



USSEC Worldwide Soy Food Markets Update

August, 2020

U.S. SOY FOR A GROWING WORLD



Japan Soy Food Market Update 2020

U.S. SOY FOR A GROWING WORLD

USSEC Japan Target Areas



SOY CRUSH

2.5 MMT



SOY FOOD

1.0 MMT



SOYBEAN MEAL 3.3 MMT

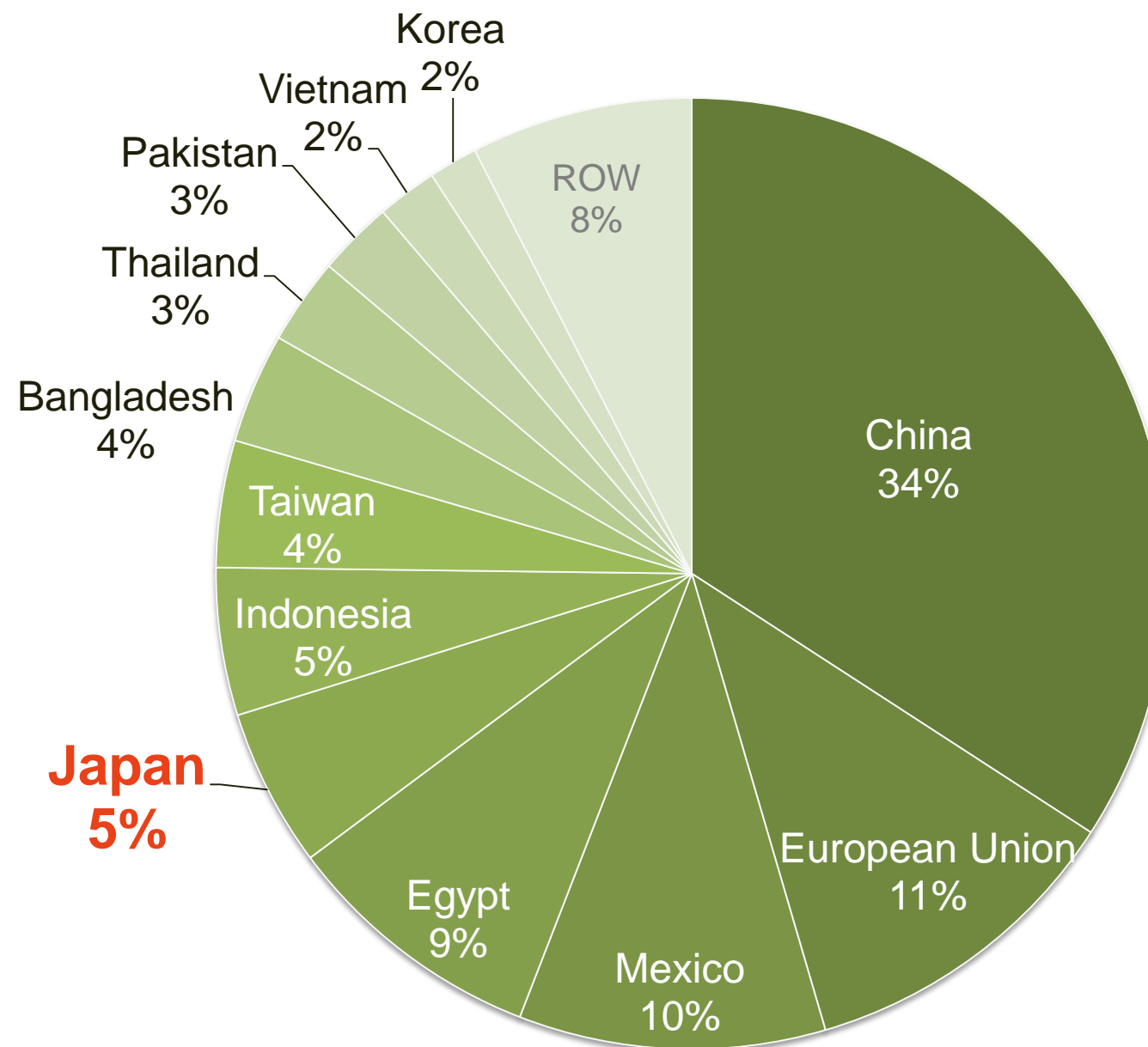


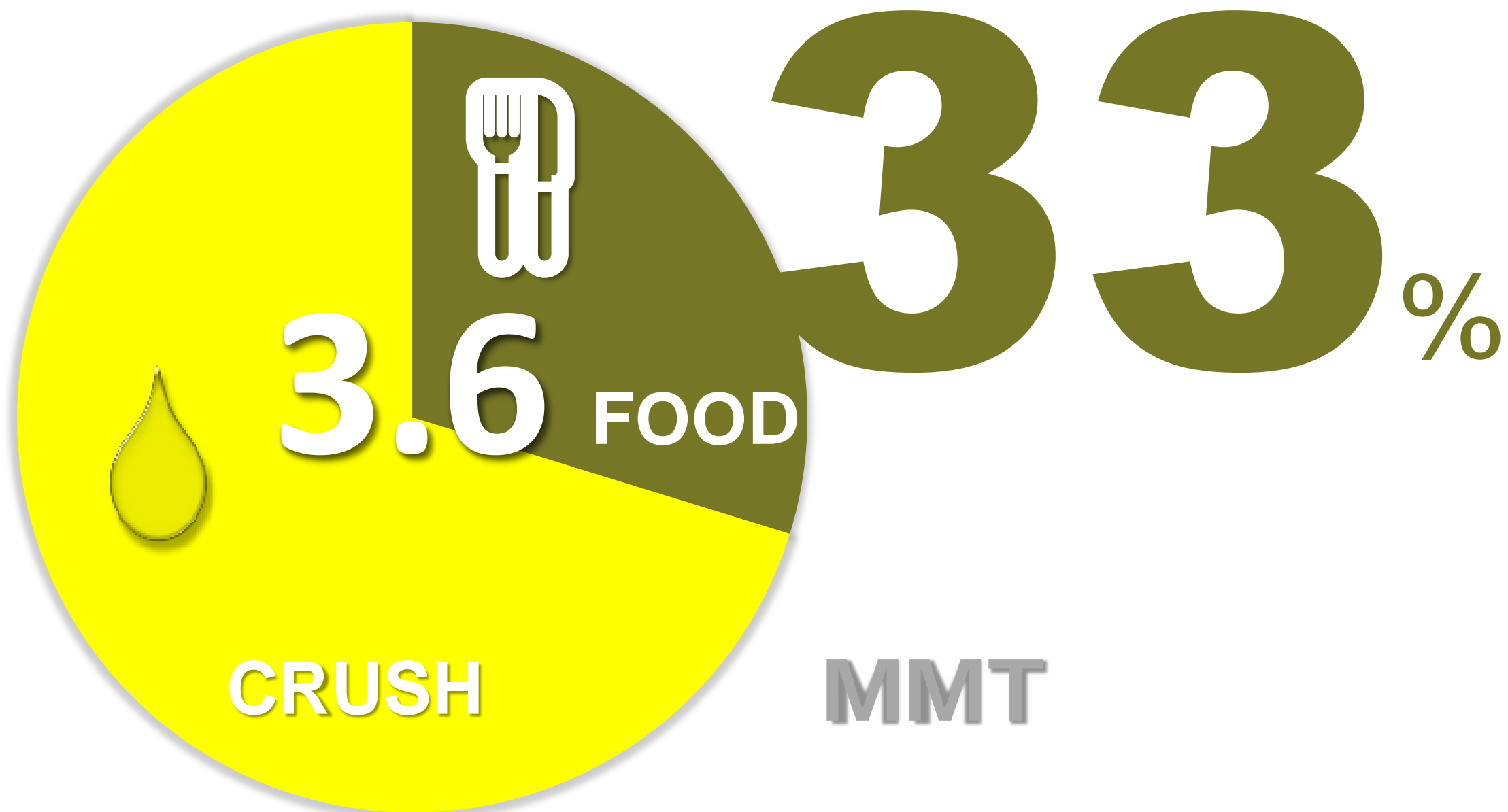
JAPAN IS THE 5th Top Importer

U.S. EXPORTS MARKETING YEAR 19/20

AS OF WEEK ENDING JULY 16, 2020

U.S. SOY FOR A GROWING WORLD

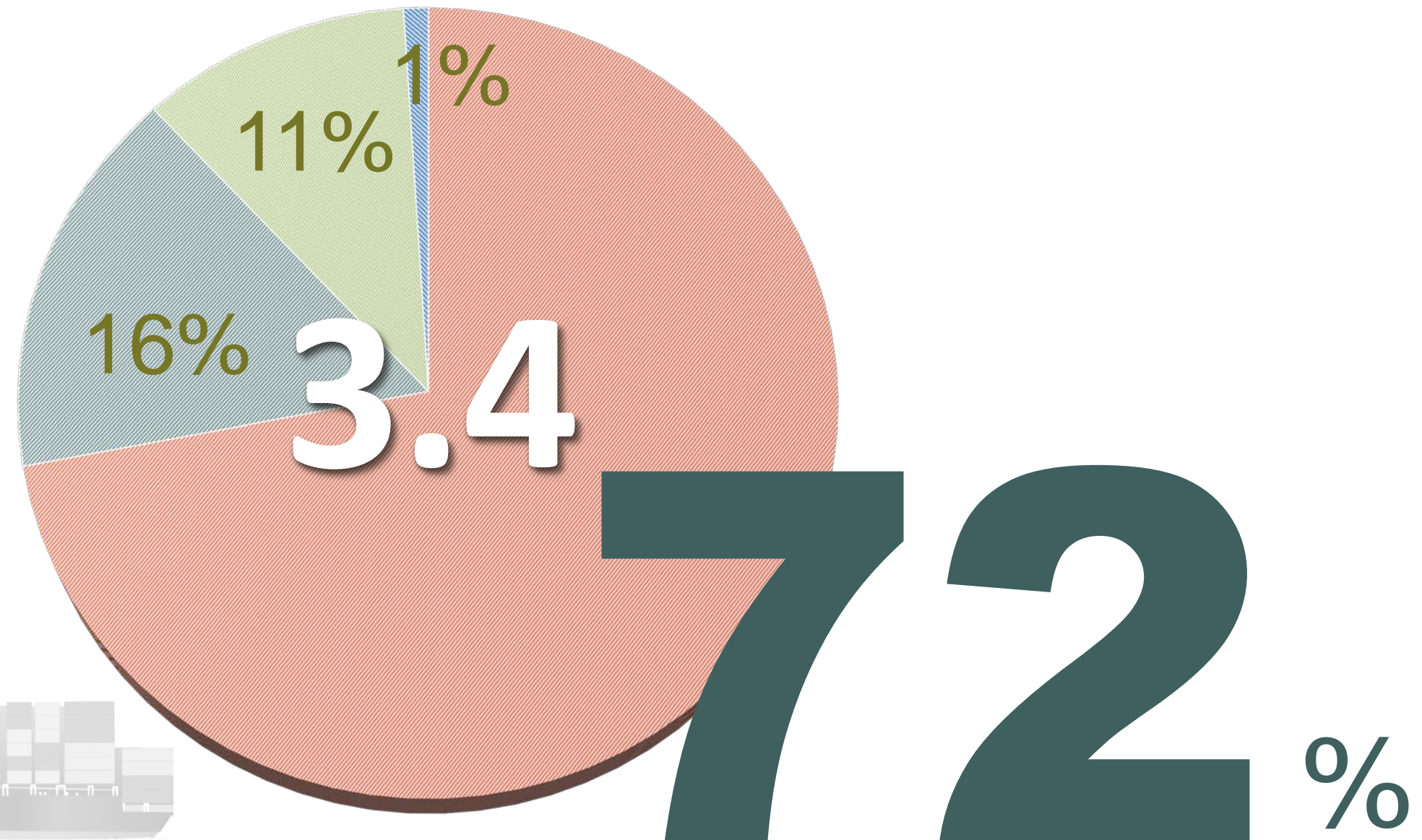




SOY.ORG Japan Soy Importing Origins

U.S. SOY FOR A GROWING WORLD

■ USA ■ Brazil ■ Canada ■ China



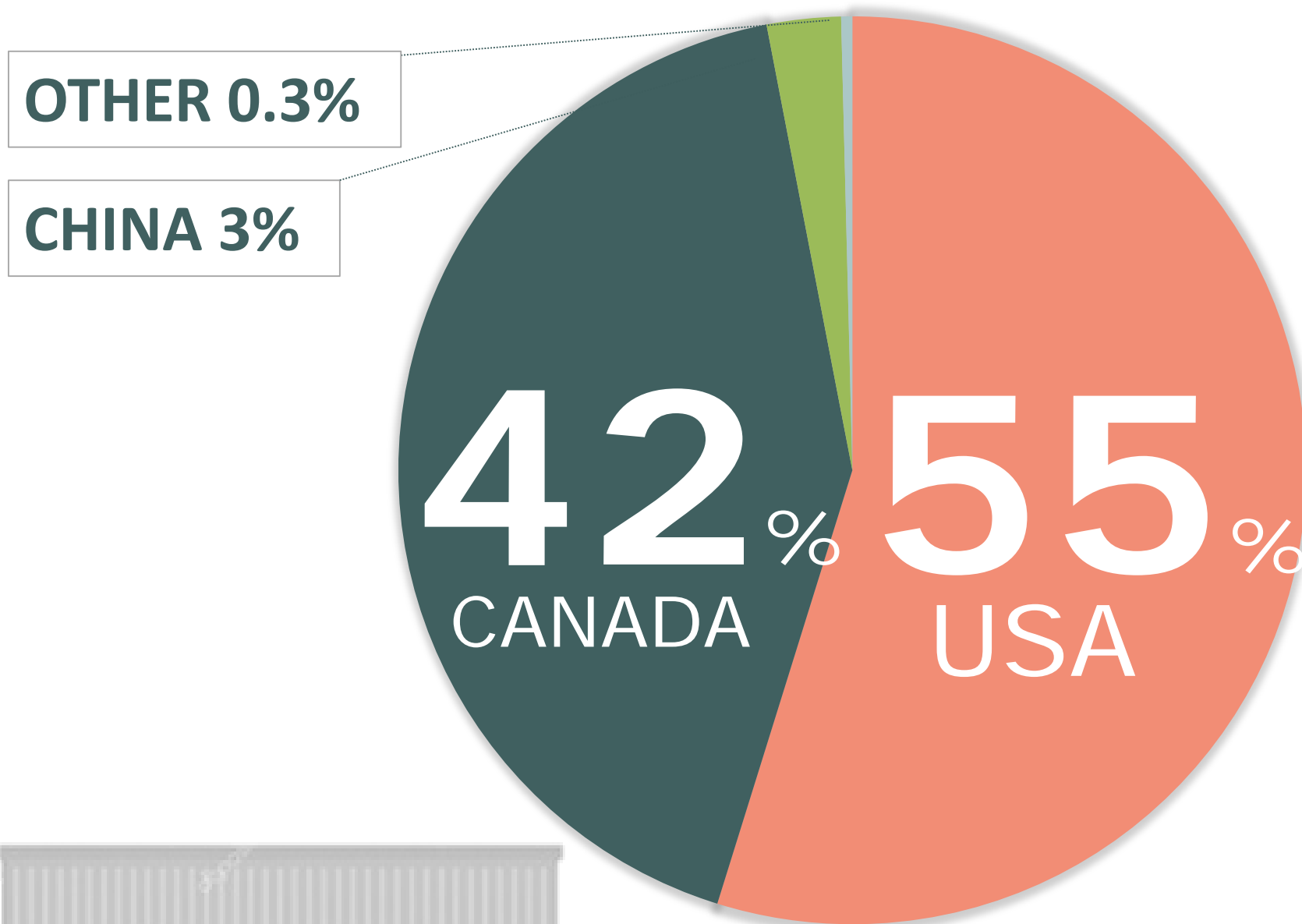
MMT



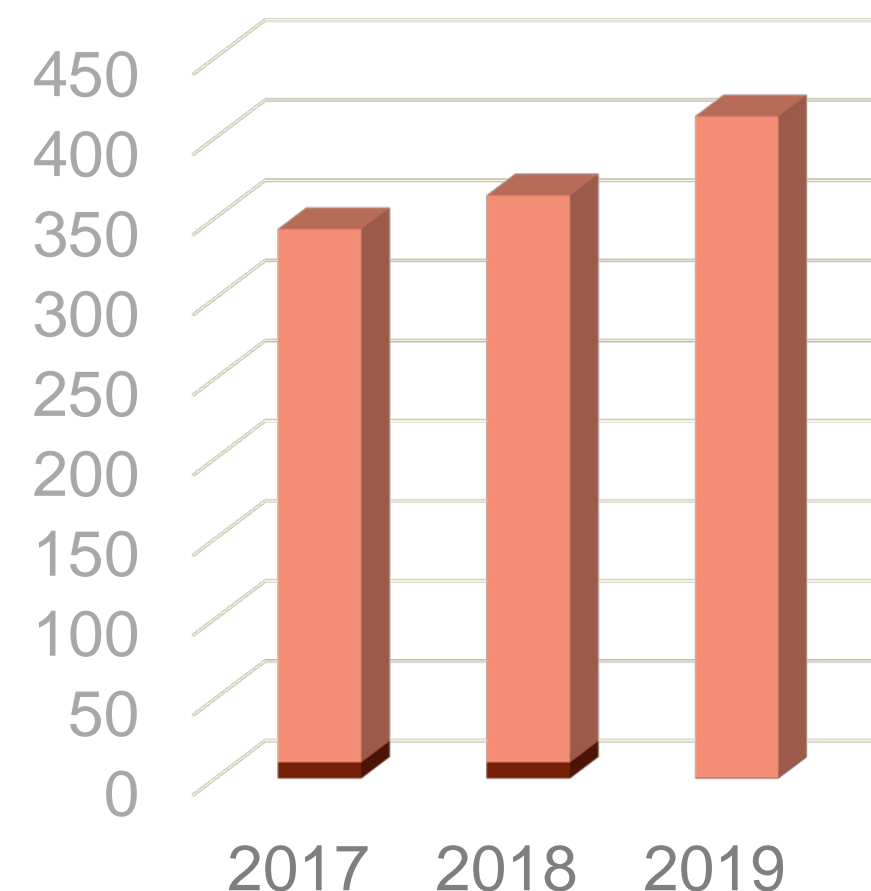
FOOD

Source: Industry Date 2020



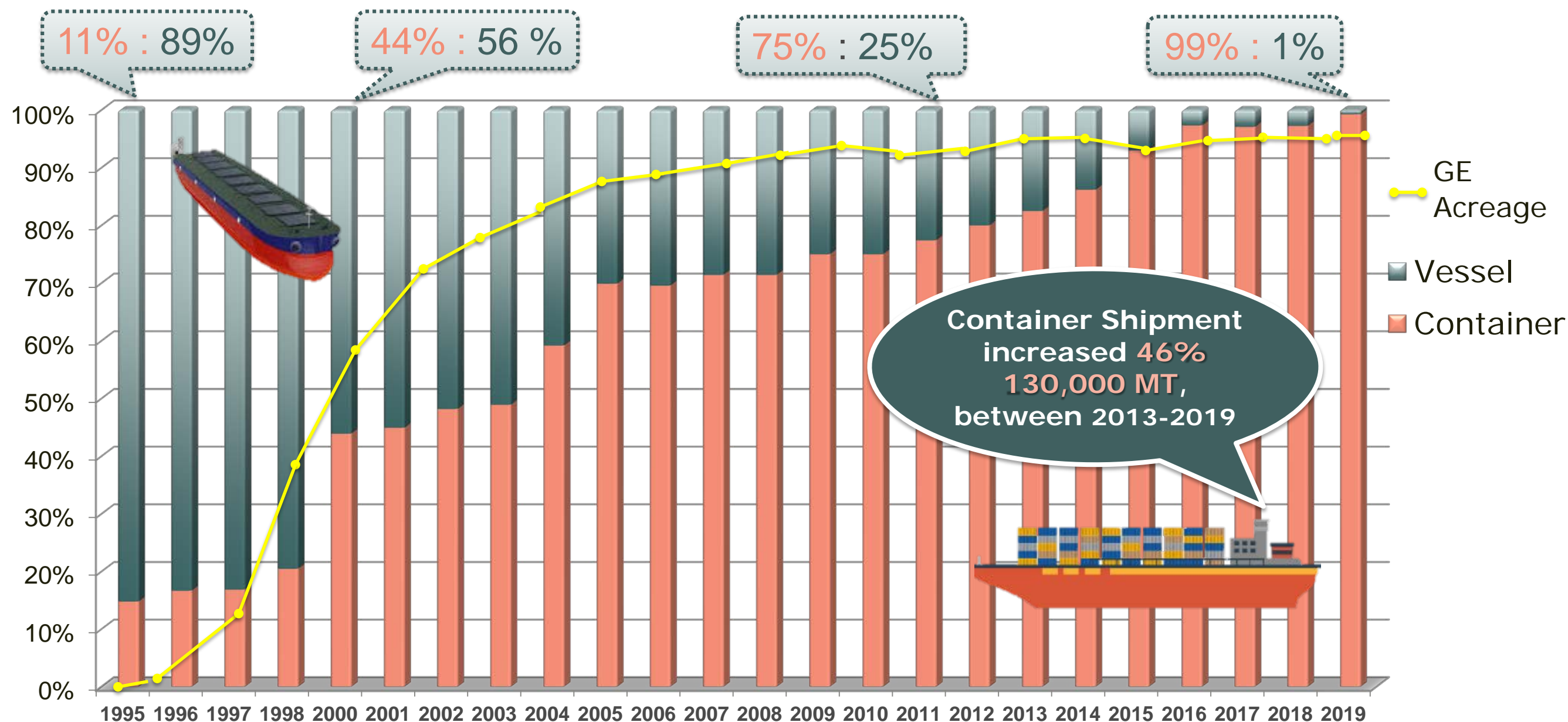


Import from US (1000 MT)

