unofficial imports, resulting in a large volume of live bovine animals and their meat being imported illegally across the border every year without being subject to VAT and import duties. Such practices pose significant risks of disease outbreaks and health hazards, and negatively affect farmers incomes and enterprise profits.

In terms of participating in FTAs, the Vietnamese livestock industry has many opportunities but also faces a number of threats:

Table 4: *Opportunities and threats for the Vietnamese livestock sector participating in FTAs*

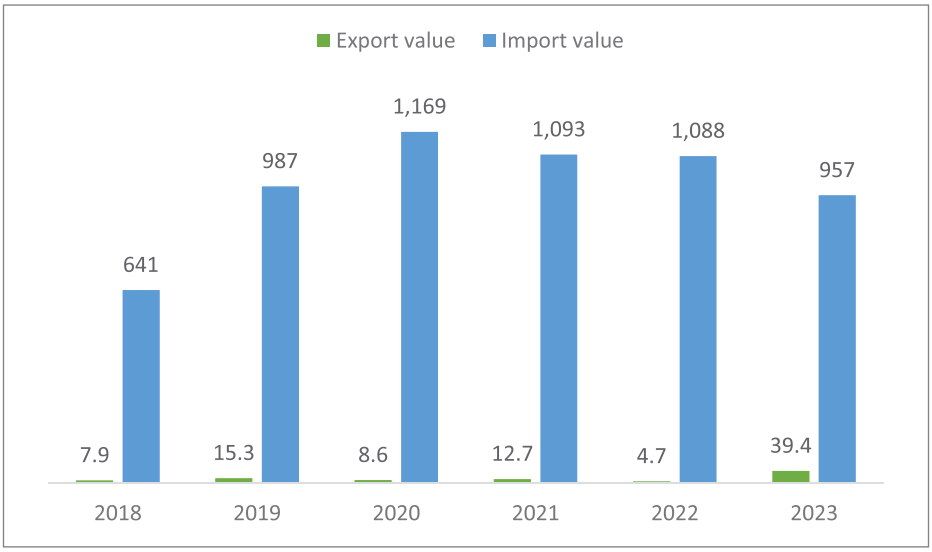
Opportunities	Threats
✓ Domestic and international consumer demand for livestock products is increasing. ✓ Joining FTAs will force Vietnam to complete its legal framework and policies to create a competitive environment among enterprises, including foreign enterprises. ✓ Participating in FTAs also promotes the livestock industry to quickly restructure towards value chain linkage, and sustainable development. Livestock enterprises are forced to improve their competitiveness to meet standards of quality, food safety and traceability as prescribed by FTAs. ✓ When import tax rates are reduced under FTAs, the livestock industry will benefit when importing animal feed materials, veterinary drugs, breeds, livestock equipment... from partner countries, contributing to reducing input costs, improving efficiency for the livestock industry. ✓ Thanks to FTAs, Vietnamese livestock products can access many new markets with great potential such as the EU, Japan, South Korea... ✓ FTAs create favorable conditions for attracting FDI into the livestock industry, helping to improve production capacity, apply advanced technologies and improve product quality.	✓ The livestock industry always faces disease outbreaks. ✓ The inadequate quantity and quality of breeding animals, and a lack of emphasis on scale development. ✓ Animal feed is mainly dependent on imports. Animal feed prices often fluctuate in an upward trend, increasing livestock costs. ✓ The importing countries set increasingly higher standards of quality, food hygiene and safety and traceability, so Vietnamese livestock products need to meet these standards for export. ✓ High production cost of domestic meat of bovine animals leads to higher selling prices than imported products. When import tax rates is reduced to 0%, imported products flood into the domestic market, competing fiercely with domestic livestock products. ✓ The livestock industry needs to implement environmental protection measures to meet environmental regulations in FTAs.

III. TRADE TRENDS AND FACTORS AFFECTING THE BEEF AND CATTLE SECTOR IN VIET NAM

3.1. Trade trends of beef and cattle products

With a young population of approximately 100 million of which over 50 percent are of working age (2022), a sustainable rate of economic growth (GDP growth rate of 6.03 percent over the 2012-2022 period), and a high urbanization rate (37.3 percent of the population resides in urban area in 2022), Viet Nam presents a promising market for beef and cattle meat. The Vietnamese beef and cattle sector has not been able to satisfy increasing domestic demand and therefore relies on imports of beef and cattle products. During the 2018-2023 period, Viet Nam exported a very small amount of beef and cattle products while import values experienced a significant increase.

Figure 1: *Total export and import value of beef and cattle from Vietnam, 2018-2023 (USD million/year)*



Source: Calculated from Viet Nam Custom's data

3.1.1. Export

- ***The export of beef and cattle products from Vietnam fluctuated between 2018 and 2023***

During the period 2018-2023, the total export value of Vietnam's live cattle and bovine meat products has been fluctuating from USD 8.6 to 39.4 million with an average value of USD 14.7 million per year. By 2023, exports reached their highest value in 6 years at USD 39.4 million, an increase of 730% compared to 2022 and 211% compared to 2021. However, the export value of cattle and bovine meat products accounts for a small proportion in comparison with other products of Vietnamese livestock products, accounting for about 6.7% of total export value of livestock sector and 22.2% of export value of meat and meat products in 2023.

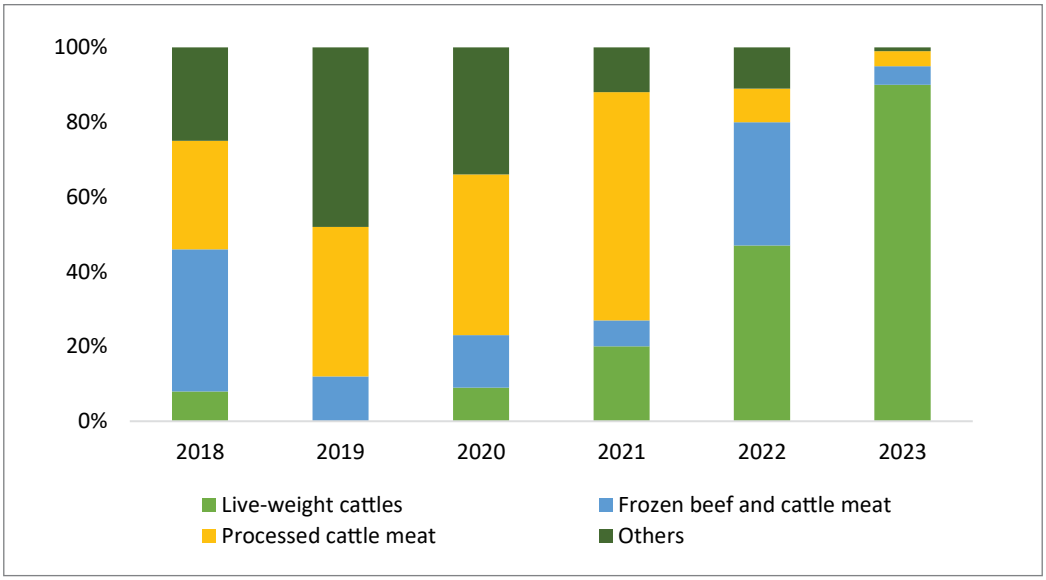
- ***Exporting beef and cattle meat products are decreasing, while the export of live cattle experiences a strong growth, albeit without following a specific pattern.***

Meat and edible meat offal after slaughter are the main export items of Vietnam. From 2018 to 2021, frozen and processed meat and edible meat offal products dominate the export with

more than 50% of total export value. However, due to market demand, from 2021, the export of live buffaloes and cattle sharply increased, rising from 20% in 2021 to nearly 90% of total export value in 2023.

Vietnam's buffalo and beef products are exported to 34 markets, of which Cambodia, Laos, China, and South Korea are the four main export markets. In 2023, exports to Cambodia reached USD 28.4 million, accounting for 72%; Laos reached USD 8.8 million, accounting for 22.2%; China reached USD 1.04 million, accounting for 2.6%; and South Korea reached USD 0.6 million, accounting for 1.5%.

