



BUSINESS OPPORTUNITIES IN THE AGRICULTURE AND AGRIFOOD SECTOR



DEPARTMENT OF AGRICULTURE AND AGRIFOOD
MINISTRY OF PRIMARY RESOURCES AND TOURISM
BRUNEI DARUSSALAM

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INTRODUCTION

- Agriculture and agrifood industries are part of the major primary resources and processing sectors which can contribute to the growth of Brunei's Gross Domestic Product (GDP), exports and Economic Diversification. As of 2020, the agriculture industry contributed 0.6% towards the country's GDP.
- Through our strategic plan, the agriculture and agrifood sector output is expected to increase exponentially with the livestock and crops industries as the leading contributors, followed by the agrifood processing industry.
- To further develop the agriculture and agrifood sector, particularly livestock and crops industries, the Department of Agriculture and Agrifood has taken efforts to encourage the participation of local and foreign direct investment (FDI) as well as to increase the domestic and export market access.

VISION & MISSION

DEPARTMENT OF AGRICULTURE AND AGRIFOOD

VISION

Towards Increasing Production on Agriculture and Agrifood Based Industries through Increasing Productivity And High Technology Oriented For Domestic and Export Market

MISSION

To Stimulate The Growth of Agriculture and Agrifood-Based Industries through High-Technology and Export, Encouraging Progressive Involvement of Local and Foreign Direct Investment, while focusing on High-Yield Production inclusive of the Primary and Processing Industries

STRATEGIC THRUST

Growth

“...in the last few years, the growth of Gross Domestic Product (GDP) has slowed down which requires us to double domestic production, especially in the non-oil and gas sector.”

(Titah excerpt of His Majesty Sultan Haji Hassanal Bolkiah Mu'izzaddin Waddaulah ibni Al-Marhum Sultan Haji Omar 'Ali Saifuddien commemorating the New Year 2016)



Export

“...It is important to remember that having a small domestic market is not an excuse for slow production growth and every company, whether private or government-owned, should be capable of trading/exporting their products and services outside the country.”

(Titah excerpt of His Majesty Sultan Haji Hassanal Bolkiah Mu'izzaddin Waddaulah ibni Al-Marhum Sultan Haji Omar 'Ali Saifuddien commemorating the New Year 2016)



Productivity

“...the country's economic growth can be stimulated by giving priority to research and the use of latest technology.”

(Titah excerpt of His Majesty Sultan Haji Hassanal Bolkiah Mu'izzaddin Waddaulah ibni Al-Marhum Sultan Haji Omar 'Ali Saifuddien commemorating the New Year 2016)



Sustainable

The implementation of strategies and programs to increase the output of these sectors must be sustainable. In order to reduce dependency on government funding, 'public-private-partnership', participation of local and foreign investors and other appropriate approaches will be explored.



STRATEGIC OBJECTIVES



To enhance the growth of agriculture and agrifood output continuously every year so as to contribute to the GDP growth, export growth and could lead to economic diversification;



To increase productivity of agriculture and agrifood industries continuously through the use of technology, modern techniques and encouraging the active participation of local and foreign direct investors (FDI);

STRATEGIC OBJECTIVE (CONTINUED)



To reduce the dependence on imports of agricultural based products, allow the imports of raw materials for the purpose of generating the agrifood processing industry growth;



To reduce dependency on government expenditure in the implementation of strategies and programs while increasing output growth in agriculture and agrifood sector by other methodologies such as Public Private Partnership (PPP), joint ventures and others;

STRATEGIC OBJECTIVE (CONTINUED)



To create the investment opportunities and local businesses in the agriculture and agrifood sector which will ultimately contribute to the creation of local employment;



To implement preventive measures and controls in order to protect the agriculture and agrifood industries from plant diseases, pests and animal diseases for the sustainability of industries concerned;

STRATEGIC OBJECTIVE (CONTINUED)

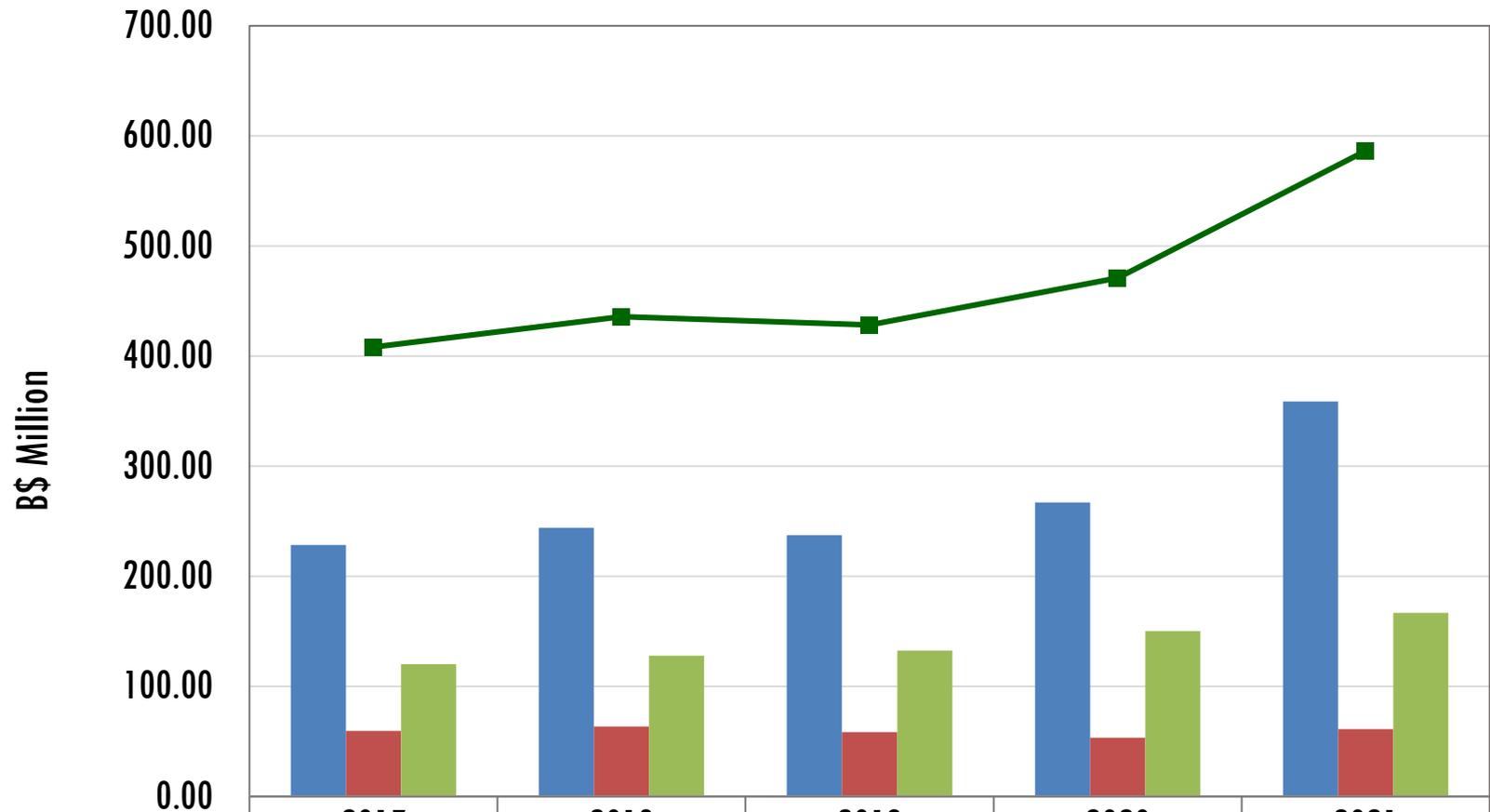


To ensure quality assurance and safety of the food industry based on agriculture for the welfare of the people