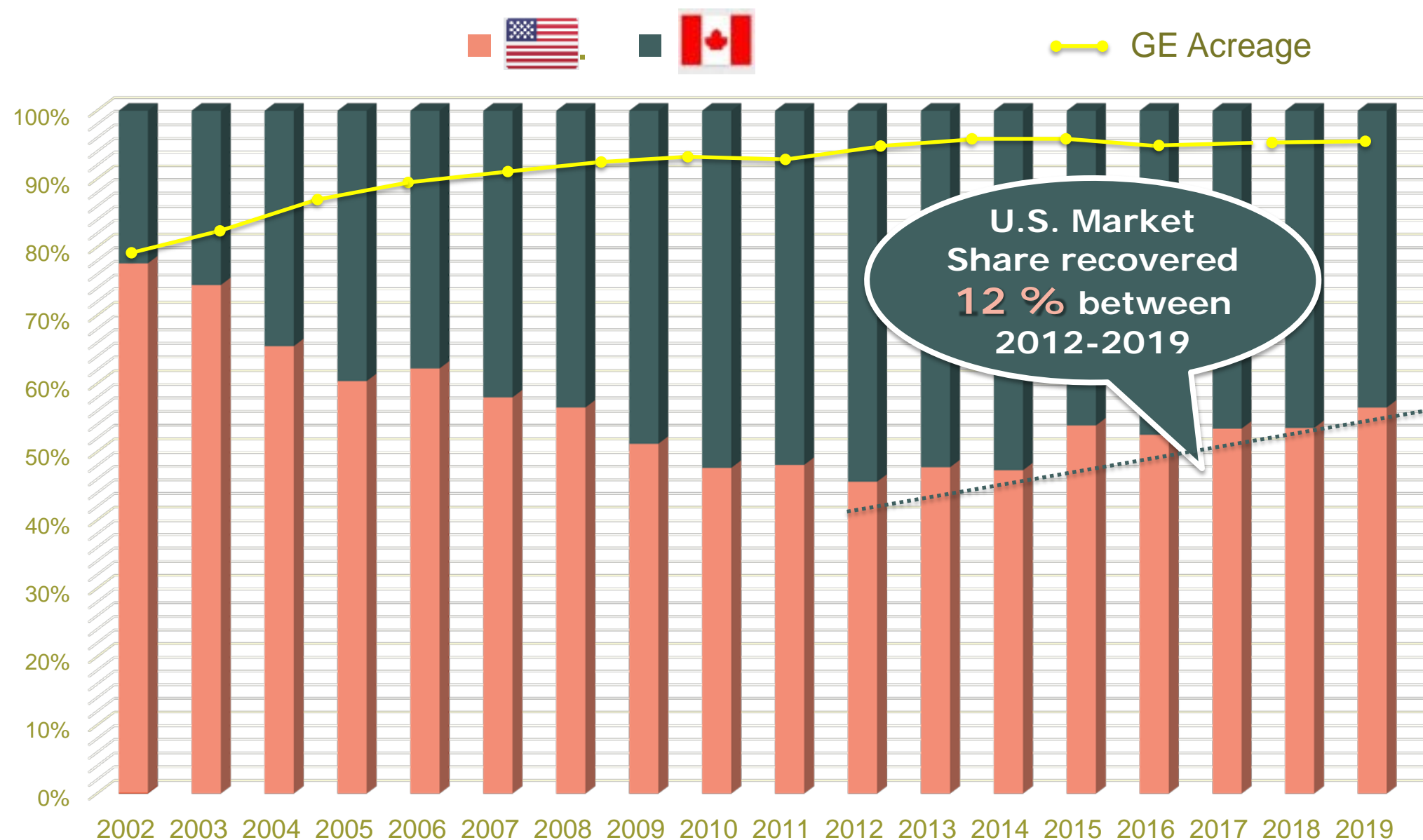


U.S. IP Food Bean Variety Shipments to Japan Container v.s. Bulk Vessel Ratio 1995-2019

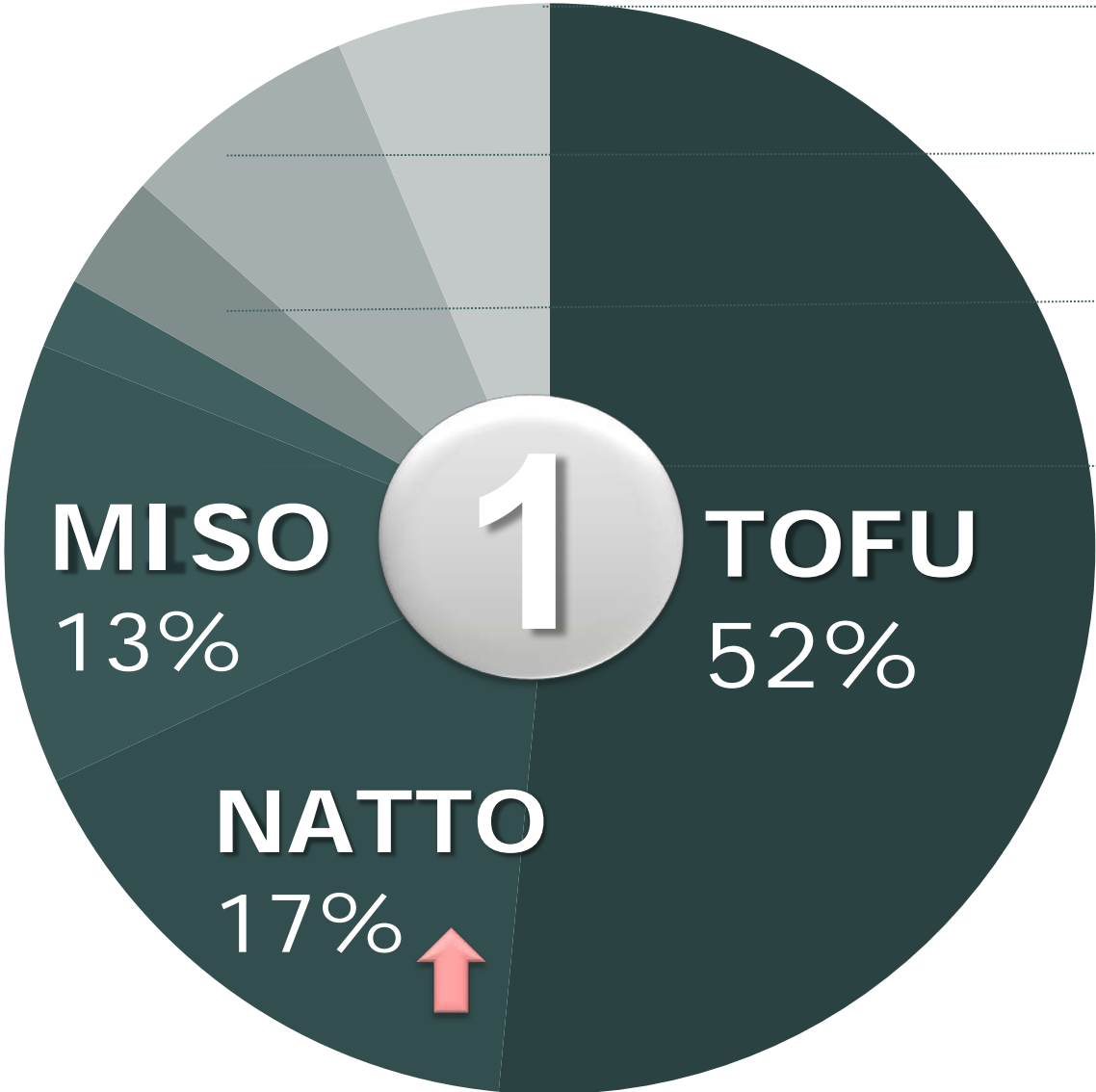
U.S. SOY FOR A GROWING WORLD



Japan Food Bean Market Share Is Recovering US vs CANADA 2002-2019



 Growing Segment



SOY MILK  **7%**

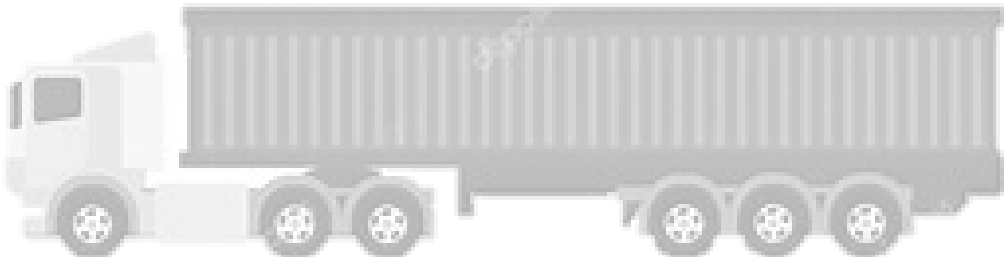
SOY FLOUR **6%**

FROZEN TOFU **2%**

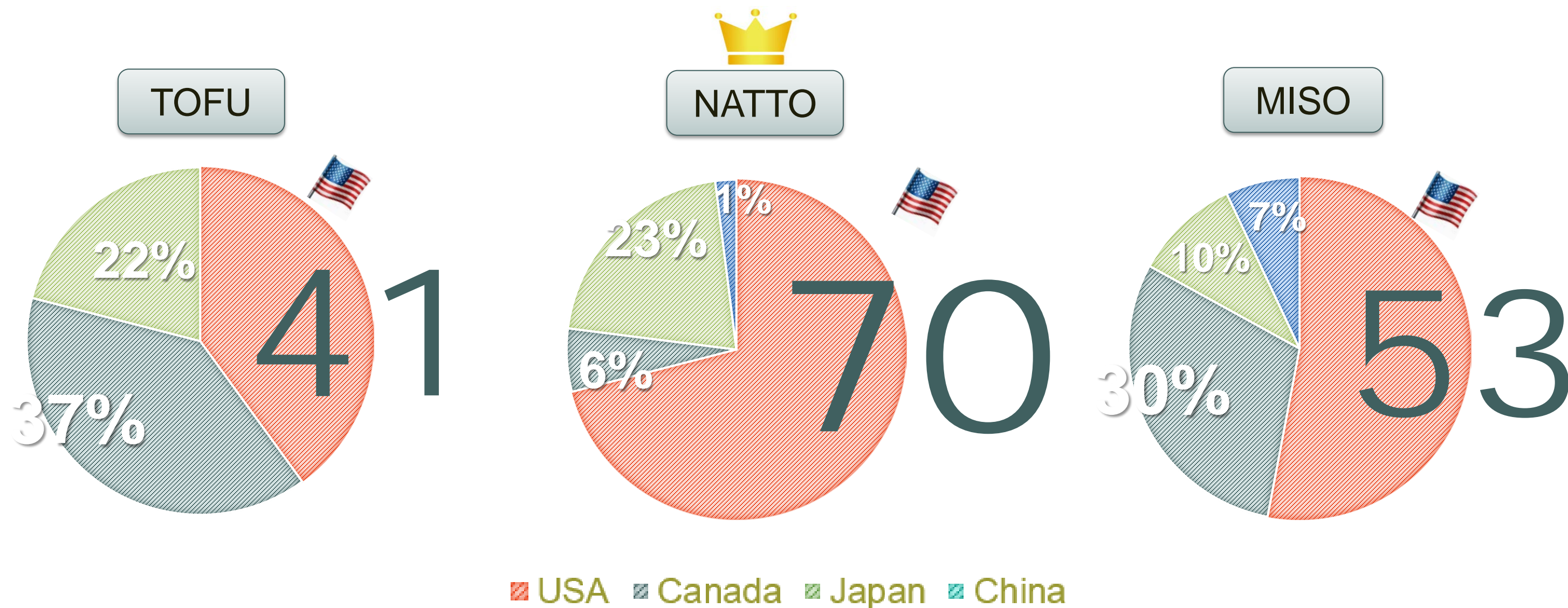
SOY SAUCE **3%**

* whole soy only, excluding soy sauce made from soy meal

MMT



JAPAN FOOD BEAN IMPORTS ORIGINS



• **JAPAN NATTO DEMAND**
WILL CONTINUE TO
GROW AND IS EXPECTED
TO REACH RECORD HIGH
IN 2020:

(GROWTH IN 2020 VS 2019)

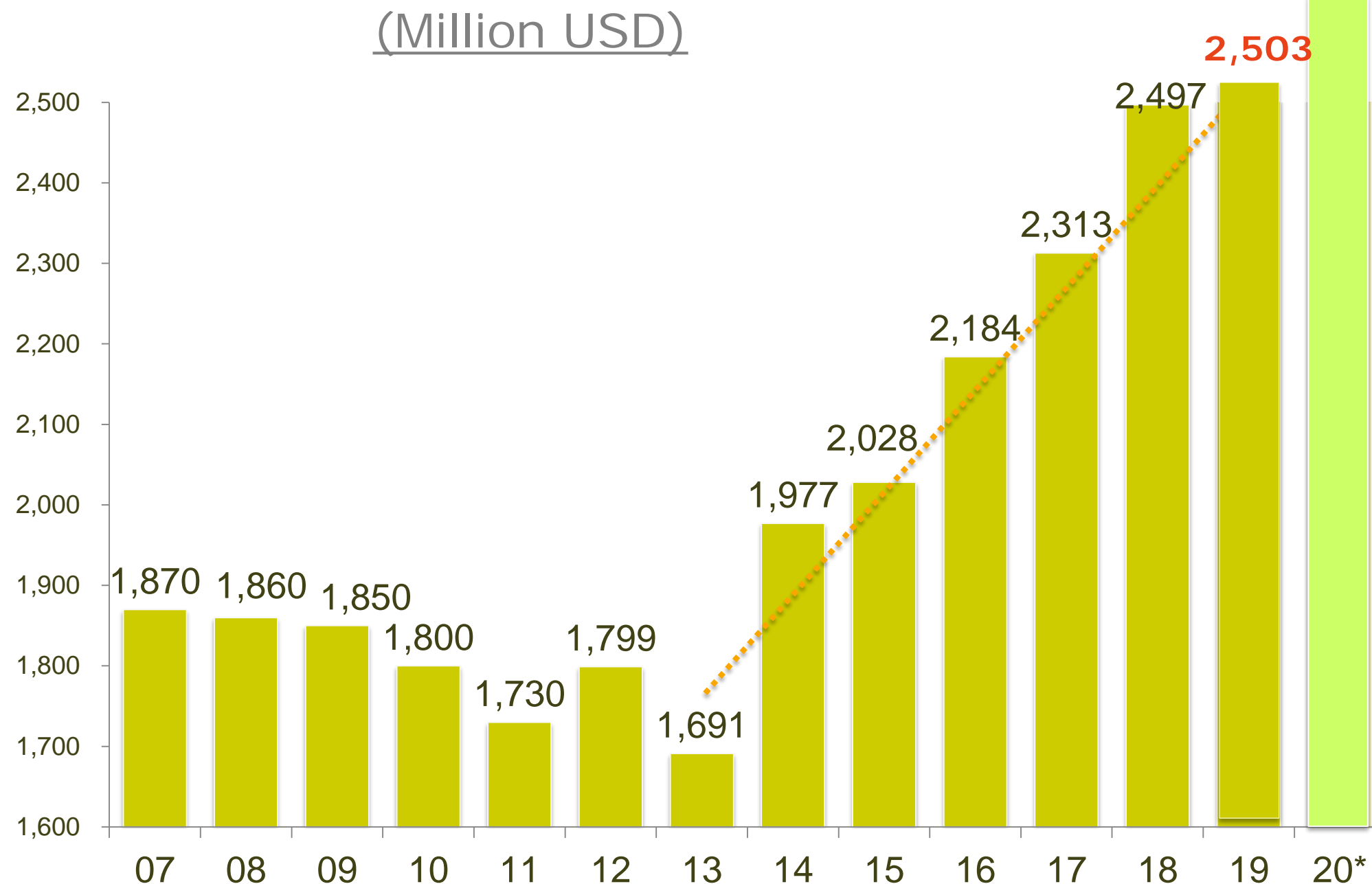
20` FEB 113.9 %

20` MAR 116.8 %

20` APR 123.2 %

20` MAY 119.4 %

-48% GROWTH
BETWEEN 2013-2019

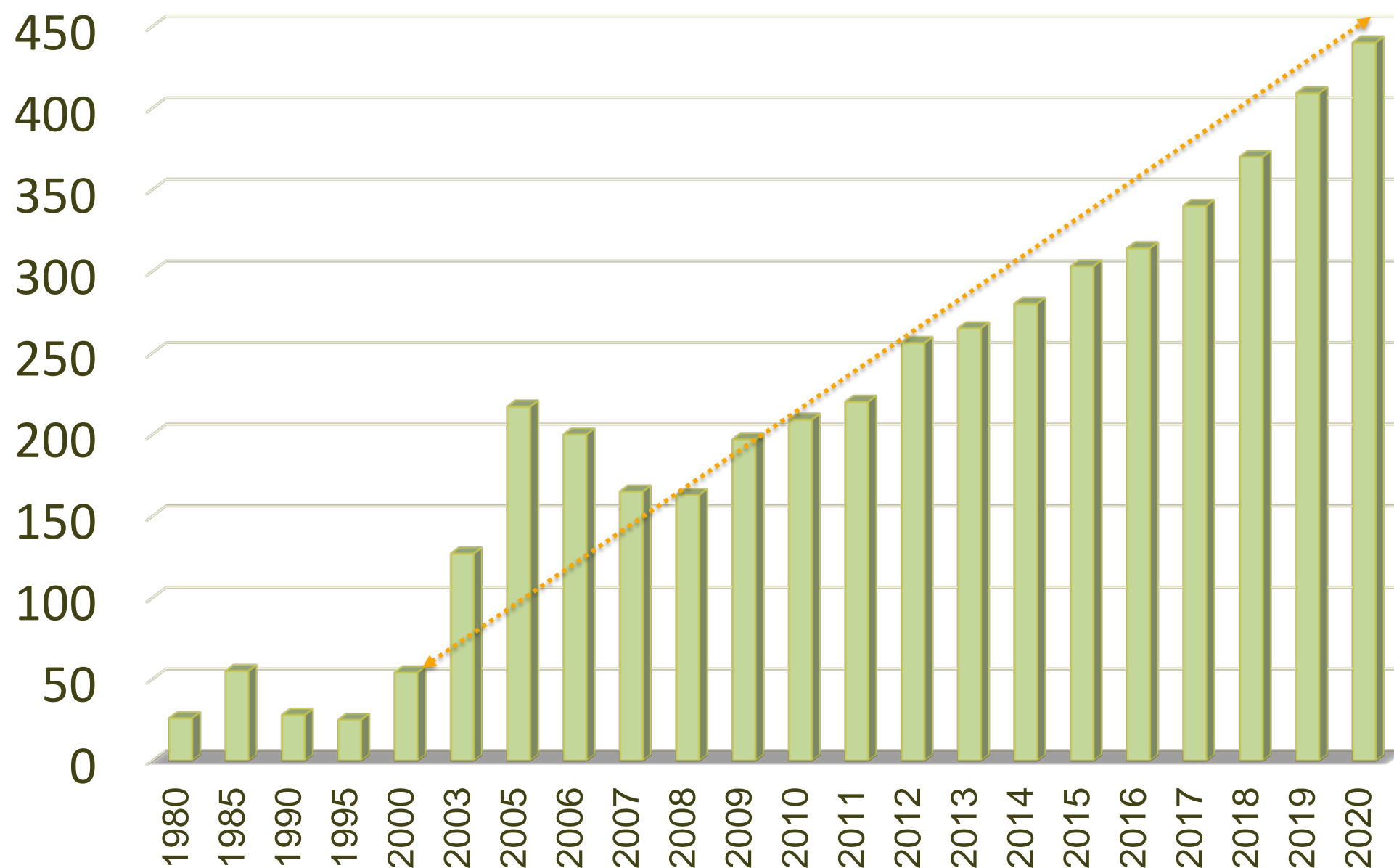


Japan Soymilk Production

U.S. SOY FOR A GROWING WORLD

(1,000 KL)

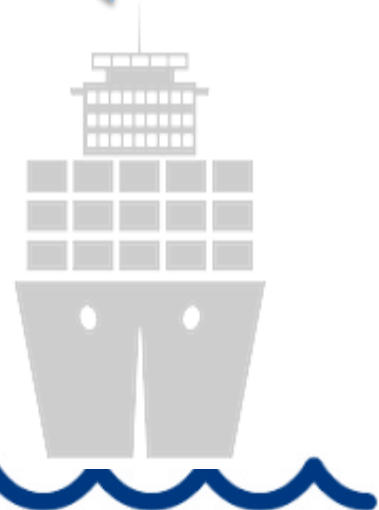
- JAPAN SOYMILK DEMAND IN 2019 INCREASED **13%** COMPARED WITH 2018
- IT WILL CONTINUE TO GROW AND IS EXPECTED TO REACH RECORD HIGH IN 2020
- 2020 DEMAND V.S. 2019 **20` JAN-MAR 7 % ↑**
- **657%** GROWTH BETWEEN 2000-2019