Figure 2: *Proportion of main export products of beef and cattle from Vietnam, 2018-2023*



Source: Calculated from Viet Nam Custom's data

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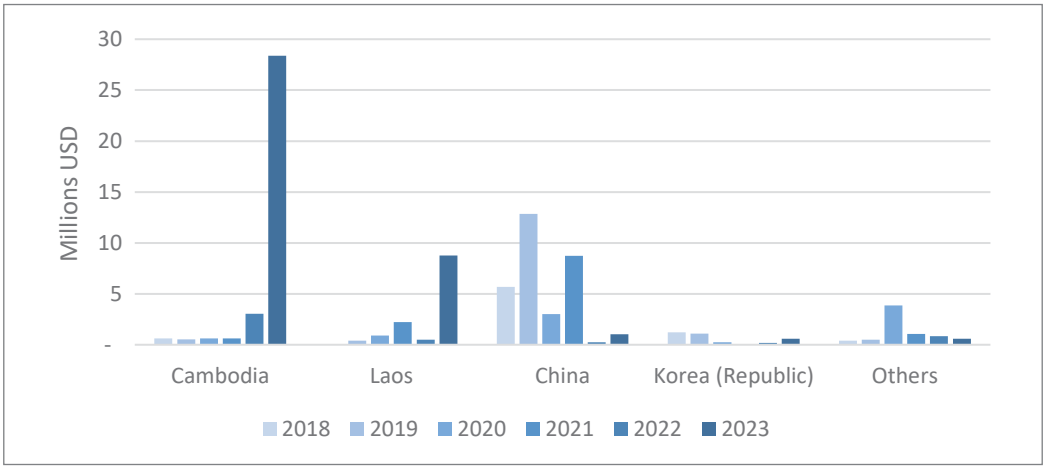
Figure 3: *Export value of beef and cattle from Vietnam by market, 2018-2023 (USD million)*

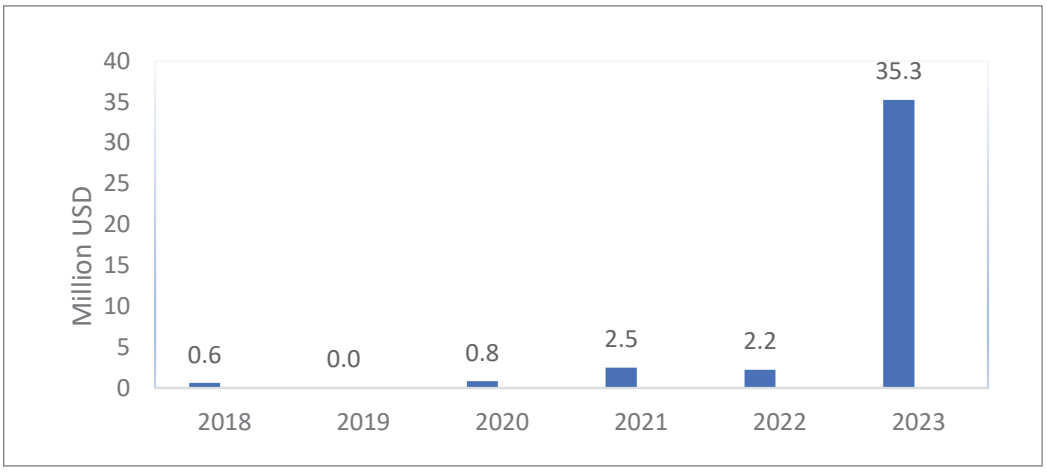


Source: Calculated from Viet Nam Custom's data

- ***Export of live cattle has increased***

The export of live cattle (HS 0102) experienced significant growth in 2023, mainly to two countries, Cambodia and Laos, all of which were breeding cattle, with an export value reaching 35.3 million USD, representing 90% of the total export turnover of cattle products. According to customs data, in 2023, over 11,800 Brahman and Brahman crossbred cattle originating from Australia were exported to Cambodia, along with more than 3,500 dairy cattle.

Figure 4: *Export value of live cattle from Vietnam, 2018-2023*



Source: Calculated from Viet Nam Custom's data

Vietnam's exports of live cattle primarily utilize the main trade routes, accounting for up to 97% of the total exports, while 3% are exported through border trade. Laos and Cambodia are the two main export markets for Vietnamese cattle in 2023. Specifically, exports to Cambodia reached 26.6 million USD, accounting for 75%, and exports to Laos reached 8.7 million USD, representing 25%.

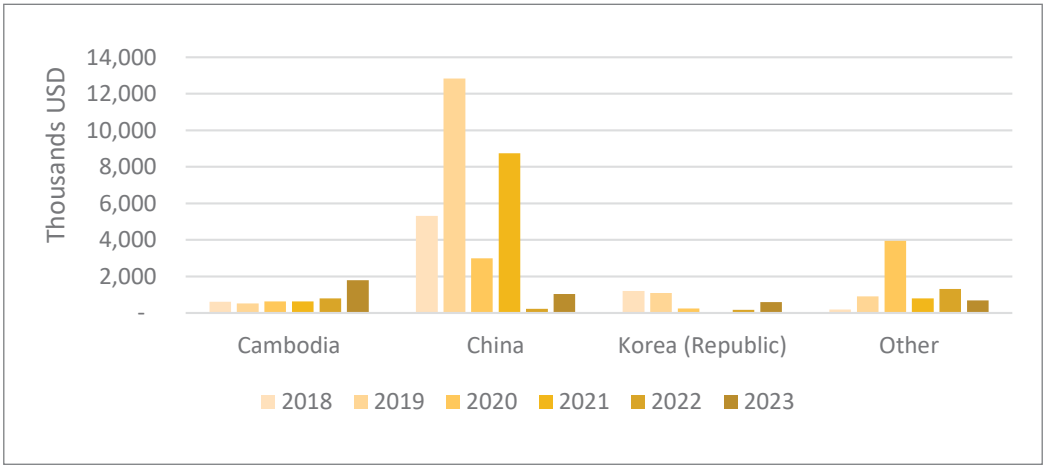
According to the International Trade Centre (ITC), during the period 2018-2022, Vietnam ranked first in the export market of live cattle to Cambodia and second in the export market of live cattle to Laos, following only Thailand. 100% of Vietnam's live cattle exports to Laos and Cambodia are through the main trade routes.

- ***The proportion of exported meat and meat product from buffalo and cattle has decreased.***

During the period from 2018 to 2023, the proportion of frozen bovine meat products within total cattle and bovine meat product exports decreased from 38% to 4% 2023. China is the largest market of Vietnamese bovine meat products but the export value to China has sharply decreased since 2022, reducing from USD 8.74 million in 2021 to USD 1.04 million in 2023.

In 2023, Vietnam's exports of bovine meat products reached 4.1 million USD. The majority of these products were exported to three markets: Cambodia, China, and South Korea. Specifically, exports to Cambodia reached 1.8 million USD, accounting for 45% of the total value of exports of bovine meat products; exports to China reached 1.03 million USD, accounting for 25%; exports to South Korea reached 0.59 million USD, accounting for 14%.

Figure 5: *Changes in the export market of Vietnam's bovine meat products*



Source: Calculated from Viet Nam Customs data

Vietnam's exports of bovine meat products primarily followed the mainstream channel, accounting for 74%, while 18% were exported through border trade and 8% were temporary import and re-export goods. All products exported to Cambodia were through the mainstream channel. For exports to China, 68% were through the mainstream channel and 32% were through temporary import and re-export. As for exports to South Korea, 96% were through border trade, and 4% were through temporary import and re-export.

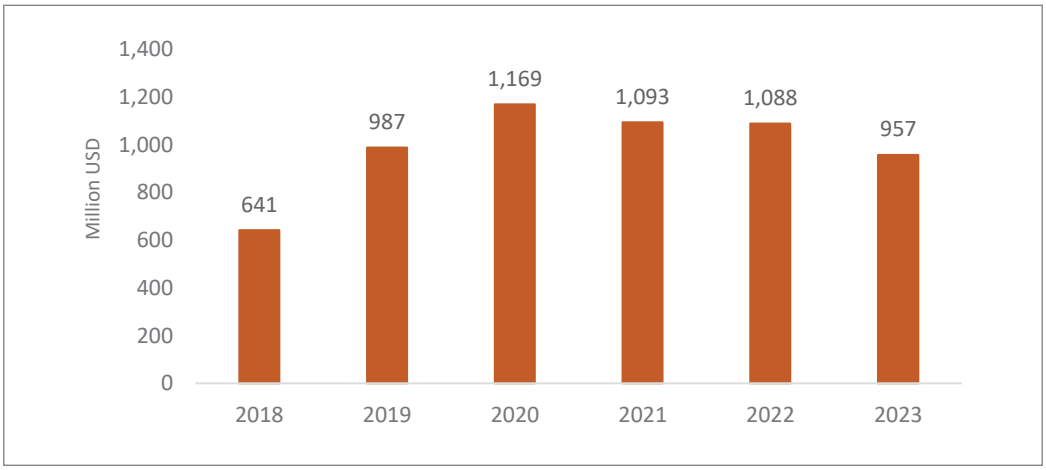
3.1.2. Imports

Despite efforts to improve cattle production and beef quality, domestic supply has not met the rising demand in terms of both quantity and quality. Most beef cattle and buffalo are raised by local farmers using free-range methods, resulting in low yield and inferior quality. These cattle are primarily sold to traders, who often do not follow the ideal fattening process, and are transported to traditional slaughterhouses, making it challenging to trace the meat origins and food safety standards.