CURRENT STATUS

AGRICULTURE AND AGRIFOOD INDUSTRIES GROSS OUTPUT TREND AT CURRENT PRICE 2017 - 2021



Livestock Industry	228.38	244.13	237.39	267.17	358.77
Crops Industry	59.65	63.69	58.41	53.46	61.10
Agrifood Industry	120.19	127.98	132.47	150.23	166.69
Total	408.22	435.80	428.27	470.86	586.56

LIVESTOCK INDUSTRY DEVELOPMENT 2021

COMMODITY	LOCAL		IMPORT		TOTAL	SELF SUFFICIENCY
	Quantity (Unit)	Retail Value (\$ Million)	Quantity (Unit)	CIF Value (\$ Million)	Quantity (Unit)	%
Broilers (mt)	30,587.09	139.73	223.91	0.69	30,811.00	99.27%
Eggs (Million eggs)	172.74	28.91	0.83	0.11	173.57	99.52%
Beef – Buffalo & Cattle (mt)	3,825.13	83.95	685.67	6.78	4,510.80	84.80%
Goat & Sheep (mt)	131.69	3.688	460.15	4.65	591.84	22.25%
Day old chicks (Million heads)	18.99	22.79	2.60	2.08	21.60	87.95%
Fertilized eggs (Million eggs)	12.01	9.61	8.63	5.36	20.64	58.19%
Miscellaneous Livestock (mt)	734.46	3.80	n/a	n/a	n/a	n/a
Livestock Feed (mt)	72,676.26	66.28	98,678.17	57.35	171,354.44	42.41%
TOTAL		358.77		77.02		

Note: CIF – Cost, Insurance, Freight

CROPS INDUSTRY DEVELOPMENT 2021

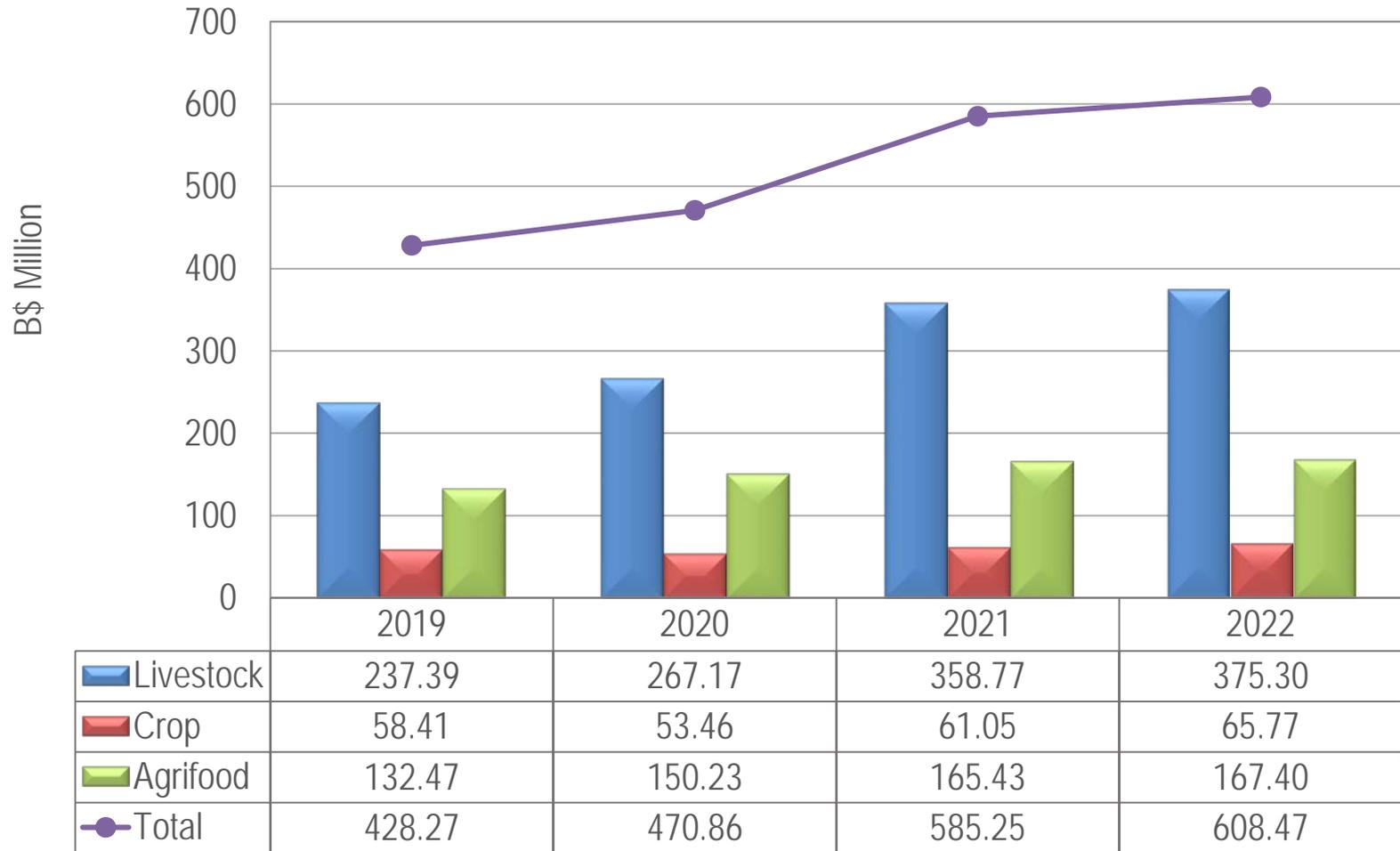
COMMODITY	LOCAL		IMPORT		TOTAL QUANTITY (UNIT)	SELF SUFFICIENCY
	Quantity (Unit)	Retail Value (\$ Million)	Quantity (Unit)	CIF Value (\$ Million)		
Tropical Vegetables (mt)	7,486.10	25.06	10,756.71	19.84	11,261.47	41.04%
Tropical Fruits (mt)	6,273.87	19.99	15,075.08	37.88	14,960.50	29.39%
Paddy (mt)	4,110.75	6.58	0.00	0.00	n/a	n/a
Miscellaneous crops (mt)	1,619.92	4.88	16,311.63	19.98	17,929.64	9.03%
Ornamental Plants (plants)	818,757	4.55	209,402	0.63	1,023,079	79.63%
Cut Flowers (Cuts)	51,883	0.04	1,205,756	1.16	1,257,639	4.13%
TOTAL		61.10		79.50		