Production Volume (2018 V.S. 2019)



Import volume
28,100



- **JAPAN SOY PROTEIN**
DEMAND INCREASED **5.9%**
BETWEEN 2018 AND 2019
REACHED RECORD HIGH
- VARIOUS FOOD & BEVERAGE COMPANIES
LAUNCHED NEW PRODUCTS
USING SOY PROTEIN TO MEET
INCREASING DEMAND FOR
PLANT-BASED FOODS
- TOP SOY PROTEIN MAKER
IN JAPAN IS BUILDING A NEW
PLANT IN CHIBA AIMING TO
EXPAND SUPPLY IN TOKYO
METROPOLITAN AREA AND
OTHERS



- Japan's total Food Bean imports increased **42,000 MT, 5.8% UP** in 2019 compared with 2018
- Japan's U.S. IP Food Bean imports in 2019 increased **52,000 MT, 14% UP** compared with 2018, while U.S. took share from all sources Canada, China and S-America! U.S. share improved **5 %** from 2018
- Traditional "IOM Soybeans" imports via bulk vessel in 2019 completely shifted to single variety container imports between 1995-2020 (bulk vessel change 89% ➔ 1%)
- Plant Based boom (mostly SOY) continue and 3 major convenience stores Seven-Eleven, Lawson, and Family Mart have launched new SOY MEAT products between May-July. Soy Protein imports and production will continue to grow
- Food Service segments such as School Lunch program, restaurant and hotels have been in decline due to COVID-19, however, overall soy foods consumption have been increasing because of increase of home cooking

INDUSTRY VOICE

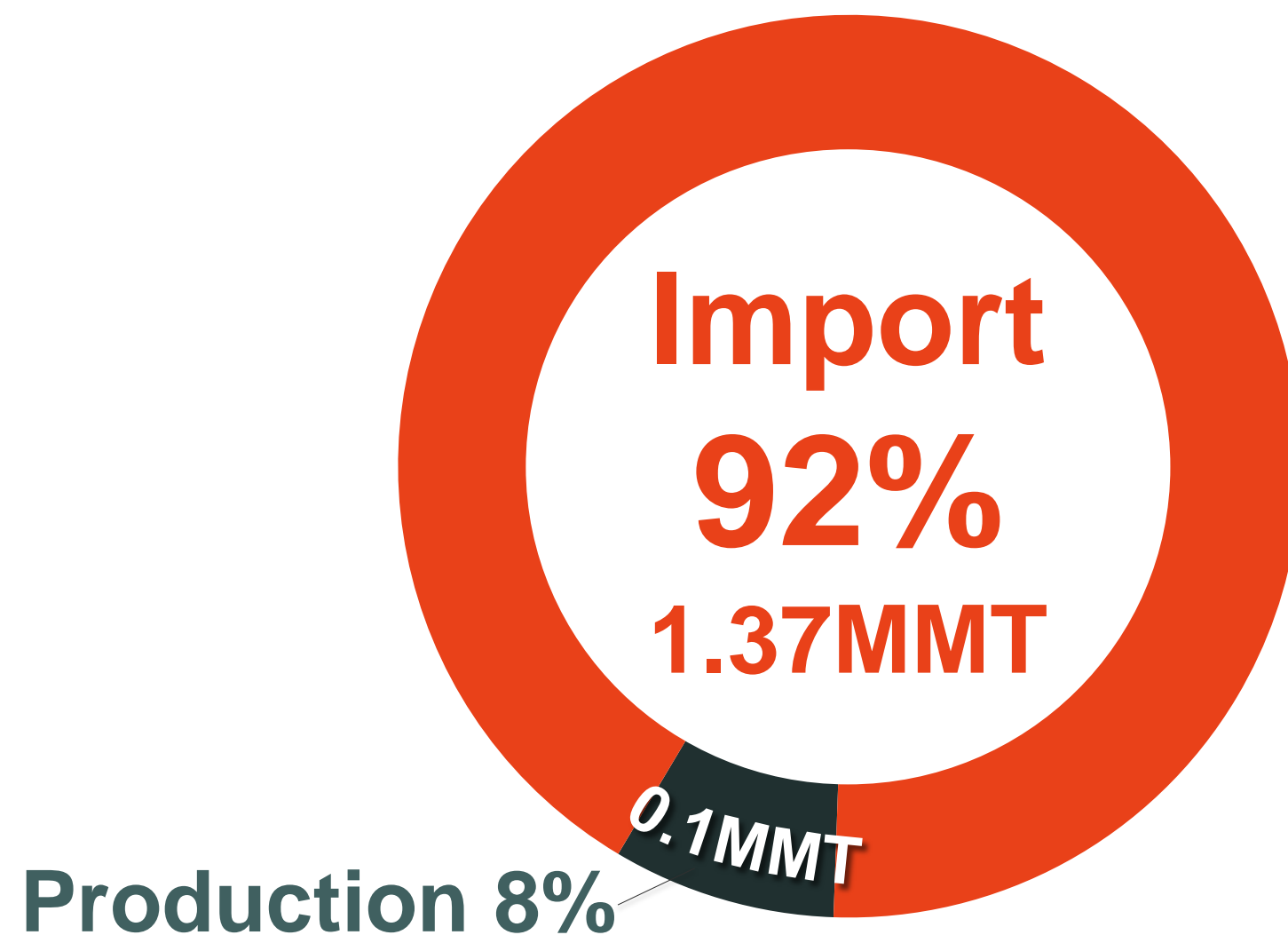
- There is tendency that major tofu manufacturers have been shifting from U.S. black-hilum to Canadian clear-hilum varieties. The reasons are: 1) To avoid black-color hilum to be comingled with their tofu and relevant products, 2) Canadian white hilum variety has higher protein content & higher production yield than that of U.S. black hilum variety. Therefore tofu processors want to source from Canada where they perceive that **U.S. white hilum high protein variety is more expensive than that of Canada, and white hilum with mid-price range variety which make beneficial for mid-to-larger scale tofu manufacturers to process tofu are not available in U.S.**
- Even if importers have planted Canadian higher protein variety in U.S., the protein have not been improved. They expect the U.S. white hilum higher protein variety to be same price as Canadian white hilum higher protein variety, however, this longstanding challenges still continue. If this challenges will be cleared, we can expect further increase of U.S. market share



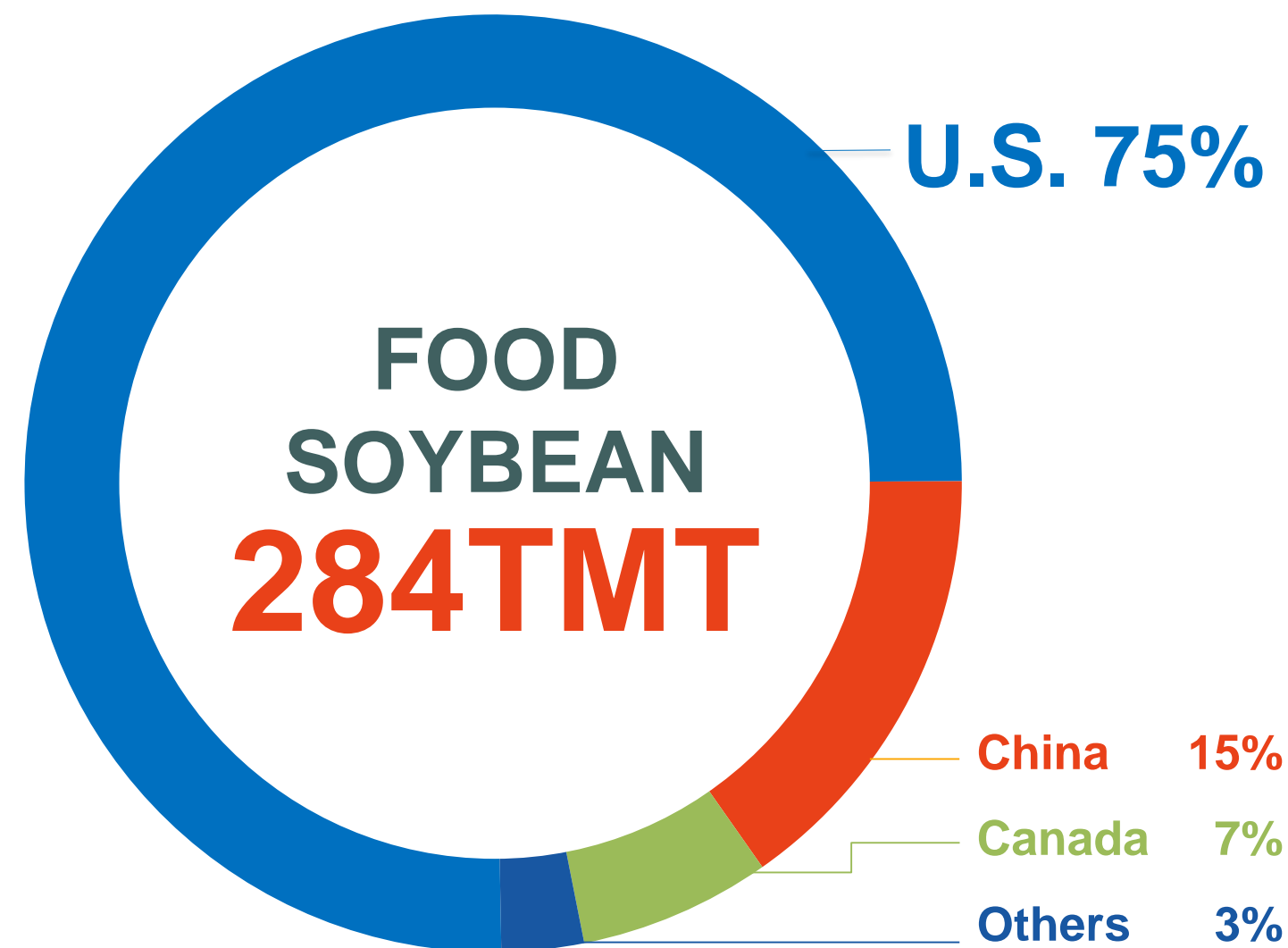
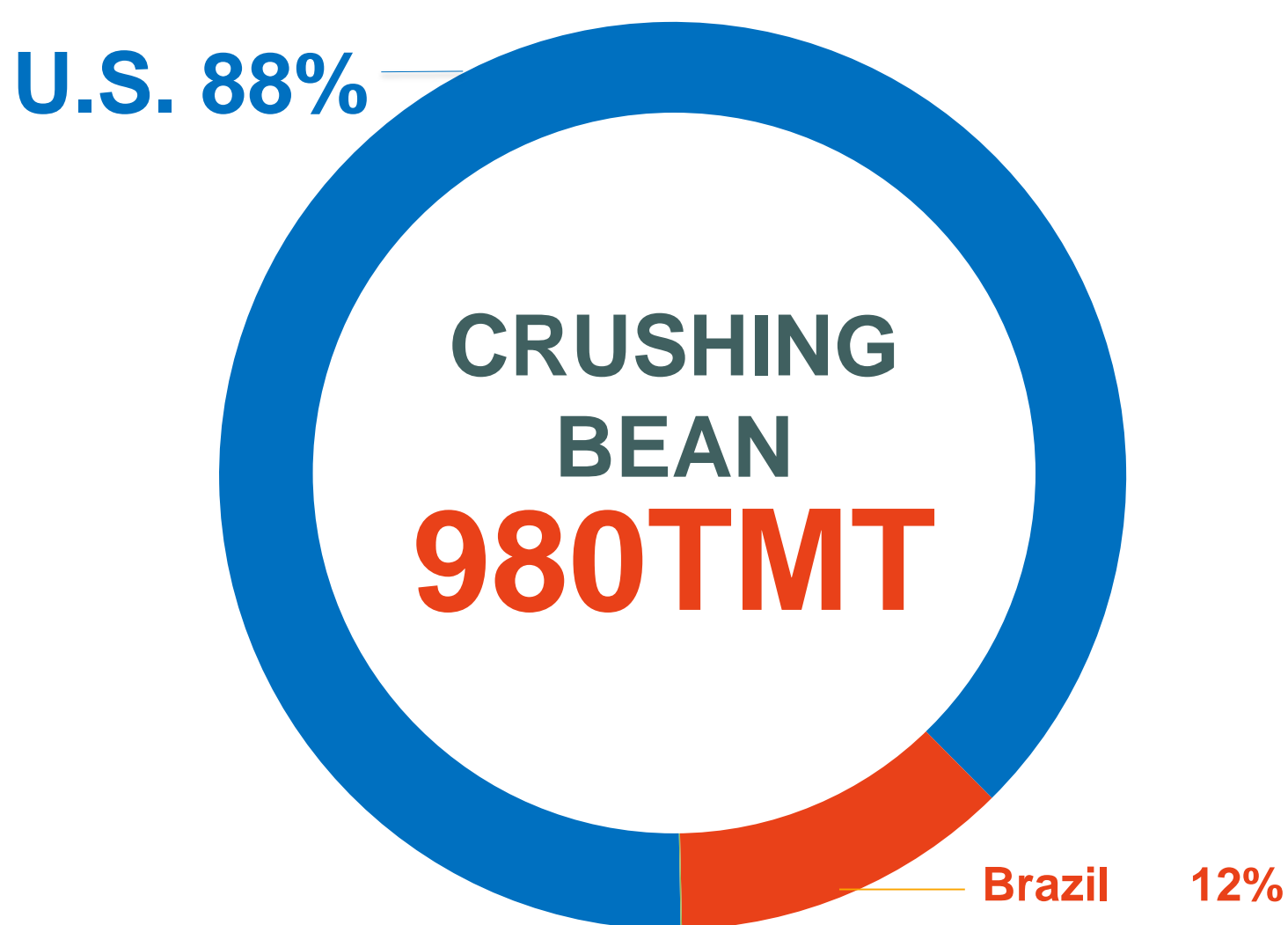
Korea Soy Food Market Update