- ***Imports have decreased slightly since the Covid-19 pandemic.***

From 2018 to 2023, the average annual growth rate of the value of live cattle and bovine meat products imports was 8.3%. In 2023, Vietnam's imports of bovine meat products, as well as live cattle, totalled $957 million USD. This represented a decrease of 12% compared to 2022 and a decrease of 12.4% compared to 2021.

Figure 6: *Total Import value of live cattle and bovine meat products, 2018-2023*



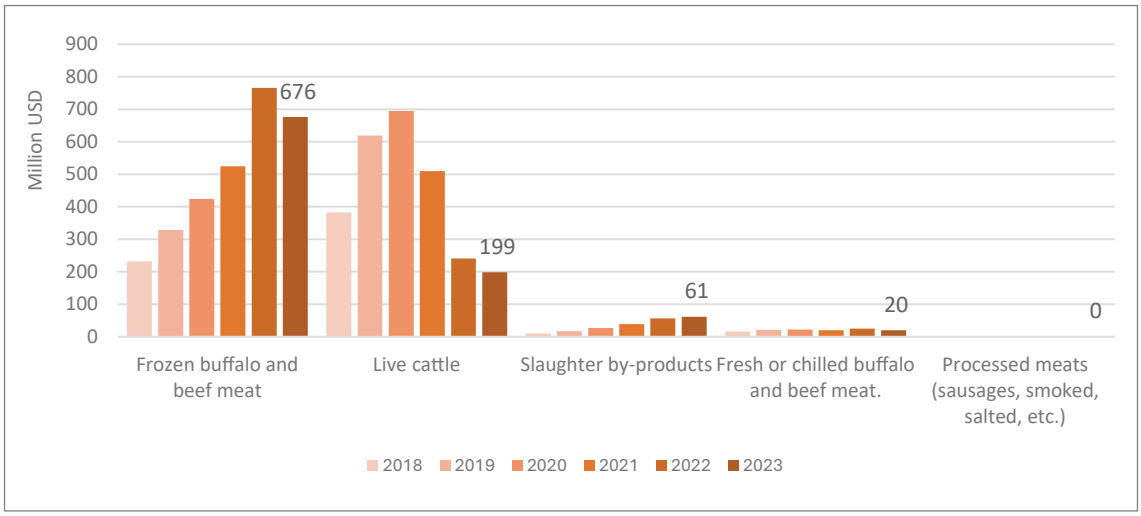
Source: Calculated from Viet Nam Custom's data

- ***Imported products have seen a significant shift from live cattle to frozen beef and buffalo meat.***

Viet Nam Custom's data shows a consistent and rapid growth in the import of frozen beef and buffalo meat over the years, while live cattle imports saw a sharp decline after reaching their peak in 2020. From 2018 to 2020, both categories of live cattle and frozen meat experienced significant growth annually, with live cattle imports, in particular, commanding double the import value of frozen meat and reaching its highest level of $695 million USD in 2020.

However, starting from 2021, due to the impact of the Covid-19 pandemic and a series of changes in consumer habits, live cattle imports decreased rapidly, reaching only around $200 million USD in 2023. Conversely, the demand for imported frozen beef and buffalo meat remained high and continued to grow, reaching its peak in 2022 at around $766 million USD. Although there was a decrease in 2023 compared to 2022, the import value of frozen beef and buffalo meat still remained significantly higher than that of live cattle imports.

Figure 7: *Total Import value of live cattle and meat of bovine animals by product group, 2018-2023*

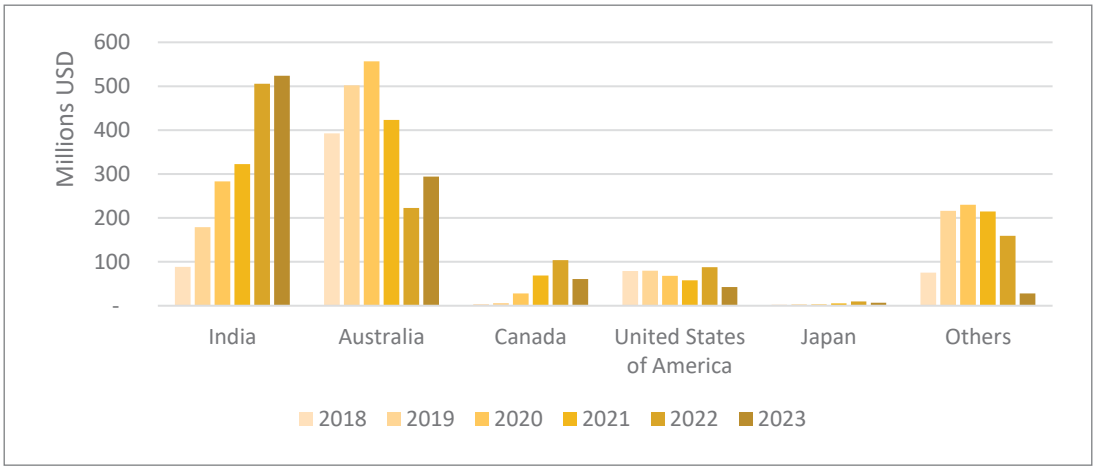


Source: Calculated from Viet Nam Customs data

- ***India has become the main supplier of frozen beef and buffalo meat for the Vietnamese market***

Vietnam imports bovine meat products from 36 markets, with India, Australia, Canada, and the United States being the four main suppliers. In 2023, imports from India reached $524 million USD, accounting for 55%; Australia reached $294 million USD, accounting for 31%; Canada reached $60.6 million USD, accounting for 6%; and the United States reached $42.8 million USD, accounting for 4.5%.

Figure 8: *Changes in Vietnam's imported market for bovine meat products by suppliers*



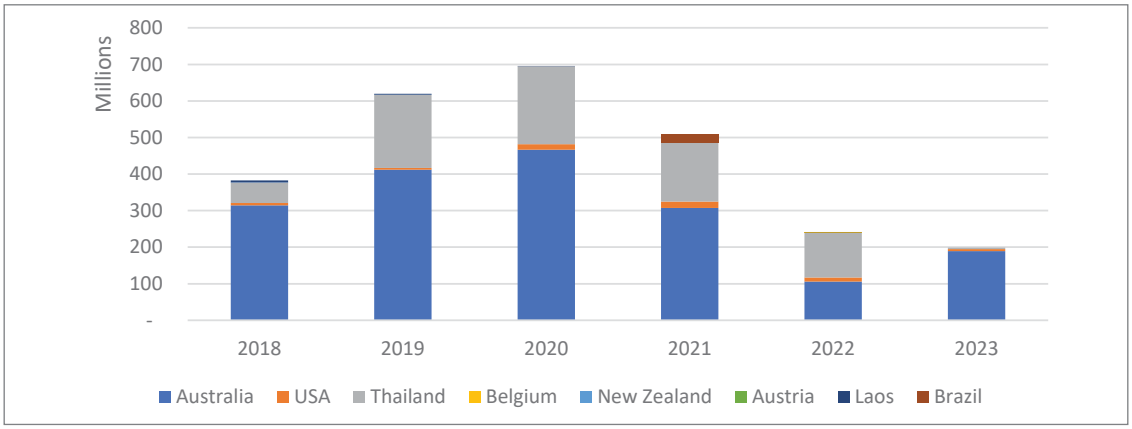
Source: Calculated from Viet Nam Custom's data

It's easy to see that India is the largest source of frozen meat for Vietnam, accounting for 73% of the total value of frozen beef and buffalo meat imports in 2023 while the import value from Australia has been decreasing since 2020. From 2018 to 2023, the average annual growth rate (AAGR) of value of bovine meat product imports was 25.7%, and the compound annual growth rate (CAGR) was 23.8%.

- ***Value of live cattle imports has decreased***

According to data from the Vietnam Customs, imports of live cattle (HS 0102) showed a decreasing trend from 2018 to 2023. In 2023, Vietnam's imports of live cattle amounted to $198.7 million USD. Australia, the United States, and Thailand are the main markets for live cattle imports to Vietnam in 2023. Specifically, imports from Australia amounted to $188.96 million USD, accounting for 95%, while imports from the United States reached $6.03 million USD, accounting for 3%.

Figure 9: *Import value of live cattle by supply countries, 2018-2023 (Million USD/year)*



Source: Calculated from Viet Nam Customs data

In general, official import data indicates a significant decrease in live cattle imports from Australia since 2021, with only a partial recovery observed in 2023, while imports from other sources remain insignificant. However, it is important to note that this data mainly includes formal imports. According to local sources, informal imports along the western border areas (bordering Laos and Cambodia) are still active, with large quantities involved. Due to the lack of information on these informal imports, it is challenging to accurately assess the actual trend of live cattle imports into Vietnam.