Note: CIF – Cost, Insurance, Freight

Rice self-sufficiency – 9.11%

TARGETS AND TRAJECTORIES

2019 - 2022



FOCUS INDUSTRIES

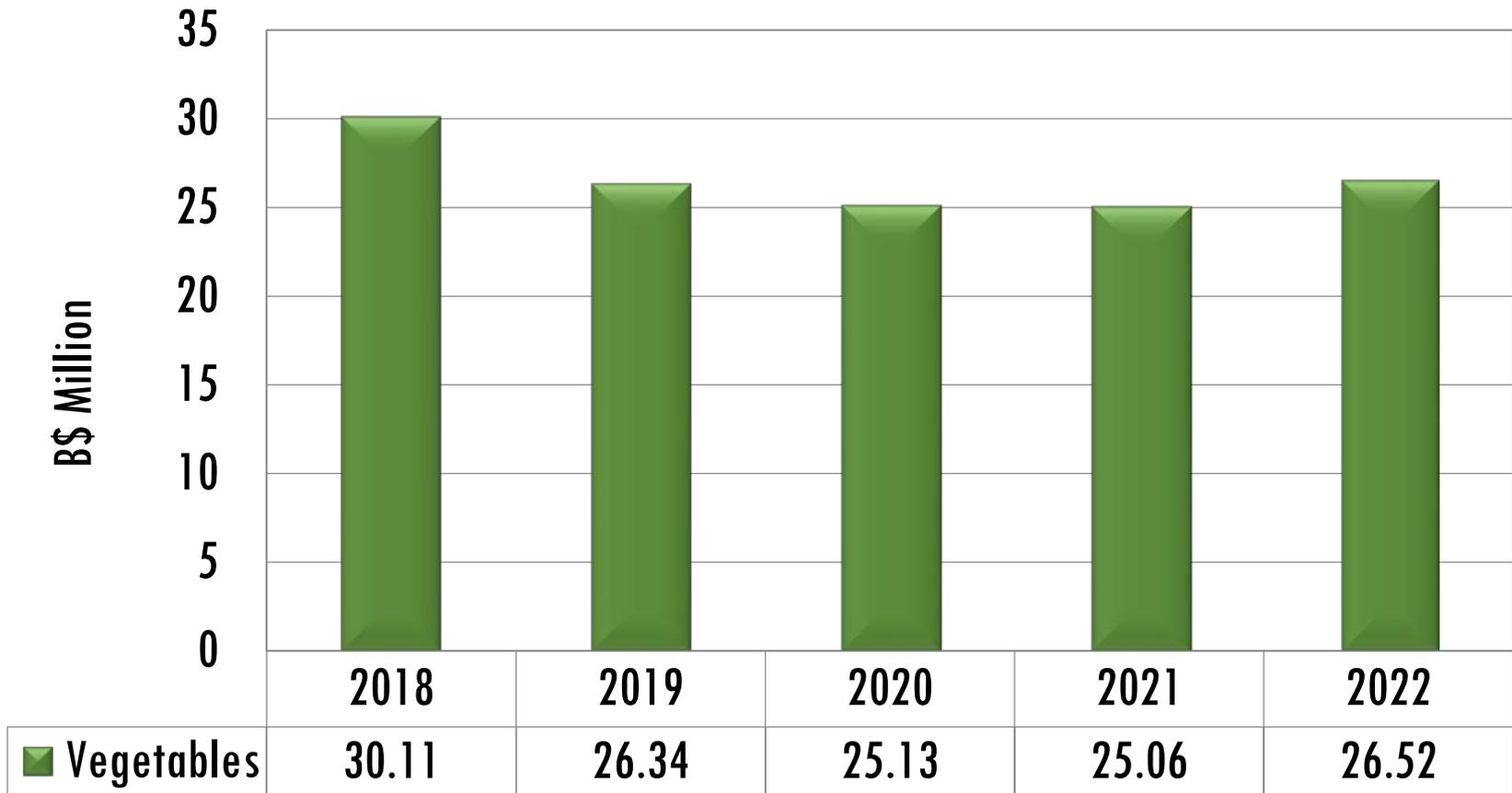


STATUS OF VEGETABLE INDUSTRY 2021

Total Consumption	18,242.8 mt
Tropical	11,264.1 mt
Temperate	6,978.7 mt
Est. Retail Value (B\$)	\$60.77 million
Per Capita Consumption	42.4 kg
Local Production	7,486.10 mt
Retail Value (B\$)	\$25.06 million
Percentage Production	41.0 %
Tropical Vegetables	66.5 %
Area Developed	1,259.8 ha
No. of Entrepreneurs	672 entrepreneurs

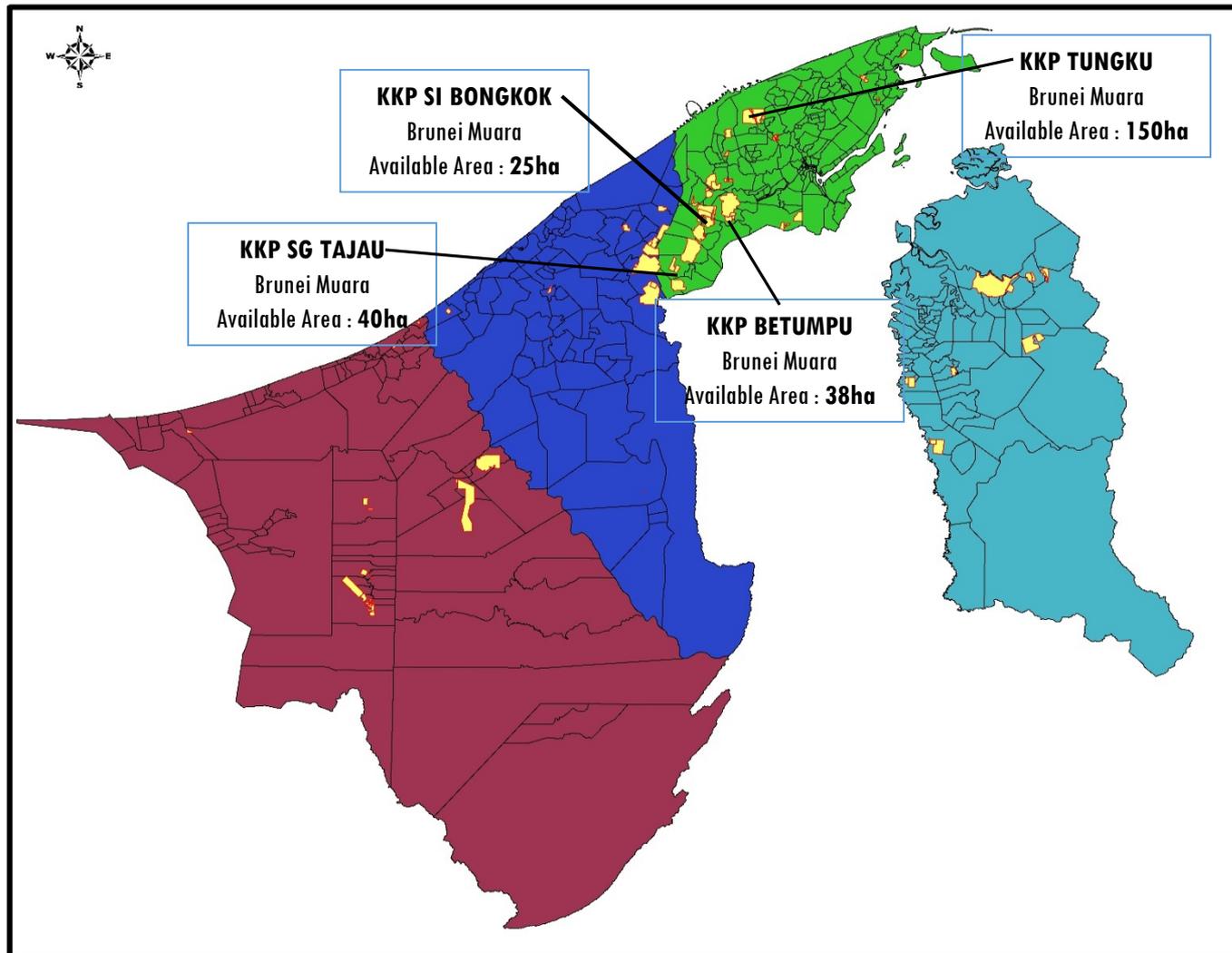
Import	10,756.7 mt
CIF Value (B\$)	\$19.84 million
Est. Retail Value (B\$)	\$35.71 million
Percentage Import	59.0 %
Average Retail Price (B\$)	\$1.69 – \$17.16 /kg
Average CIF Price (B\$)	
Tropical	\$0.33 – \$12.77 /kg
Temperate	\$0.93 – \$32.20 /kg
Brunei Population Size	429,999 people