U.S. SOY FOR A GROWING WORLD

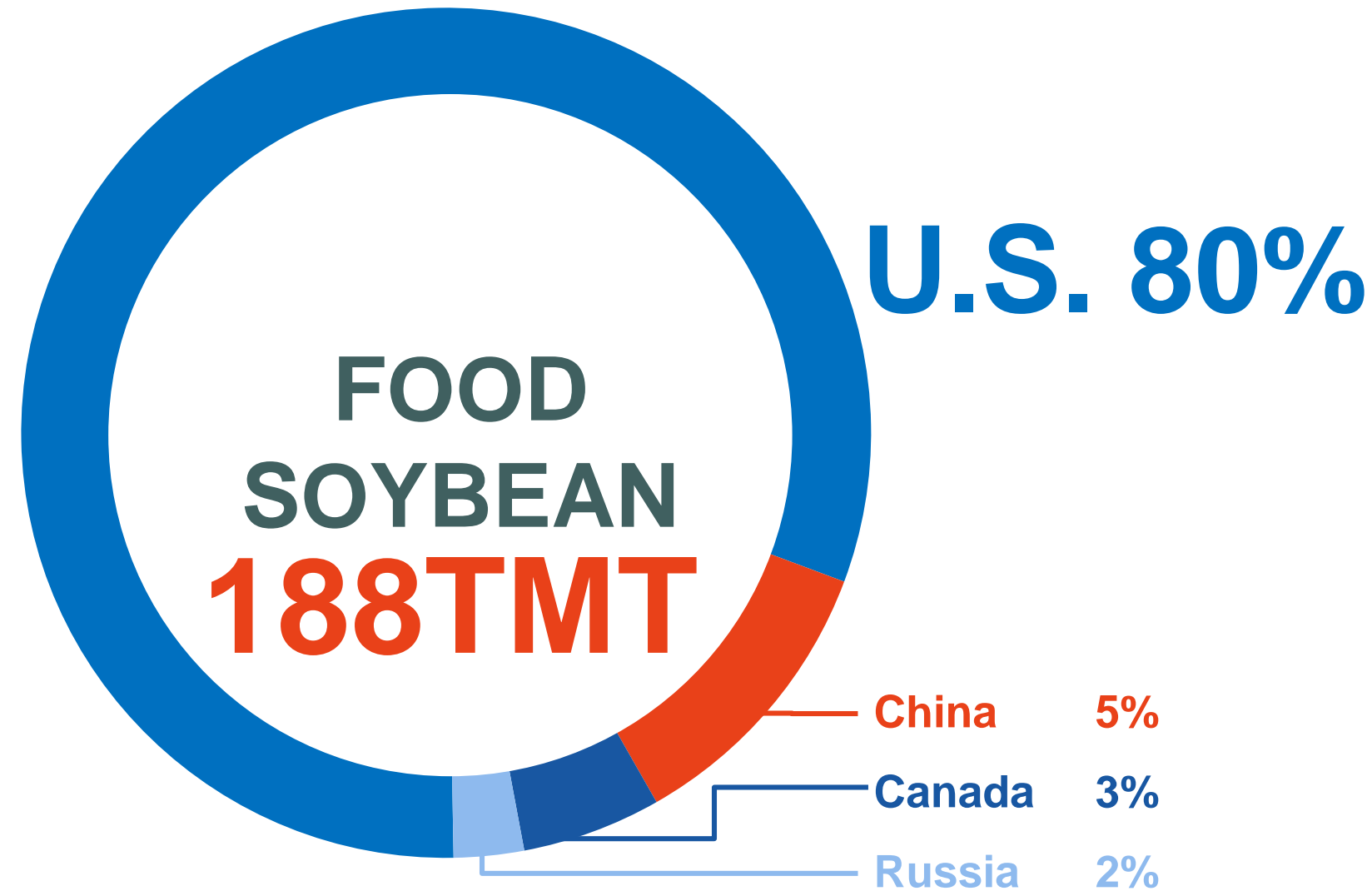
2019 Korea Soy consumption



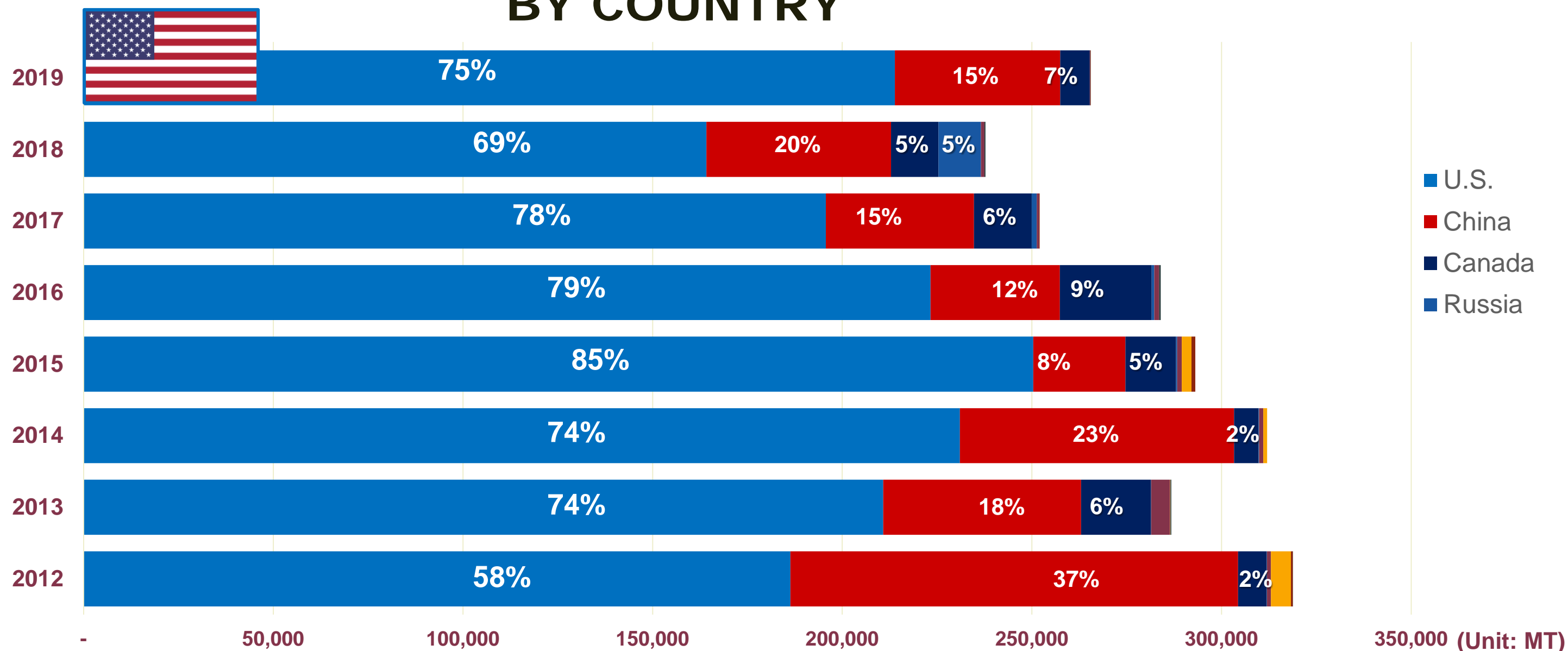
2019 ORIGIN OF IMPORTED SOYBEANS



2020 ORIGIN OF IMPORTED Food SOYBEANS (JAN-JUN, 2020)



HISTORICAL FOOD BEAN IMPORTS BY COUNTRY



Tariff rate for FOOD BEAN import

5%

within TRQ

70+% of food bean (U.S. No.1 Non-GM)
imported by aT, a state-run trading company

487%

outside TRQ

0%

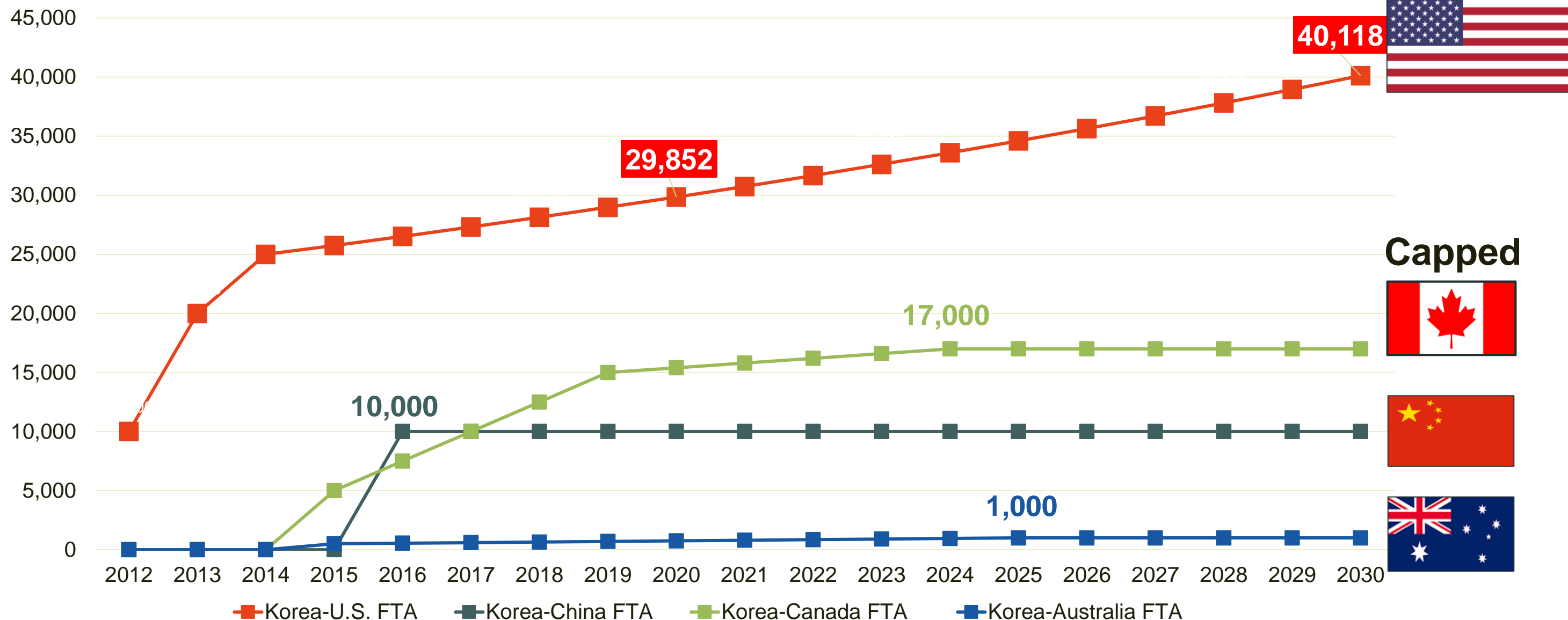
under FTA

FTA TRQ allocated to 11 soy food associations
(tofu, soy sauce & paste, soy milk, bean sprouts, etc.)

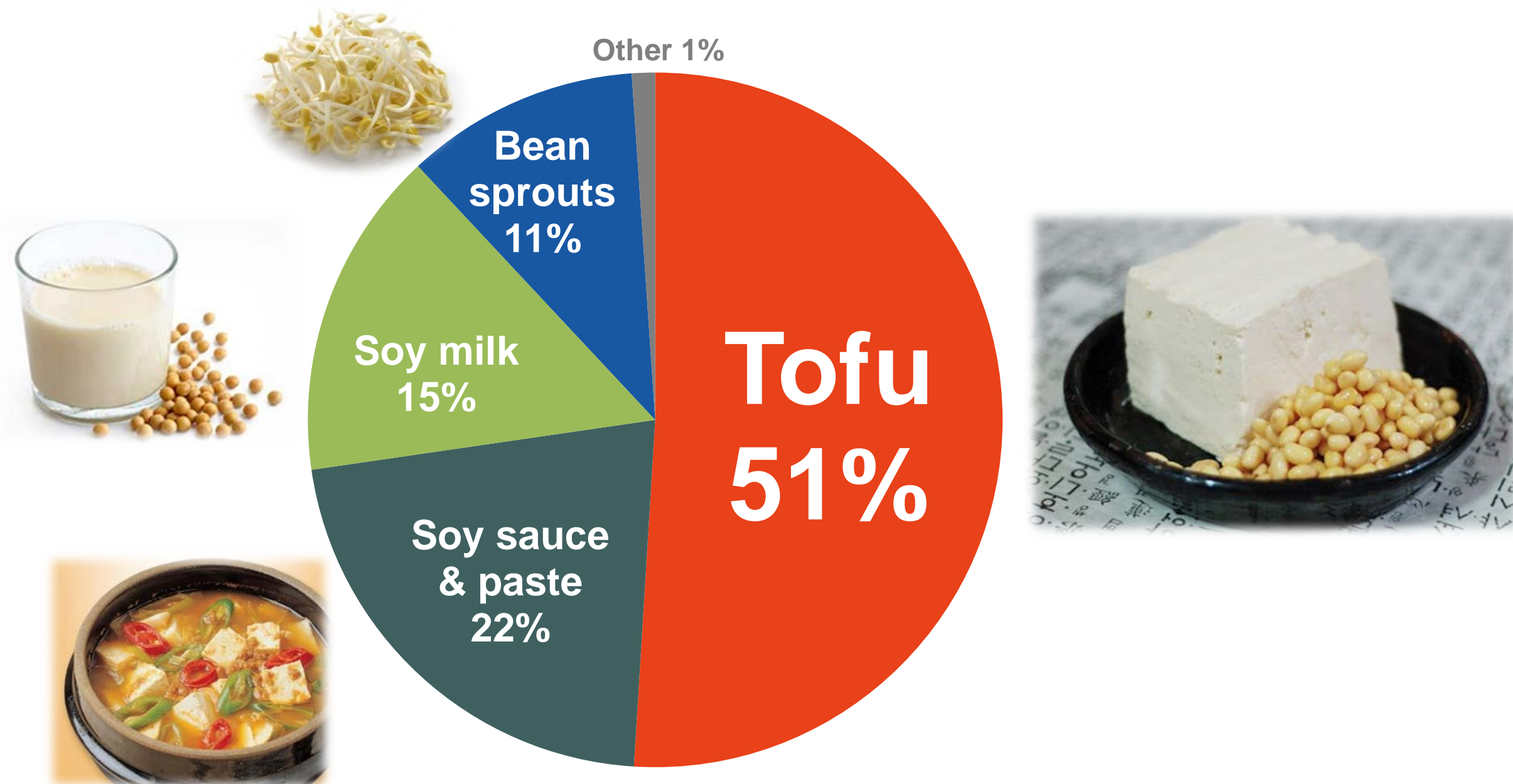


FTA TRQ for IP food Bean

(Unit: MT)



2019 SOY FOOD MARKET SEGMENT

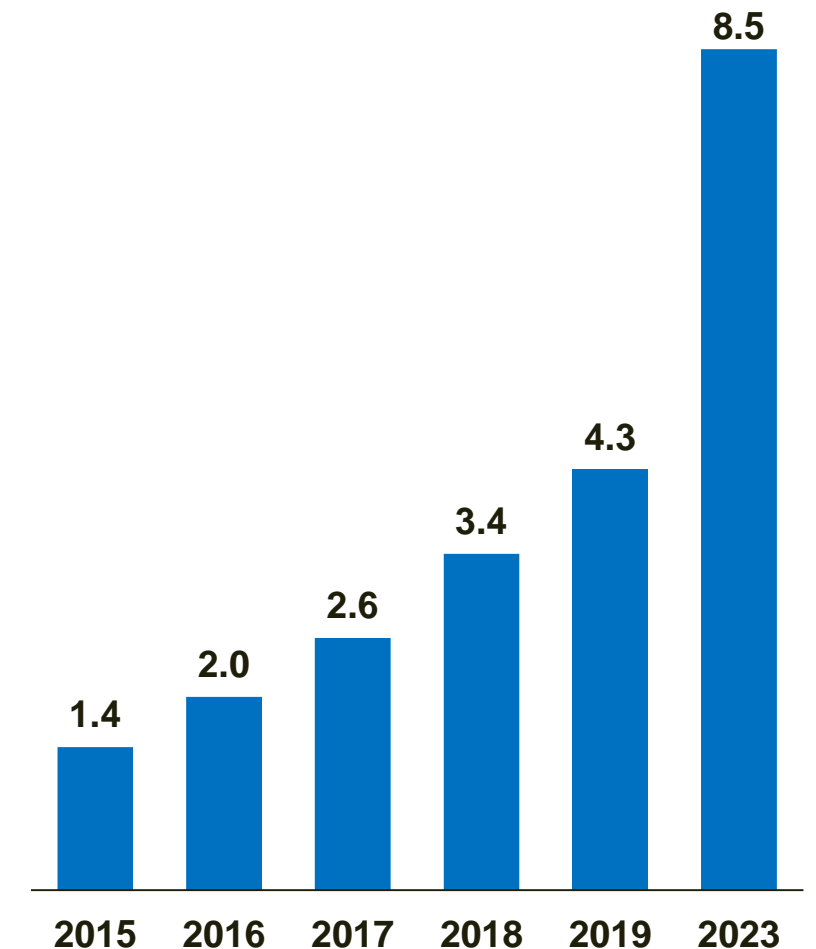


RECENT TRENDS

- B2C sales increase of tofu, soy sauce & paste
- Rise in demand for HMR & Meal Kits
- Growing interest in Plant Based Meats

Korea HMR Market Size

(Unit: US\$ Trillion)



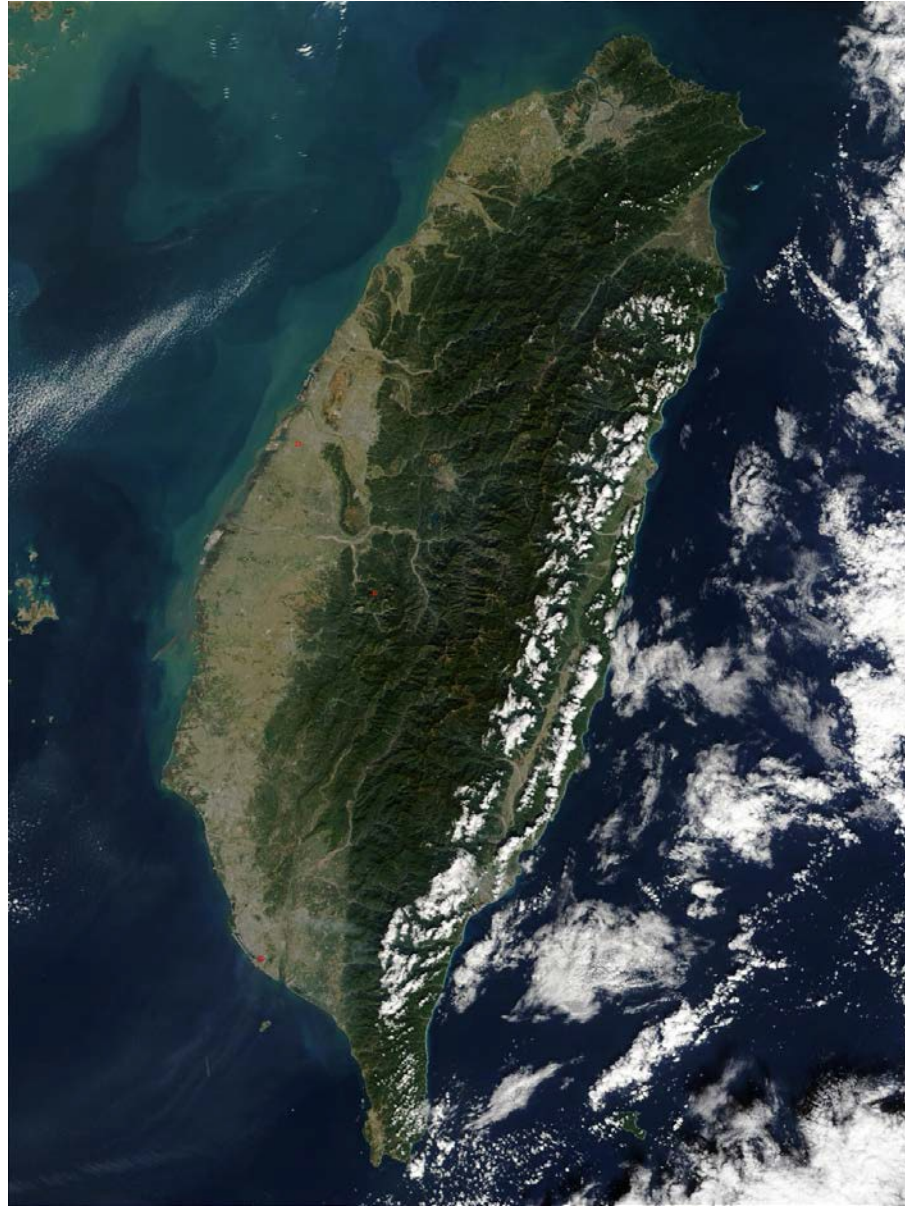


Taiwan Soy Foods Market Briefing

Julian Lin, Taiwan Market Director / Greater China Region
U.S. Soybean Export Council

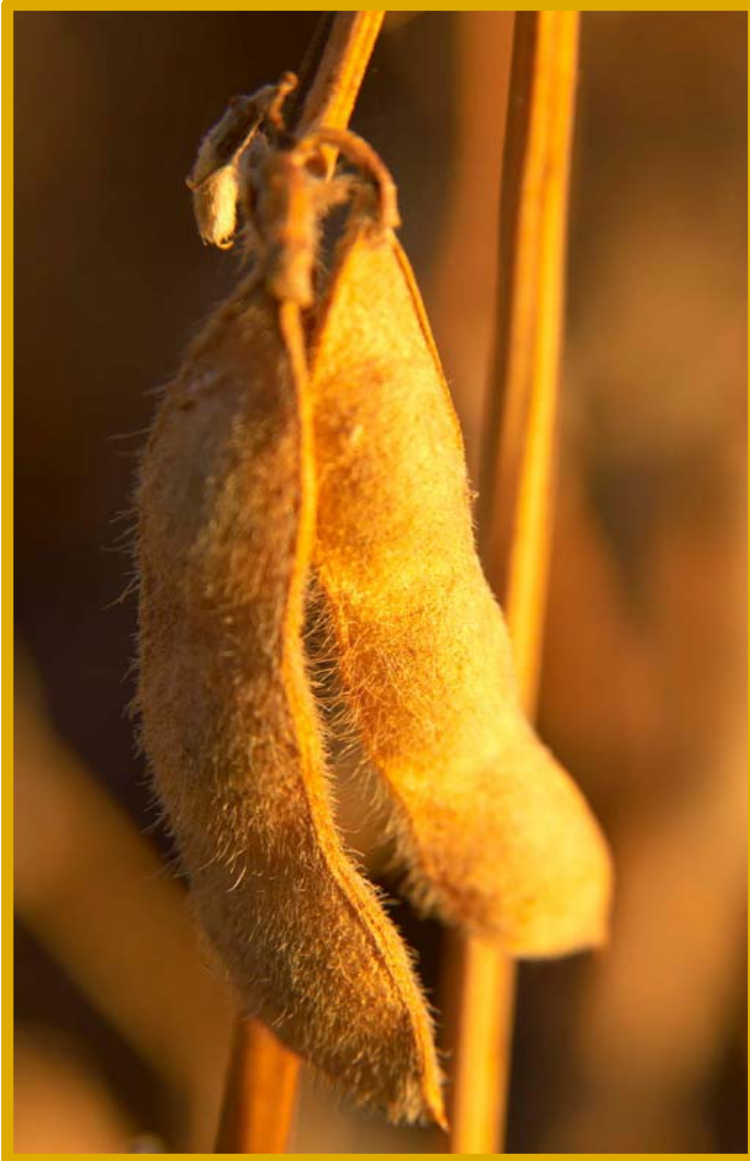
U.S. SOY FOR A GROWING WORLD





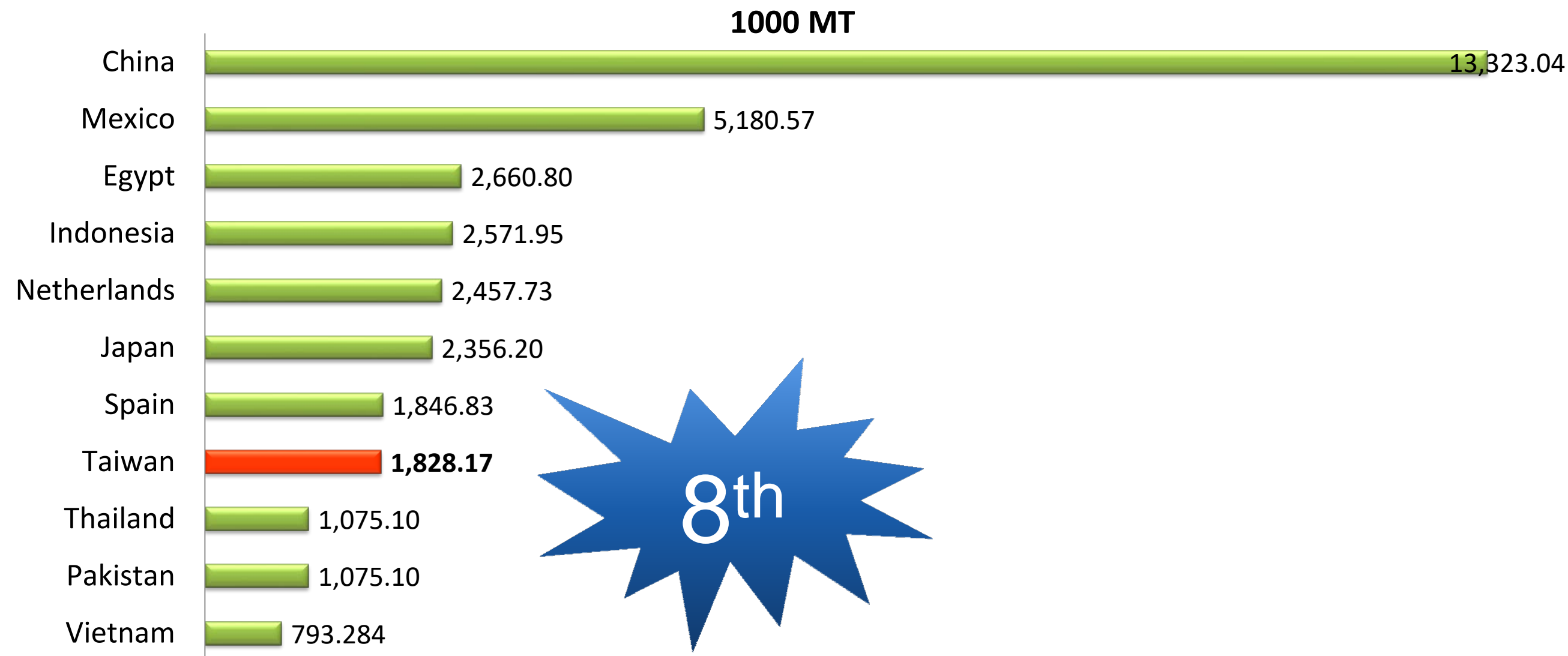
- General Market Situation
 - US Soybeans to Taiwan
 - Taiwan Soy Food Market
- Marketing Activities in Taiwan
 - SUSS Logo in Taiwan