3.2. Factors affecting imports of live cattle and bovine meat products

3.2.1. Domestic production

- ***The development of cattle herds has shown a tendency to slow down since Covid-19***

According to the Department of Livestock Production, during the period from 2018 to 2023, the number of cattle (both beef and dairy cattle) increased while the number of buffaloes decreased. Specifically, the number of cattle showed a growth with an average annual growth rate of 1.9%/ year, increasing from 5.5 million head in 2018 to 6.37 million head in 2023. However, compared to 2021, the number of cattle showed a slight decrease in 2022, down by 0.8%. In 2023 the cattle herds slightly increased (about 0.5%) in comparison with 2022.

Table 5: *Bovine population and production in Vietnam, 2018-2023*

No	Products	Unit	Livestock Production/population					
			2018	2019	2020	2021	2022	2023
3	Cattle (beef and dairy)	Thous. heads	5802.9	6060.0	6325.6	6365.3	6339.4	6370
	Beef Cattle		5508.5	5742.3	5994.3	6034.1	6014.2	6008.5
	Buffalo		2425.1	2387.9	2332.7	2264.7	2231.6	2200
	Bovine meat products	Thous.tons	527.9	547.3	562.3	584.9	601.1	613.6

Source: Department of Livestock Production

During the period from 2018 to 2023, the growth rate of the beef cattle herd averaged 1.7% per year, increasing from 5.51 million heads to 6.008 million heads in 2023. The beef cattle herds continuously increased from 2018 to 2021 but showed a decreasing trend in 2022 and 2023.

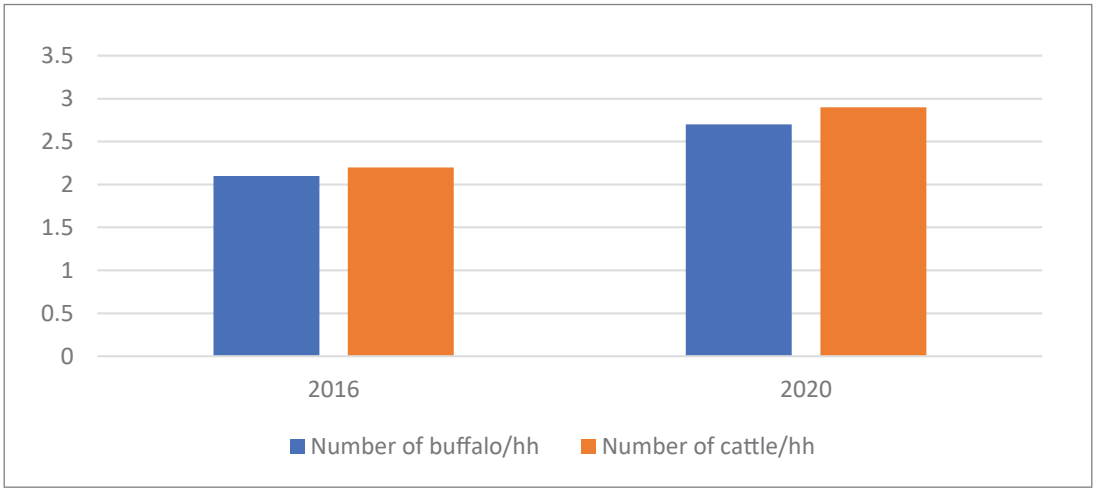
The decrease in beef cattle herds is attributed to the low economic efficiency of beef cattle farming, leading farmers to reduce their herds. Additionally, the importation of beef is also affecting domestic cattle farming. Prolonged low prices of beef cattle have caused significant difficulties for farmers, leading to a reduction in herds.

In Viet Nam, meat production of cattle and buffalo accounts for a small proportion compared to pig and poultry meat, accounting for about 7-8% of total live-weight meat. In the 2018-2023 period, the beef and buffalo meat increased from 527.9 thousand tons in 2018 to 613.6 thousand tons in 2023 with an average growth rate of 3%/year.

- ***Vietnam is developing large-scale farming operations, but small-scale livestock farming still accounts for a significant proportion.***

According to the Livestock Department of MARD, livestock farming is shifting from small-scale to larger household-scale operations, promoting the development of farm models, concentration, and the establishment of livestock value chains. This is an important factor contributing to increased productivity, quality, disease control capability, and food safety. However, most livestock farming is still small and very small-scale, accounting for 60-80% of the total livestock population depending on the locality. The average scale of buffalo and cattle farms are quite small with 2.7 heads/household (buffalo) and 2.9 heads/household (cattle) in 2020. Except for some provinces with suitable land conditions and grassland areas for livestock farming, most provinces primarily engage in small-scale livestock farming within residential areas, with operations typically consisting of less than 10 cattle/buffaloes per household.

Figure 10: *Average production scale of buffalo and cattle farms in Vietnam*



Source: Agrocencus 2020, GSO

- ***Vietnam has the advantage of developing livestock farming, but it faces challenges in developing large-scale livestock herds.***

Vietnam has advantages in developing livestock farming in general and beef cattle farming in particular. The country's diverse terrain, ranging from plains to hills and mountains, and its varied climate from tropical to temperate zones, provide favourable conditions for beef cattle farming in various regions. Additionally, Vietnam benefits from a rich natural food source, with fertile plains, grasslands, and areas for cultivating rice and sugarcane, all of which contribute to providing natural feed for beef cattle.

According to the General Statistics Office, in 2022, beef cattle farming in Vietnam was primarily concentrated in the following regions: Northern Central and Central Coastal area (39%), Northern Midland and Mountain area (20%), Central Highlands (15%), and Mekong Delta (14.4%), Red River Delta (6.9%); and Southeast (5.7%).

In Vietnam, the North Central Coast and the Central Coastal region stand out as having the largest population of beef cattle nationwide. This prominence owes much to the region's diverse geography, which ranges from plains to hills, and its moderate humidity levels.

However, despite the favourable conditions, beef cattle farmers in these regions have encountered various challenges in recent years. Firstly, there has been an increasing scarcity of green fodder, primarily due to the diminishing grazing areas caused by industrialization. Additionally, the reduction in agricultural land available for grazing, driven by the shift to more economically lucrative crops, exacerbates the shortage of green fodder for cattle.

Secondly, the escalating prices of livestock feed and agricultural by-products used in cattle feed pose significant hurdles for farmers. The increased cost of feed substantially raises the production expenses for beef cattle farmers, affecting their profitability and overall viability. This surge in feed prices strains the financial sustainability of farms and individual households engaged in beef cattle farming.

- ***The quality of domestic breeds is being enhanced to compete with imported cattle.***

The proportion of crossbred cattle in Vietnam has gradually increased over the years, accounting for approximately 66.8% of the total cattle population in 2022. Certain regions, such as the Mekong Delta and the Red River Delta, have particularly high rates of crossbred cattle, ranging from 80-90% and over 90%, respectively. Crossbred cattle have proven to be efficient in production, leading to higher economic returns for farmers through increased meat yield and productivity.

With the growing demand for beef and advancements in genetic science, various new cattle breeds, such as crossbred beef varieties, have proliferated and are widely used countrywide. Breeds such as Droughtmaster, Brahman, Blanc Bleu Belge (BBB), Angus, and Charolais stand out among them because of their quick growth, plentiful meat output, and superior quality. In particular, the BBB (3B) breed, also referred to as "muscle beef," is highly sought-after in various regions due to its robust muscular attributes.

Vietnam has undertaken various breeding programs to enhance the quality and productivity of its cattle breeds. These initiatives, strategically implemented by the government, aim to meet the evolving demands of the livestock industry. The Foundational Livestock Breeding Program, initiated in the late 20th century and continuing to the present, focuses on establishing and improving foundational livestock breeds to serve as the basis for further breeding efforts. Its goal is to enhance genetic traits such as growth rate, meat quality, and disease resistance.

The Sindization Program, launched in the late 1960s and 1970s, seeks to promote the Sind breed of cattle known for its adaptability to tropical climates and high productivity. This program aims to increase the population of Sind cattle through selective breeding and distribution to farmers. Additionally, the Beef Cattle Crossbreeding Program, implemented from the late 1970s to the 1980s and onwards, focuses on crossbreeding indigenous cattle breeds with high-quality beef cattle breeds to enhance meat quality and productivity.

Vietnam's Yellow Cattle Improvement Program, initiated in the 1970s, aims to improve the genetic traits of the indigenous Yellow Cattle breed, emphasizing both milk and meat production capabilities and disease resistance. Lastly, Vietnam's Cattle Improvement Program for Increased Productivity and Quality, implemented from the early 21st century to the present, emphasizes the use of advanced breeding techniques and technologies to achieve desired genetic improvements.

These breeding improvement programs play a crucial role in elevating the overall standard of cattle breeds in Vietnam, contributing to increased meat production, improved economic returns for farmers, and the sustainability of the livestock industry.

