



社会经济研究中心
**SOCIO-ECONOMIC
RESEARCH CENTRE**

**The Poultry Issue:
What's Behind It and How to Cope?**

09 June 2022

Key messages



Malaysia has sufficient supply of chicken for domestic consumption



The COVID-19 pandemic and Russia-Ukraine war induced supply and cost shocks



Solutions to ensure sustainable poultry industry



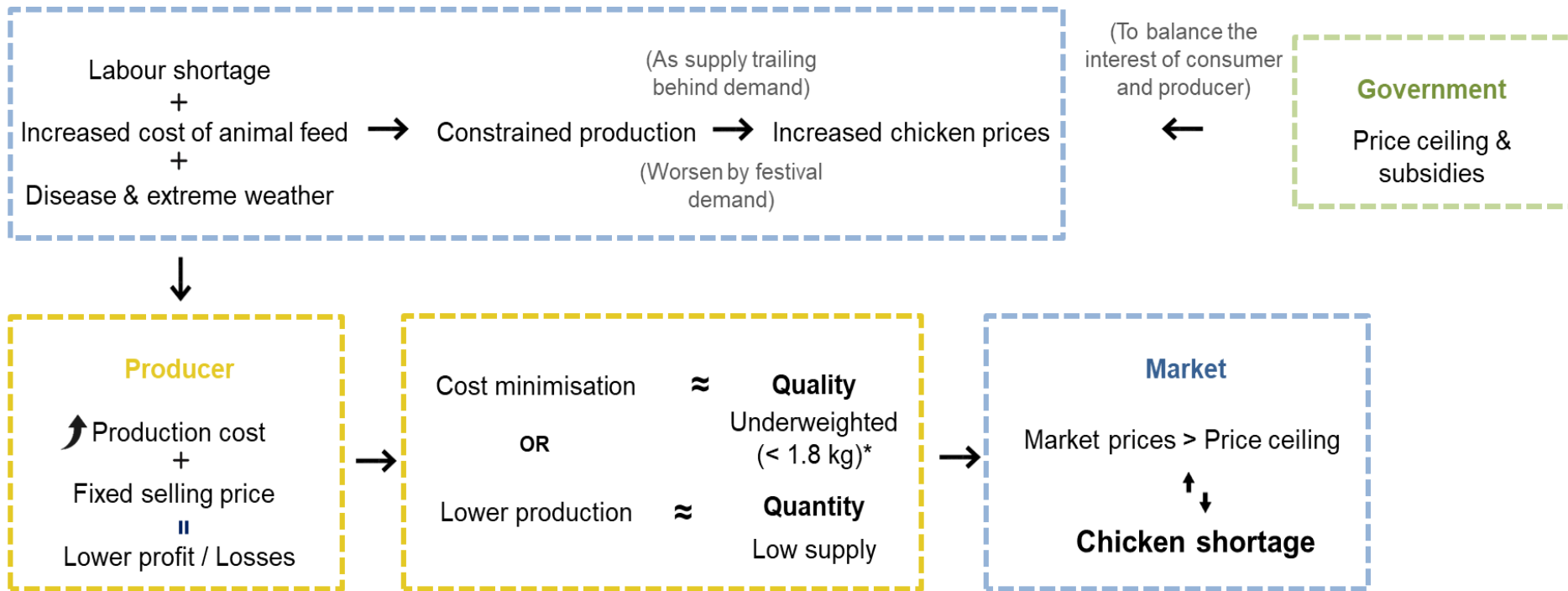
Market Analysis (2011 – 2020)

*Sufficient supply of chicken for
domestic consumption*

Why is there a chicken shortage?

The COVID-19 pandemic, labour shortages, diseases, weather conditions and the Russia-Ukraine war have taken their toll at different levels of the supply chain, from broiler farm, production process, wholesaler and retailer.

Explanatory chart: Chicken shortages and price increases



* The breeding process generally takes six to eight weeks to reach a market carcass weight of 1.8kg.

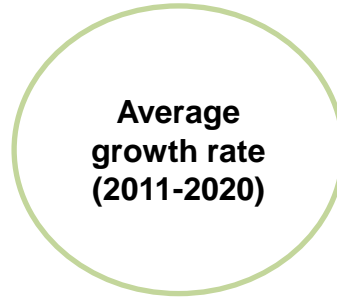
Malaysia's production and consumption of poultry



Domestic Production

Average: 1.54 million tonnes per year

↑ **2.1% p.a.**



Average
growth rate
(2011-2020)



Domestic Consumption (only for food)

Average: 1.47 million tonnes per year

↑ **2.8% p.a.**

Domestic Production (number of birds)

Average: 269.6 million birds per year

↑ **3.1% p.a.**

V/S

Consumption per capita (only for food)

Average: 47.5 kg per capita per year

↑ **1.4% p.a.**

Notes:

1. Poultry includes chicken and duck
2. Food refers to poultry that people eat
3. Annual average of production and consumption for the period of 2010-2020
4. p.a. refers to per annum

Source: Department of Statistics, Malaysia (DOSM)

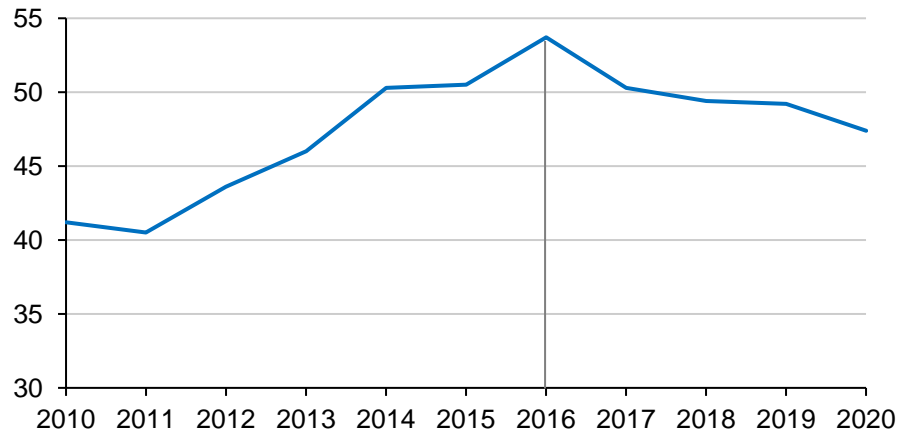
Both production and consumption had declined since 2016