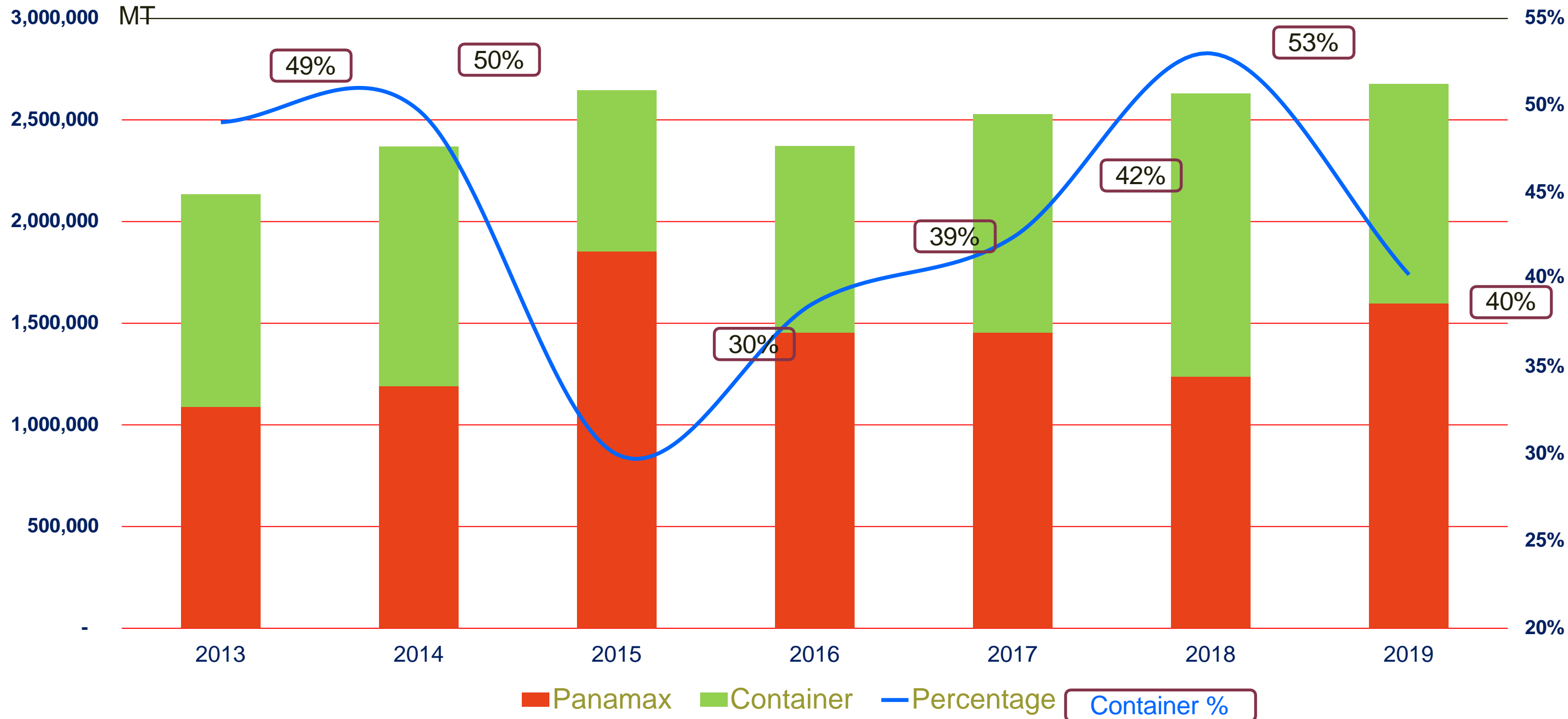
General Market Situation



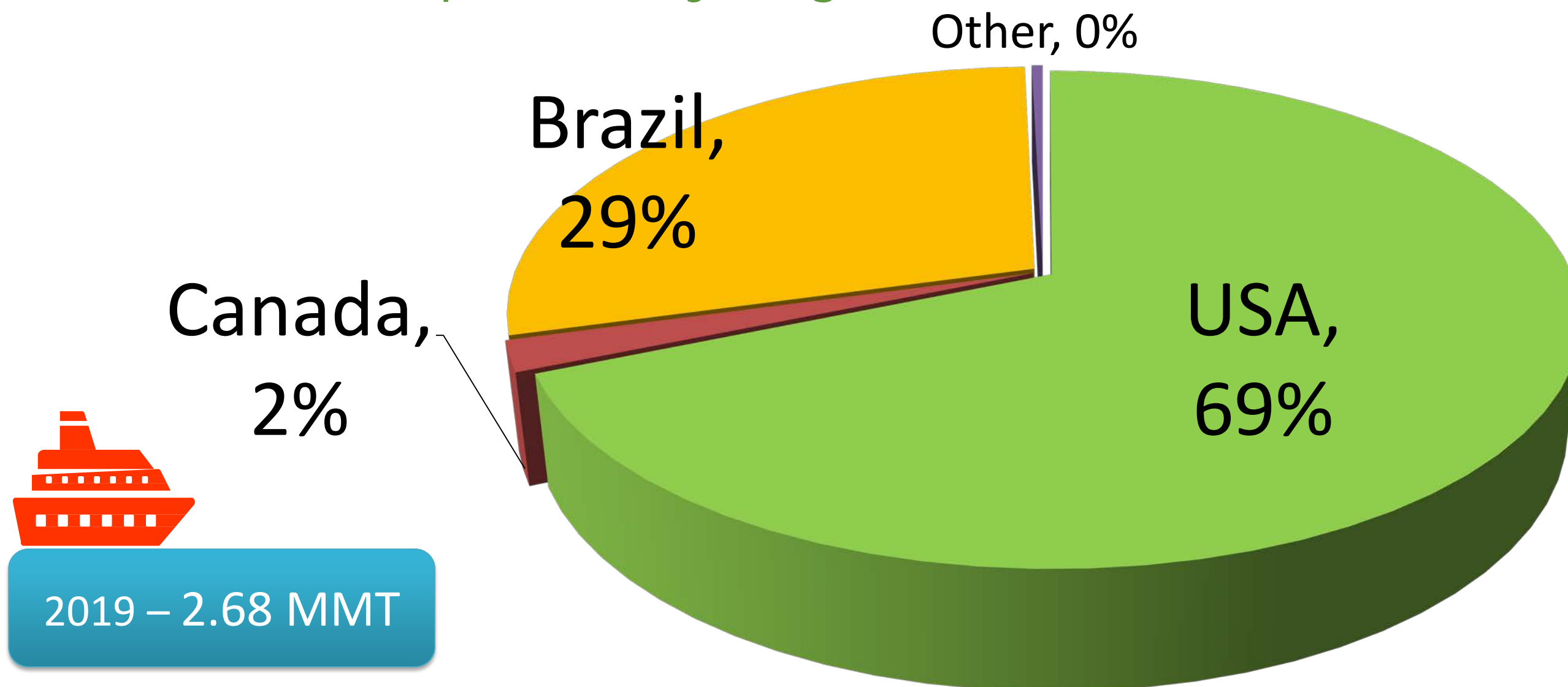
- Greater China Region
- GDP Growth 2.37% (2020 Est.)
- GDP Per Capita – USD 27,437 (2020 Est.)
- Large, Stable & Mature Market:
 - 23.6 Million Population but Low Population Growth (0.88% Est.)
 - High Per Capita Consumption of soybean (114Kg)
- Long-time Loyal Customers of U.S. Soybeans
- Brazilian & Canadian Competition
- Containerized Shipment Opportunities

Largest Export Markets for U.S. Soybeans (2018/19)





2019 Taiwan Imported Soy Origins



Taiwan Soybean Food Market

Imported Soybeans

2.67 million MT (2019)

Market Share : U.S. 69% ; Brazil 29%

11 kg
per capita
Food sector

Soybeans for Food

240,000 MT (est.)

U.S. has 77% market share

Soybeans for Feed

2.28 million MT

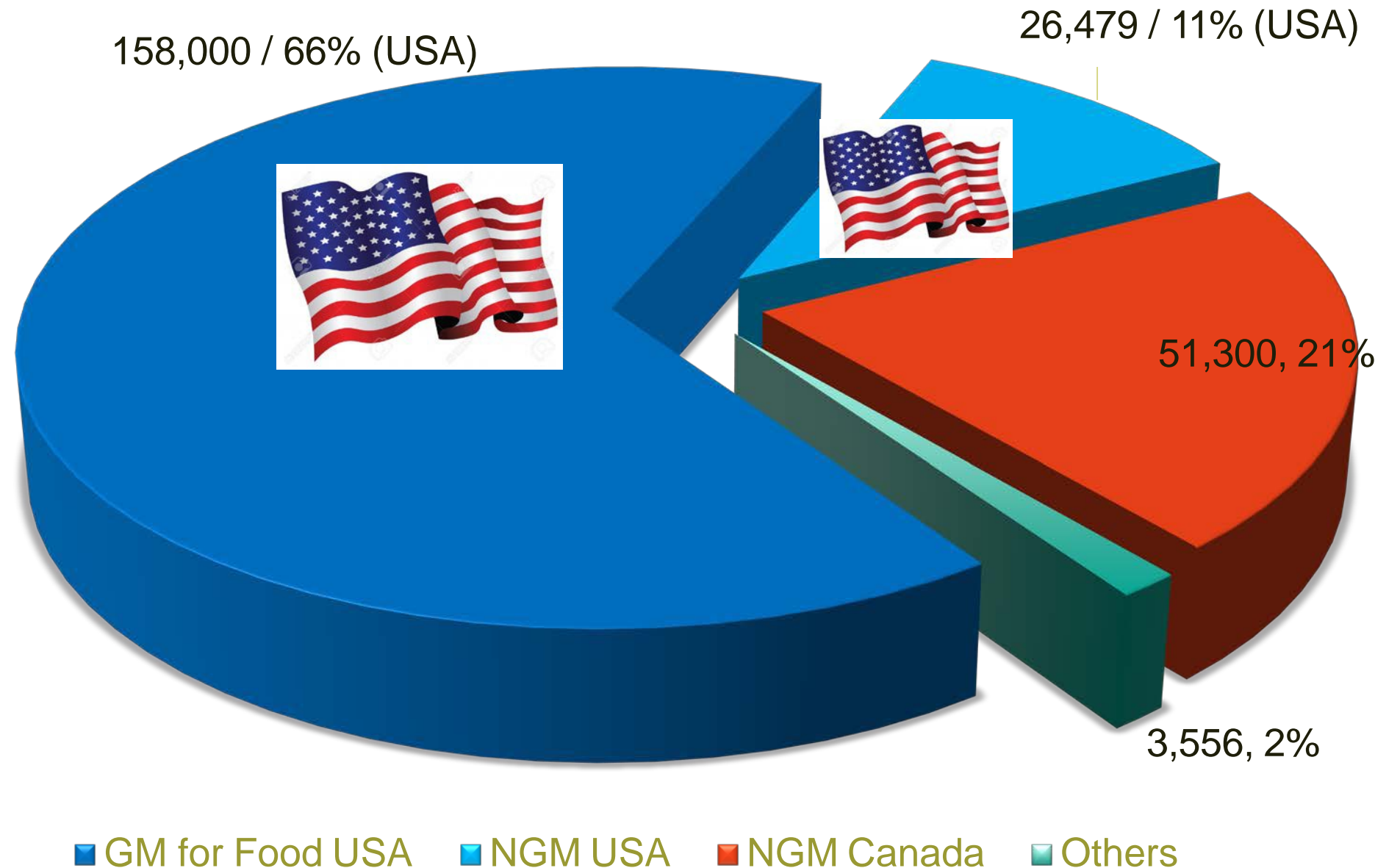
U.S. has 63% market share

Soybeans for Food in TW (2019)

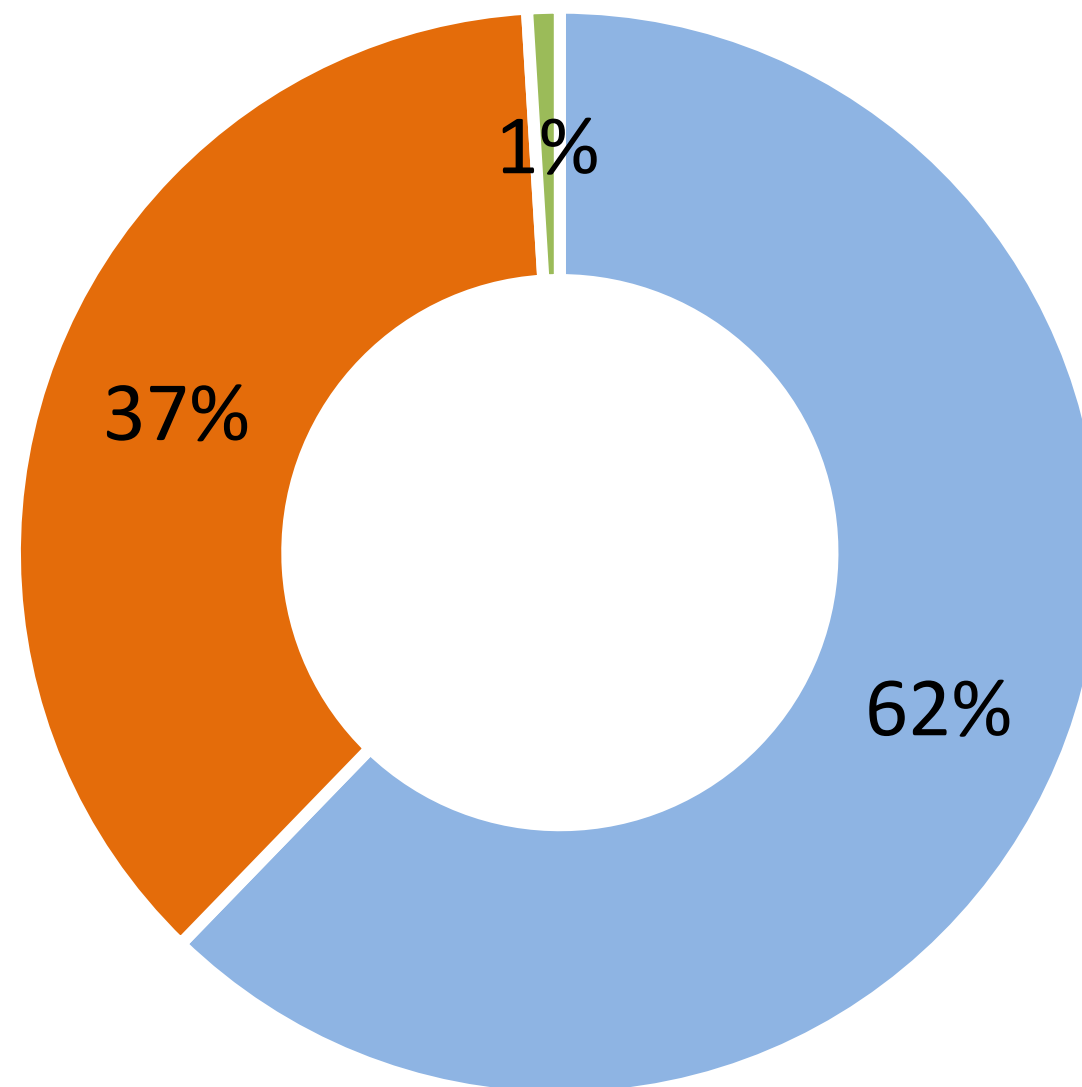
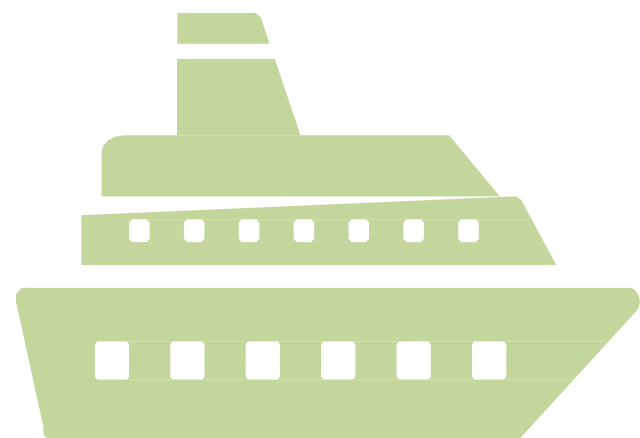
UNIT:MT

* Sorted soybeans means cleaned soybeans that crushers processed 100% from imported U.S. commodity (GMO). Its market spec is 0% FM but not variety specific and it is sold to food processors in 60kg or 30kg PP woven bags.

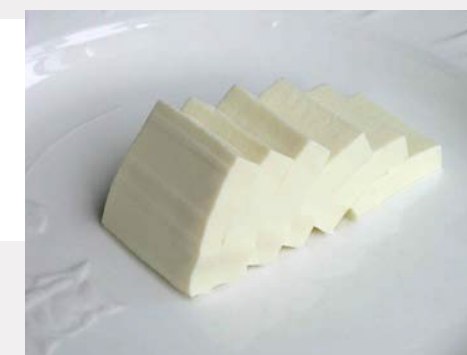
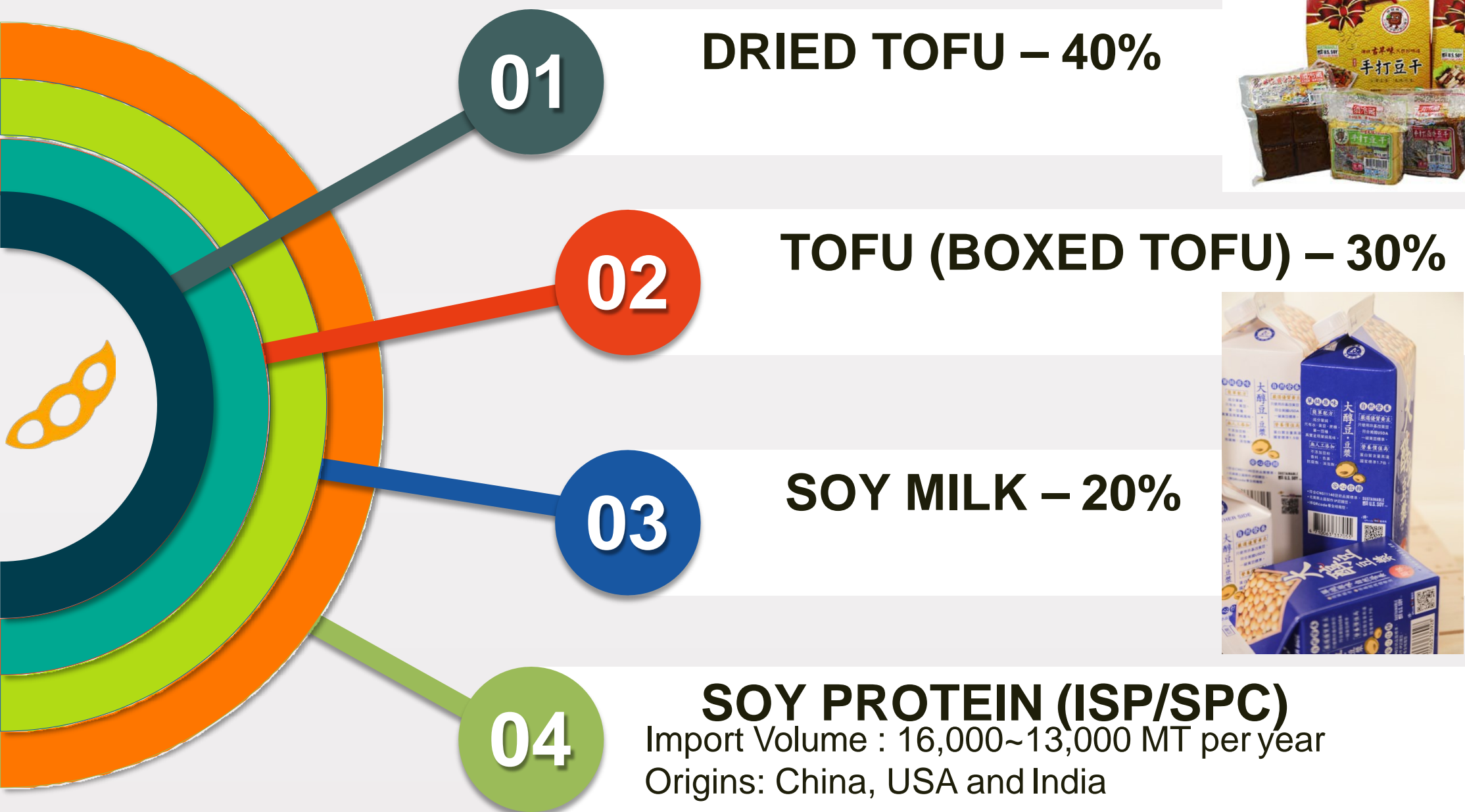
NGM-Import Vol: 81,335 MT
CAN-51,300 MT
USA-26,479 MT
Others-3,556 MT



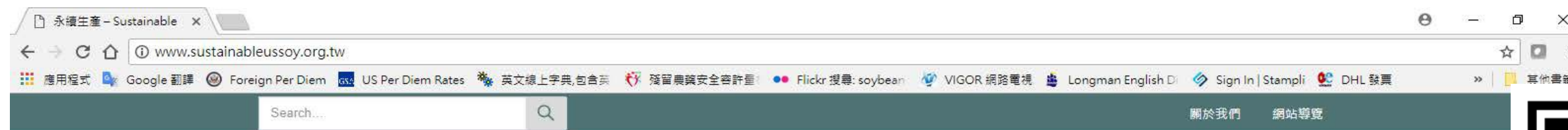
NGM Soybeans Import to Taiwan Jan-Jun/2020



- Canada: 26,185 MT
- USA: 15,476 MT
- Australia: 405 MT



Sustainable of U.S. Soy Website (Traditional Chinese)



S.U.S.S. LOGO IN TAIWAN

Total 8 Major Soy Foods Related Companies in TW Applied the Logo

- Taisun Enterprises Co., Ltd
- TTET Union Corp
- Great Wall Enterprise Co., Ltd.
- Wei-Chuan Foods Corp.
- Rei-Yuan Soy Food Co., Ltd.
- Cheer Home Soy Food Co., Ltd
- Fung Jung Industry Corp.
- Huang Feng Food Co., Ltd.