- ***The application of high technology in farming and slaughtering processes remains limited***

The application of high technology in livestock farming and slaughtering processes remains mostly limited to large-scale enterprises in Vietnam. Smaller-scale livestock farmers continue to face numerous constraints in adopting technological advancements in their operations.

In various localities, advanced technologies such as artificial insemination and the use of sex-sorted semen have been implemented in cattle farming. Economic crossbreeding combinations between specialized beef breeds like Charolais, Simmental, Limousin, Hereford, Drought Master, and more recently Senepol, Blanc Blue Belge (BBB), and Wagyu with foundation cow herds of Sind and Brahman crosses have contributed to enhancing the productivity and quality of beef cattle nationwide.

Some regions with concentrated and medium to large-scale cattle farming have adopted advancements in breeds, feed, and barns to mitigate heat stress, including shade structures, automatic misting systems, and temperature-controlled cooling. They also utilize total mixed ration (TMR) feed, automated feeding and manure management systems. Certain dairy cattle farms have embraced high-tech solutions such as European and American farming technologies (e.g., Delaval systems), automatic cooling barns, and compliance with international standards like Global Gap ISO 9001. Organic farms adhere to European organic standards (e.g., TH True Milk, Vinamilk).

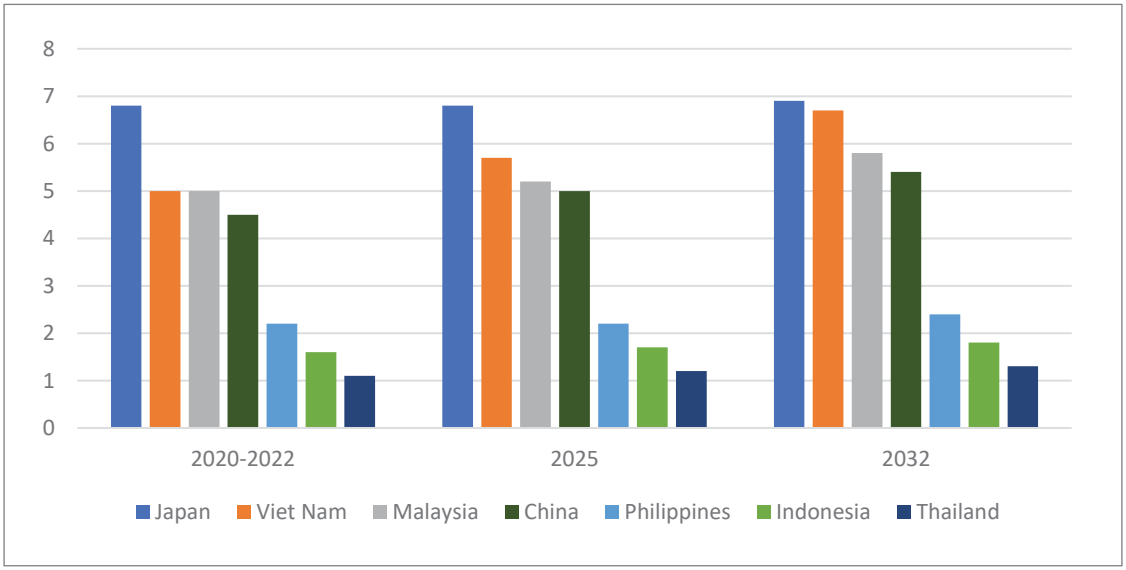
Vietnam has also implemented advanced breeding technologies, including sex-sorted semen, with a female calf birth rate reaching 87-92% of the supplier's recommended rate. Additionally, techniques like embryo transfer (both conventional and sexed), production of dairy embryos, in vitro fertilization, and embryo splitting have been applied to enhance breeding efficiency and genetic selection in cattle farming.

3.2.2. Domestic consumption

- ***Viet Nam is a good potential market bovine meat products***

Beef is a very popular protein meat in Vietnam. While the local diet is dominated by pork, poultry meat and fish on a per capita consumption volume basis, beef consumption frequency is the highest in South-East Asia. With a young population of approximately 100 million of which over 50 percent are of working age (2022), a sustainable rate of economic growth (GDP growth rate of 6.03 percent over the 2012-2022 period), and a high urbanization rate (37.3 percent of the population resides in urban area), Vietnam presents a promising market for high value meat products, including beef and buffalo meat products.

Figure 11: *Beef and veal consumption per capita in selected countries (kg/capita/year)*



Source: OECD-FAO Agricultural Outlook (Edition 2023)

According to the Department of Livestock Production (DLP), beef consumption in Vietnam was estimated at 3.15 kilograms per capita in 2018 with an annual growth rate of 5 percent/ year. Therefore, the beef consumption in 2022 is approximately 3.83 kilograms per capita per year. Current domestic beef production meets up to 45 percent of market demand, offering opportunities for the major beef-producing countries to export their respective beef and beef products to Vietnam. The average beef and veal consumption of Vietnamese people in 2020-2022 period, according to the Food and Agriculture Organization of the United Nations (FAO), is significantly higher than the DLP's estimation, at about 5 kilograms per person per year, higher that of China (4.5 kg) and 4.5 times higher than Thailand. FAO also estimated that the beef and veal consumption per capita in Viet Nam will grow by 2.34% annually in 2023- 2032 period, the fastest rate in South East Asia region.

However, abattoirs and dealers claim that since the COVID-19 era, Vietnam's demand for beef consumption has dropped dramatically. The consumption of beef appears to be declining most visibly in households and restaurant groups. According to PwC's "2023 Consumption Habits" survey, Vietnamese consumers are starting to practice greater frugal spending. More specifically, compared to the global average of 69%, 62% of consumers tend to buy fewer non-essential items. The majority of Vietnamese households still view beef as a luxury good (Khoi, 2021).

In addition, due to severe government restrictions on alcohol consumption and the economic challenges that followed the Covid-19 pandemic, the consumption of beef in restaurants and eateries across the nation has decreased. Restaurants and hotels in major cities like Hanoi and Ho Chi Minh City have less money to spend on food items like fish and beef. According to a representative of a significant Ho Chi Minh City supermarket chain, wholesale customer purchases (primarily from hotels and restaurants) have dropped between 30 and 35 percent from pre-COVID-19 levels (Tri & Trung, 2023). Furthermore, the economic downturn has resulted in a large number of industrial zone workers being laid off, which has significantly reduced the purchasing power at communal kitchens.

- ***Vietnamese consumers are gradually changing preference from "hot meat" to "cool meat", especially in big cities***

Fresh beef and buffalo meat (hot meat) are the most preferred type of beef in Vietnam as it is often associated with high quality and better taste. This also reflects common meal preparation habits, that demand purchasing fresh ingredients for cooking the same day. Hence, consumers were traditionally likely to buy fresh meat at markets daily.

Food health and safety remain two of the biggest public concerns in Vietnam due to a series of food scandals over the past decade, which was amplified during the pandemic. As a result, awareness of beef types other than regular fresh beef has been growing. According to interviews with slaughterhouses in some provinces, before the Covid-19 pandemic, the majority of people still preferred traditional beef and hot meat sold mainly at local markets. Currently, while the habit of consuming hot meat remains the preference of many Vietnamese people, since the Covid-19 pandemic, people's concerns have gradually shifted to safe and clearly sourced foods. This has led to a trend of shifting towards purchasing meat at supermarkets, shopping centres in major cities. As people accept using meat sold in supermarkets, they also begin to accept using chilled and frozen meat as a substitute for hot meat with many health risks.

- ***Chilled and frozen imported meat is mainly consumed in restaurants, canteens in industrial zones and schools***

Consumers in Vietnam are showing a growing acceptance of and preference for chilled and frozen meat over traditional hot meat. The National Standards for chilled meat in Vietnam were only introduced in 2018. This trend has become increasingly prominent and robust, particularly since the Covid-19 pandemic. Alongside pork, the consumption of chilled beef and buffalo meat is also on the rise, manily in kitchens of factories, schools and restaurants. Factories and production facilities for chilled beef have been established and put into operation.

The national standard for chilled buffalo and beef meat in Vietnam is governed by TCVN 12429-2:2020, issued under Decision No. 3272/QĐ-BKHCN by the Minister of Science and Technology on November 26, 2020. Chilled meat retains its nutritional value and does not suffer from nutrient loss like frozen meat does. It maintains a tender texture similar to fresh meat, making it a preferred choice among consumers. Although precise data on the consumption rate of chilled meat in Vietnam is still lacking, representatives from MLA (Meat & Livestock Australia) indicate that slaughterhouses and processing enterprises are increasingly focusing on developing chilled meat products to meet market demand.