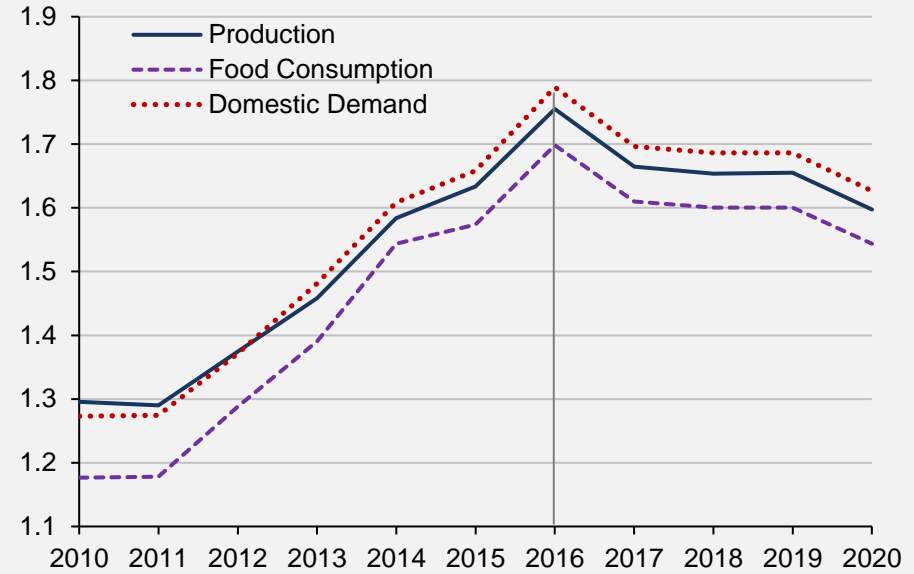
While domestic production has outpaced domestic consumption, the surplus gap has narrowed over the years.

Ratio (Production/Consumption)	2010	2015	2020
	110.1%	103.8% ↘	103.5% ↘

Per Capita Consumption of Poultry (kg/year)



Domestic Production and Consumption of Poultry (million tonnes)



- Domestic production of poultry was more than meeting domestic food consumption in 2010-2020.
- However, it was insufficient to meet national demand for final consumption including the use as inputs for food processing since 2012.

Note: Poultry includes chicken and duck

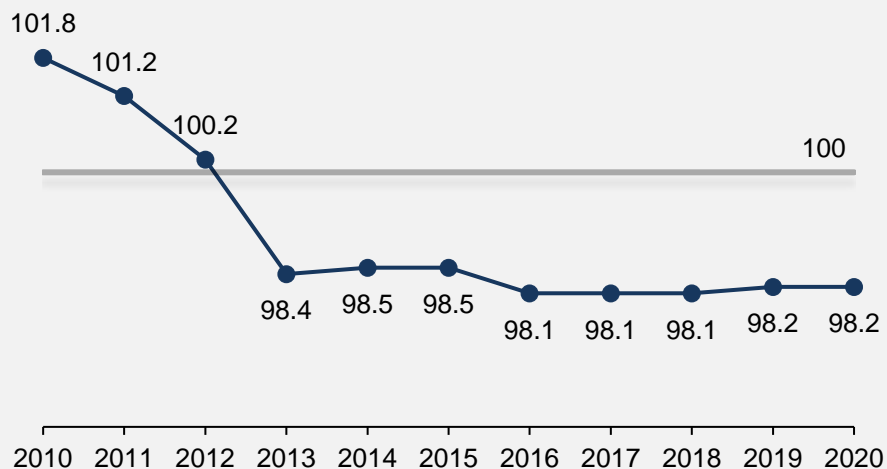
Source: DOSM (Supply and Utilization Accounts (SUA) of Selected Agricultural Commodities)

Almost self-sufficient; small dependence on poultry imports

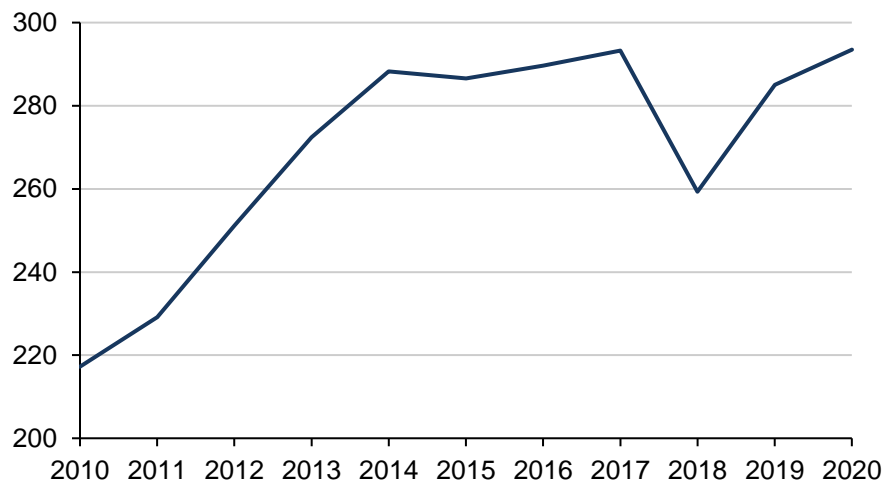


- The **self-sufficiency ratio (SSR)** for chicken has declined progressively from 101.8% in 2010 to steadying around 98.1%-98.2% in 2016-2020.
- The **import dependency ratio (IDR)** had fluctuated between 4.0% and 4.3% during the period 2016-2020.

