

CROP SURVEY



PTEXIM ANALYSIS

A FULL REPORT ABOUT BLACK
PEPPER CROP & MARKET GLOBAL

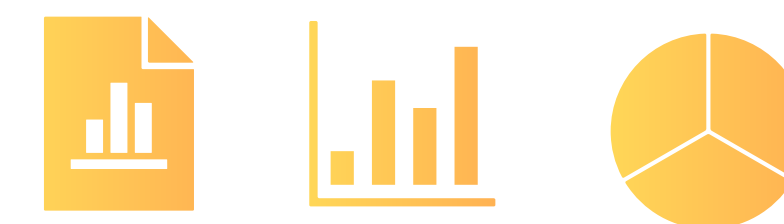
2022



CROP SURVEY

A FULL REPORT
ABOUT BLACK
PEPPER CROP &
MARKET GLOBAL

2022



PTEXIM ANALYSIS

ABOUT REPORT

Just over 1 month left until the end of 2021, a year of economic and political turmoil due to the impact of the global Covid-19 pandemic. Accordingly, the pepper market is not an exception to this impact. How does the pepper crop in 2022 tend to change? Forecast output, price level, supply - demand will be like?

Based on aggregated documents from various sources, analyzing multi-dimensional perspectives from the main factors affecting the pepper market, PTEXIM has conducted the Report on the Vietnam and world pepper crop in 2022. Hope this is a valuable reference, providing useful information. The report is certainly not without shortcomings, we look forward to receiving your sincere comments so that we can continue to improve in the following reports.



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PTEXIM CORP

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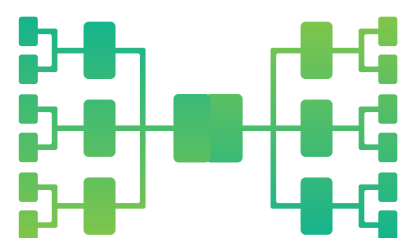
1



OVERVIEW OF THE WORLD'S PEPPER CROP SIZE IN 2021



PTEXIM CORP



PEPPER CROP SIZE 2021 & EXPORT SITUATION



PEPPER CROP SIZE 2021 AND EXPORT SITUATION

COUNTRIES	CARRY OVER 2020	IMPORT	CROP 2021	DOMESTIC CONSUMPTION	QUANTITY AVAILABLE TO EXPORT 2021
Brazil	5,500	200	95,000	7,000	93,700
Indonesia	3,500	500	55,000	30,000	29,000
Malaysia	2,000	1,000	20,000	7,000	16,000
Sri Lanka	6,000	0	25,000	12,000	19,000
Cambodia	2,100	0	15,000	450	16,650
China	12,800	60,000	30,000	90,000	12,800
India	20,000	25,000	65,000	70,000	40,000
Thailand	1,000	4,500	4,500	8,500	1,500
Madagascar	1,000	0	3,500	1,500	3,000
Ecuador	700	0	5,000	1,000	4,700
Viet Nam	45,000	30,000	220,000	10,000	285,000
Total	<u>99,600</u>	<u>121,200</u>	<u>538,000</u>	<u>237,450</u>	<u>521,350</u> (MT)

FROM 1ST JAN 2021 - 31ST OCTOBER 2021

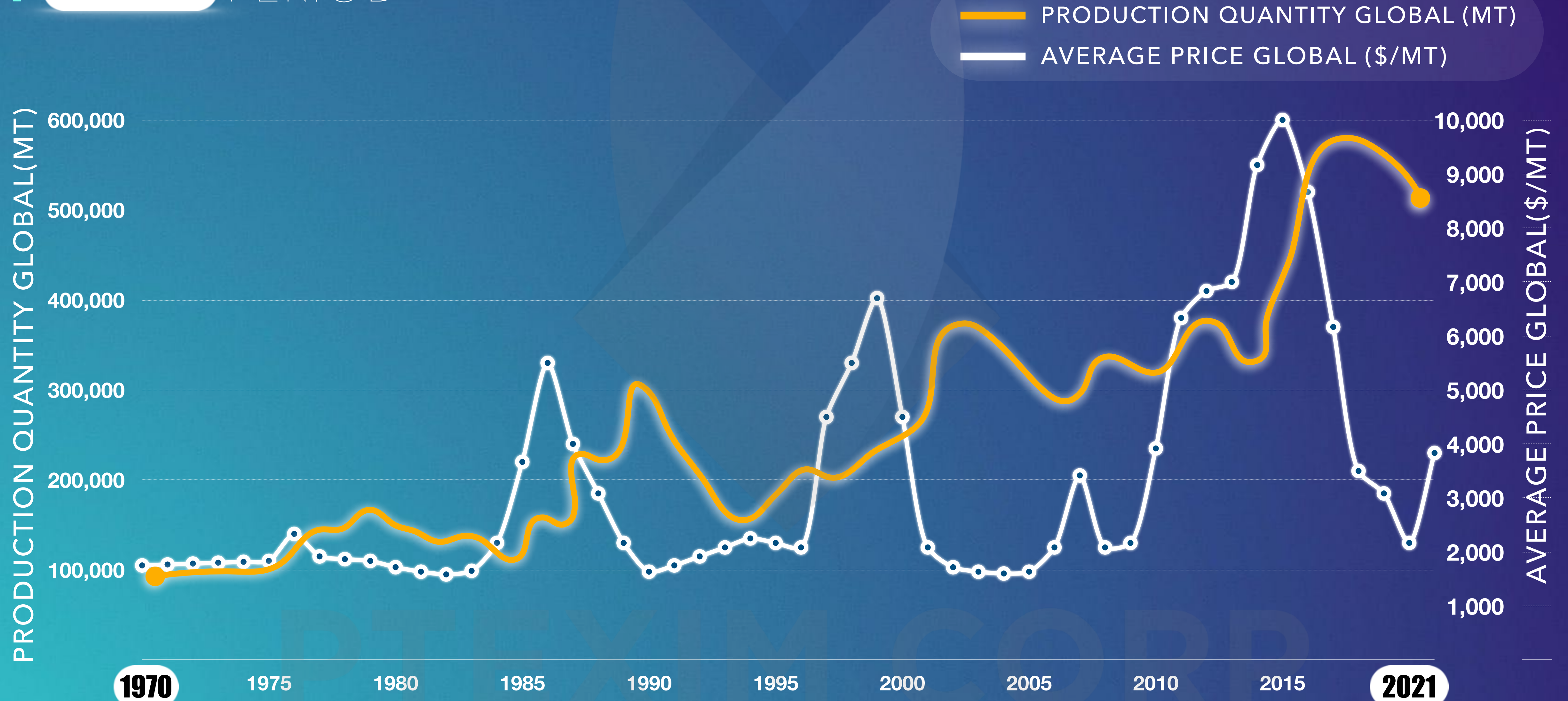
VIETNAM BLACK PEPPER PRICE CHART

i From the beginning of 2021 until now, the price of pepper has increased by **63%**. It is forecasted that the pepper price increase cycle will continue until 2022 & 2023 when the supply has been significantly shorted in the past time.



BLACK PEPPER PRODUCTION QUANTITY & AVERAGE PRICE GLOBAL

50 YEAR PERIOD





FORECAST OF VIETNAM'S PEPPER CROP IN 2022



VIETNAM AT A GLANCE



PRODUCTION AREA & QUANTITY

130,655 HECTARES



GIA LAI
(12,206 HA)

HARVESTING TIME

JAN FEB **MAR APR MAY** JUN JUL AUG SEP OCT NOV DEC



DAKLAK
(38,616 HA)

HARVESTING TIME

JAN **FEB MAR APR MAY** JUN JUL AUG SEP OCT NOV DEC



DAKNONG
(32,286 HA)

HARVESTING TIME

JAN **FEB MAR APR** MAY JUN JUL AUG SEP OCT NOV DEC



BINH PHUOC
(16,084 HA)

HARVESTING TIME

JAN **FEB MAR APR MAY** JUN JUL AUG SEP OCT NOV DEC



DONGNAI
(16,725 HA)

HARVESTING TIME

JAN **FEB MAR APR MAY** JUN JUL AUG SEP OCT NOV DEC



**BA-RIA
VUNG TAU**
(11,038 HA)

HARVESTING TIME

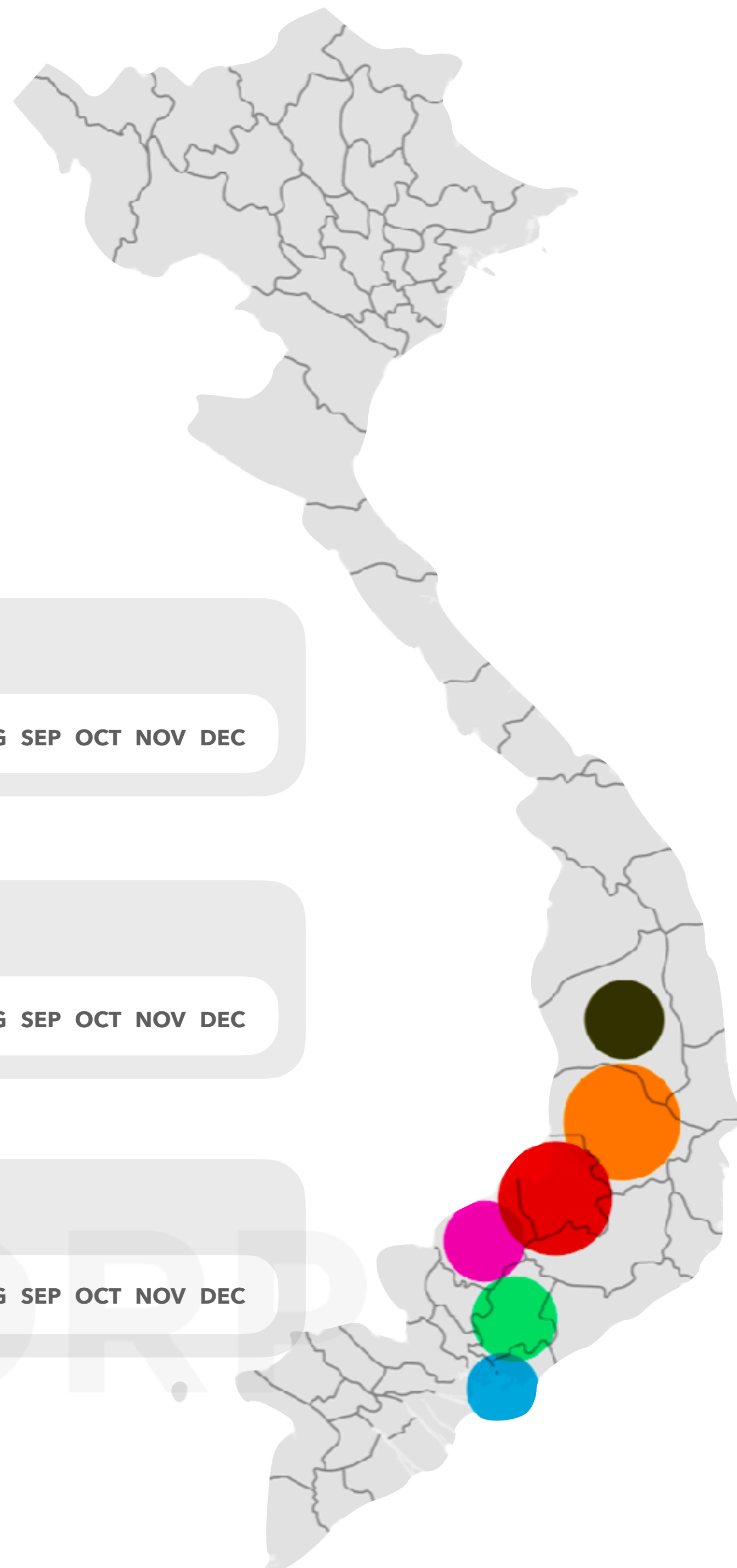
JAN **FEB MAR APR MAY** JUN JUL AUG SEP OCT NOV DEC