3.2.3. Changes in trade policy

- ***Vietnamese producers face high competition from importers due to tariff reduction path of FTAs***

According to signed Free Trade Agreements (FTAs), Vietnam's import tax duties on live cattle currently range from 0-5%, while post-slaughter meat products still face Most Favored Nation (MFN) tariff rates ranging from 8-35% for WTO members. As a result, businesses often opt to import live cattle for fattening and slaughter. However, under the committed tariff reduction schedule, meat products from other countries are expected to see reduced or eliminated tariffs. In such a scenario, high-quality chilled and frozen meat products at competitive prices will find it easier to enter the Vietnamese market. This will intensify competition for domestic products, posing a greater challenge for local producers.

- ***China's tightened management of cross-border exports and source traceability has led to a redirection of temporarily imported products towards consumption in Vietnam.***

Since 2018, and in particular since the Covid-19 pandemic, China has been advocating for enhanced quality management of imported goods, intensifying efforts to combat smuggling, and formalizing cross-border trade activities. For Vietnam, the export of livestock products such as live cattle and meat across the border has significantly decreased during the period of 2021-2023 compared to pre-Covid-19 times. According to traders in the northern region, prior to 2019, the export of live cattle and frozen meat products sourced from India and Cambodia to China was relatively easy through informal cross-border exchanges. At certain times, the export live cattle from Vietnam to China through the border line might reach up to 17 trucks per day, carrying approximately 40 cattle per truck. However, China has now nearly completed the construction of a steel fence system along the border and redirected most import-export activities to official border checkpoints. This has led to a sharp decline in the export of cattle products from Vietnam to China.

- ***Standards for exporting live animals make Australia less competitive in Vietnamese market***

The export of live animals is regulated by the Australian Meat and Live-stock Industry Act 1997, the Export Control Act 1982 and the regulations and instruments issued under these Acts. The Export Control (Animals) Order 2004 sets out the conditions for export and requires the exporter to hold a livestock export licence and permit and provide a Notice of Intention for export. Exported livestock must meet importing country requirements. This may include mandatory pre-export quarantine and the issuing of a health certificate confirming the animal meets health protocol requirements as negotiated between Australia and the importing country.

Exporters must also comply with the Australian Standards for the Export of Livestock and have in place an approved Export Supply Chain Assurance System (ESCAS). The ESCAS requires the exporter to establish a system of control for transporting livestock to a particular country, including tracing all livestock through an independently-audited supply chain up to the point of slaughter. Exporters are required to demonstrate the ability to track and manage cattle at any point in the process, from gathering on ships to transportation, management, feedlot, and slaughter at the importer's facilities. The identification system should enable easy identification of individual cattle, facilitate dispute resolution at each stage, and provide comprehensive reports for each batch and the entire shipment.

In Vietnam, compliance with ESCAS requirements also faces some challenges due to the need for significant investments in both infrastructure and skills by livestock farming and slaughter facilities. According to a report by DAFF (2022), since 2011, the department has conducted assessments of 73 reports concerning non-compliance in Vietnam. The primary violations are related to unapproved abattoirs or loss of control and/or traceability in facilities.

To comply with ESCAS regulations, importers, feedlots, and Australian cattle slaughterhouses require significant investment resources compared to domestic livestock farming and abattoir units. As a consequence, the investment for importing Australia live cattle is quite high, leading to high price of beef in comparison with imported beef or live cattle from other countries. According to interviewed slaughterhouses, despite Australian cattle being of high quality and favoured by consumers, they face considerable price competition with imported frozen meat products. For slaughterhouses, the investment costs for slaughtering Australian cattle are

higher than smaller local slaughterhouses. However, the selling price of Australian beef may be lower, prompting many facilities to reduce the capacity for slaughtering Australian cattle and shift towards slaughtering locally-raised breeds.

3.2.4. Behaviour changes of key actors in cattle supply chain

- ***Cattle farmers are reducing their herds and delaying restocking due to low prices of live cattle***

The low selling prices of live cattle have discouraged farmers from expanding their herds or replenishing their stocks. According to surveys conducted in some provinces, the majority of cattle and buffalo owned by small-scale livestock farmers (those with fewer than 10 animals) still account for over 80% of Vietnam's total herd. However, since late 2023, many households have reduced their livestock numbers or suspended operations to pursue other work, leaving only about one-third of the farms still active. Traders also confirm that, from 2023 to early 2024, purchasing cattle from small-scale farmers has become challenging, with the number of cattle and buffalo only remaining at about 30-40% compared to before.

According to livestock farmers and traders, the main reason for the low prices of live cattle throughout 2023 and early 2024 is the oversupply in domestic market, mainly due to imported frozen meat. A significant influx of cheap imported frozen meat, including illegally imported products, has contributed to driving down prices. This surplus of imported meat has created intense competition in the market, leading to reduced demand for local live cattle and consequently lowering their selling prices.

Small-scale livestock farmers in Thai Binh province, for example, cite increased feed costs and low selling prices as reasons for losses and herd reduction. For farms with around 100 head of cattle, only those able to utilize local feed sources to reduce costs can break even when the live cattle price fluctuates between 68,000 to 72,000 VND/kg; otherwise, those relying on commercial feed will incur losses. In the Central Highlands region, small-scale farmers also face difficulties due to rising feed costs, especially during the dry season when feed prices can double, resulting in no profits. In the South, throughout 2023, beef prices plummeted significantly, with the price of calves sold to farmers dropping to only 6-7 million VND/head, a decrease of over 60% compared to before. Meanwhile, prices of commercial feed for cattle increased from 170,000 VND/bag to 250,000 VND/bag, and dry grass fodder from 25,000 VND/roll (about 10 kg/roll) to 35,000 VND/roll; even fresh grass such as elephant grass and lemongrass rose to 1,000-1,200 VND/kg, causing losses for all cattle farmers.

- ***Small-scale livestock farmers tend to also do small -scale slaughtering to maximize profits***

In surveyed provinces, livestock farmers are facing with a significant challenge of cattle price reduction. While live cattle prices are decreasing, retail prices for slaughtered meat remain notably high. In response, some livestock farmers are adopting strategies such as slaughtering the animals themselves or sell them to small-scale slaughterhouses to maximize their profits per head of cattle. For instance, in Thai Binh, some farmer can still profit from their investment if they buy a calf for roughly 10 million VND and slaughter their own beef cattle to sell at the local market after about three months of feedings and fattening, instead of selling the beef cattle they slaughter at the neighbourhood market mature beef cattle to traders. If they sell live cattle to traders they may result in difficulties as there might be quality issues (underweight, low meat ratio, etc.), leading to very low selling prices. In addition,

numerous small-scale livestock farmers are opting to sell their calves for meat due to the slow rates of reproduction.

- ***Beef feedlots are maintaining their scale at a moderate level and seeking new cattle breeds from imported sources***

Livestock farms and feedlots are also experiencing losses due to low selling prices of live cattle. Since late 2023, these farms have been slow to replenish their herds, maintaining them at around 40-50% of capacity. Additionally, fattening farms in northern provinces are trending towards switching from the BBB breed to the Brahman and Brahman crossbreeds. Currently, farms mainly rely on the BBB breed, which typically constitutes 70-80% of the total herd, due to its high meat yield. However, recent assessments by traders and slaughterhouses indicate that BBB beef is gradually becoming less popular and harder to sell compared to domestic breeds. If not raised for a sufficient duration and weight, BBB beef tends to have a pale colour and is difficult to sell. Therefore, some medium to large-scale feed lotters are shifting their breed composition for fattening by experimenting with the white Brahman breed.

The Brahman cattle breed mainly originates from Cambodia and is collected by traders along the border and supplied to farms in northern and central regions. Notably, imported Brahman cattle have a fast growth rate and require simpler feed compared to BBB cattle. However, the importation and quality control of imported breeds from border areas pose certain risks and challenges, including disease control and livestock health.