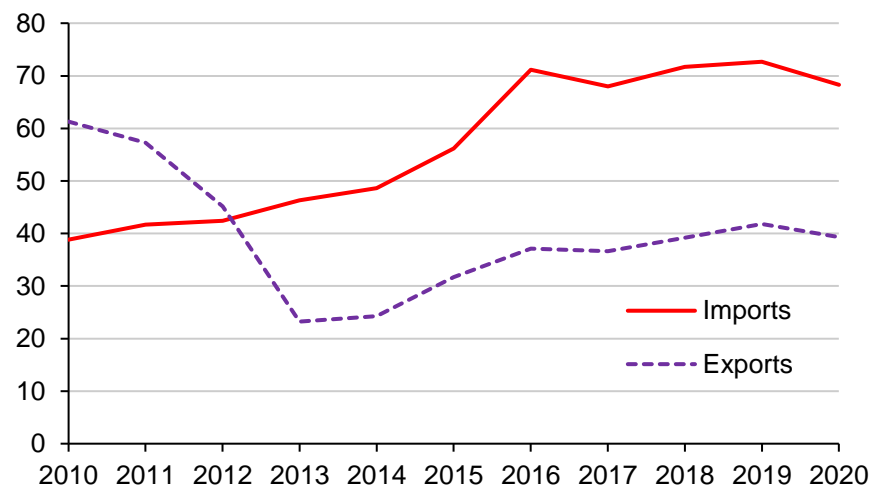
Self-Sufficiency Ratio (SSR)
(%)



Number of Chicken Production
(million units)



Imports and Exports of Poultry in Malaysia
(thousand tonnes)



Source: DOSM (Supply and Utilization Accounts (SUA) of Selected Agricultural Commodities)

Malaysia's exports and imports of chicken in 2021



Total imports: RM767.1 million



Major sources of imports (% of total)



Thailand (70.2%)



China (22.0%)

2021: Imports of chicken by category and source of imports

Imports of Live Chicken	Value (RM million)	% Share of Total
France	0.07	73.9%
Singapore	0.02	26.1%
Others	-	-
Total	0.09	100.0%

Imports of Non-live Chicken	Value (RM million)	% Share of Total
Thailand	538.2	70.2%
China	168.6	22.0%
Others	60.3	7.9%
Total	767.0	100.0%

Total exports: RM713.4 million



Major export destinations (% of total)



Singapore (93.4%)

2021: Exports of chicken by category and export destinations

Exports of Live Chicken	Value (RM million)	% Share of Total
Singapore	661.9	99.9%
Thailand	0.6	0.1%
Others	0.01	0.0%
Total	662.5	100.0%

Exports of Non-live Chicken	Value (RM million)	% Share of Total
Thailand	32.2	63.3%
Timor-Leste	7.3	14.3%
Others	11.4	22.4%
Total	50.9	100.0%

Note: The non-live chicken includes cut or not cut, and fresh or frozen

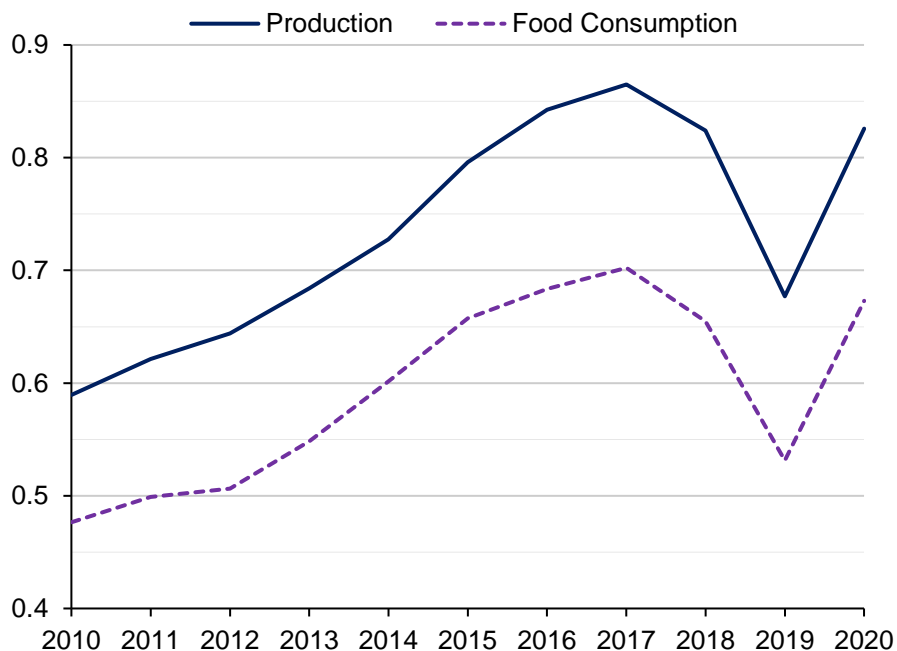
Source: DOSM

Per capital consumption of eggs has rebounded in 2020

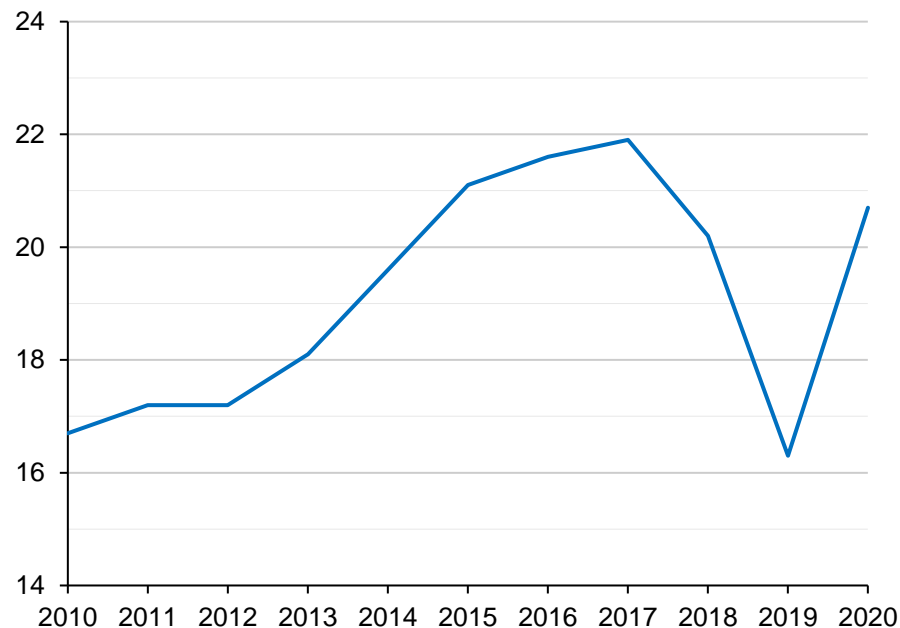


Domestic production and consumption of eggs had **increased steadily by 3.4% p.a. and 3.5% p.a. over the past ten years (2011 – 2020)**, respectively.