Sustainable of U.S. Soy – Soy Foods



SUSTAINABLE
U.S. SOY™

美國黃豆
永續生產認證





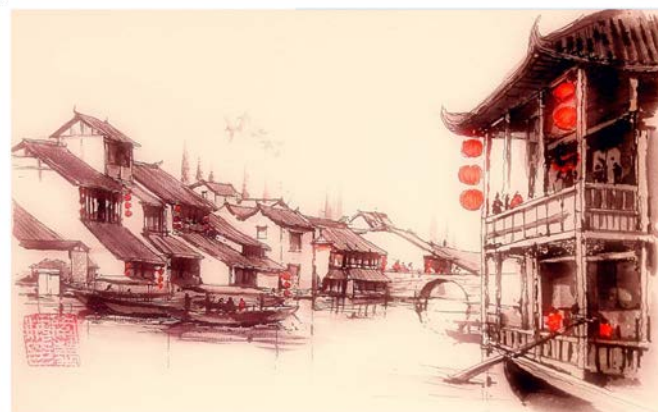
China Soy Food Market Updates

U.S. SOY FOR A GROWING WORLD



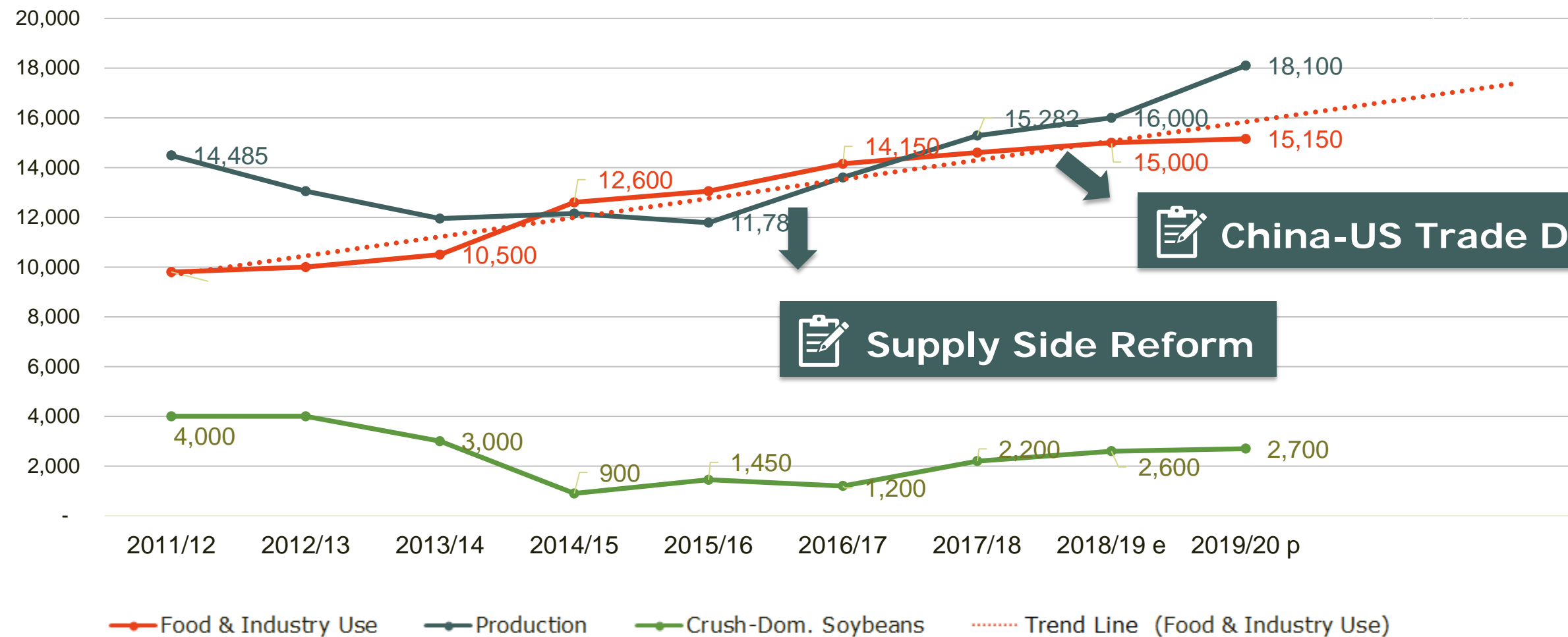
Overview

- China is the 4th largest producer of soybeans in the world.
- **1.4 billion** soy consumers
- **15.97 MMT** soybean production in 2018/19, all non-GMO soybeans.
- China's non-GMO soybean consumption per annum **15 MMT**.



China Domestic Soybean S/D

(In Thousand MT)

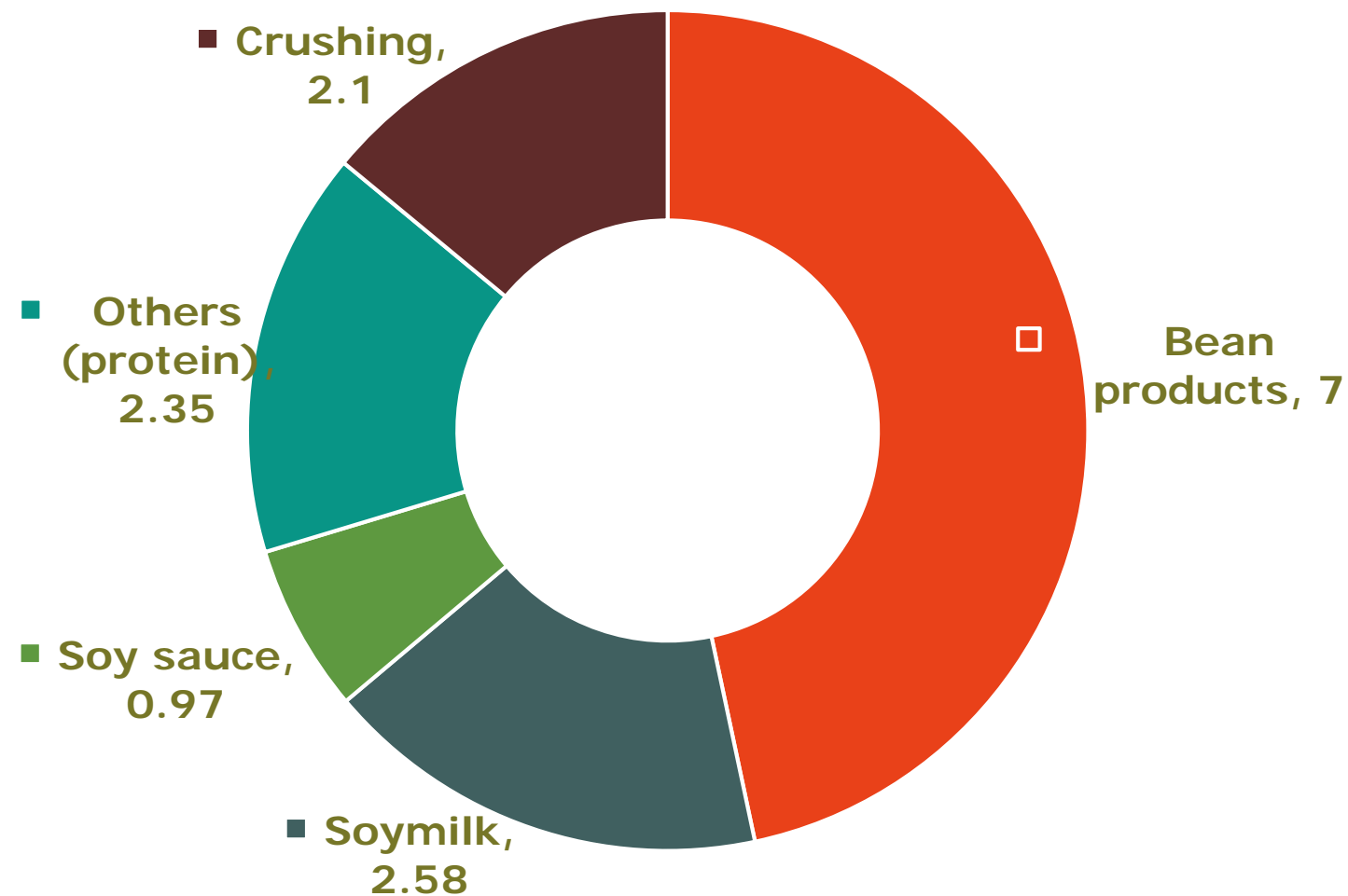


 **China-US Trade Dispute**

 **Supply Side Reform**

NON-GMO SOYBEAN CONSUMPTION

(In Million MT)

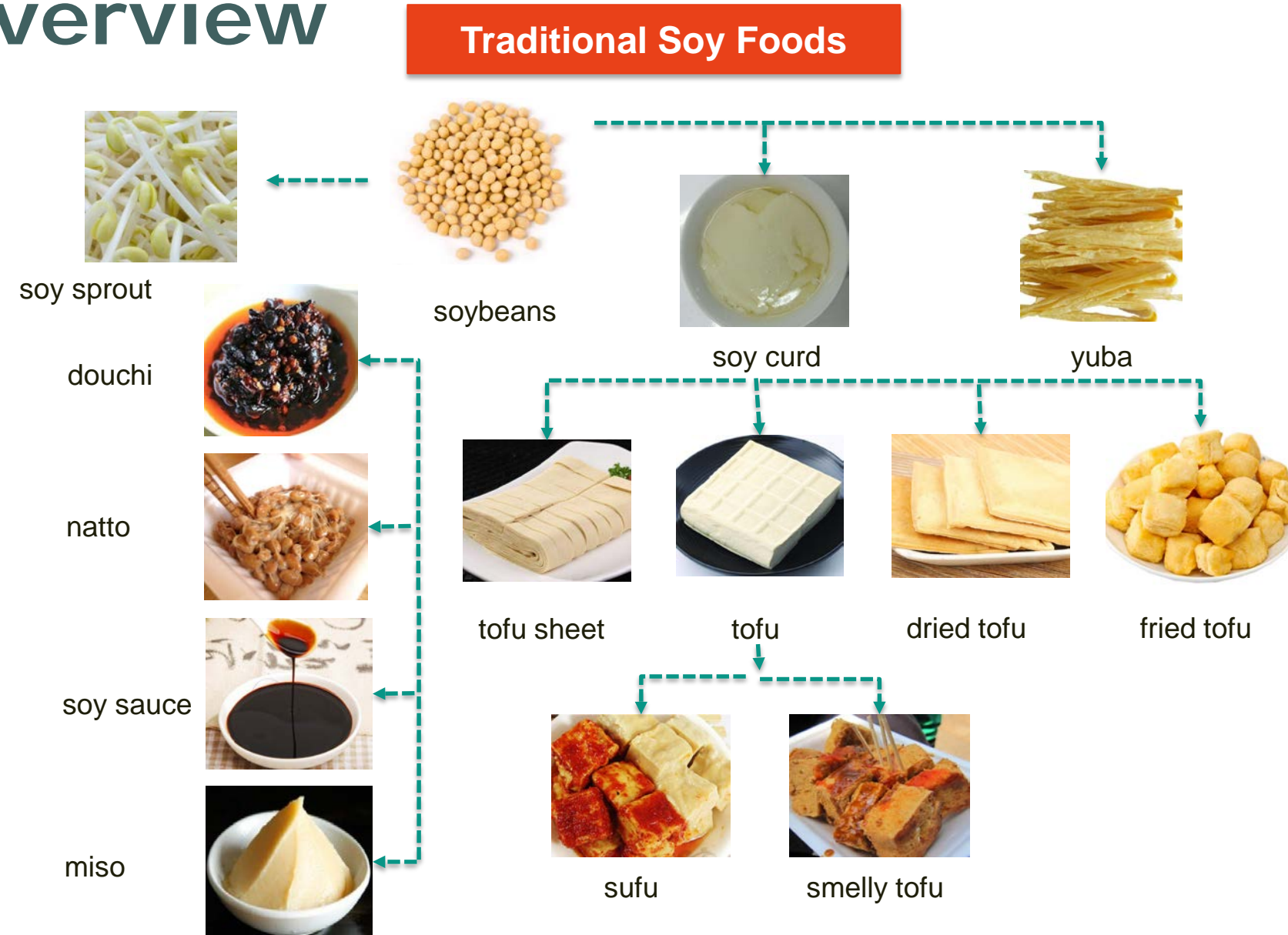


China's non-GMO soybean consumption per annum **15 MMT**.

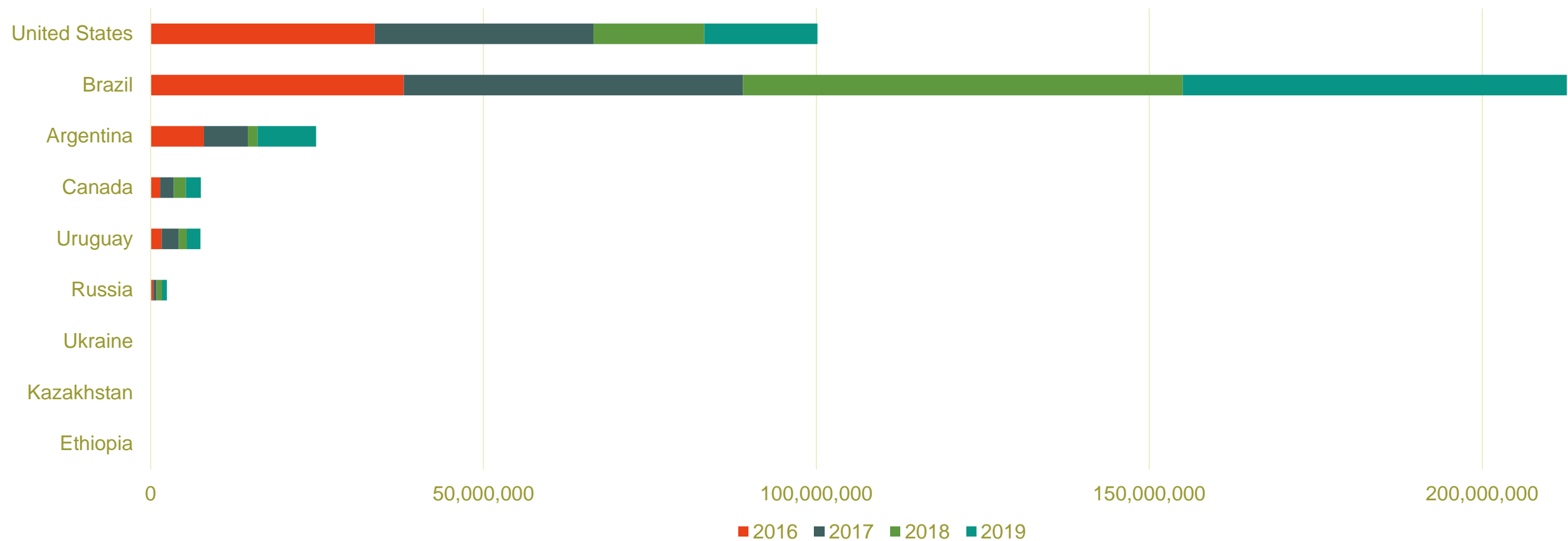
- In bean products 7 MMT
- In soymilk 2.58 MMT
- In others (protein) 2.35 MMT
- In crushing 2.1 MMT
- In soy sauce 0.97 MMT

Trade / Commercial Overview

- Soy food consumption growing. Increased 100% over the last 20 years.
- The scaled special soy foods processors, such as soymilk and yuba, have been aware of the importance of consistency of soybean varieties and started to purchase single variety food soybean.



Soybean Imports into China



Policy and / or Commercial Issues

- As an outcome of the Phase I trade agreement, Chinese soybean importers can apply for tariff exclusion. If approved by the Ministry of Finance, the importer can enjoy a general **3%** tariff. The exclusion system began accepting applications on March 2, 2020.
- Zero-tolerance policy for GMOs in non-GMO food bean imports, which is the largest impediment to the import of U.S. non-GMO soybeans.
- Trade issues with the U.S. spurred China to diversify its sources for imported food beans, and it initiated trade agreements with other countries including Russia, Ukraine, Ethiopia, Bolivia and India.

USSEC China Efforts

FY19 Team to GTE






FY19 Trade Forum



FY20 Virtual Conference



Solutions to China Foodbean Buyers:

-  Choose a stable supplier, ensuring supply by advance contracting, especially for IP food beans;
-  Learn more about the U.S. soybean market & develop new supply channel;
-  Use the main economic functions of CBOT: price risk management and price discovery.

Upcoming Offline Events

Type	Event	Date	City
Industry Conference	China Protein Beverage Development Seminar	August 25-27	Huangshan, Anhui
Trade Team	GTE	August 25-27	Huangshan, Anhui
Workshop	U.S. IP Food Bean Advantages in Soy Milk	TBD	Wuxi, Jiangsu
Expo	China International Import Expo	November 5-10	Shanghai



SE Asia Soy Food Market Update

U.S. SOY FOR A GROWING WORLD

OVERVIEW

- SE Asia Food Use Soybean Trade & Market Overview
- SE Asia Food Use Soybean Consumption for Soy food & Beverages
- Drivers & Trends in Soy Food and Beverage Development in SE Asia
- Changed Consumer Behaviors in SE Asia - Challenges & Opportunities





SOY

USSEC
U.S. SOYBEAN EXPORT COUNCIL

ASA
International
Marketing

UNITED
SOYBEAN
BOARD

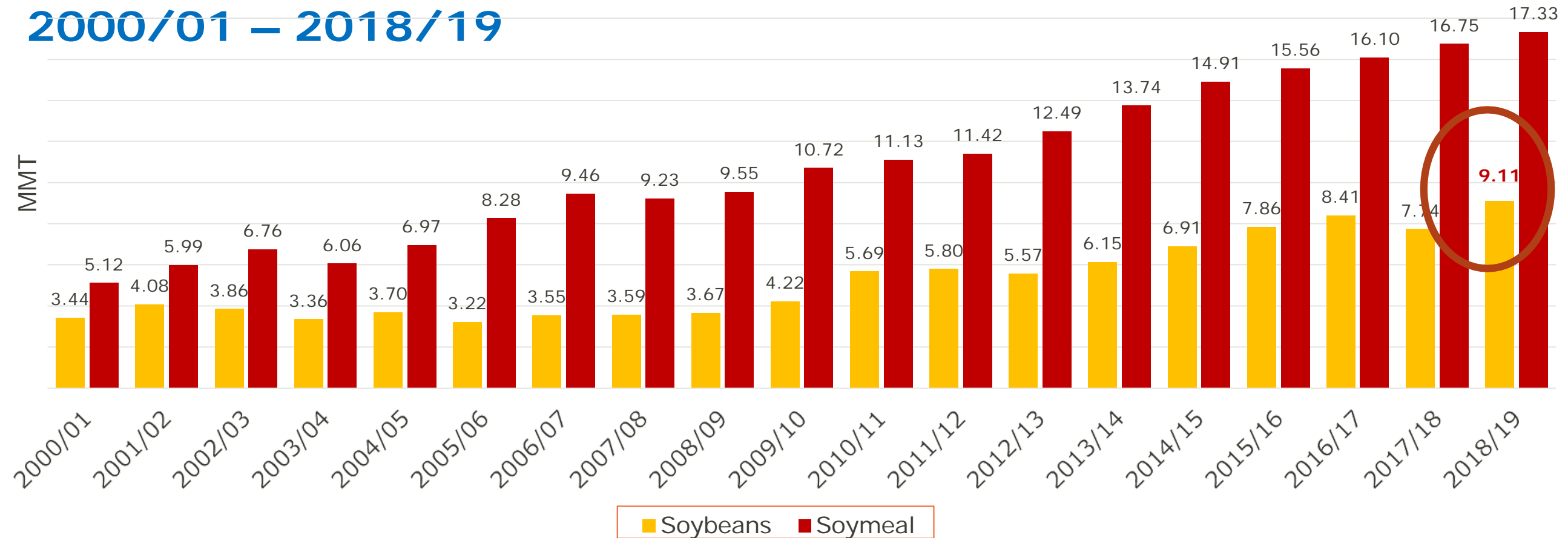
US Soy & Soy Food Market in SE Asia

- SE Asia population **660M**  **690M by 2025**
 - **22-54 yr**
 - **5-19 yr**
- 
- **5th** largest trading partner of US.
 - **\$11.5 billion** in US agri-export In 2017/2018.
 - **\$234 billion** two-way goods trade US-SE Asia
 - **62.5%** of the total **9.1 MMT** soybean utilized - **US Soy**
 - **4 MMT** of the **9.1 MMT** - for food uses