- ***Traders in border areas are increasing imports of breed cattle***

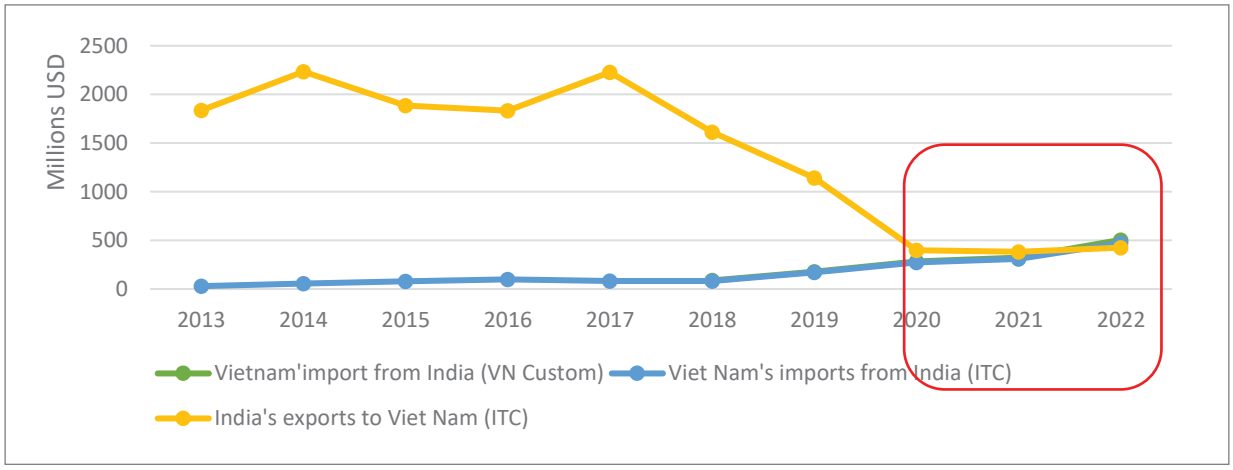
Traders in the southern border areas indicate that there is currently an increasing demand for imported breeding cattle to serve the needs of reestablishing breeding farms. Breeds such as Brahman and Brahman hybrids are attracting significant interest from many fattening farms. Despite reports of high demand, official statistics in nationwide cannot accurately reflect the actual number of imported breeding cattle into Vietnam, as most export activities are conducted through informal border exchanges, and even smuggling. the Department of Animal Husbandry and Veterinary Medicine in Gia Lai reported that imports of breed cattle reached over 14240 heads in 2023, more than 13 times the amount in 2022, citing data from the Department of Animal Health Region V.

Furthermore, according to a trader in Long An province (at a border gate with Cambodia), in 2023, traders imported an average of 300–400 cattle per day from Cambodia to Vietnam. After importation, these cattle are transferred to feeding farms and have been registered for vaccination against diseases with the local authorities. The imported breed of cattle from Cambodia is typically Brahman, weighing between 300 and 400 kg of liveweight per head. After the 3–4 month fattening period, when sold, each cattle can weigh around 600–700 kg. Since live cattle (whole, living animals) are typically purchased for between 30,000 and 50,000 VND/kg in Cambodia, which is less than in Vietnam, many traders buy them to supply different stakeholders like slaughterhouses, processing facilities, and breeding farms throughout the nation. Generally, the breeding farms pay the expenses associated with bringing these cattle into Vietnam. A “Certificate of Animal Quarantine Inspection” is still given to the cars carrying these cattle to transfer them to other provinces.

- ***Importers and traders are shifting from temporary re-importation to formal imports of frozen cattle meat products for the domestic market***

According to a beef trade expert, prior to 2019, Vietnamese traders engaged in temporary imports of frozen meat products such as buffalo meat from India and re-exported them to the Chinese market. However, since the outbreak of Covid-19, China has implemented numerous measures to manage imported products from Southeast Asia, leading to the disruption of temporary re-exported items such as frozen buffalo meat from entering the Chinese market. In 2023, the influx of frozen buffalo meat from India into the Vietnamese market significantly reduced prices of domestic livestock products. Experts attribute this primarily to traders shifting from temporary imports of frozen meat for re-export to China to direct imports for consumption within the Vietnamese market.

Figure 12: *Import and export of frozen, boneless meat of bovine animals from India to Vietnam*



Source: Calculated from Viet Nam Custom's data and Trademap-ITC (4/2024)

Comparing the import-export data of frozen buffalo and beef (HS 020230) from both Trademap-ITC and Vietnam Customs reveals some alignment with the expert's assessment. According to Trademap-ITC, India reported an average annual export value of frozen buffalo and beef to Vietnam at $1.82 billion during the period from 2013 to 2019. However, Vietnam's import data from India recorded only an average of $85.9 million, equivalent to 4.7% of India's reported figures. The data from the period 2020 until now shows significant growth in Vietnam's reported import figures on Trademap-ITC (matching Vietnam Customs data). This discrepancy underscores the trend highlighted by the expert: a substantial increase in direct imports of frozen buffalo and beef from India to Vietnam during this period, bypassing intermediary markets. This trend is also believed to be similar for live buffalo and cattle, but specific data is lacking to substantiate it.

- ***Slaughterhouses are maintaining minimal production capacity***

Cattle slaughterhouses have also been significantly affected by recent price fluctuations. The interviewed slaughterhouses have minimized their cattle slaughtering capacity due to decreased demand and price. Currently, these slaughterhouses only maintain very minimal slaughtering operations, ranging from 1 to 3 heads per day, with the maximum being 10 cattle per day, representing a reduction of over 90% compared to 2022.

The main challenges facing these slaughterhouses stem from reduced domestic supply and competition from imported products. The increasing importation of frozen meat has driven prices down, leading traditional customers of slaughterhouses such as canteens, restaurants, and hotels to switch to cheaper imported products. Consequently, traders and slaughterhouses alike have had to scale back their operations. In terms of pricing, domestically slaughtered meat is sold in the market at around 210,000 VND/kg, whereas imported frozen meat is priced significantly lower at 90,000 VND/kg.

In addition, competition from small-scale slaughterhouses also poses challenges for larger, centralized slaughterhouses. The quality control of slaughtered products in small-scale facilities is often lax, leading to issues such as fraud regarding product quality and quantity. Meanwhile, centralized slaughterhouses that invest in full equipment and adhere to regulations face higher costs and struggle to compete on price with smaller facilities.

- ***Government authorities face difficulties in controlling the use of banned substances in livestock farming, especially with imported live cattle***

One major concern shared by most traders and slaughterhouses regarding the domestic cattle market is the use of growth-promoting agents in livestock farming. Currently, the prohibition of these agents for domestically-raised cattle has been regulated by the Livestock Law of 2018, and sanctions are specified under Article 28 of Decree 14/2021/ND-CP dated March 1, 2021, which imposes administrative fines ranging from 50 to 80 million VND and may entail criminal liability, requiring the destruction of prohibited substances and animals that have been exposed to them. However, according to traders, there is still evidence of livestock farmers using growth-promoting agents to stimulate animal growth.

Furthermore, the smuggling of live cattle across border areas also poses significant risks regarding the use of prohibited substances. Traders suggest that breeding cattle may be exposed to growth-promoting agents before being imported into Vietnam, making it difficult to detect which animals have been subjected to these substances. Overall, the use of prohibited substances in livestock farming directly affects consumer health and contributes to unhealthy competition with domestic breeding facilities.

IV. CONCLUSION AND POLICY RECOMMENDATIONS

Vietnam's beef and cattle meat market is undergoing a noticeable shift in terms of trade and consumption. Imports have marginally decreased since the COVID-19 pandemic, while exports are still exhibiting an unstable tendency to rise. According to customs data, Vietnam still has the potential to export cattle and beef to neighbouring nations like Laos and Cambodia (particular live cattle), as well as the profitable Chinese market. Vietnam, however, is still a net importer of beef and cattle meat products; the value of imports is more than 24 times that of exports. Specifically, the imported frozen beef and buffalo meat is increasing while there is a decrease in live cattle import. The trade trend in beef and cattle products has been reflecting the changes in domestic production, consumption and behaviour of key actors in Vietnamese cattle sector.

In regards to production, the rapid increase in frozen meat imports in recent years is considered one of the leading reasons of the decline in domestic cattle raising. Discrepancies between statistical data and feedback from stakeholders within the beef cattle farming chain make it challenging to determine the extent of production decline and assess the domestic beef and

livestock supply. However, statistical data shows that despite slight fluctuations in the total herds, domestic beef production has still increased due to the cattle production actively adopting scientific advancements to enhance productivity. Nevertheless, since 2023, most stakeholders in the chain have been reporting a significant decrease in total livestock herds in various regions due to reduced cattle prices and increased feed costs, as well as intense competition from imported frozen meat and live cattle.

In terms of consumption, the demand for beef and cattle meat in Vietnam remains significant and holds considerable development potential, despite recent fluctuations due to economic downturns and the COVID-19 pandemic. However, it's noteworthy that the consumption trends and habits of Vietnamese consumers are gradually changing, requiring adjustments from livestock farmers, producers, and importers to meet market demands. Since COVID-19, consumers, especially in major cities, are increasingly accepting the use of frozen and chilled meat as substitutes for fresh meat, which has long been a tradition in Vietnam. Customs data also shows a rapid increase in frozen meat imports, partly reflecting increased domestic consumer demand. While previously, frozen meat products mainly passed through Vietnam for re-export to China, since the COVID-19 pandemic, imported frozen meat has shifted towards domestic consumption in Vietnam and has seen a rapid increase in recent times. However, there appears to be inconsistent data and poor-quality control of imported live cattle from border regions. Improper management of cattle sources imported is likely to have negative impacts on both domestic production and consumers' health.