VEGETABLE INDUSTRY TARGETS 2018 - 2022



Note : 2018 - 2021 actual data

VEGETABLE INDUSTRY AREAS



FOCUS & TARGET TECHNOLOGY VEGETABLE INDUSTRY



Hydroponics



LED Lighting



Vertical Farming



Fertigation



Greenhouses



Hanging
Fertigation

Photos sources:

<http://www.powerhousehydroponics.com/4-commercial-vertical-farms-worth-attention/>

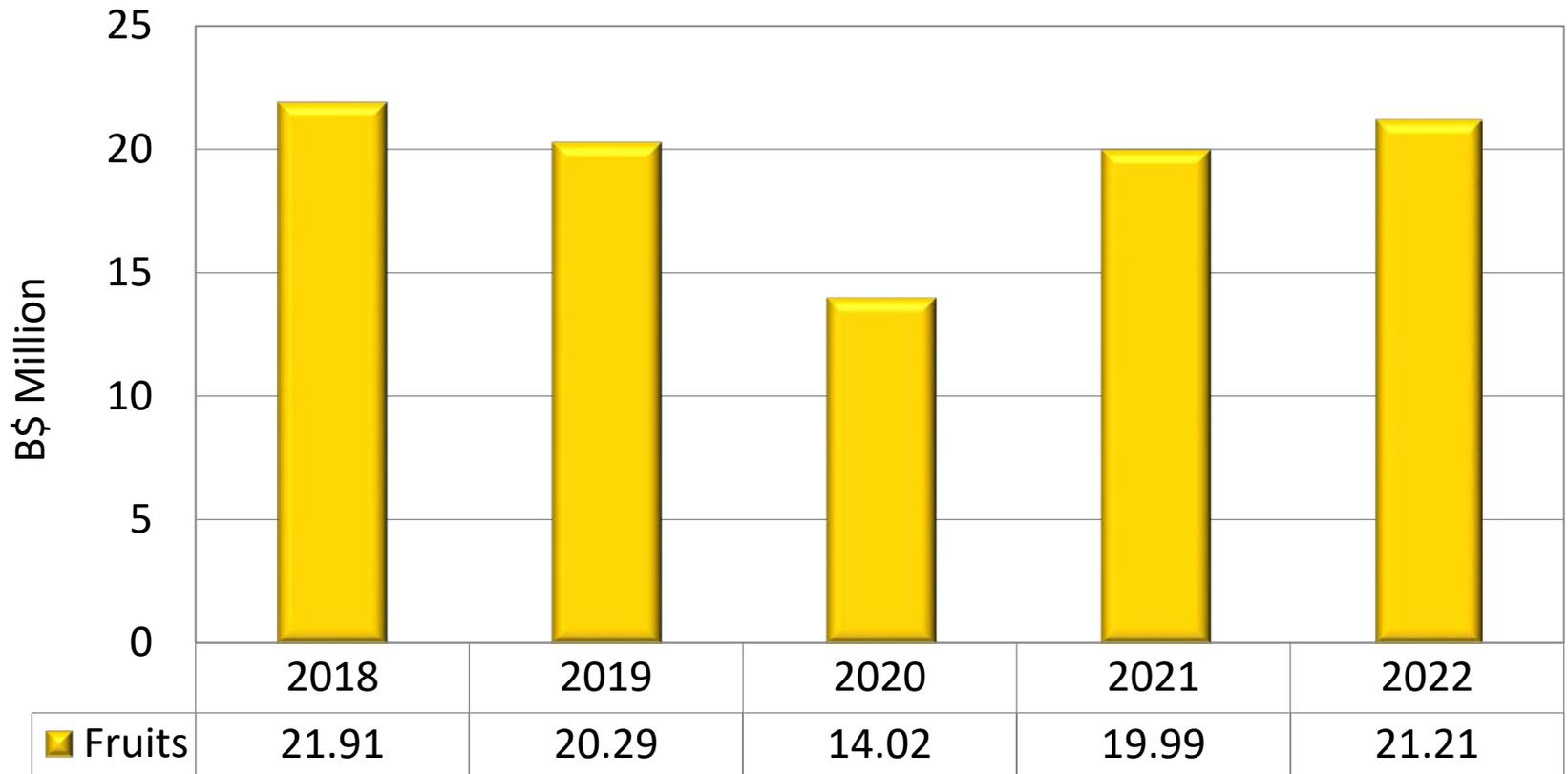
<http://www.eco-business.com/news/panasonic-ventures-into-farming-in-singapore/>