25% of World Soyfood Consumption is in SE Asia

SOYBEAN IMPORT BY SELECTED COUNTRIES

SE Asia's Imports of Soybeans & Soymeal 2000/01 – 2018/19



SSOY

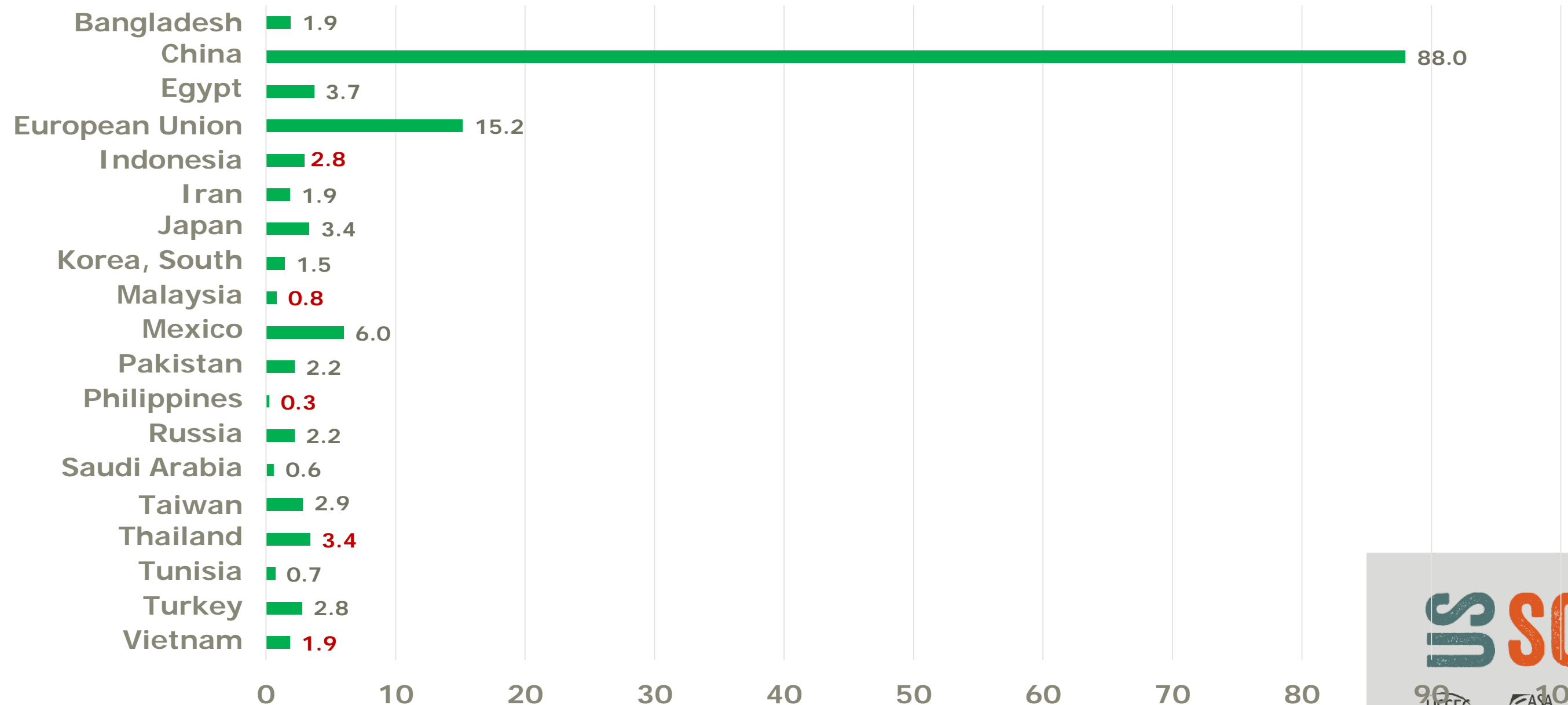
USSEC
U.S. SOYBEAN EXPORT COUNCIL

ASA
International
Marketing

UNITED
SOYBEAN
BOARD

SOYBEAN IMPORT BY TOP 20 COUNTRIES

2018 - 2019 (MT 000)



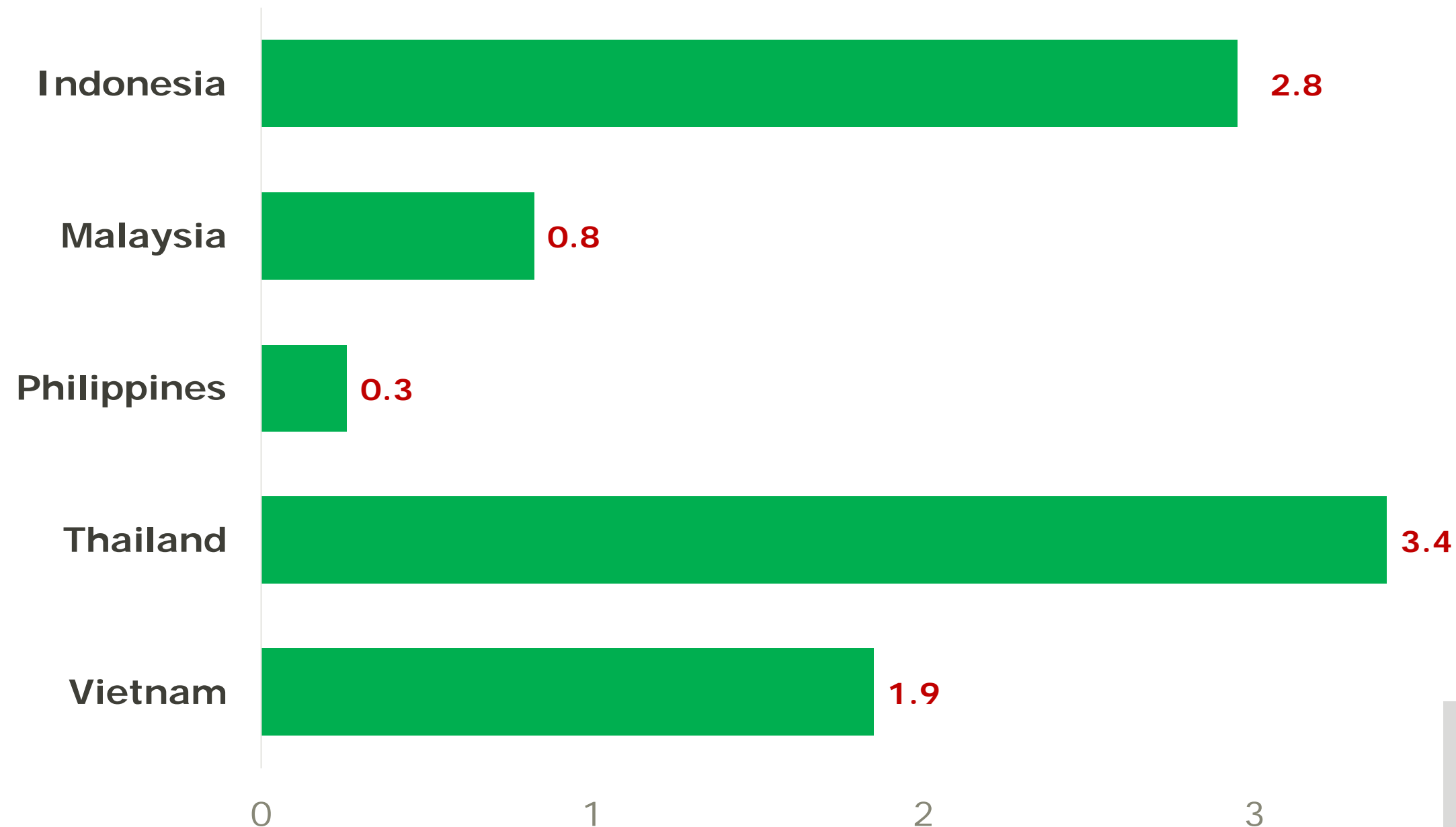
US SOY

USSEC
U.S. SOYBEAN EXPORT COUNCIL

ASA
International
Marketing

100
UNITED
SOYBEAN
BOARD

SOYBEAN IMPORT BY SELECTED COUNTRIES IN SE ASIA (2018-2019 MT 000)



SSOY

USSEC
U.S. SOYBEAN EXPORT COUNCIL

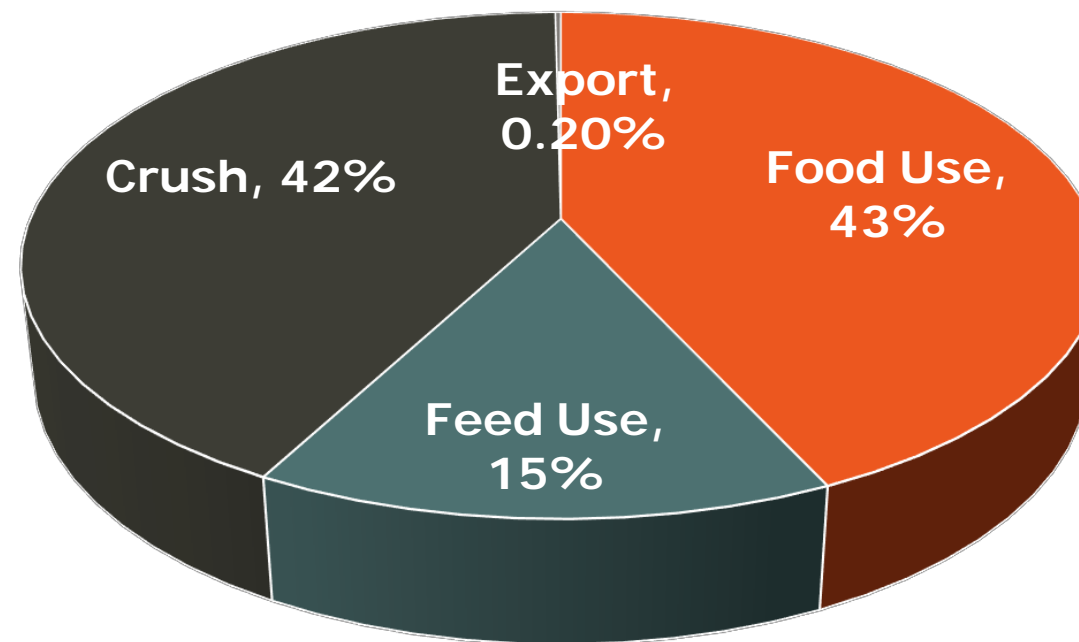
ASA
International
Marketing

UNITED
SOYBEAN
BOARD

US Soy & Soy Food Market in SE Asia

- In 2018/19, about **4 MMT** of soybean was used in SE Asia* for food **(43% of total soybean utilized, 9.1 MMT)** with the remainder used for crushing and feed
- **US Soy accounts for 62.5%** of the total **9.1 MMT consumed.**

SE Asia* Soybean Consumption
2018/2019



Source: USDA (<https://apps.fas.usda.gov/psdonline/app/index.html#/app/advQuery>)

*includes Malaysia, Indonesia, Philippines, Thailand, Vietnam & Singapore

SOY

USSEC
U.S. SOYBEAN EXPORT COUNCIL

ASA
International
Marketing

UNITED
SOYBEAN
BOARD

SE Asia Soybeans Consumption for Food

Selected SE Asia Countries 2018/2019 (1000 MT)

Country	Food Use	Local	Imported Soybean
Indonesia	3,100	520	2,623
Thailand	260	55	3,155
Vietnam	480	81	1,596
Philippines	25	1	150
Malaysia	165	0	747
Singapore	18	0	21
Total	4,032	657	8,292



Source: USDA (<https://apps.fas.usda.gov/psdonline/app/index.html#/app/advQuery>)

The logo for the US Soybean Council, featuring a stylized 'S' made of two curved lines and the word 'SOY' in a bold, orange, sans-serif font.

The logo for the United Soybean Export Council (USSEC), featuring the acronym 'USSEC' and the full name 'U.S. SOYBEAN EXPORT COUNCIL' below it.

The logo for the American Soybean Association (ASA), featuring the acronym 'ASA' and the text 'International Marketing' below it.

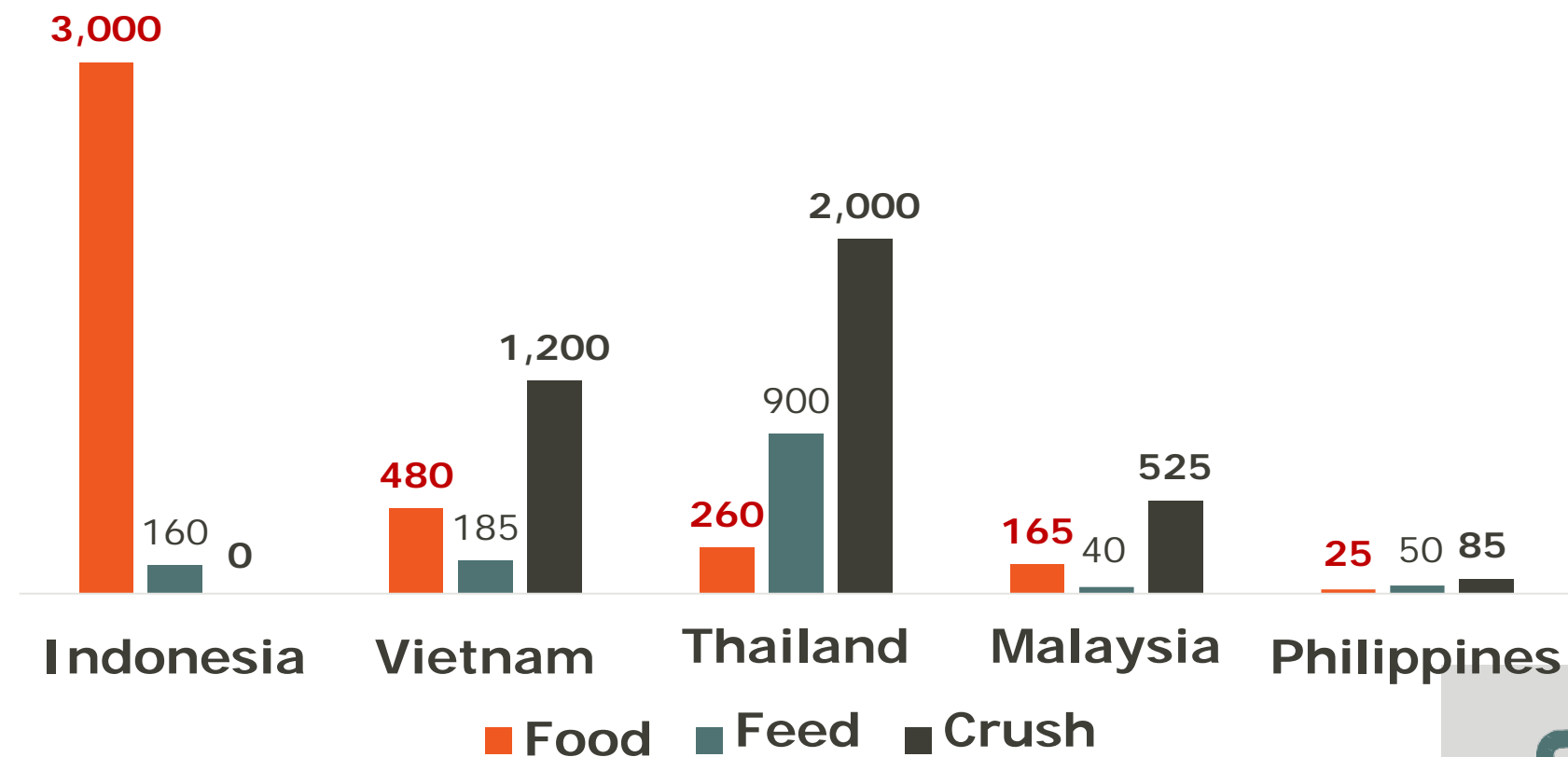
The logo for the United Soybean Board, featuring a stylized 'U' and 'B' and the text 'UNITED SOYBEAN BOARD' below it.

SE Asia Region

Food Use Soy

- **Indonesia** - world 4th largest by population largest (about 270 Million)
- The largest soy food market in the SEAsia, with consumption of **3.16 MMT** in 2018/19
- **Vietnam and Thailand** are the next largest, with food consumption of **480,000 MT** and **260,000 MT** in the same year.

SE Asia* Soybean Use 2018/2019
(1000 MT)



Source: USDA (<https://apps.fas.usda.gov/psdonline/app/index.html#/app/advQuery>)

*includes Malaysia, Indonesia, Philippines, Thailand, Vietnam

SOY

USSEC
U.S. SOYBEAN EXPORT COUNCIL

ASA
International
Marketing

UNITED
SOYBEAN
BOARD



Indonesia Soy Food Use Overview

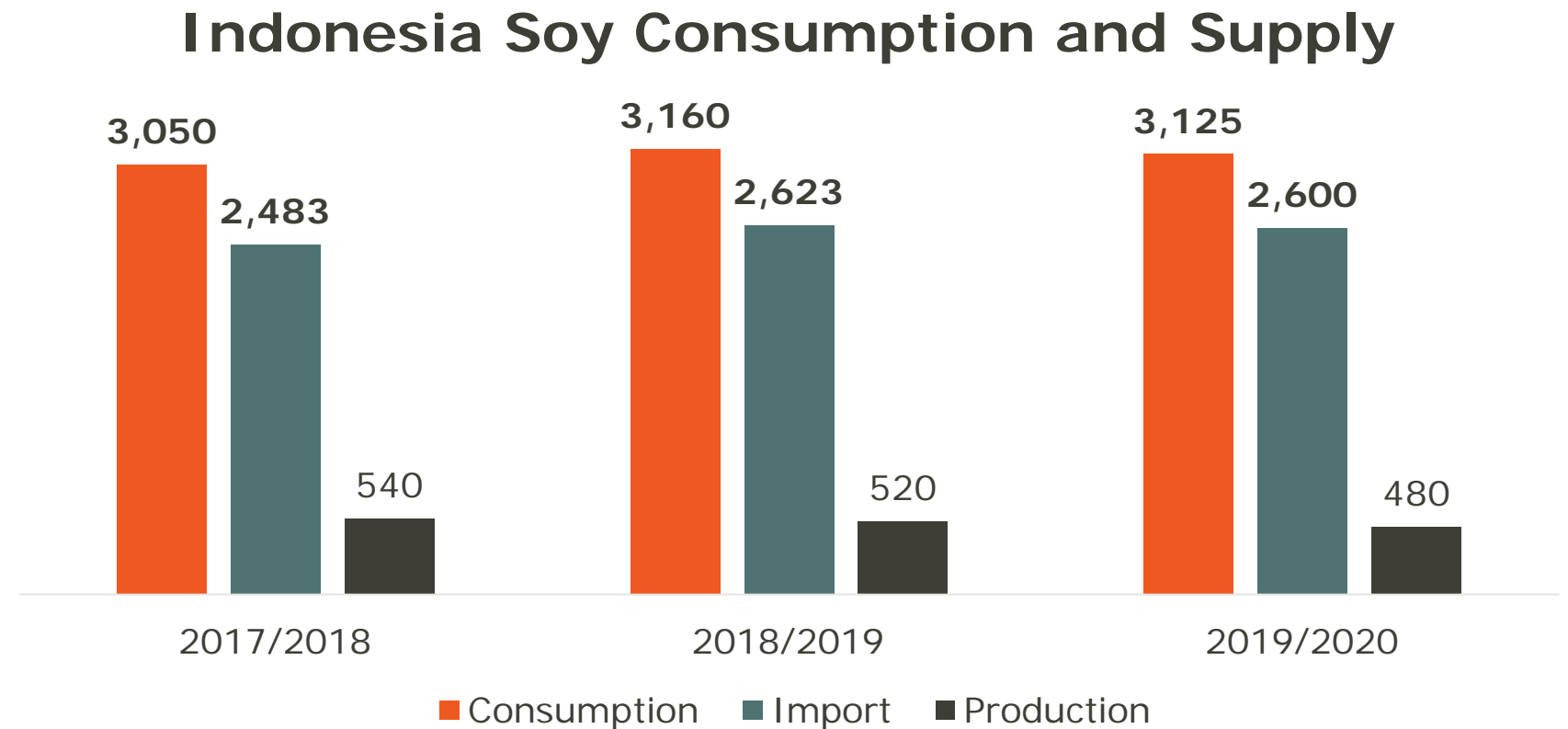
U.S. SOY FOR A GROWING WORLD



Indonesia

Soybean Consumption and Supply

- In 2018/19 Indonesian soybean consumption – 3.16 MMT
- US Soy - 2,623 MMT
- Local production 520,000 MT.
- Almost all soybeans are used for food, mostly **tempe and tofu**
- Opportunities for high value US **IP soybeans** for value-add soy products **10-15,000 MT**



Source: USDA (<https://apps.fas.usda.gov/psdonline/app/index.html#/app/advQuery>)