OTHER
(3,700 HA)

HARVESTING TIME

JAN **FEB MAR APR MAY JUN JUL** AUG SEP OCT NOV DEC

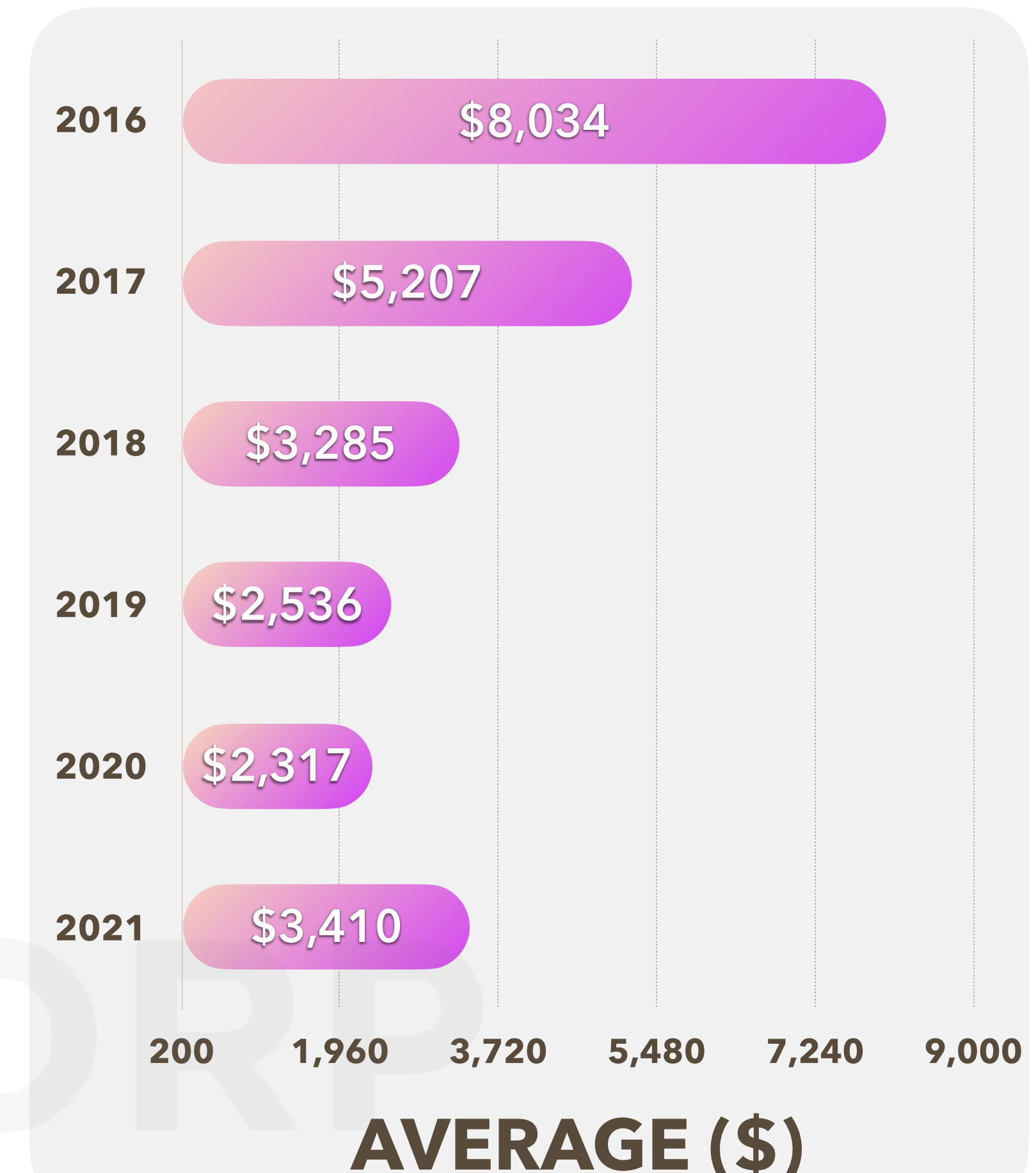
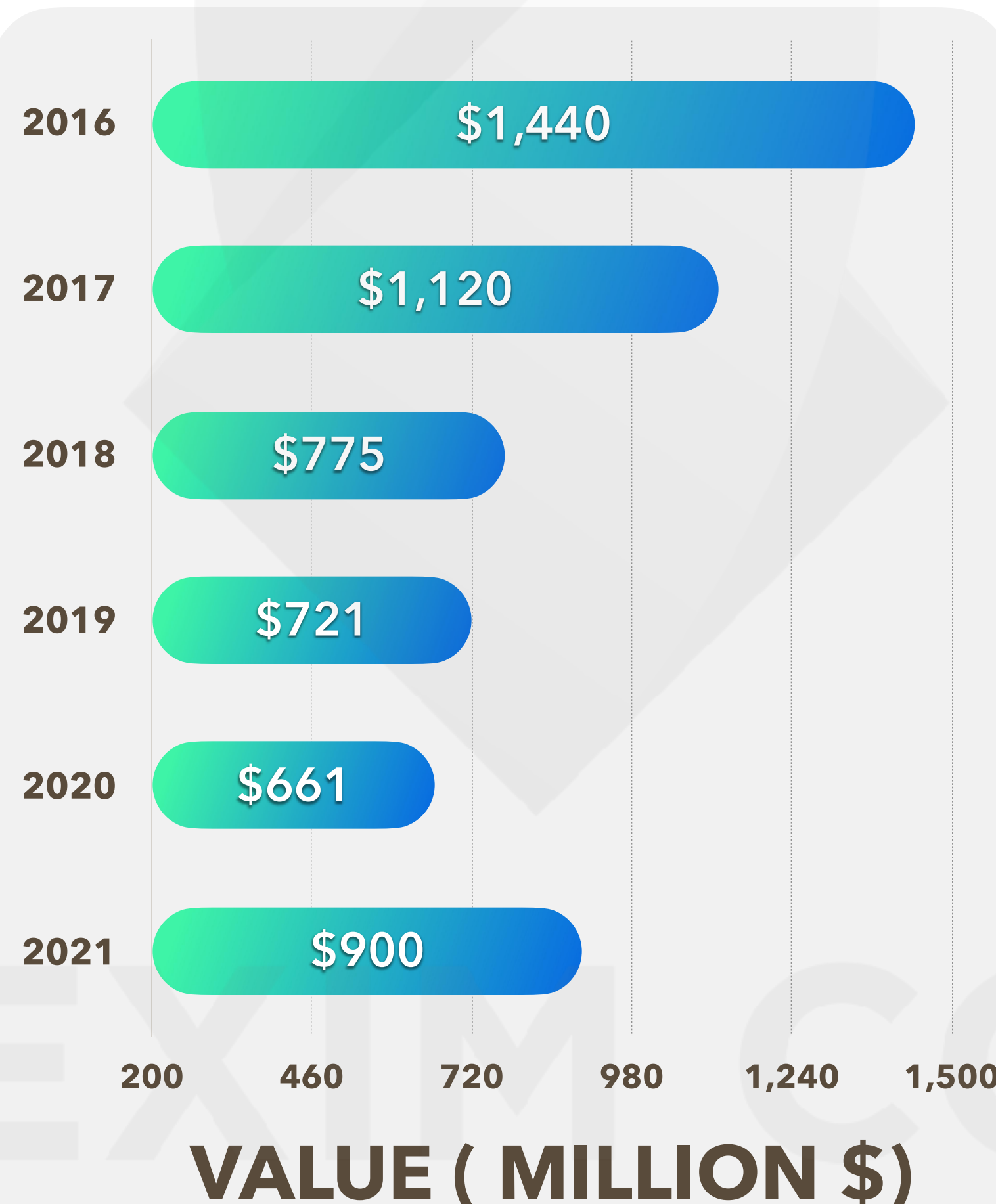
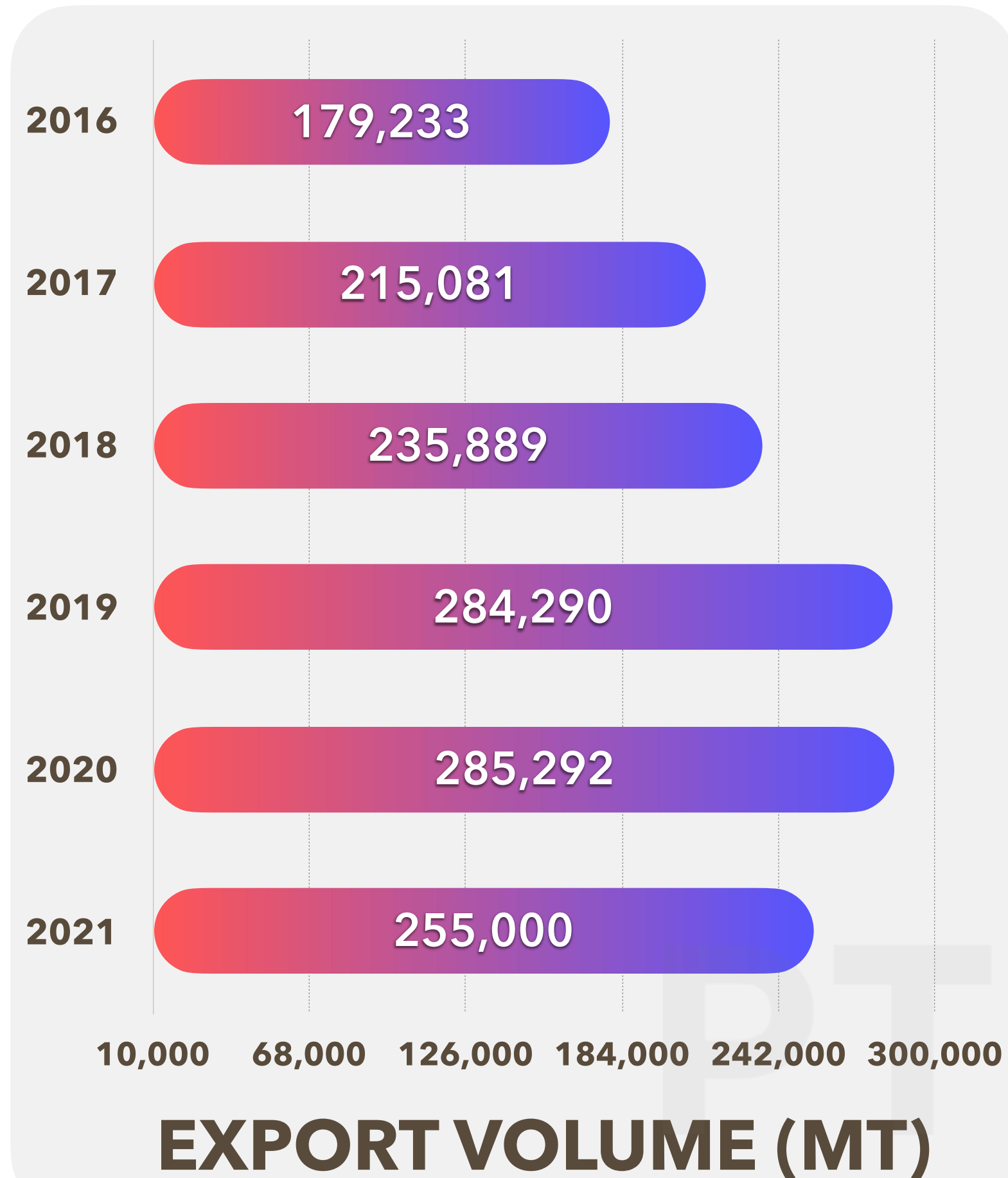