STATUS OF FRUITS INDUSTRY 2021

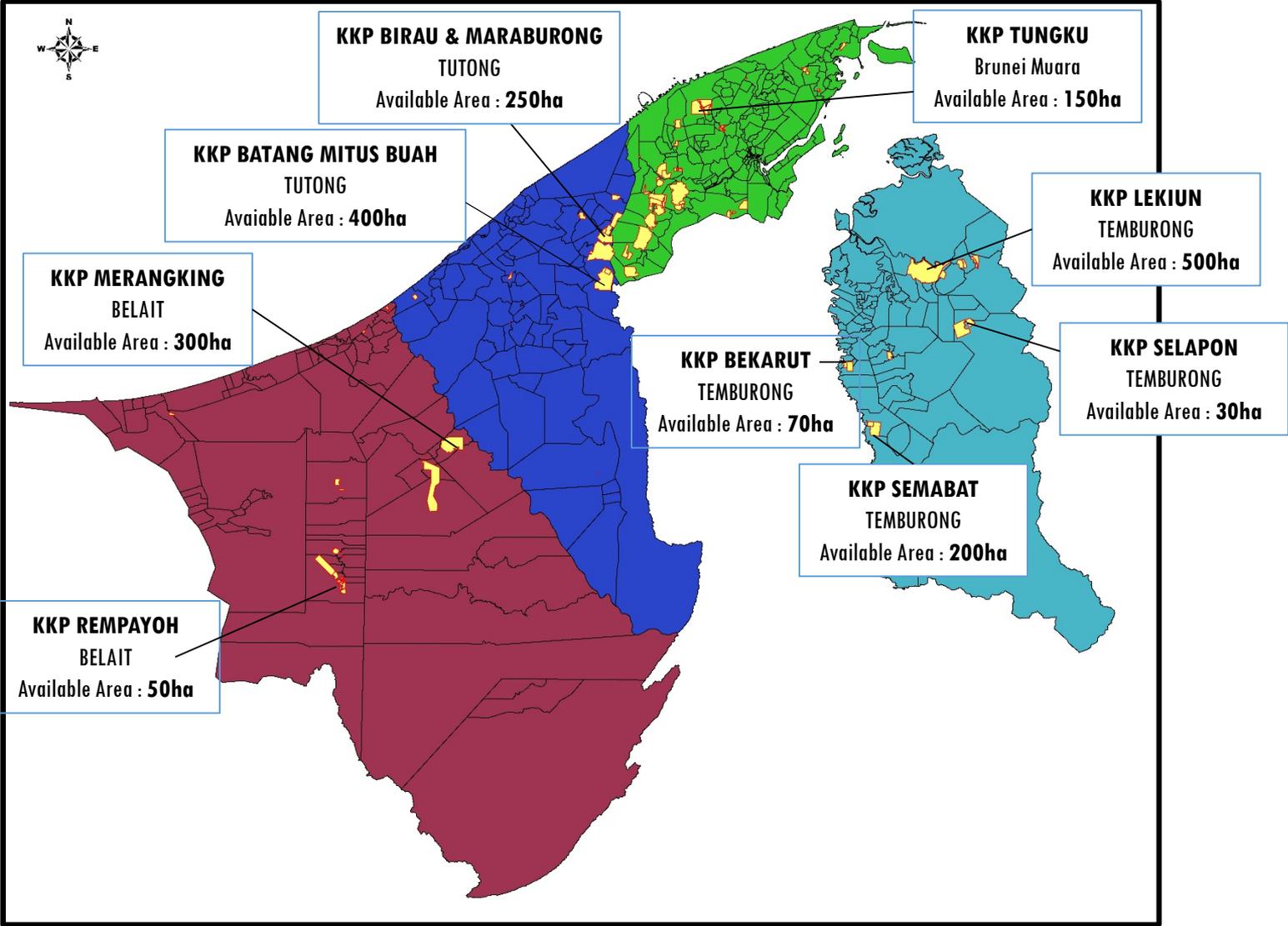
Total Consumption	21,348.9 mt	Import	15,075.1 mt
Tropical	14,960.7 mt	CIF Value (B\$)	\$37.88 million
Temperate	6,388.3 mt	Est. Retail Value (B\$)	\$61.59 million
Est. Retail Value (B\$)	\$81.58 million	Percentage Import	70.6 %
Per Capita Consumption	49.6 kg	Average Retail Price (B\$)	\$0.52 – \$11.34 /kg
Local Production	6,273.9 mt	Average CIF Price (B\$)	
Retail Value (B\$)	\$19.99 million	Tropical	\$0.33 – \$27.11 /kg
Percentage Production	29.4 %	Temperate	\$1.82 – \$44.56 /kg
Tropical Vegetables	41.9 %	Brunei Population Size	429,999 people
Area Developed	3,423 ha		
No. of Entrepreneurs	2,449 entrepreneurs		

FRUITS INDUSTRY TARGETS 2018 - 2022



Note : 2018 - 2021 actual data

FRUITS INDUSTRY AREAS



FOCUS & TARGET TECHNOLOGY

FRUITS INDUSTRY



Drip Irrigation



Fertigation



Greenhouses

Photos sources:

<http://www.powerhousehydroponics.com/4-commercial-vertical-farms-worth-attention/>

<http://www.eco-business.com/news/panasonic-ventures-into-farming-in-singapore/>



STATUS OF FLORICULTURE INDUSTRY 2021

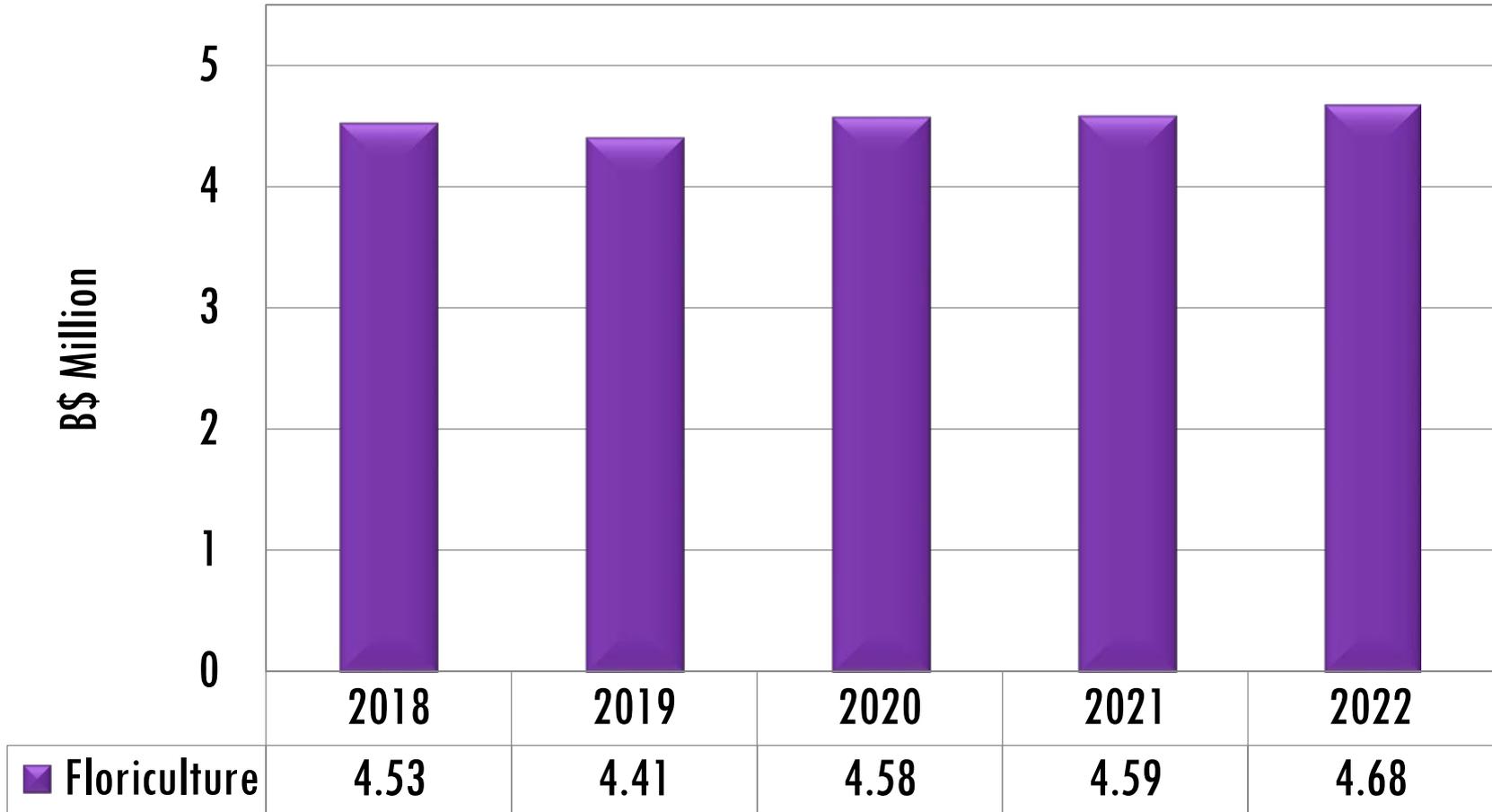
Ornamental Plants

Total Consumption	1,028,159 plants
Est. Retail Value (B\$)	\$ 5.56 million
Local Production	818,757 plants
Retail Value (B\$)	\$4.55 million
Percentage Production	79.6 %
Total Import	209,402 plants
CIF Value (B\$)	\$0.63 million
Est. Retail Value (B\$)	\$1.01 million
Percentage Import	20.4 %
Average Retail Price (B\$)	\$2.67 – \$20.26 /plant
Average CIF Price (B\$)	\$0.01 – \$1,418.35 /plant