The key actors in cattle supply chains such as famers, traders, feedlots and slaughters also change their behaviours to response the market change in the recent times. Livestock farmers are reducing their production scale and delaying the development progress of cattle due to low prices of live cattle. Some small-scale farmers slaughter their cattle by themselves or sell to small slaughterhouses instead of medium and large-scale slaughter houses to maximize their profits. Meanwhile, feedlots and slaughterhouses maintain their moderate scale and seeking new cattle breeds from neighbour countries like Lao and Cambodia. Breed cattle traders in border areas also increase to import for breeding farms while frozen cattle meat importers are shifting from temporary re-importation to formal imports to the domestic market. The increase of importing frozen cattle meat leads to the high competition between imported and fresh domestic meat, particular in the context of market-opening pathways under the Vietnamese FTA commitments. In addition, government authorities face difficulties in controlling the use of banned substances in beef and cattle meat products, especially with imported live cattle.

Vietnam's cattle sector is currently facing numerous challenges in maintaining production, increasing productivity and meat quality, ensuring animal feed sources with reasonable price, controlling cattle meat quality of both imported and domestic sources. To sustainably develop the beef and cattle sector in Vietnam, the government should consider necessary solutions and recommendations, including:

In term of ***production***, small-scale household farming requires multifaceted support. This includes advocating for efficient and safe feeding practices, such as utilizing by-products as bio-feed, and encouraging labor-intensive feed mixing methods to optimize resources. Moreover, there's a pressing need for policies that facilitate access to land funds and capital sources, fostering investment and the expansion of production capacities. Developing integrated supply chains and focusing on deep processing to add value to livestock products are also crucial strategies to enhance competitiveness and profitability. Through agricultural promotion activities and vocational

training, farmers are encouraged to enhance their skills and capabilities in applying technology in processing green fodder, waste treatment technology, and circular economy models.

Regarding trade dynamics, securing ***feed sources*** domestically and limiting reliance on imported feed is essential to ensure the sustainability and autonomy of Vietnam's livestock sector. Coherent policies spanning production, market access, and import/export regulations are necessary to ensure the competitiveness of the domestic livestock industry. Strict controls over imports are particularly critical to safeguard local producers from unfair competition and maintain consumer preference for domestically produced meat. By aligning policies across various sectors, Vietnam can foster a conducive environment for the sustainable growth and development of its livestock industry.

By prioritizing appropriate ***cattle breeds***, such as the Sind crossbreed, renowned for its premium quality and efficient rearing characteristics, Vietnam can capitalize on its genetic resources to enhance production efficiency and product quality.

In terms of ***technology*** adoption, establishing identification codes for livestock farms is paramount to facilitate source tracing and product tracking along the supply chain. Leveraging information technology and digital transformation tools can streamline management processes and enhance efficiency throughout the production cycle. Additionally, there's a need to promote the adoption of advanced livestock farming technologies among producers. Currently, these technologies remain fragmented and underutilized, but their widespread adoption could significantly improve productivity and product quality.

Moreover, ***attracting investments*** in large-scale livestock projects is crucial for sectoral development. However, it's imperative to implement stringent controls over these operations to mitigate environmental pollution and minimize risks associated with disease outbreaks. Furthermore, fostering cooperation and knowledge transfer initiatives among livestock breeders is essential to enhance technical skills and ensure product quality standards are met consistently.

To control beef and cattle meat products quality, strict ***quality control measures*** over imported and domestic livestock products are crucial to all stages in the value chain from farming, slaughtering, transporting and distributing. Additionally, ensuring the control of imported products of unknown origin, quality, and low prices is essential for fair competition.

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ANNEXES

Annex 1: A list of bilateral and multilateral free trade agreements (FTAs) between Vietnam and other countries

	Vietnam							Number of FTAs the two countries participate in
	AJCEP (1/12/2008)	VJEPA (1/10/2009)	AANZFTA (1/1/2010)	AIFTA (1/1/2010)	CPTPP (2018, effective in Vietnam from Jan 14, 2019)	EVFTA (1/8/2020)	RCEP (1/1/2022)	
Japan	X	X			X		X	4
Australia			X		X		X	3
India				X				1
Canada					X			1
EU						X		1
USA								0

Note: the numbers in parentheses () indicates the effective date of FTAs.

Annex 2: Comparison of special preferential import tax rates of Vietnam for implementation of FTAs from January 1, 2018 and rules of origin (ROO) of the FTAs

HS Code	Description	Ordinary rate	Preferential rates	AANZFTA 1/1/2010 - Australia		AIFTA 1/1/2010 India		CPTPP 14/1/2019 Australia, Canada		RCEP with Australia 1/1/2022	
				Special preferential rates	ROO[5]	Special preferential rates	ROO[6]	Special preferential rates	ROO[7]	Special preferential rates	ROO[8]
0102	**LIVE BOVINE ANIMALS**										
	-Cattle:				WO		RVC(35) or CTSH		CC		WO
01022100	--Pure-bred breeding animals	5	0	0		0		0		0	
010229	-- Other	7,5	5	0		2018: 1 From 2019: 0		0		0	
	-Buffalo:										
01023100	--Pure-bred breeding animals	5	0	0		0		0		0	
01023900	-- Other	7,5	5	0		2018: 1 From 2019: 0		0		0	

[5] https://trungtamwto.vn/file/22615/0-full-text-second-protocol.pdf

[6] https://trungtamwto.vn/file/20870/phu-luc-1--quy-tac-xuat-xu.pdf

[7] https://trungtamwto.vn/file/18337/1_Ph%E1%BB%A5%20l%E1%BB%A5c%20I-Quy%20t%E1%BA%AFc%20c%E1%BB%A5%20th%E1%BB%83%20m%E1%BA%B7t%20h%C3%A0ng_Full(HS2012).pdf

[8] https://trungtamwto.vn/file/21586/phu-luc-i-psr.pdf

HS Code	Description	Ordinary rate	Preferential rates	AANZFTA 1/1/2010 - Australia		AIFTA 1/1/2010 India		CPTPP 14/1/2019 Australia, Canada		RCEP with Australia 1/1/2022	
				Special preferential rates	ROO[5]	Special preferential rates	ROO[6]	Special preferential rates	ROO[7]	Special preferential rates	ROO[8]
0201	**MEAT OF BOVINE ANIMALS, FRESH OR CHILLED**										
02011000	- Carcasses and half-carcasses	45	30	0	Cc	2018: 15 2019: 10 2020: 9 2021: 8 From 2022: 0	RVC(35) or CTSH	14/1-31/12/19: 10,3 From 2020: 0	CC	2022: 27 2023: 24 2024: 21	CC
02012000	-Other cuts with bone in	30	20	0		2018: 12 2019: 10 2020-2021: 8 From 2022: 0		14/1-31/12/19: 6,6 From 2020: 0		2022: 18 2023: 16 2024: 14	
02013000	-Boneless	21	14	0				14/1-31/12/19: 5 From 2020: 0		2022: 12,6 2023: 11,2 2024: 9,8	
0202	**MEAT OF BOVINE ANIMALS, FROZEN**										
02021000	- Carcasses and half-carcasses	30	20	0	Cc	2018: 12 2019: 10 2020-2021: 8 From 2022: 0	RVC(35) or CTSH	14/1-31/12/19: 6,6 From 2020: 0	CC	2022: 18 2023: 16 2024: 14	CC
02022000	- Other cuts with bone in	30	20	0							
02023000	- Boneless	21	14	0				14/1-31/12/19: 5 From 2020: 0		2022: 12,6 2023: 11,2 2024: 9,8	
0206	**EDIBLE OFFAL OF BOVINE ANIMALS, SWINE, SHEEP, GOATS, HORSES, ASSES, MULES OR HINNIES, FRESH, CHILLED OR FROZEN**										
02061000	- Of cattle, fresh or chilled	12	8	0	CC	2018-2019: 10 2020: 9 2021: 7,5 From 2022: 0	RVC(35) or CTSH	14/1-31/12/19: 6 2020: 4 2021: 2 From 2022: 0	CC	2022: 7,2 2023: 6,4 2024: 5,6	CC
	- Of cattle and frozen animals:										
02062100	- Tongue	12	8	2018: 5 From 2019: 0		2018-2019: 10 2020: 9 2021: 7,5 From 2022: 0		14/1-31/12/19: 6 2020: 4 2021: 2 From 2022: 0		2022: 7,2 2023: 6,4 2024: 5,6	
02062200	- Liver	12	8								
02062900	- Other	12	8	0							
1602	**MEAT, OTHER PROCESSED OR PRESERVED POST-SLAUGHTER MEAT BY-PRODUCTS**										
160250	- From cattle animals:	52.5	35	2018: 20 2019: 15 2020: 10 2021: 8 From 2022: 5	RVC (40) or CC	2018: 15 2019: 12,5 2020-2021: 10 From 2022: 5	RVC(35) or CTSH	14/1-31/12/19: 25,5 2020: 21,2 2021: 17 2022: 12,7 2023: 8,5 2024: 4,2 From 2025: 0	CC; or RVC (45)	35	CC