VIETNAM AT A GLANCE



EXPORT OF VIETNAM BLACK PEPPER INSIGHT

PERIOD 2016-2021



PHUC THINH EXPORT IMPORT INVESTMENT CORPORATION (PTEXIM CORP)

PTEXIM CORP Add : 43, Street 17, An Phu Ward, District 2, HOCHIMINH City, Vietnam.

VIETNAM AT A GLANCE



MANY EXPERTS PREDICT THAT VIETNAM'S PEPPER PRICE WILL INCREASE IN A RANGE OF **25 % - 30 %** COMPARED TO 2021

30,000



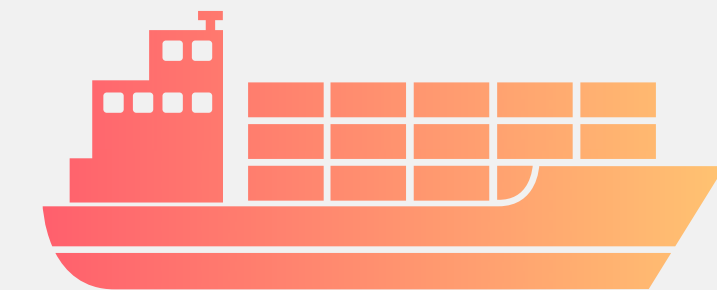
CARRY OVER 2021

200,000



2022 CROP SIZE

30,000



IMPORT FROM OTHER COUNTRIES TO REPROCESS AND REEXPORT

VIETNAM AT A GLANCE



CARRY OVER & REDUCTION QUANTITY



GIA LAI

PRODUCTION AREA **12,206 HA**

CARRY OVER **2%**

REDUCTION 2022
COMPARED TO 2021 **20%**



DONGNAI

PRODUCTION AREA **16,725 HA**

CARRY OVER **6%**

REDUCTION 2022
COMPARED TO 2021 **24%**



DAKLAK

PRODUCTION AREA **38,616 HA**

CARRY OVER **5%**

REDUCTION 2022
COMPARED TO 2021 **15%**



DAKNONG

PRODUCTION AREA **32,286 HA**

CARRY OVER **4%**

REDUCTION 2022
COMPARED TO 2021 **12%**

VIETNAM AT A GLANCE



CARRY OVER & REDUCTION QUANTITY



BINH PHUOC

PRODUCTION AREA

16,084 HA

CARRY OVER

12%

**REDUCTION 2022
COMPARED TO 2021**

15%



**BA-RIA
VUNG TAU**

PRODUCTION AREA

11,038 HA

CARRY OVER

5%

**REDUCTION 2022
COMPARED TO 2021**

15%



QUANG TRI

PRODUCTION AREA

2,000 HA

CARRY OVER

0%

**REDUCTION 2022
COMPARED TO 2021**

30%



LAM DONG

PRODUCTION AREA


1,700 HA

CARRY OVER

12%

**REDUCTION 2022
COMPARED TO 2021**

30%



ANALYSIS OF FACTORS AFFECTING VIETNAM'S PEPPER CROP IN 2022

FACTORS AFFECTING VIETNAM'S PEPPER CROP IN 2022 AT A GLANCE



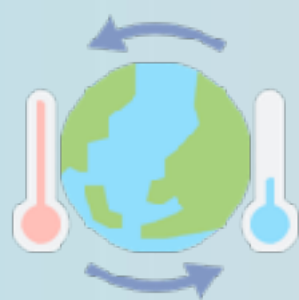
Low prices in recent years makes farmers less take care of pepper plantations



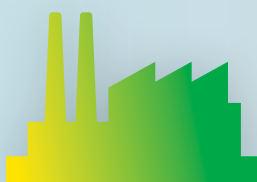
The weather this year is **not favorable**. Rainfall is **not uniform**.



Farmer does not take care of pepper plantations and is affected by the rapid increase in fertilizer prices, many times main pepper area **lockdown** due to the pandemic.

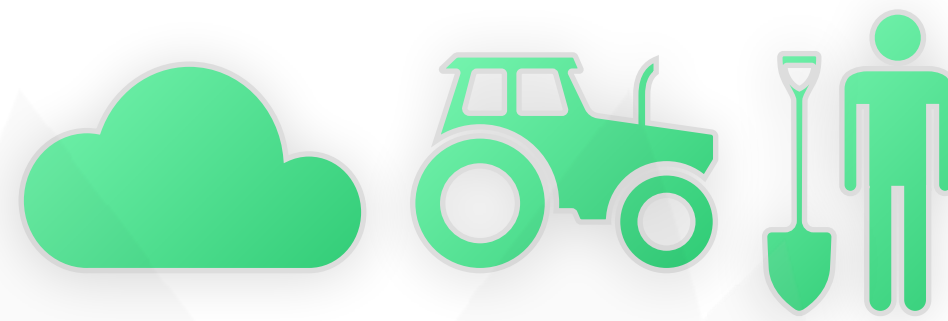


Due to **climate change**, the harvest time will be **slower** than in previous years.



Production will continue to **decrease** next year.

WEATHER - FARMING - FARMER



The ASEAN Meteorological Center (**ASMC**) recently made a forecast that the winter of 2021-2022 will be **colder**, with severe cold, and early onset of **harmful cold**. Above-average **heavy rainfall** will make landfall in most of Southeast Asia.



Ms. Nguyen Thi Cuong - Central Highlands: "In general, in the year of **high yielding** work, the condition of this year's pepper plants is nutritionally reduced to the rate of left bad beans, affecting the rate of left bad beans productivity. It is expected that this year's harvest season (2021-2022) will be **more than halved** compared to the previous year's production (2020-2021)"

Mr. Vu Van Vuong - Farmer in South-east Province in Vietnam: "The case has **better production capacity** with regular remedial services and heavy rains in the area."