Total Production and Consumption of Eggs (million tonnes)



Per Capita Consumption of Eggs (kg/year)



Note: Eggs include chicken and duck eggs; Conversion rate of chicken / duck egg - 1 piece = 60 grams

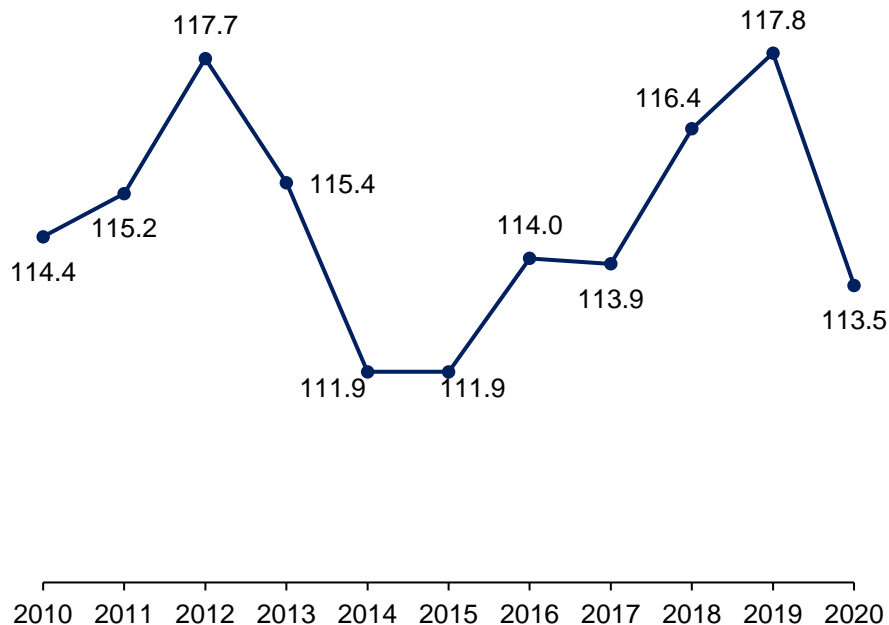
Source: DOSM (Supply and Utilization Accounts (SUA) of Selected Agricultural Commodities)

Malaysia is well self-sufficient with the supply of eggs

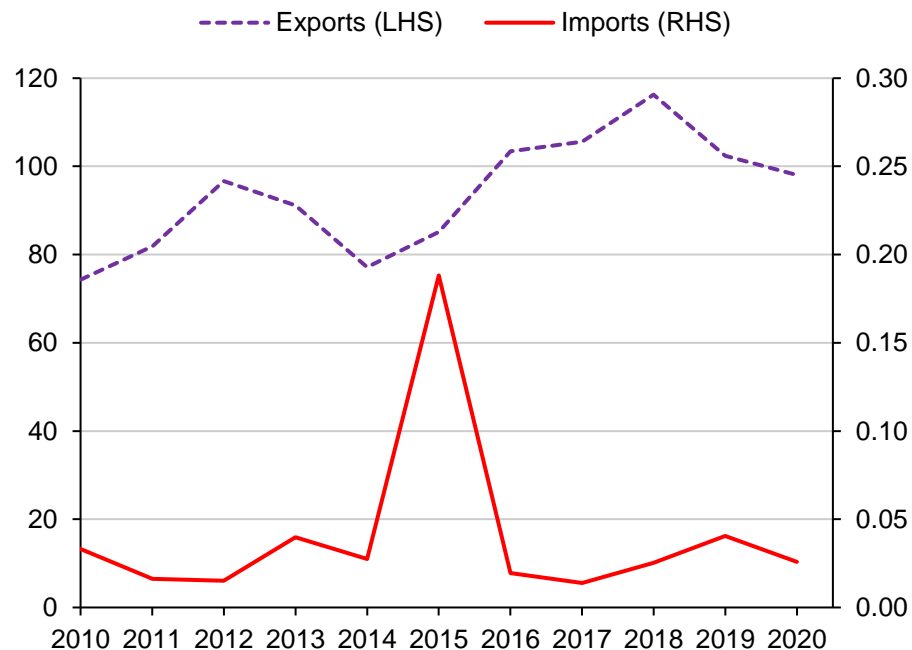


With the SSR has consistently staying above 100%, Malaysia is a net exporter of eggs, growing by **2.8% p.a. in 2011-2020**.

Self-Sufficiency Ratio (SSR) (%)



Imports and Exports of Eggs (thousand tonnes)



Note: Eggs include chicken and duck eggs; Conversion rate of chicken / duck egg - 1 piece = 60 grams
Source: DOSM (Supply and Utilization Accounts (SUA) of Selected Agricultural Commodities)

Malaysia is a solid net exporter of eggs



- Both **Singapore and Hong Kong** have purchased a total of 94.3% of Malaysia's exports of eggs in 2021.
- No imported eggs in 2021.

2021: Major buyers of Malaysia's production of eggs 2021



Exports of Eggs	Value (RM million)	% Share of Total
Singapore	395.1	74.8%
Hong Kong	102.8	19.5%
Others	29.9	5.7%
Total	527.8	100.0%

Note: Eggs include only chicken eggs in the shell

Source: DOSM

Did you know?

- Meat chicken and laying chicken **require different portions and preferences of feeds**. For example, feed consumption will be approximately 1 kg for an egg-laying chicken and 4 kg for a meat chicken for the first six weeks.
- Owing to cultural and religious reasons, **chicken is one of the largest per capita consumption of meat**, registering an average of 47.4 kg per year in 2020.

Per capita consumption of meat (kg/year)

		2017	% Share of Major Livestock	2018	% Share of Major Livestock	2019	% Share of Major Livestock	2020	% Share of Major Livestock
Major Livestock	Poultry	50.3	67.1%	49.4	66.1%	49.2	66.8%	47.4	66.0%
	Beef	5.5	7.3%	5.7	7.6%	5.4	7.3%	5.6	7.8%
	Mutton	1.3	1.7%	1.3	1.7%	1.1	1.5%	1.3	1.8%
	Pork	17.9	23.9%	18.3	24.5%	18.0	24.4%	17.5	24.4%
	Subtotal	75.0	100%	74.7	100%	73.7	100%	71.8	100%
Fishery	Mackerel	5.2	-	5.5	-	5.7	-	5.7	-

Source: DOSM (Supply and Utilization Accounts (SUA) of Selected Agricultural Commodities); Manitoba Government (Canada)

The Current Issues

*Poultry prices up due to supply disruptions,
shortage of workers; and increased cost of
animal feeds*

What drives supply and demand disequilibrium?