Cut Flowers

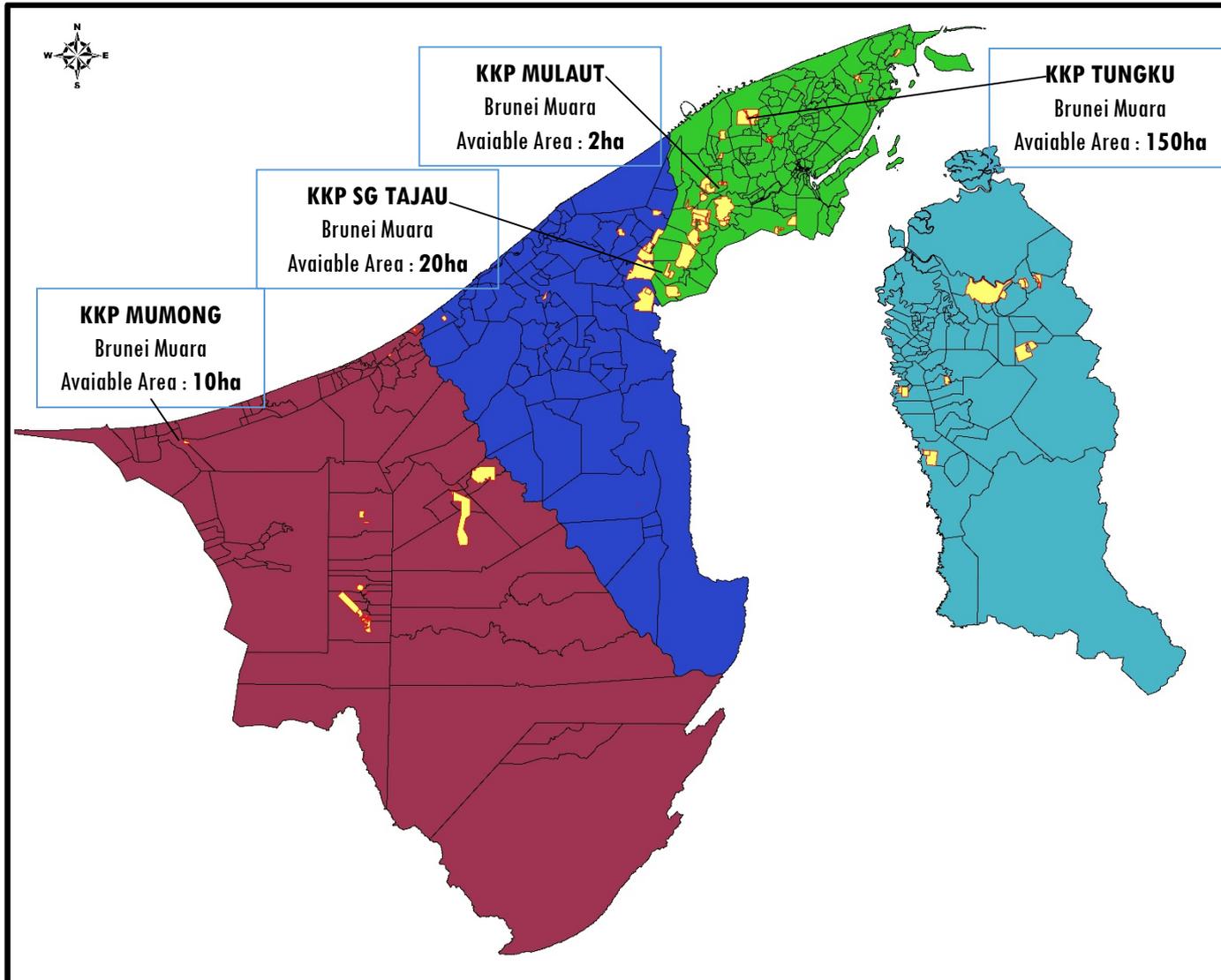
Total Consumption	1,257,639 cuts
Est. Retail Value (B\$)	\$1.90 million
Local Production	51,883 cuts
Retail Value (B\$)	\$0.04 million
Percentage Production	4.13 %
Total Import	1,205,756 cuts
CIF Value (B\$)	\$1.16 million
Est. Retail Value (B\$)	\$1.86 million
Import (%)	95.9 %
Average Retail Price (B\$)	\$0.74 – \$1.00 /cut
Average CIF Price (B\$)	\$0.14 – \$49.00 /cut