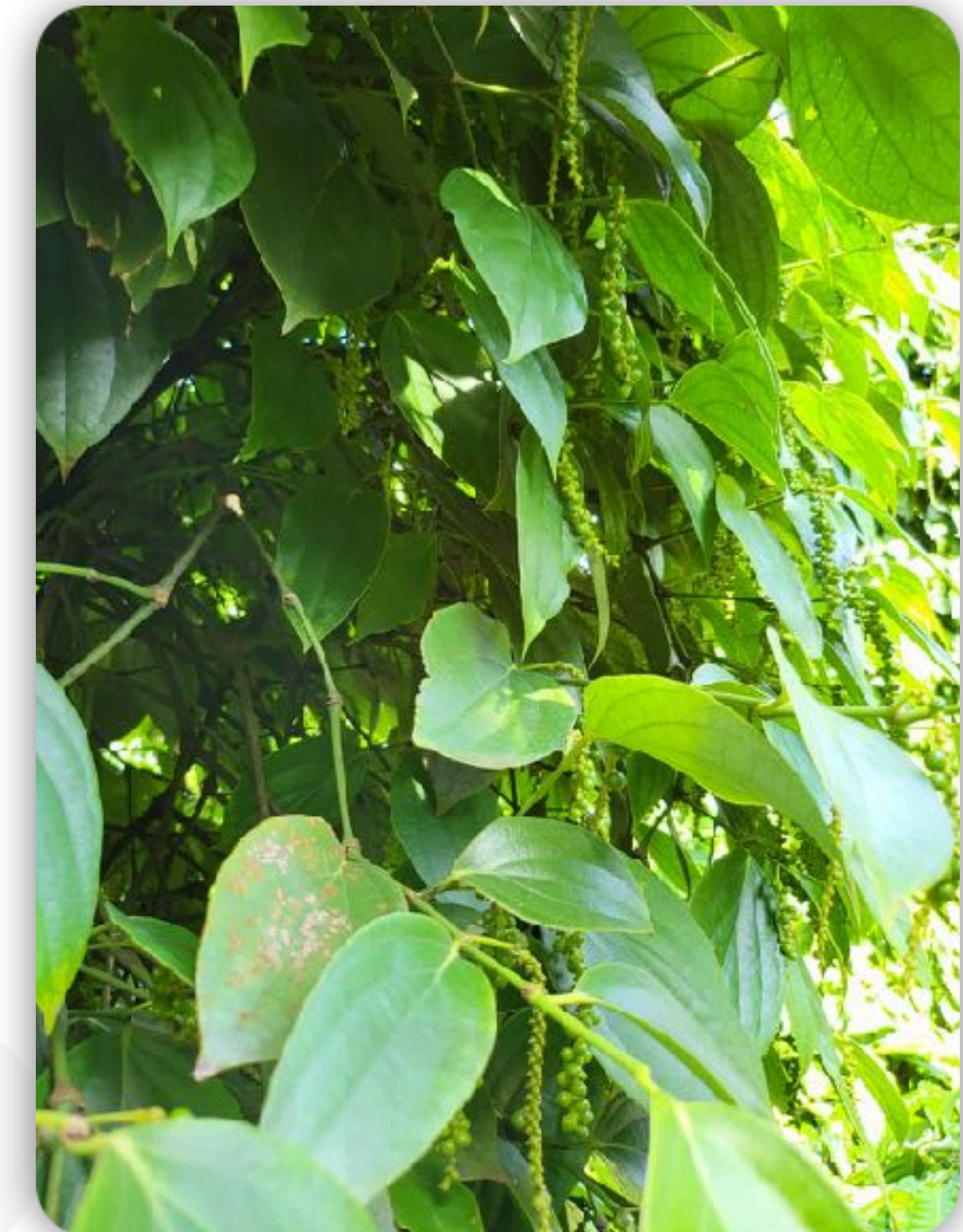
SITUATION OF PEPPER PLANT IN VIETNAM



SPARSE BEADS



FEW SEEDS



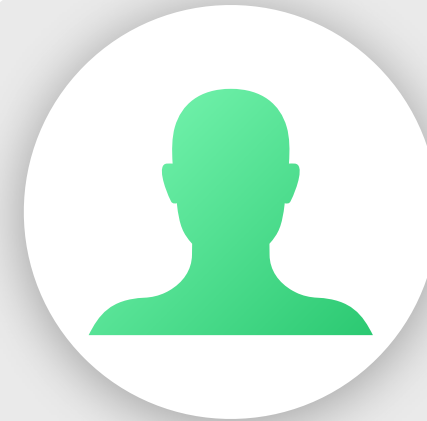
Flower irregularly & bloom at different times.

GOVERNMENT & LOCAL AGENCY POLICY



“

Definitely, 2020 is the year the price “bottomed out” and now begins a **new bullist cycle**. In the next few months and the following years, the price will gradually improve, it is likely that by the end of this year, the price will reach from **90,000 to 100,000 VND/kg**. It is forecasted that pepper prices may peak like the previous cycle in the next 8-10 years. The expected price can be up to **250,000-300,000 VND/kg**” emphasized Mr. Hoang Phuoc Binh.



Mr. Hoang Phuoc Binh, Vice Chairman, General Secretary of Chu Se Pepper Association (Gia Lai)


The most recent cycle from 2001 to 2006 was a bear price cycle, pepper price “bottomed out” in 2006. After that, the price started going up until 2015, the price peaked at over 200,000 VND/kg. From 2016, the price started going down again until the “bottom” level of about 34,000 VND/kg in early April 2020.



On the basis to make an affirmation that pepper has started a new price **Bullist Cycle**, Mr. Hoang Phuoc Binh said that in the past few years, pepper prices have been pretty low, farmers invest in pepper plantation and loosing, so pepper plantation owners do not investment, a lot of farms are completely **destroyed**. Therefore, the area is greatly reduced. Through the survey, it is Estimated that 2017 is the year with the largest area (153,000 ha), until 2021, it is estimated that the **harvested area** will be **less** than half of the 2017 area. The harvest in 2021 will **decrease over 30%** compared to the previous year. If we take the data of the harvest output of 2020 according to the Vietnam Pepper Association (VPA) of 240,000 tons, this year it will only be around 150,000 tons.





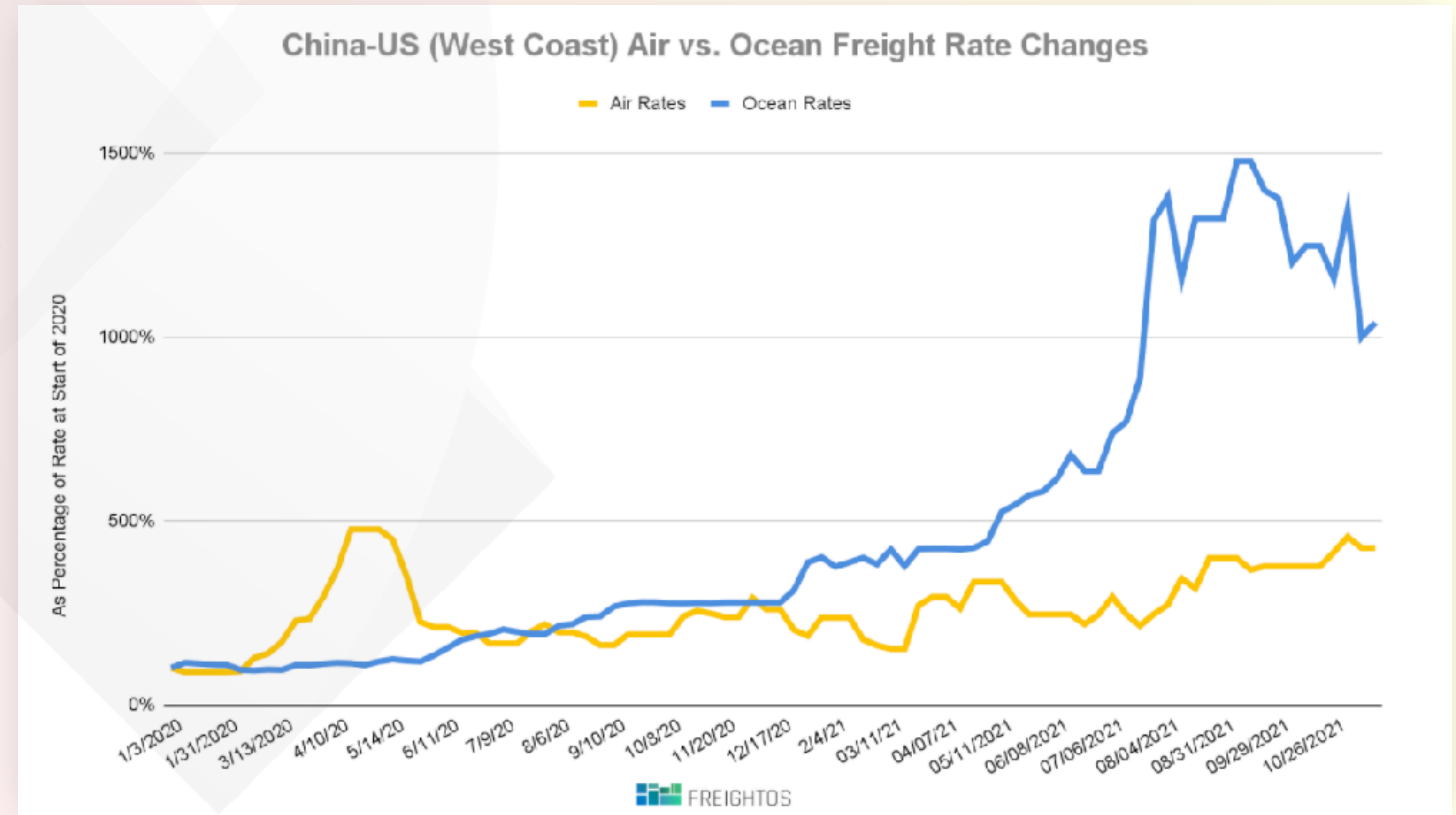
LOGISTICS & SHIPPING FREIGHT

 In ocean freight, following their significant, post-peak season fall last week, transpacific ocean rates were stable this week, increasing 3-4% to both coasts, though they remain extremely elevated at 8-9X the pre-pandemic norm.


The easing prices are not being driven by any significant improvement in the port congestion that is tying up a significant share of the lane's capacity.


 Continued struggles with disrupted schedules and the resulting port congestion have been enough to keep Asia-Europe rates from experiencing a rate dip similar to the one on the transpacific.


 The number of ships waiting for a berth hasn't fallen yet, leading some carriers to cancel upcoming West Coast services and others to move capacity to the under-served intra-Asia services, especially as manufacturing in  Vietnam recovers.



COVID-19 VIRUS

 The **Reuters** interviewed more than ten of the world's leading medical experts and forecasted that by 2022, the wave of infections caused by the Delta variant cooled down in many regions of the world. COVID-19 can turn into an endemic disease. But even then, each year this epidemic can still kill many people.

 WHO has set a target that by the end of 2022, 70% of the world's population will be vaccinated against COVID-19. In Vietnam, it is expected that in the first half of 2022, there will be an additional 100 million doses of vaccine.