1. Labour shortages has exacerbated the supply of chicken

- Johor can only produce 60% of the demand because a worker needs to take care of over 30,000 chicks. →
- Low life expectancy of chicken
- Low quality of chicken supply



2. Shifted behavioural consumption

- An incremental increase in consumer spending →
- Recovering demand amid higher festive demand

- Domestic production was sufficient to meet demand of chicken in the market.
- But, the supply constraints (time of breeding, costs pressure and shortages as well as weather change) have restrained the breeders' capacity to meet unexpectedly surge in domestic demand in the short term.

News:

- The Federation of Livestock Farmers' Association of Malaysia (FLFAM) indicated that the production had recovered from last year but still could not meet the unexpectedly high demand. They expect the problem would be resolved within a month (June 2022) as the supply-demand gap closes.

What drives supply and demand disequilibrium? (cont.)

3. The Russia-Ukraine war shocks



Ukraine and Russia account for nearly 15% of the global supply of corn*

Soaring prices of maize and soybean

Notably, primary ingredients for meat chicken, including cereal grain (e.g. corn) and oilseed meals (e.g. soybean), of which cereal grains take up between 60%-70%. A substantial rise in the cost of animal feeds can significantly affect domestic poultry breeders, where about 72% of overall cost goes into chicken feed and is imported from overseas, such as Brazil and Argentina.



Domestic breeders might opt for lower quality or lower quantity of feeds

Size of chicken matters. Breeders want to increase the weight of chicken to 1.8 kilograms to avoid specific issues, such as loss of reputation or complaints by consumers.



Sluggish growth of chicken

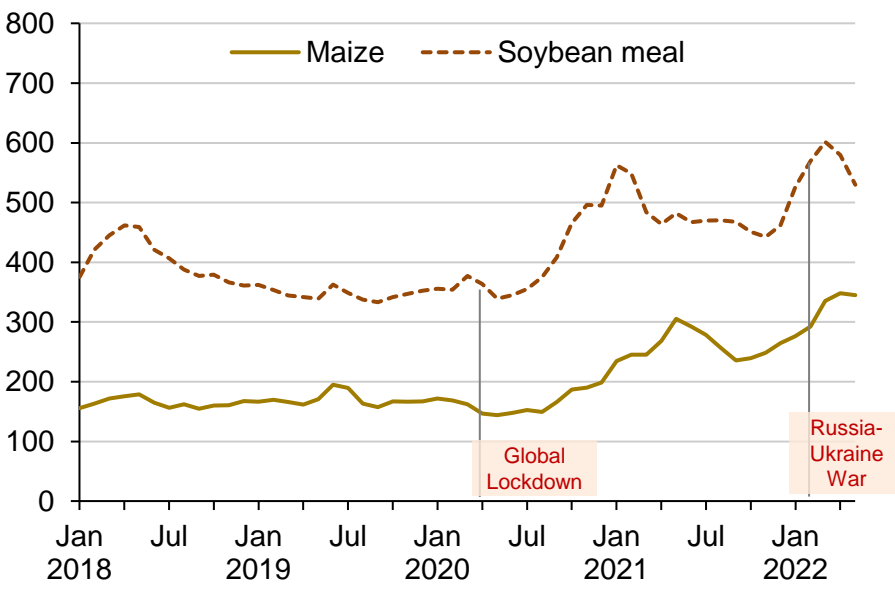
* Calculated from UN Comtrade Database

Increasing cost of animal feeds drives meat chicken price higher

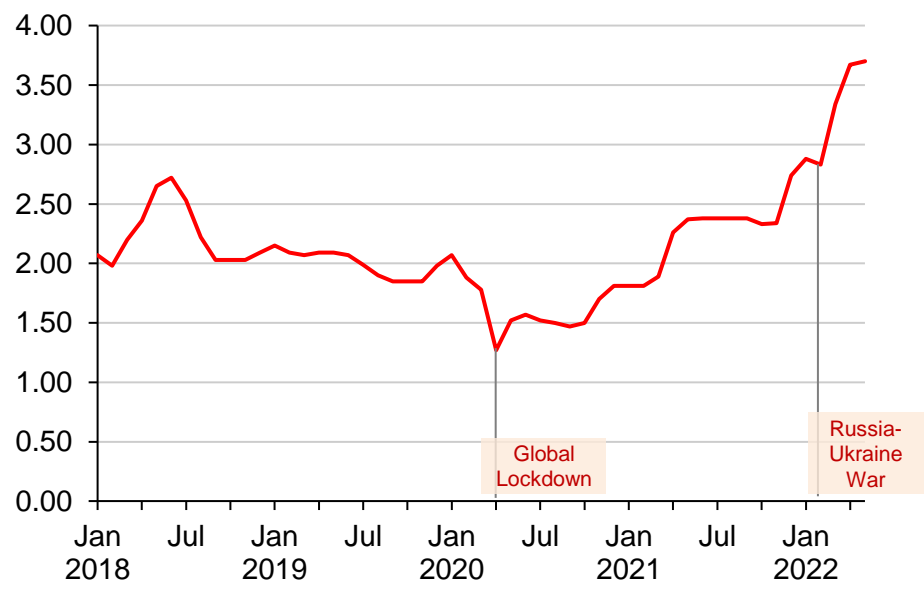
A glance at global prices of maize and soybean meal as well as meat chicken

	Maize (known as corn)	Average growth rate (Feb 2020 – May 2022) 2.5% per month ↗ <i>0.4% per month</i> <i>(Feb 2018 – Jan 2020)</i>	↗		US\$3.70 per kg (May 22)	Average growth rate (Feb 2020 – May 2022)
	Soybean meal	1.4% per month ↗ <i>-0.2% per month</i> <i>(Feb 2018 – Jan 2020)</i>	↗	US\$2.07 per kg (Jan 18)	2.1% per month ↗ <i>0.0% per month</i> <i>(Feb 2018 – Jan 2020)</i>	

Global Prices of Maize & Soybean meal
(US\$/metric ton)



Monthly Prices of Meat Chicken
(US\$/kg)



Source: World Bank

Increasing cost of animal feeds drives meat chicken price higher (cont.)