FLORICULTURE INDUSTRY TARGETS 2018 - 2022



Note : 2018 - 2021 actual data

FLORICULTURE INDUSTRY AREAS



FOCUS & TARGET TECHNOLOGY FLORICULTURE INDUSTRY



Blackout Screens



LED Lighting



Benching System



Grading System



Packaging System



STATUS OF PADDY INDUSTRY 2021

Total Consumption	4,110.75 mt
Est. Retail Value (B\$)	\$6.58 million

Local Production	4,110.75 mt
Retail Value (B\$)	\$6.58 million

Average Retail Price (B\$)	
Local Paddy Scheme	\$1.60 /kg

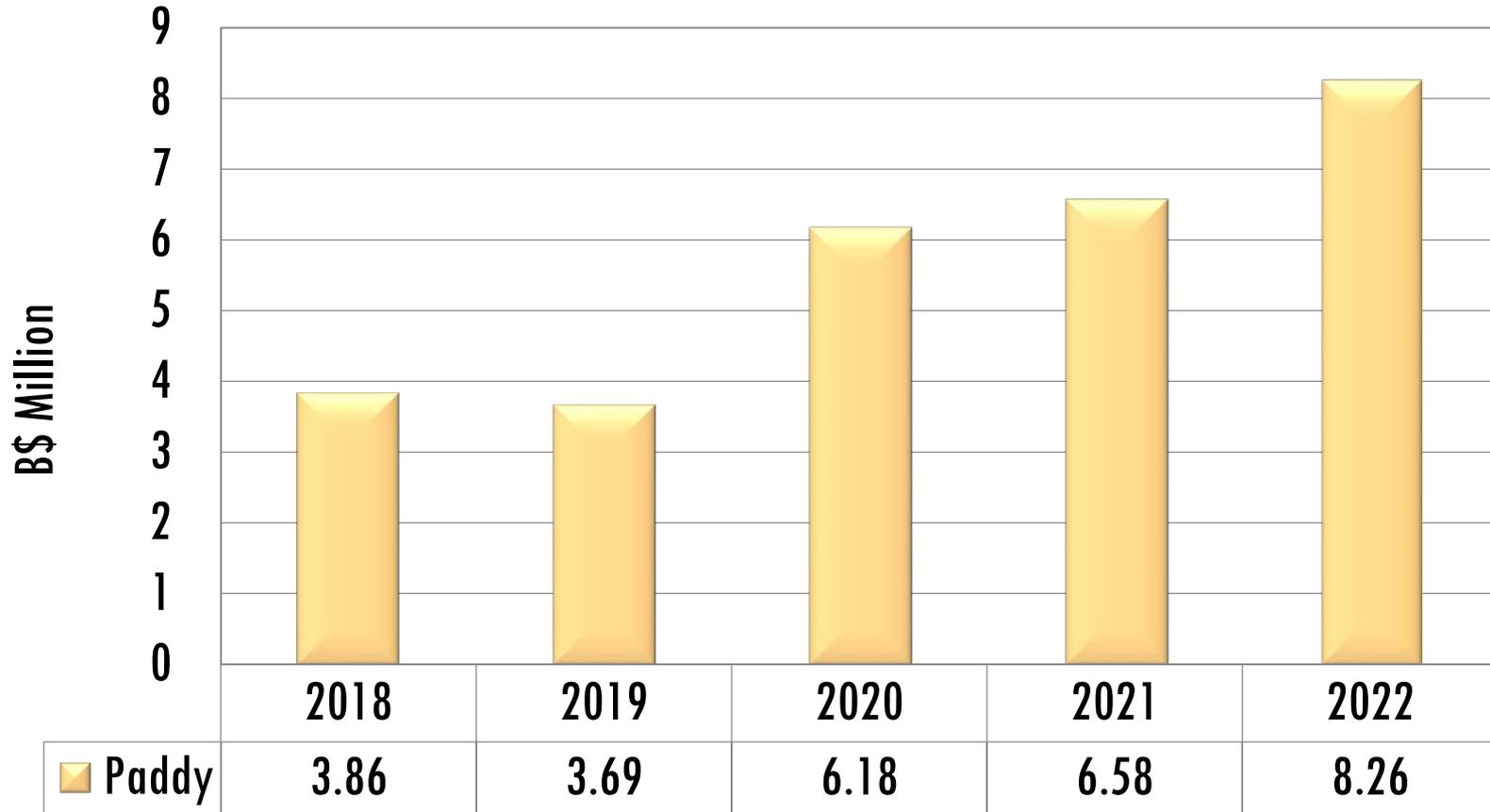
Area Developed	1,124.06 ha
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No. of Entrepreneurs	524 Entrepreneurs
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Note:

There is no import for paddy

PADDY INDUSTRY TARGETS 2018 - 2022



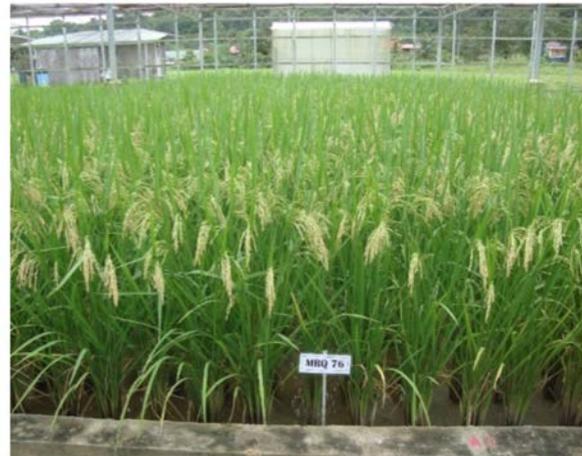
Note : 2018 - 2021 actual data

FOCUS TECHNOLOGY - HIGH YIELDING VARIETIES



2009 - LAILA

1st Modern inbred rice variety planted commercially (3mt/ha/season)



2016 - MRQ76

Variety originated from Malaysia (4-6mt/ha/season)



2016 - BDR5

Product of DOAA R&D. Targeted for rainfed areas (2mt/ha/season)



2018 - SEMBADA188

Variety originated from Indonesia. (5-6mt/ha/season)



Nov 2020 - TITIH

Variety selected through collaboration with Sunland Agritech Pte Ltd. (8.5mt/ha/season)



STATUS OF BROILER INDUSTRY 2021

Total Consumption 30,811 mt
 Retail Value (B\$) \$140.72 million
 Per Capita Consumption (kg/yr) 71.7 kg

Total Day Old Chick 21,595,869 birds
 Local 18,994,032 birds
 Import 2,601,837 birds
 Price Per Chick (B\$) 1.20 /bird

No. of Slaughter Broiler 20,391,393 birds
 Mortality Rate 8.11 %
 Growth Period 7 weeks
 Average Dressed Weight (kg) 1.50 /bird

No of Entrepreneurs 54 persons

Local Production 30,587.1 mt
 Retail Value (B\$) \$139.73 million
 Percentage Production 99.27 %
(not included processed product)

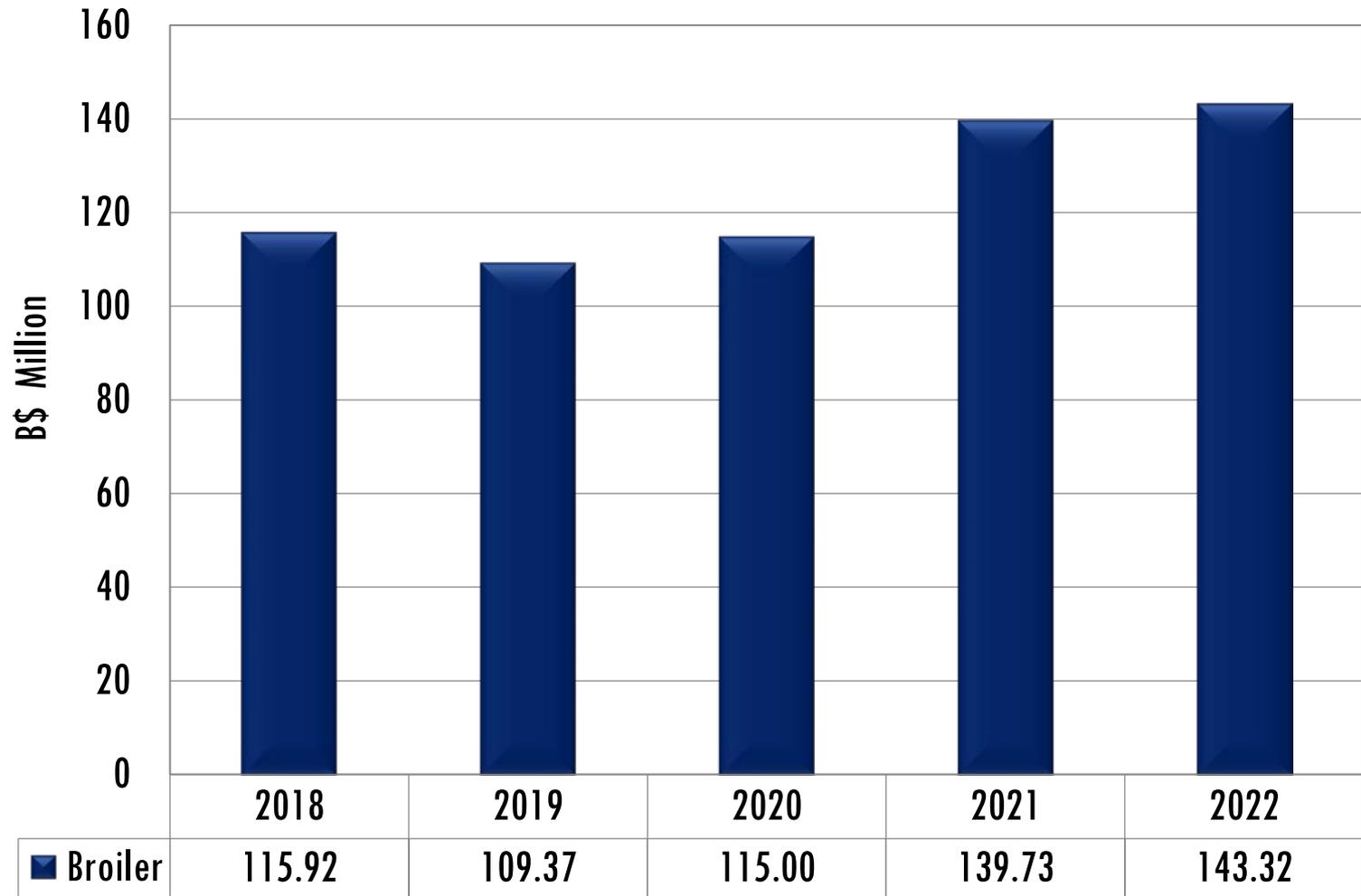
Import (Chilled & Frozen) * 223.9 mt
 CIF Value (B\$) \$0.69 million
 Est. Retail Value (B\$) \$0.99 million
 Percentage Import 0.7 %