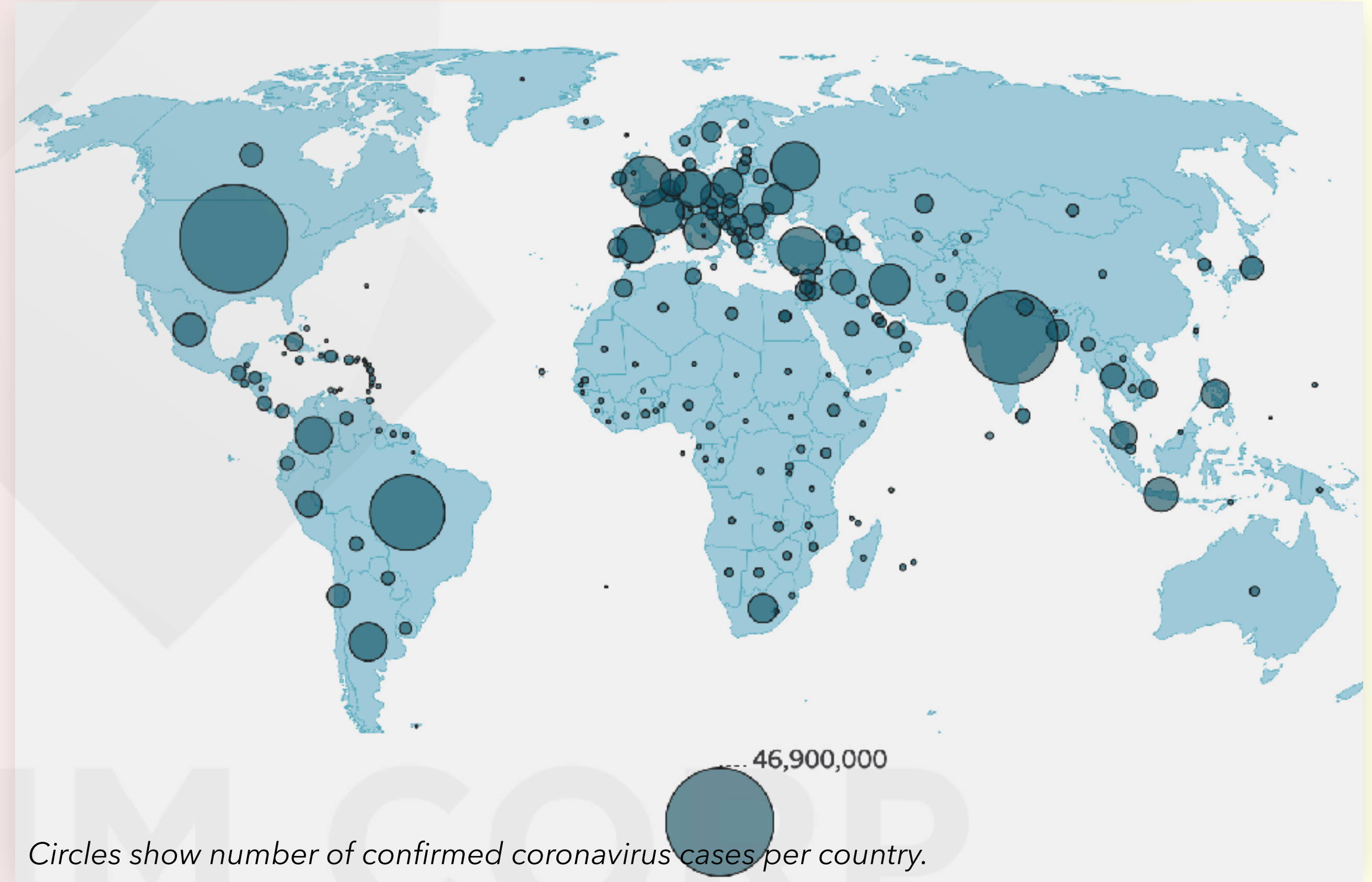
 The National Assembly requires in 2022, to license and put into use the Covid-19 vaccine produced by Vietnam.

253,352,791

Cases

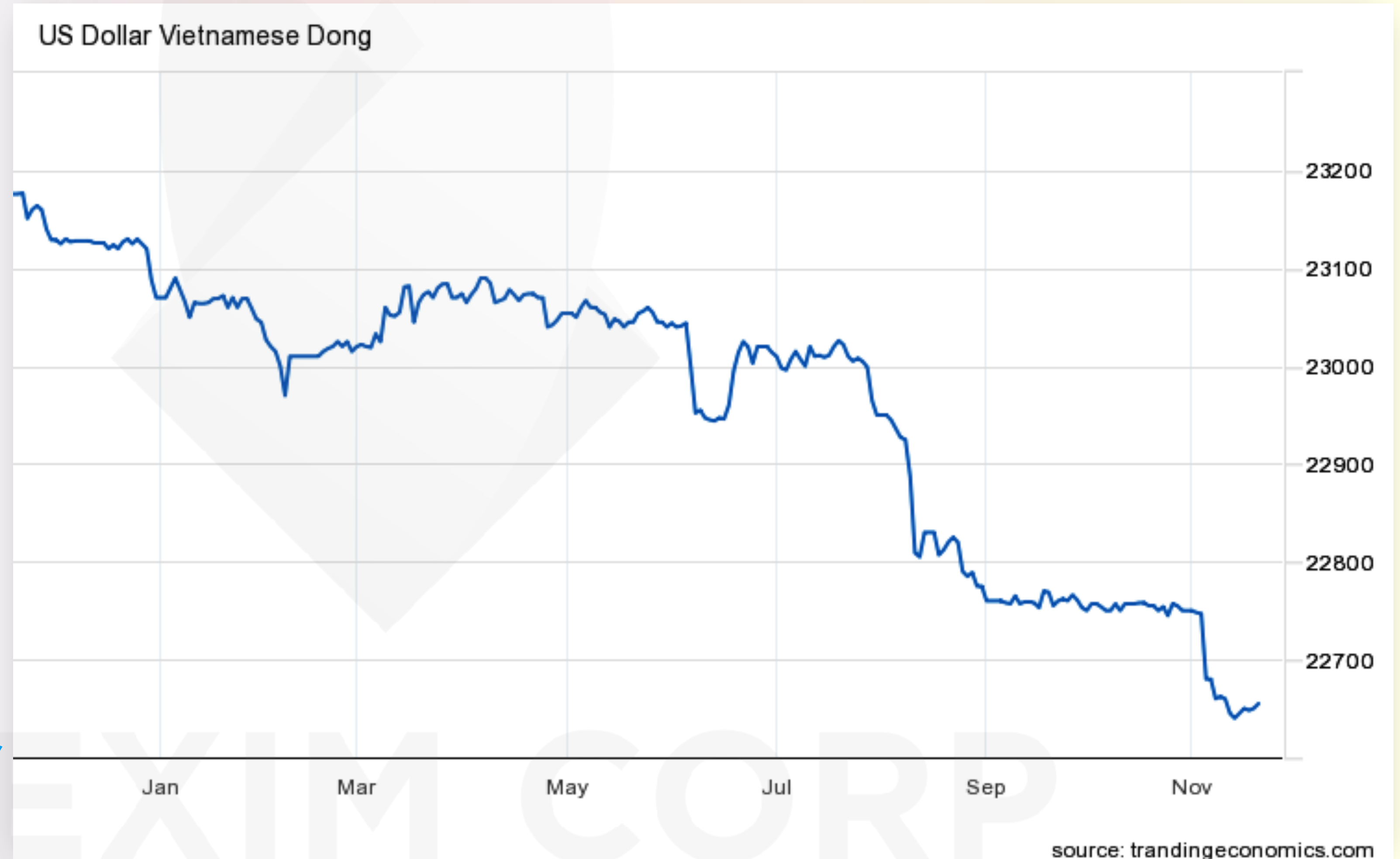
5,101,198

deaths



CURRENCY \$

\$ The Vietnamese Dong is expected to trade at 22680.00 by the end of this quarter, according to Trading Economics global macro models and analysts expectations. Looking forward, we estimate it to trade at **22680.00** in 12 months time. (Source: <https://tradingeconomics.com/vietnam/currency>)



CROP SIZE & CARRY OVER VIETNAM BLACK PEPPER CONSOLIDATION



30,000 Tons

30% ↓

**CARRY OVER
2022**

Carry Over 2022 reduces 30% compared with 2021.

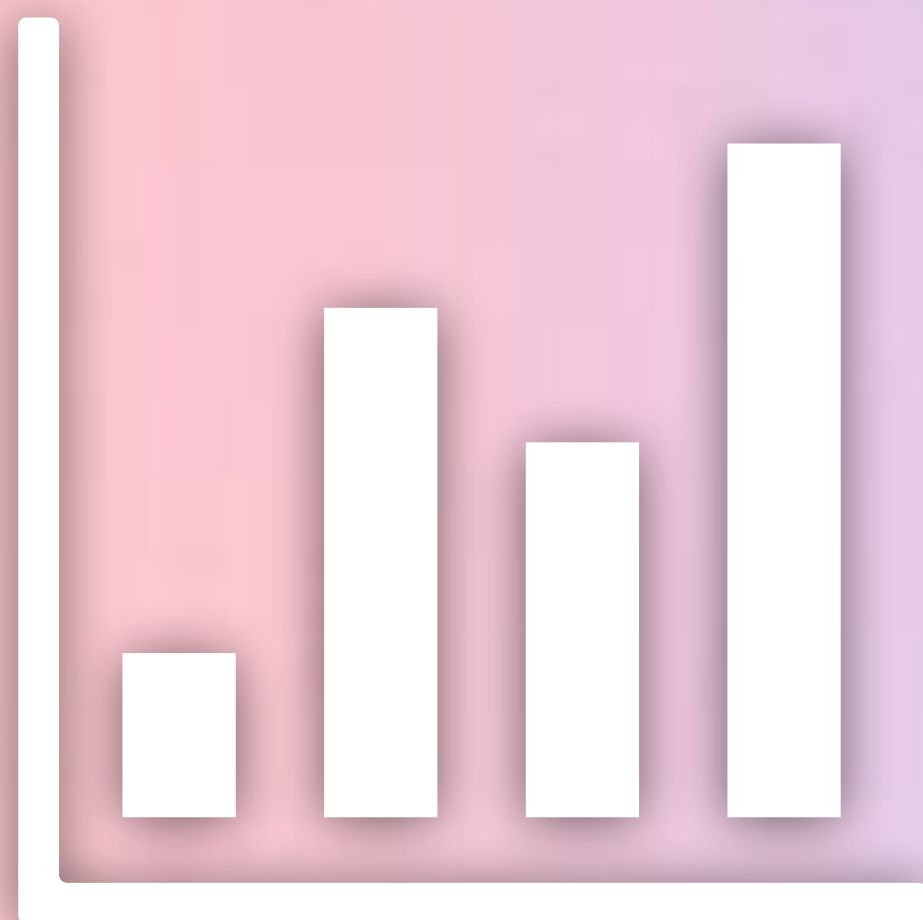


200,000 Tons

10-15% ↓

**CROP SIZE
2022**

2022 Crop size reduce 10 - 15% compared with 2021 crop.



FORECAST OF THE WORLD PEPPER CROP IN 2022

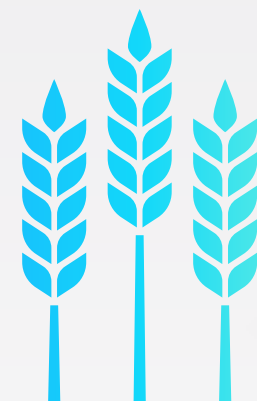


VIETNAM AT A GLANCE - FORECAST 2022



30,000 Tons

CARRY OVER*



200,000 Tons

CROP SIZE



30,000 Tons

IMPORT TO REPROCESS AND REEXPORT



Carry over **30.000** MTs like **frozen** stock and concentrate on **rich** farmers/collectors/exporters. It may keep a few more years and **no pressure** to offer to the spices market if price is **not attractive**.