Prices of chicken of different grades have been increasing since April 2020



Standard Chicken

May 2022: **RM10.02 per kg**

⤴ +40.5%

Jan 2020: **RM7.13 per kg**

Average growth rate
(Feb 2020 – May 2022)

1.2% per month ↗

-0.3% per month
(Feb 2018 – Jan 2020)



Super Chicken

May 2022: **RM11.19 per kg**

⤴ + 40.4%

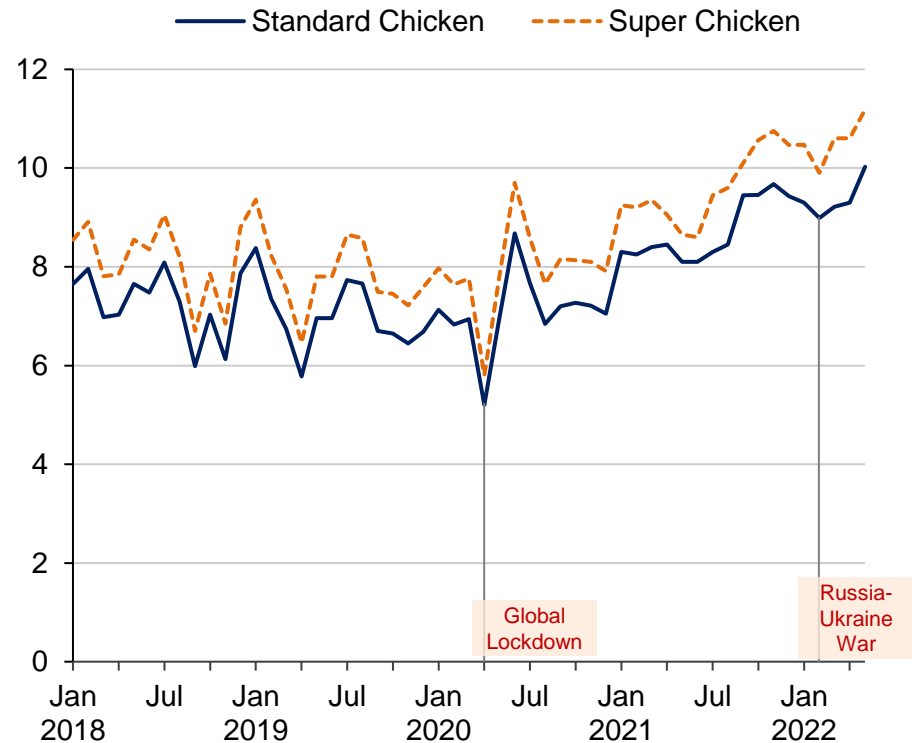
Jan 2020: **RM7.97 per kg**

Average growth rate
(Feb 2020 – May 2022)

1.2% per month ↗

-0.3% per month
(Feb 2018 – Jan 2020)

Retail Price for Standard Chicken and Super Chicken (RM/kg)




Standard Chicken: Slaughtered and dressed with leg, head, liver, gizzard, or any parts

Super Chicken: Slaughtered and dressed without leg, head, liver and gizzard



Source: Department of Veterinary Services (DVS); Federal Agricultural Marketing Authority (FAMA)

Russia-Ukraine war adds on a new shock on retail prices

The COVID-19 Pandemic

	Jan 2020		Feb 2022	Average growth rate (Monthly)
 Standard Chicken	RM7.13 per kg	+ 26.1% →	RM8.99 per kg	0.9% per month <i>-0.3% per month (Feb 2018 – Jan 2020)</i>
 Super Chicken	RM7.97 per kg	+ 24.2% →	RM9.90 per kg	0.9% per month <i>-0.3% per month (Feb 2018 – Jan 2020)</i>

Russia-Ukraine war

	Feb 2022		May 2022	
 Standard Chicken	RM8.99 per kg	+ 11.5% →	RM10.02 per kg	3.7% per month
 Super Chicken	RM9.90 per kg	+ 13.0% →	RM11.19 per kg	4.2% per month

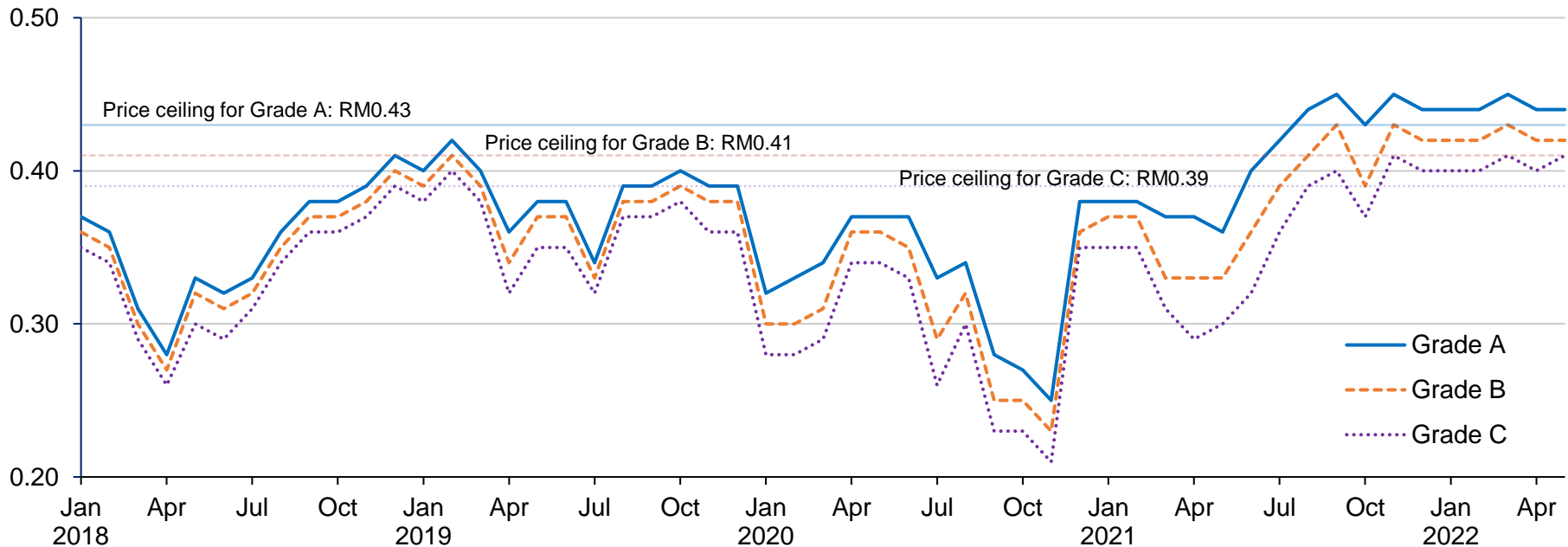
Starting early-December 2021, the Government **fixed the ceiling prices for chicken and eggs at various levels and categories** throughout the supply chains to cope with food inflation. The latest prices for standard and super chicken were capped at **RM8.90 per kg and RM9.90 per kg, respectively at retail level in Peninsular Malaysia (excluding Langkawi) since 5 Feb 2022.**