Average Retail Price (B\$)
 Whole Chicken \$4.57 /kg

Average CIF Price (B\$)
 Part \$3.10 /kg
 Further Processed \$4.42 /kg
 Processed \$3.35 /kg

Brunei Population 429,999 persons

BROILER INDUSTRY TARGETS 2018 – 2022



Note : 2018 - 2021 actual data

FOCUS & TARGET TECHNOLOGY BROILER INDUSTRY



Automated feeding system



Automated water system



Ventilation fans



Efficient ventilation system



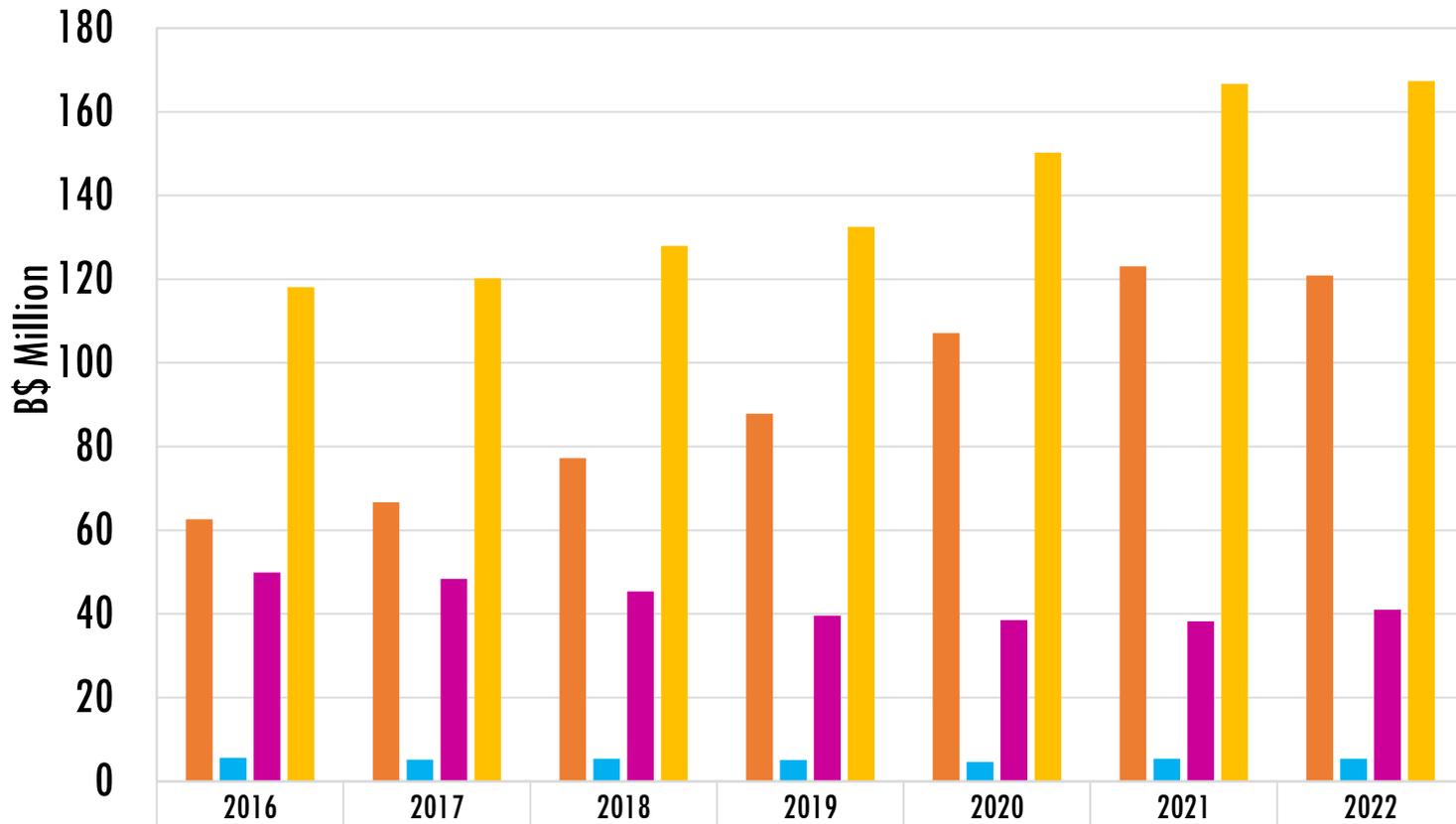
Air-conditioned system with air-conditioned wall

STATUS OF AGRIFOOD INDUSTRY 2021

- This industry contributed B\$166.69 million or 28% of the agriculture and agrifood sector.
- Categorized into:
 - Livestock Process and Value-Added Products
 - Crop Process and Value-Added Products
 - Others (Food and Drink)



AGRIFOOD INDUSTRY TARGET 2018 - 2022



	2016	2017	2018	2019	2020	2021	2022
■ Livestock Process and Value-Added Products	62.63	66.66	77.22	87.83	107.08	123.08	120.91
■ Crop Process and Value-Added Products	5.59	5.19	5.42	5.09	4.63	5.4	5.4
■ Others (Food and Drink)	49.89	48.34	45.33	39.55	38.51	38.2	41
■ Total	118.11	120.19	127.97	132.47	150.22	166.69	167.31

Note : 2018 - 2021 actual data

FOCUS & TARGET TECHNOLOGY AGRIFOOD INDUSTRY



Vacuum Packaging
Machine



Horizontal Packaging
Machine



Dough Sheeter



3 Tier Oven



Encrusting Machine

INITIATIVES

Land

- Agriculture Pilot Project
- Land Expansion
- Account Managers

Labour

- Localisation efforts with relevant agencies
- Recruitment of IBTE graduates
- Streamlining foreign labour application process

Capital

- Co-Matching schemes
- Contract Farming Program for Youth

Entrepreneur

- Local Market Facilitation
- Export Market Facilitation
- Corporate governance

Technology

- Solar technology
- Semi-conventional technology
- Drone technology

SPIN OFF OPPORTUNITIES IN AGRICULTURE AND AGRIFOOD SECTOR

- Production/Supply of Seeds and Seedlings
- Marketing Services
- Transportation Services
- Fertilizer Supplier
- Machinery Supplier
- Slaughter House
- Waste Disposal
- Hatchery



THANK YOU

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Website : <http://www.agriculture.gov.bn>