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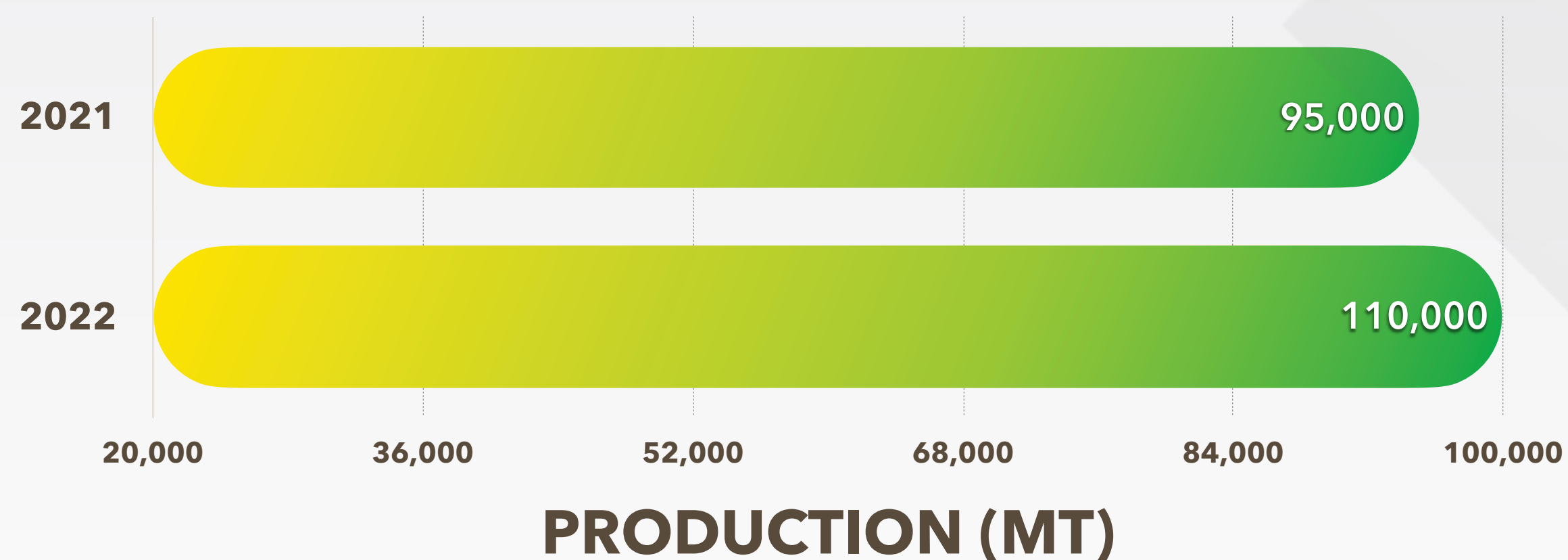
BRAZIL AT A GLANCE - FORECAST 2022



PRODUCTION QUANTITY

CHANGE **10-15,000** ↑

% CHANGE **10-15%** ↑



Brazilian farmers are actively increasing pepper plantation, so crop size from Brazil is expected to increase continuously in the next 3 years.



PRODUCTION AREA

Espirito Santos (**ES**) Production



- Farmers to planting new pepper plantation. Production has been increasing from now until next **3 years** is foreseen.
- 2022 production exceed 60.000 MTS
- Harvest from **January to June**, can extend from **August to December**

PARA (**PA**) & **Bahia** Production



- Farmers to planting new pepper plantation.
- Aug/Sept/Oct 2021 production is around **45,000 - 50,000** tons
- Harvest from **August to December**



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CHINA AT A GLANCE - FORECAST 2022

Recently, China suffered the most widespread cold wave in a decade - affecting 90% of its territory, severely challenging the agricultural industry. Drops of up to 160 degrees Celsius in many places. Chinese meteorologists predict frequent cold spells this winter. According to forecasts of 56 economists polled by Reuters, China's economic growth rate will slow to 5.5% in 2022 from the previous forecast of 8.2%.



18,500 Hectares

AREA



30,000 *Tons

**Estimate*

TOTAL CROP SIZE

CROP SEASON TIME

JAN FEB MAR **APR MAY JUN JUL** AUG SEP OCT NOV DEC



18,500
Hectares

HECTARES UNDER PEPPER CULTIVATION IN 2021



25-30,000
Tons

PRODUCTION QUANTITY



85,000-90,000
Tons

DOMESTIC CONSUMPTION



2000-5,000
Tons

EXPORT



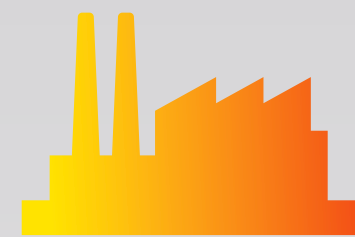
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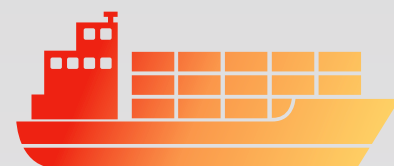
INDONESIA AT A GLANCE - FORECAST 2022

Economic growth looks set to gain speed in 2022, after a further wave of Covid-19 infections in Q3 will have likely limited the scope of this year's rebound. Elevated energy prices and pandemic-related uncertainty pose risks. FocusEconomics Consensus Forecast panelists expect GDP to expand 5.2% in 2022.



PRODUCTION 2022

40,000 – 50,000 Tons



EXPORT VOLUME 2022

30,000 Tons

HARVEST TIME

JAN FEB MAR APR MAY JUN **JUL AUG SEP** OCT NOV DEC



INDONESIAN GEOGRAPHICAL INDICATION




Bangka – Belitung Production



- The biggest pepper producers in Indonesia
- Mostly produce white pepper (known as **Muntok**)

Lampung Production



- The second biggest pepper producers in Indonesia
- Mostly produce black pepper 



PTEXIM CORP

PHUC THINH EXPORT IMPORT INVESTMENT CORPORATION (PTEXIM CORP)

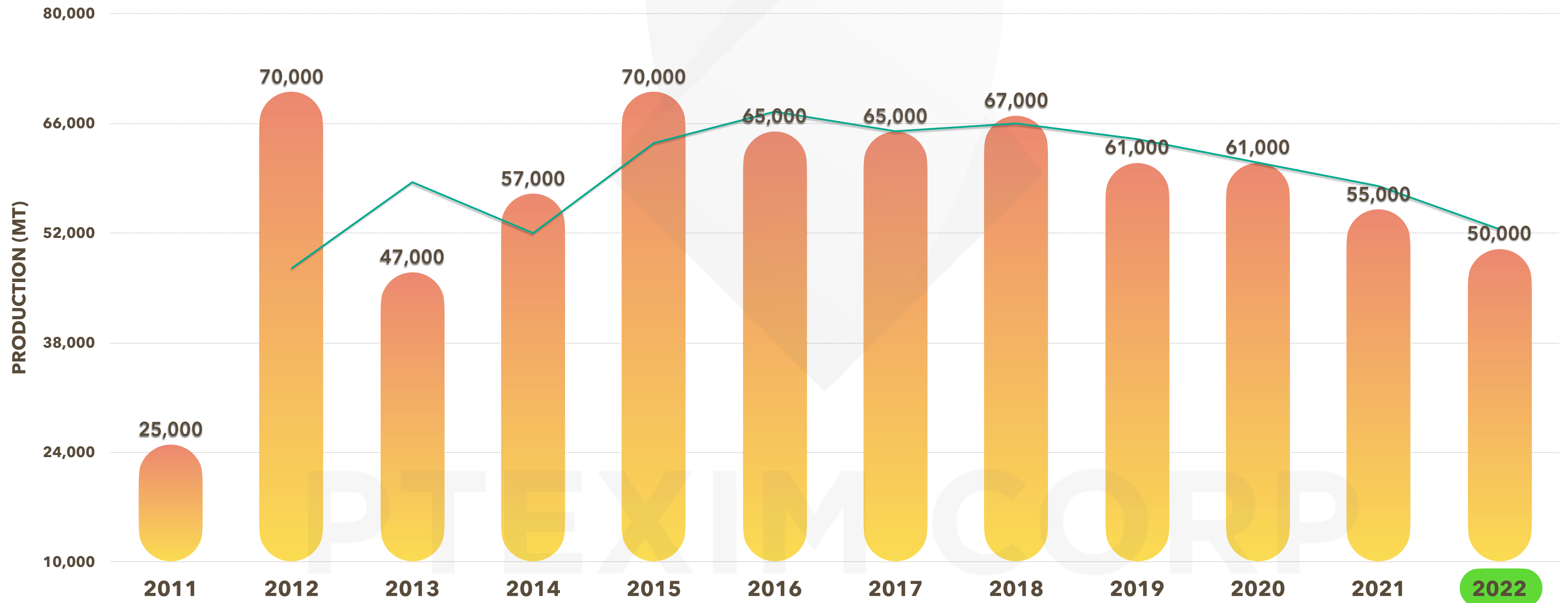
Add : 43, Street 17, An Phu Ward, District 2, HOCHIMINH City, Vietnam.