Russia-Ukraine war adds on a new shock on retail prices (cont.)

Egg prices have increased slightly

- Grade A, B and C eggs **increased between 1.1% and 1.4% per month** from Feb 2022 to May 2022.
- Under the price ceiling, the mandated maximum price for **Grade A, B and C is fixed at RM0.43, RM0.41 and RM0.39 per egg respectively.**

Retail Price for Eggs in Malaysia
(RM per egg)



Source: DVS; FAMA

Prices of chicken and eggs were generally priced above retail price ceiling

Notably, the increase in chicken prices was significant. For instance, the standard chicken was priced at RM8.90 – RM12.00 per kg at retail level, whereas the price ceiling was just RM8.90 per kg in Peninsular Malaysia (excluding Langkawi).

Goods at retail level	Unit	Price (RM) based on 2 JUN 2022					
		Peninsular Malaysia (except Langkawi)		Sarawak		Sabah	
		Price Ceiling	Market Price	Price Ceiling	Market Price	Price Ceiling	Market Price
Standard Chicken	Per KG	8.90	8.90 – 12.00	9.30 – 12.40	9.30	10.50 – 10.80	11.00 - 11.50
Super Chicken	Per KG	9.90	9.80 – 13.00	10.30 – 13.20	11.00 – 12.00	11.50 – 11.80	11.00 – 12.00
Grade A Chicken Egg	Each	0.43	0.46	0.45 – 0.48	0.45-0.46	0.48 – 0.49	0.47 - 0.48
Grade B Chicken Egg	Each	0.41	0.44	0.43 – 0.46	0.43	0.47 – 0.48	0.46 - 0.47
Grade C Chicken Egg	Each	0.39	0.42	0.40 – 0.44	0.41	0.46 – 0.47	0.45 - 0.46

Standard Chicken: Slaughtered and dressed *with* leg, head, liver, gizzard, or any parts.

Supper Chicken: Slaughtered and dressed *without* leg, head, liver, or gizzard.

Source: Federal Government Gazette; FAMA

What drives supply and demand disequilibrium? (cont.)

4. Diseases and extreme weather conditions

Risk factors to the breeders, especially in the open coops

For example:

Extreme weather



- Heat stress
- Low appetite
- Easily tiredness



Reduced growth
Quality of chicken



In a nutshell:

- The COVID-19 pandemic induced supply disruptions; recovering demand; labour shortages, diseases and extreme weather conditions have dampened the output and productivity as well as the quality of poultry breeders.
- The Russia-Ukraine war inflicted supply and price shocks for maize (corn) and soya bean as well as other commodities have added a new layer of cost on the poultry industry via increasing cost of animal feeds.

Solutions & Commentaries

Sustainable poultry management

Administrative and trade measures to address the chicken shortages

Announcement	Measures	Implementation date
3 Dec 2021	Malaysian Family Maximum Price Scheme	7 Dec 2021 – 31 Dec 2021
31 Dec 2021	Extended Malaysian Family Maximum Price Scheme	1 Jan 2022 – 4 Feb 2022
31 Jan 2022	Revised price ceiling & Subsidies	5 Feb 2022 – 5 Jun 2022
18 May 2022	Abolition of Approved Permit (AP) for chicken cuttings and whole chicken	18 May 2022
21 May 2022	Reallocate chicken surplus stock to states with shortage	
23 May 2022	Expansion and optimisation of facilities	
23 May 2022	Export ban	1 Jun 2022
2 Jun 2022	Extended price ceiling	6 Jun 2022 – 30 Jun 2022

Note:

- Standard chicken prices were fixed at RM9.50 per kg during the Deepavali celebration (1–7 Nov 2021), then decreased to RM9.30-RM9.50 (7 Nov to 31 Dec 2021), RM9.10 (1 Jan to 4 Feb 2022) and RM8.90 (5 Feb to 30 Jun 2022) in Peninsular Malaysia (excluding Langkawi).
- Export ban on 3.6 million chickens per month until domestic production and prices are stabilised.

Source: Federal Government Gazette; Various

1. Price ceiling to ensure affordable prices

- Effective from 5 February to 5 June 2022, a mandated maximum price of chicken and eggs was revised and implemented.
- Subsequently, the price ceiling was extended to 30 June 2022.

Good	Unit	Price (RM)								
		Peninsular Malaysia (except Langkawi)			Sarawak			Sabah		
		Producer	Wholesale	Retail	Producer	Wholesale	Retail	Producer	Wholesale	Retail
Live Chicken	Per KG	5.60	6.05	-	5.80 – 8.10	6.30 – 8.10	-	6.30	6.30	
Standard Chicken	Per KG	-	7.60	8.90	-	8.10 – 11.20	9.30 – 12.40	-	9.50 – 9.80	10.50 – 10.80
Super Chicken	Per KG	-	8.90	9.90	-	9.30 – 12.40	10.30 – 13.20	-	10.50 – 10.80	11.50 – 11.80
Grade A Chicken Egg	Each	0.39	0.41	0.43	0.40 – 0.43	0.43 – 0.45	0.45 – 0.48	0.44 – 0.45	0.46 – 0.47	0.48 – 0.49
Grade B Chicken Egg	Each	0.37	0.39	0.41	0.38 – 0.41	0.41 – 0.43	0.43 – 0.46	0.43 – 0.44	0.45 – 0.46	0.47 – 0.48
Grade C Chicken Egg	Each	0.35	0.37	0.39	0.36 – 0.39	0.39 – 0.41	0.40 – 0.44	0.42 – 0.43	0.44 – 0.45	0.46 – 0.47

Standard Chicken: Slaughtered and dressed *with* leg, head, liver, gizzard, or any parts.