INDONESIA AT A GLANCE - FORECAST 2022



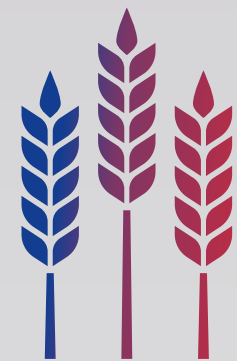
PEPPER PRODUCTION IN INDONESIA FROM 2011 TO 2021

In **2021**, it was estimated that approximately **50 thousand metric tons** of pepper was produced in Indonesia. Since less well cared pepper plantation from farmers. This figure did not change much from the This figure did not change much from the previous year's.



MALAYSIA AT A GLANCE - FORECAST 2022

The ministry (MAFI) had been allocated RM4.82 billion under Budget 2022 to drive modernisation of the agricultural sector in improving food security and safety, generating higher income and attracting more young agropreneurs. In Budget 2022, the provision of subsidies and incentives for the agriculture and fisheries industries would be continued with an allocation of RM1.7 billion.



HECTARES UNDER PEPPER CULTIVATION IN 2022

13,500 Hectares



PRODUCTION QUANTITY

20,000 Tons



DOMESTIC CONSUMPTION

7,000 Tons



EXPORT

11,000 Tons

CROP SEASON TIME

JAN FEB MAR APR MAY **JUN JUL AUG SEP** OCT NOV DEC



PRODUCTION AREA



SARAWAK

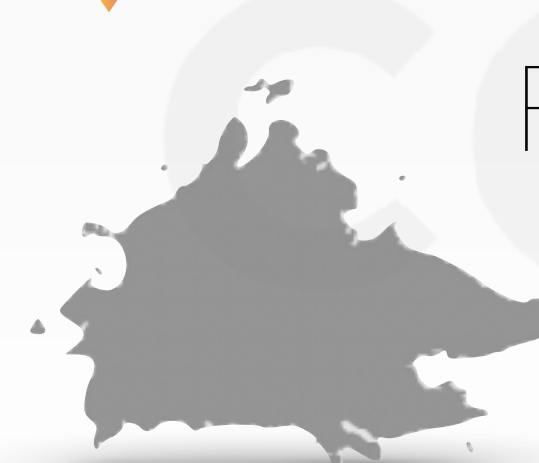


Pepper Production Area

98 %



PENINSULAR MALAYSIA & SABAH



Pepper Production Area

2 %

SRI LANKA AT A GLANCE - FORECAST 2022

CROP SEASON TIME

JAN FEB MAR **APR MAY JUN JUL** AUG SEP OCT NOV DEC



20,000 Hectares

HECTARES UNDER PEPPER CULTIVATION IN 2022



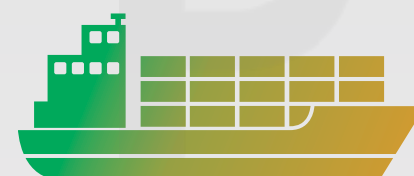
25,000 Tons

PRODUCTION QUANTITY



12,000 Tons

DOMESTIC CONSUMPTION



8,000-13,000 Tons

EXPORT

INDIA AT A GLANCE - FORECAST 2022

Pepper growers in Hassan, Chikkamagaluru and Kodagu districts of Karnataka state, India are worried that pepper production may drop sharply due to erratic weather. Prolonged rains cause soil moisture to increase, affecting the ability of pepper plants to grow. Some growers fear that production in the 2022 crop year will fall by 20%, compared with 65,000 tons in 2020-2021.



PRODUCTION AREA



CROP SEASON TIME

JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

125,000

HECTARES UNDER PEPPER CULTIVATION IN 2022



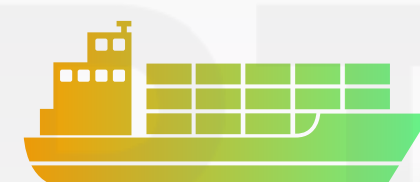
55-60,000 Tons

PRODUCTION QUANTITY



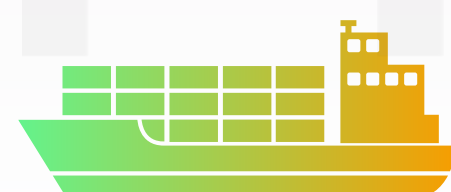
70,000 Tons

DOMESTIC CONSUMPTION



13,000-15,000 Tons

EXPORT



25,000 Tons

IMPORT



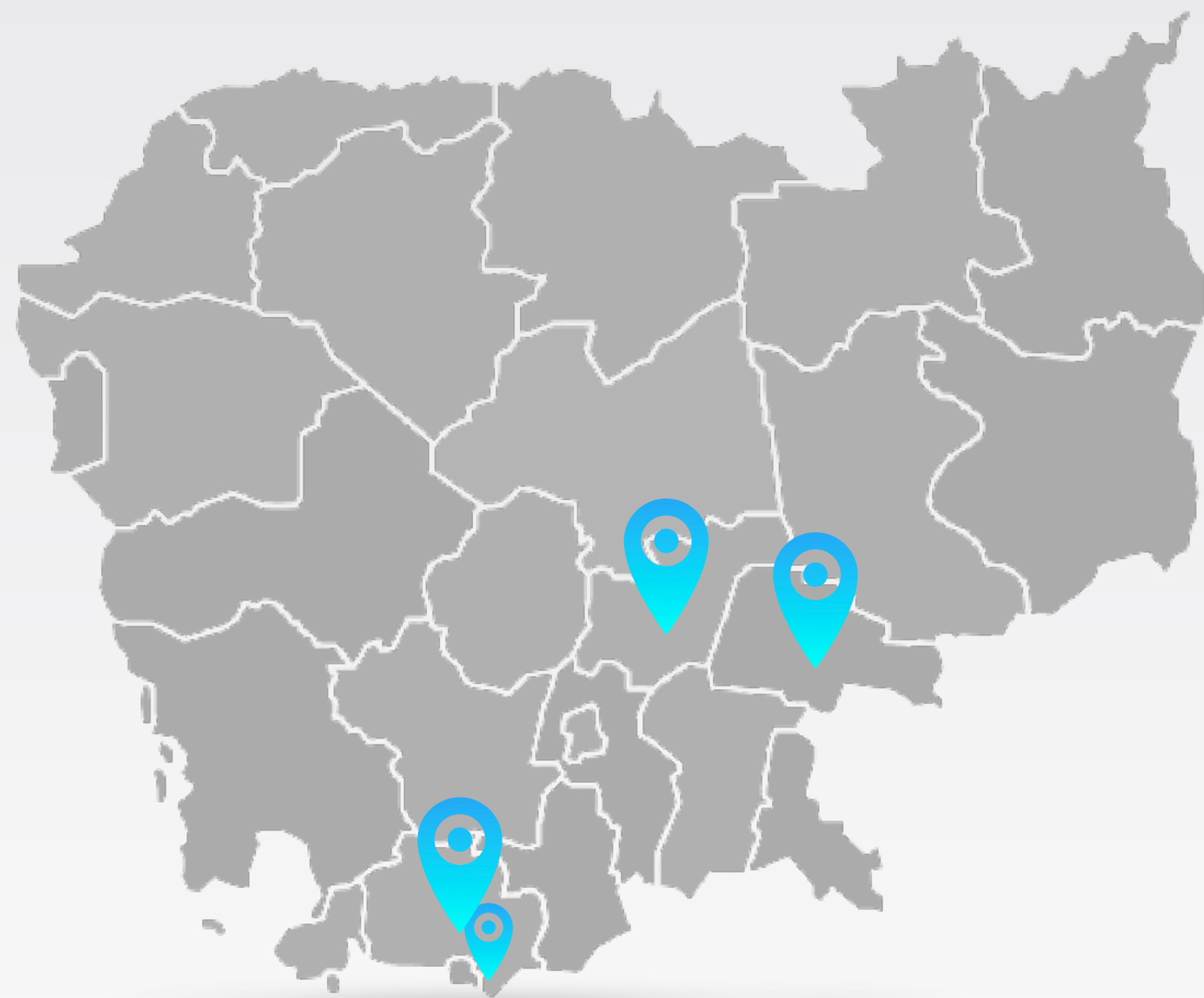
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CAMBODIA AT A GLANCE - FORECAST 2022

The Cabinet on October 22 gave the nod to a draft budget of \$8.013 billion for public spending in 2022, an increase of 6.8 per cent year-on-year, in a move expected to help power a prompt economic recovery as the Kingdom emerges from the ravages of the Covid-19 health crisis.

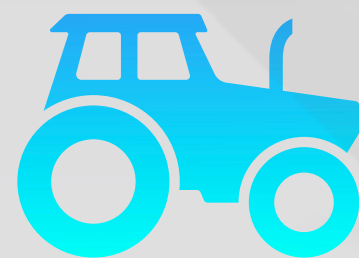


Black pepper
Production
Cambodia

-  Kampong Cham
-  Thbong Khmum
-  Kampot
-  Kep

CROP SEASON TIME

JAN FEB MAR **APR MAY JUN** JUL AUG SEP OCT NOV DEC



30,000 Tons

PRODUCTION QUANTITY



6.822 Hectares

PRODUCTION AREA



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THAILAND AT A GLANCE - FORECAST 2022



PRODUCTION AREA & QUANTITY



4,500 Tons

PRODUCTION QUANTITY



8,500 Tons

DOMESTIC CONSUMPTION



500-1000 Tons

EXPORT



4,500 Tons

IMPORT

MADAGASCAR AT A GLANCE - FORECAST 2022



PRODUCTION AREA & QUANTITY



3,500 Tons

PRODUCTION QUANTITY



1,500 Tons

DOMESTIC CONSUMPTION



1,500-2000 Tons

EXPORT

ECUADOR AT A GLANCE - FORECAST 2022



PRODUCTION AREA & QUANTITY



5,000 Tons

PRODUCTION QUANTITY



1,000 Tons

DOMESTIC CONSUMPTION



4,000 Tons

EXPORT

PTEXIM CORP



PHUC THINH EXPORT IMPORT INVESTMENT CORPORATION (PTEXIM CORP)

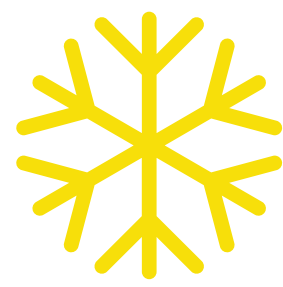
Add : 43, Street 17, An Phu Ward, District 2, HOCHIMINH City, Vietnam.



CROP SIZE CONSOLIDATION



Seasonalities



 **Vietnam**

JAN

FEB

MAR

APR

MAY

JUN

JUL

AUG

SEP

OCT

NOV

DEC

 **Indonesia**

JAN

FEB

MAR

APR

MAY

JUN

JUL

AUG

SEP

OCT

NOV

DEC

 **India**

JAN

FEB

MAR

APR

MAY

JUN

JUL

AUG

SEP

OCT

NOV

DEC

 **Brazil**

JAN

FEB

MAR

APR

MAY

JUN

JUL

AUG

SEP

OCT

NOV

DEC

 **Malaysia**

JAN

FEB

MAR

APR

MAY

JUN

JUL

AUG

SEP

OCT

NOV

DEC

 **Sri Lanka**

JAN

FEB

MAR

APR

MAY

JUN

JUL

AUG

SEP

OCT

NOV

DEC

 **Cambodia**

JAN

FEB

MAR

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DEC

ESTIMATING TOTAL PEPPER CROP SIZE IN THE WORLD IN 2022



200,000 TONS
Vietnam



105,000 TONS
Brazil



60,000 TONS
India



50,000 TONS
Indonesia



30,000 TONS
Cambodia



30,000 TONS
China



25,000 TONS
Sri Lanka

533,000 Tons

GLOBAL PEPPER CROP SIZE 2022

DETAILS ESTIMATING TOTAL PEPPER CROP SIZE IN THE WORLD IN 2022

Vietnam	Brazil	India	Indonesia	Cambodia	China	Sri Lanka	Malaysia	Ecuador	Thailand	Madagascar
200,000	105,000	60,000	50,000	30,000	30,000	25,000	20,000	5,000	4,500	3,500

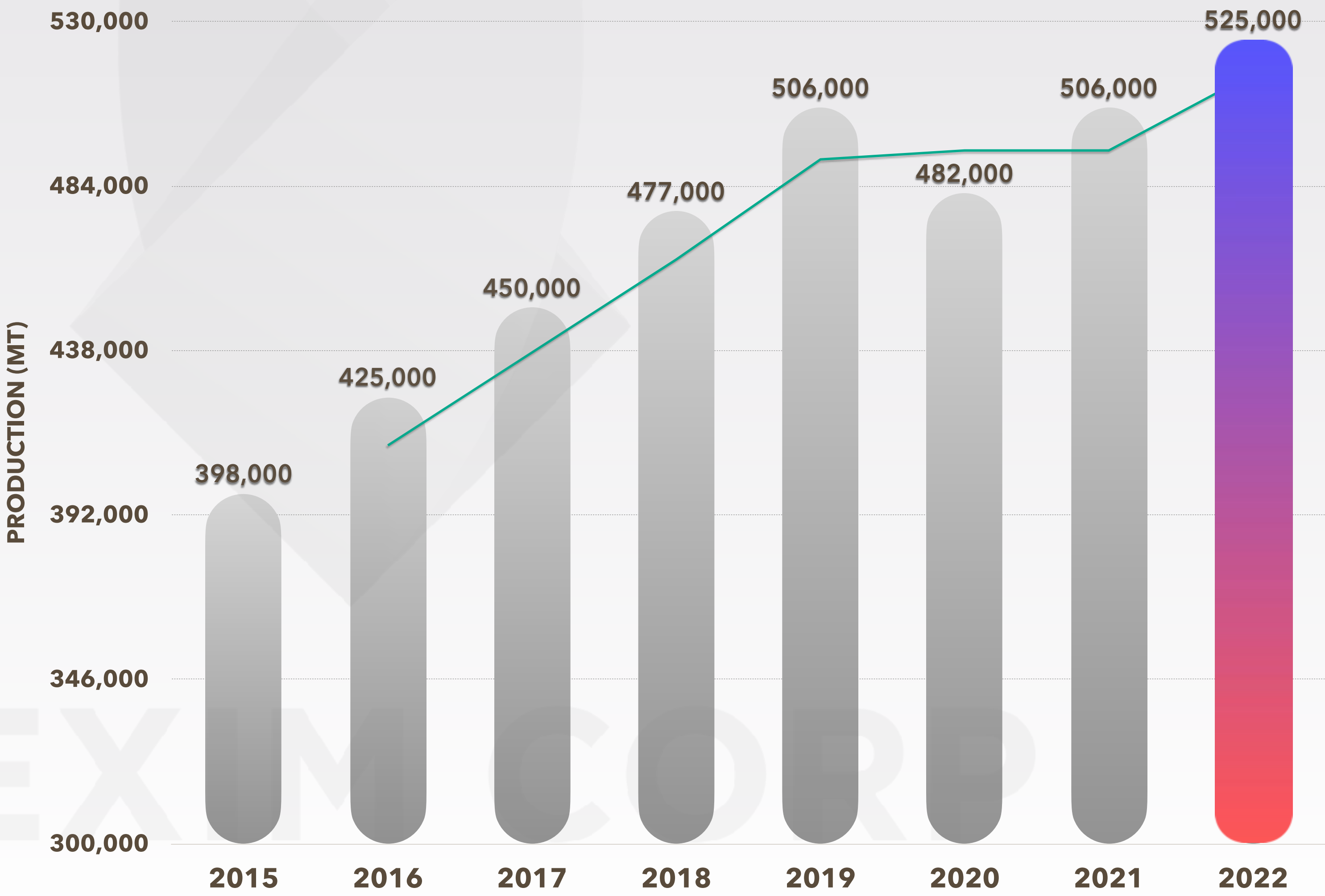
YEARLY WORLD CONSUMPTION

Pepper consumption of the world is expected to increase by 6-8% from 2015 to 2019. In 2022, the global demand forecasts will **increase** again by **about 3-5%** at least.

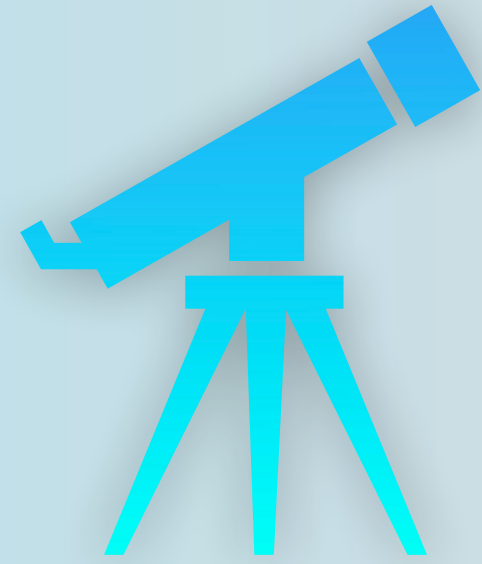


525,000 Tons

WORLD CONSUMPTION
2022



PTEXIM VIEWS



According PTEXIM views, global output has reduced, particularly in two big countries:

🇻🇳 **Vietnam** at **minimum 10-15%** and 🇮🇳 **India** about **20%**.

Reason : Climate Change & Pepper prices are low for 3 consecutive years, so farmer does not invest and caring for the main pepper production areas which have been seriously affected by Covid-19, which leading to a shortfall of workers.

🔭 In addition, the amount of **inventory also decreased**.

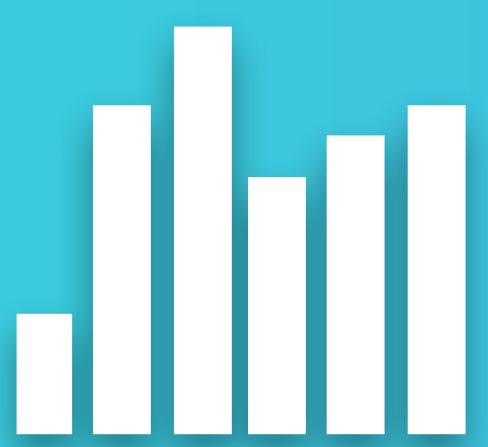
🔭 The price **bullist cycle** of pepper is forecasted to continue in 2022 and 2023. It can be seen that the total pepper production in 2022 and the total world demand are almost in balance. At the same time, this is the time when governments "**Inject**" money, which should push up the cycle of commodity prices, including pepper.





FORECAST MARKET TREND DURING 2022

Q **1**



FLUCTUATE

First Quarter
2022

SHORT-TERM

Q **2**



UPTREND

Second
Quarter 2022

SHORT-TERM

Q **3**

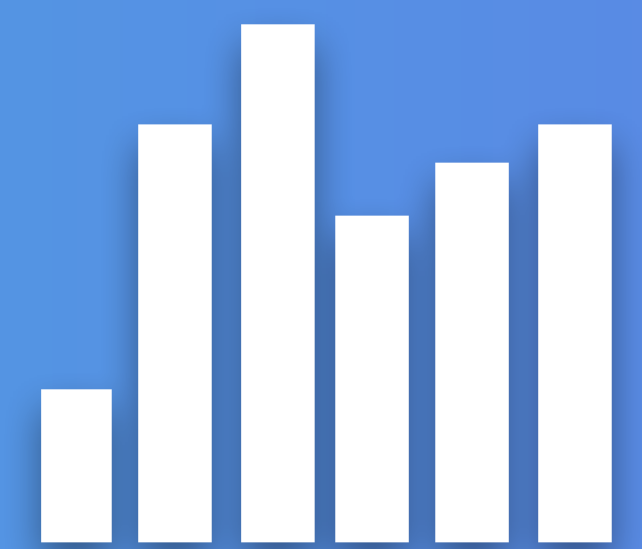


UPTREND

Third
Quarter 2022

MEDIUM-TERM

Q **4**



FLUCTUATE

Fourth
Quarter 2022

LONG-TERM

CROP SURVEY

A FULL REPORT
ABOUT BLACK
PEPPER CROP &
MARKET GLOBAL

2022

THANK YOU!

Please do not hesitate to send me if you have any further request.

Hien, Nguyen Vu

CEO

A: 43 Street17, Quarter 5, An Phu Ward, District 2, HCMC, VN

M: +84 902 222 295

E: spices@ptexim.com.vn

PTEXIM CERTIFICATE



RAINFOREST ALLIANCE



USDA ORGANIC *Available during 2022*



PTEXIM FACTORY



1. WHOLE SPICES FACTORY (Address : Daklak Province, VN)



2. FOOD FACTORY (Address : Ba-Ria Vung Tau Province, VN)

www.ptexim.com.vn