Supper Chicken: Slaughtered and dressed *without* leg, head, liver, and gizzard.

Source: Federal Government Gazette

2. Subsidies for producers

- In response to the price ceiling, subsidies were given to support the poultry farmers to sustain their operations, with **RM0.60 per kg for chicken** and **RM0.05 per egg for Grade A, B and C, respectively**.
- With a long period of price ceiling and continued hike in raw material prices, including animal feeds, the increased costs have outpaced the price ceiling, and hence, the subsidies were not enough to cover their cost. The producers will be disincentivised to increase supply.
- There were instances where the breeders were getting their subsidy payment late, and hence, affecting their cash flow.

Potential risks to price ceiling and subsidies: **Market exit and supply low-quality chicken**

News 1:

- Although some shops, such as chicken rice shops possessed sufficient supply, but the chicken supply was underweight and the cost is higher at RM10.50 per kg.

News 2:

- The application of subsidies requires breeders to go through many paperwork, such as contract agreements, and hence, slowing down the process.

News 3:

- According to Prime Minister, the offered subsidies totalling RM729.43 million, mainly benefitted small businesses with only RM50 million of disbursement. It is found that major companies had no interest in applying for the subsidy and instead, wanted the government to allow chicken prices to be dictated by the market.

3. Abolition of Approved Permit (AP)

- The abolition of the AP for whole chicken and chicken parts allows the importers to source for supply and mitigate the chicken shortages in Malaysia.
- Though Malaysia has near self-sufficiency of chicken, the liberalisation of AP may not be of help in this current situation. That said, the permanent abolishment of AP is a good move as it encourages the freer entry of players into the market amid domestic suppliers that would face competition from abroad.
- Besides the abolishment of AP, the sources of suppliers also need to be looked into.

Potential risks: **Limited quantity of imported goods and still-high prices**

- The shortage of chicken meat is a global phenomenon. Hence, the quantity of chicken meat imports may be somewhat limited.
- Prices of imported chicken will still be higher due to increased costs as well as the impact of the weak Ringgit.

4. Export restrictions

- A ban on exporting 3.6 million chickens per month to shift the current production to meet domestic demand until the production and price level are stabilised.

Potential risks: **Business reputation and diversion of orders**

- The export ban may conceivably reduce business reputation; for instance, a breach of the contract between farmers and buyers may result in financial losses.
- This measure may cause a diversion of orders from Malaysia to our competitors such as Thailand, which does not impose an export ban.

'Chicken-rice crisis' as Singapore's national dish hit by Malaysian export ban

By Heather Chen, CNN

Updated 0704 GMT (1504 HKT) June 2, 2022

Note: According to Ministry of Agriculture and Food Industries (MAFI), only 6% of chicken production is for export.

5. Reallocation, expansion and optimisation

- Allocation of the chicken stock from one state to offset insufficient supply in another state.
- Implementation of chicken buffer stock and optimisation of storage facilities owned by the Ministry of Agriculture and Food Industry (MAFI) and related agencies.
- Simplified application of subsidies provides convenient access to poultry farmers.
- Expansion of recognised slaughterhouses increases the domestic supply of chicken.



Short-term solutions to cope with the chicken shortage

1. Adjustment of price ceiling and subsidies

How?

- Review the ceiling price and subsidies from time to time so as not to misalign too much from prevailing market prices
- Price ceiling and subsidies can be counterproductive and distort the allocation of resources
- Targeted subsidies for the vulnerable households

Risk?

- ❖ Stopgap measure
- ❖ Continued subsidies will burden the persistent budget deficits
- ❖ The unsustainable subsidies and budget deficit increase the material risks to undermine the country's creditworthiness

2. Abolishment of price ceiling and subsidies

How?

- Invisible hand helps the demand and supply of goods in a free market, whereby the chicken price will find its equilibrium without any intervention

OR

Risk?

- ❖ Consumers' demand will adjust their consumption behaviour if prices are not artificially fixed
- ❖ Concerns about further price increases if the supply cannot cope with higher demand

Medium-to long-term: Food sustainability and Food Security

- **Food security, price affordability and stability remain a national priority for all.** There are no simple solutions but complex tasks to tackle food inflation and food security.
- Public-Private Partnership is needed to ensure a sustainable food supply and price affordability.
- In ensuring the sustainability of the agriculture sector and food security, we propose the following action plans in the short-and medium-term:



Stop market intervention. Government's regulatory interventions though well-intended, are often counterproductive. They distort the functioning of the market and the allocation of resources as well as a disincentive towards farm production. The Government's primary focus is to create competition (not protection) in every segment of the food supply chains (producer, procurement, stockpiling and food distribution system) so as to reduce costs, curb rent-seeking and plug leakages in the food management system. Food subsidies should move from products to targeted vulnerable households to ease the impact of rising cost of living.



Encourage technology diffusion and smart farming. Both the Government and private sector have to accelerate technology assimilation in food and farming concerning environmental sustainability, climate change, crop yields and mechanisation. This will reduce dependence on costly inputs, labour, fertilisers, and pesticides as well as stimulate food production.

Medium-to long-term: Food sustainability and Food Security (cont.)



Increase arable land for farming. A mere 5.5% of total planted areas (close to 450,000 hectares) was allocated for fruits, vegetables, herbs, species and other crops. On average, less than 200,000 hectares of land were used for fruit crops and less than 100,000 hectares for vegetables and cash crops in 2016-2020. This compared to 5.9 million hectares for oil palm trees and 1.1 million for rubber trees.



Shoring up all elements of the food supply chain from producers to consumers (planters/growers, food processing industry and food wholesaler and retail distribution sector). Building a more resilient food supply chain and management system that has more capacity to gather, process, move and store in different geographic areas of the country will provide more and better market options for consumers and producers.



Provide real-time market information. Invest in market information systems to provide reliable and timely data on food production, demand and supply, trade and prices. This will send the right price signals from producers to consumers; to strengthen the supply chain, stabilise prices, reduce business risk and increase response time.



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