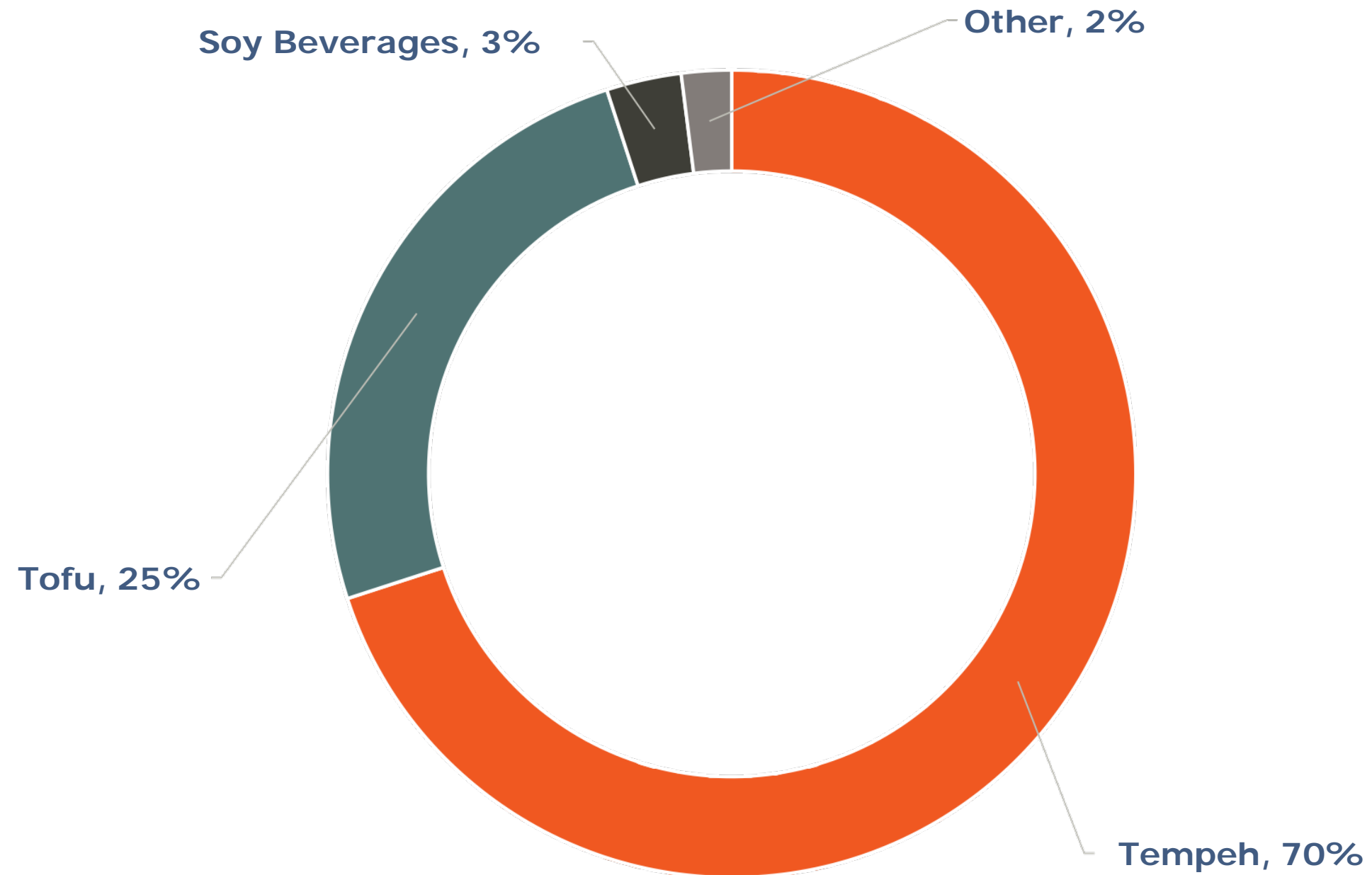
US SOY

USSEC
U.S. SOYBEAN EXPORT COUNCIL

ASA
International
Marketing

UNITED
SOYBEAN
BOARD

Breakdown of Indonesia Soy Food Use



Indonesia

Food Use Soybean Market

- U.S. soybeans are preferred in Indonesia due to their uniform size, color and suitability for tempe and tofu manufacturing. **Tempe and tofu will remain a preferred protein source in Indonesia.”**
- Indonesia is also the **10th largest consumer of soymilk in the world**, with total consumption growing from 82 million liters in 2012 to 100 million liters in 2015. Consumption is projected to reach 116 million liters in 2018.
- **Growth in the human food use of soybeans in Indonesia is projected at around 3-5% with the highest growth potential in outside Java for tempeh and tofu, the value-added and nutrition/special foods categories.**
- About **15,000 MT** of value add IP soybeans are imported in 2016/17.



Indonesia

Food Use Soybean Market - tempe and tofu

- The most recent National Socio-Economic Survey (SUSENAS) provides positive reading on soy-based food consumption trend among Indonesian people. Tempe consumption, accounting for 70% of total food use of soybean, registered annual growth at 1.4% within 2013-2018 period. Tofu, the second largest soybean food use, indicated stronger annual consumption growth at 3.2% in the same period.
- SUSENAS also suggests Sulawesi and Kalimantan regions, inhabited by 35 million people, are potential to become the powerhouse of soy-based food consumption growth in Indonesia. These two islands saw the strongest tempe and tofu consumption growth in Indonesia.
- Tempe and tofu are not only major protein sources as they account for 11.4% of daily protein intake, but also both products are consumed by all levels of income. SUSENAS data shows 20% poorest and 20% richest households get 8.7% and 7.1% of their daily protein respectively from tempe and tofu.



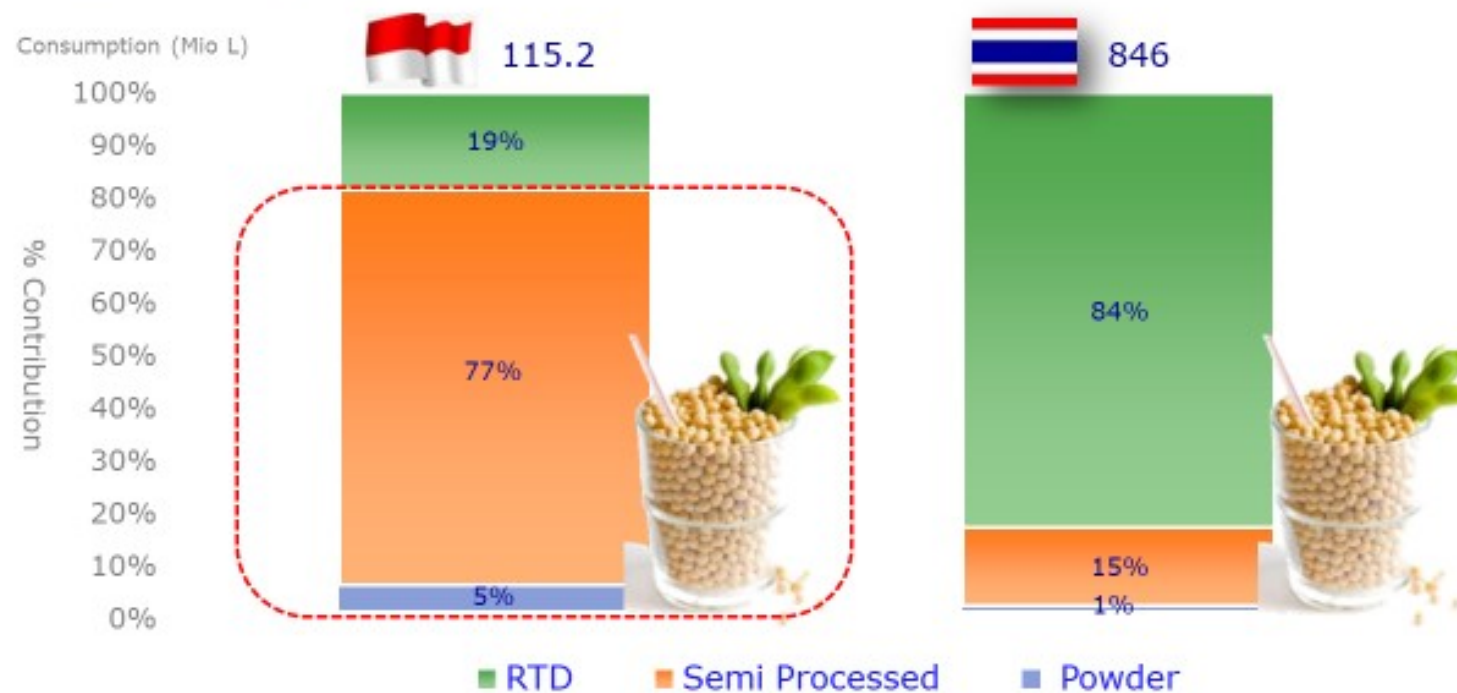
Indonesia

Food Use Soybean Market - Soymilk



Soymilk by Process

Compare to Thailand, Ready-to-Drink Soymilk is only 19% which is big opportunity to grow



Further on the ready-to-drink (RTD) soymilk, National Agency for Food and Drug Control already issued license for market circulation for almost 850 RTD soy beverages products. Unfortunately, nearly 70% of those products are imported mostly from Malaysia, Thailand and South Korea. While the locally-produce brands are sold at cheaper price, they have disadvantageous especially in terms of health claims and product variation.

Source: Indonesia Dairy Alternative, Compass 2018

SOY

USSEC
U.S. SOYBEAN EXPORT COUNCIL

ASA
International
Marketing

UNITED
SOYBEAN
BOARD

Indonesia

Food Use Soybean Market - Impact of COVID-19

- FAS revised down 2019/20 soybean consumption to 2.75 million tons as many soy food producers have reduced their production due to increasing production costs and weakening demand following massive closures of restaurants and hotels. Over 1,500 hotels have been shuttered across Indonesia while social distancing measures have impacted nearly every restaurant's ability to fully operate, including the country's ever-present food stalls.
- Additionally, the rupiah has declined 13 percent since early February 2020, forcing soy-based product retail prices significantly higher. To balance these challenges many producers have either reduced the size of the product sold in order to maintain a stable price or have temporarily closed production. Tempeh and tofu remain important parts of the Indonesian diet and are expected to remain the leading sources of affordable protein for many consumers.

Source: [FAS USDA Jakarta Oilseed Update May 2020](#)





Thailand Soy Food Use Overview



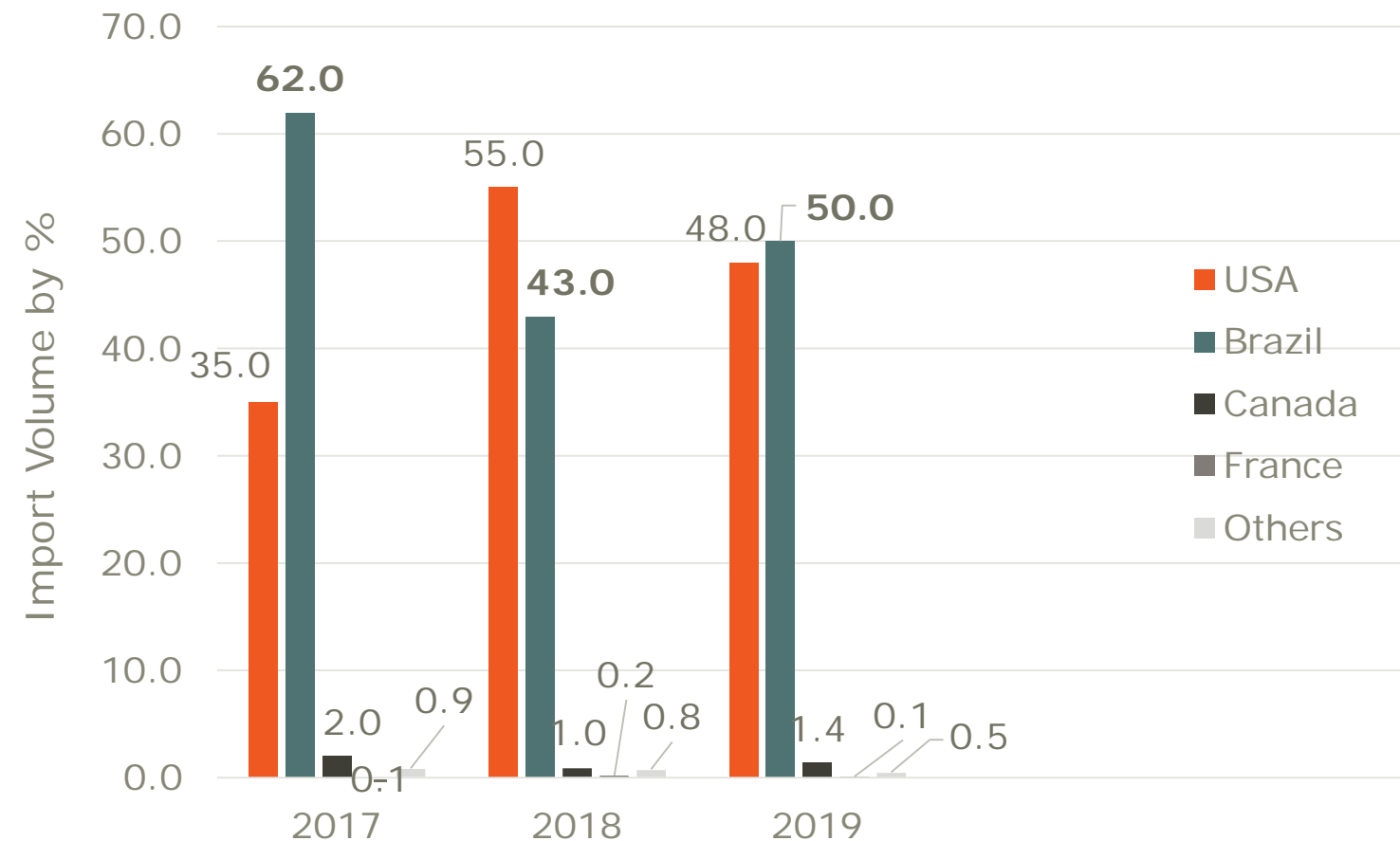
U.S. SOY FOR A GROWING WORLD



Thailand

Supply, Demand, and Trade

Thailand Shares of Soybean Import by Volume (%)



Source: The Customs Department, Thailand

- Thailand imports more than **3 MT** of whole soybeans per year.
- In 2019, the U.S. accounted for **48%** of Thai imports and Brazil accounted for **50 %**.
- About **60,000-70,000 MT** per year of imported soybeans are food grade and **non-GM varieties**. About **60%** of these are U.S. origin.

SOY

USSEC
U.S. SOYBEAN EXPORT COUNCIL

ASA
International
Marketing

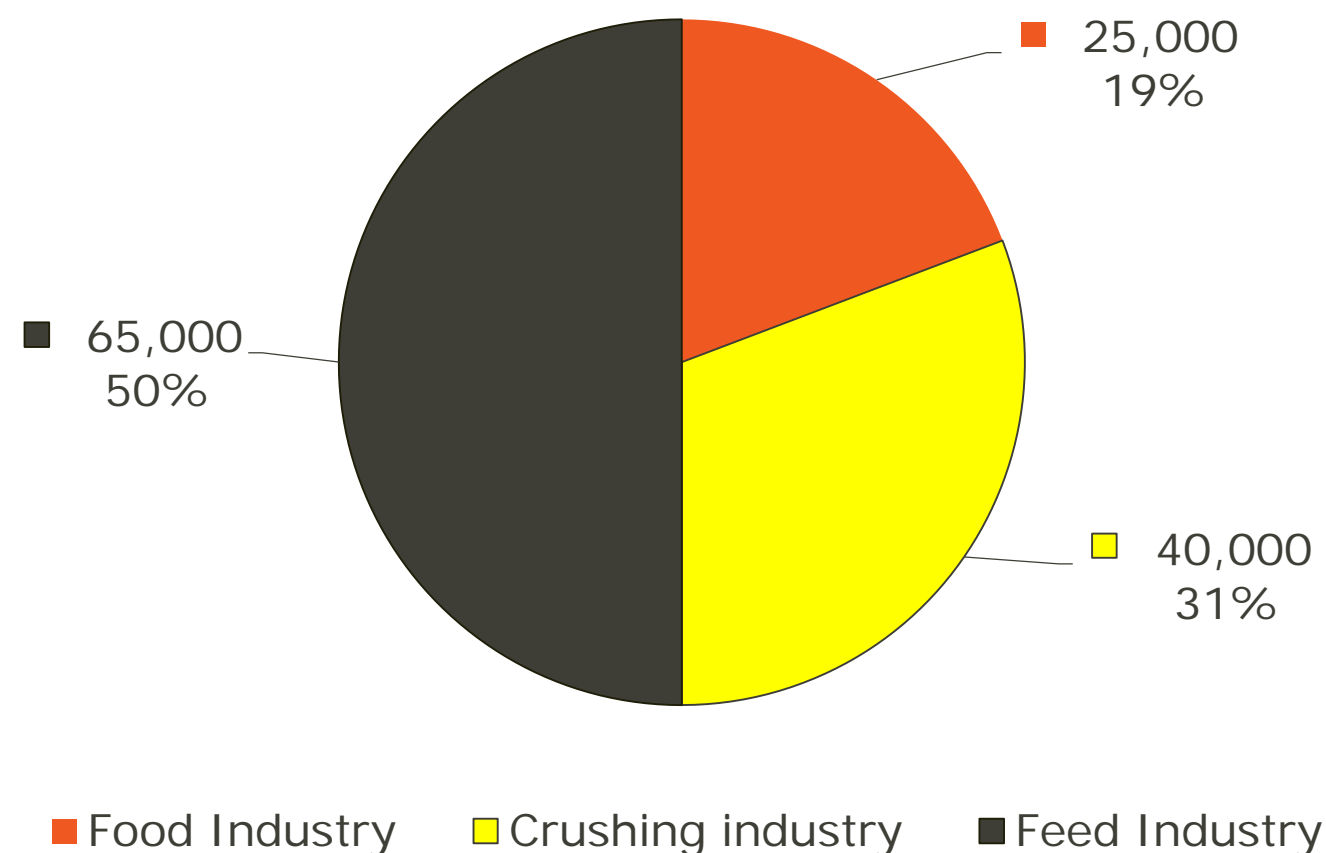
UNITED
SOYBEAN
BOARD



Philippines Soy Food Use Overview

U.S. SOY FOR A GROWING WORLD

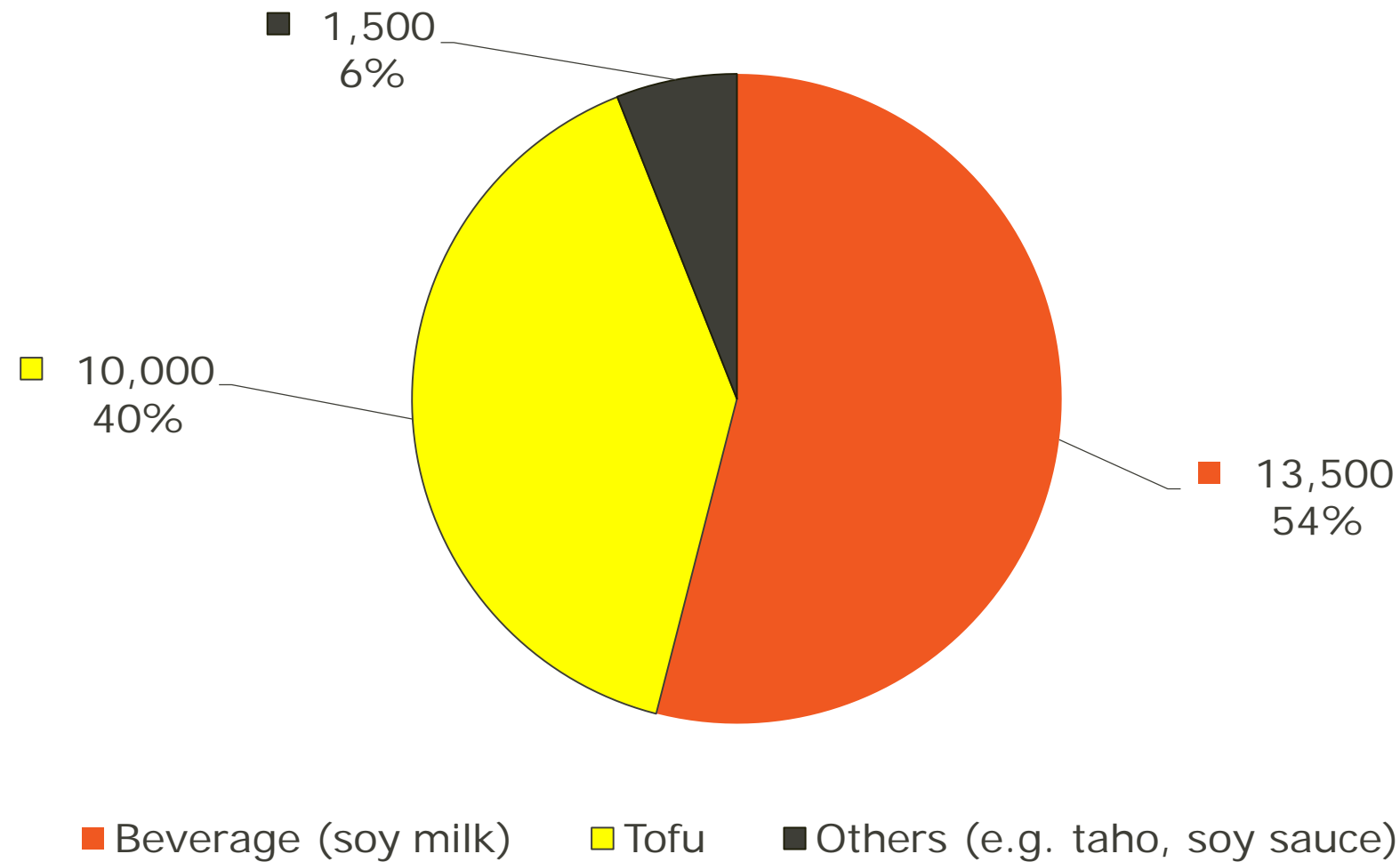
U.S. Soybean Import and Usage for MY 2019-2020 (MT)



Note: Feed industry usage is for the production of full fat soybean; crushing industry refers to soybean oil production by one company for their own use



U.S. Soybean Usage in the Food Industry (MT)



SOY

USSEC
U.S. SOYBEAN EXPORT COUNCIL

ASA
International
Marketing

UNITED
SOYBEAN
BOARD

Other relevant information

- U.S. soybean is the main importing source for food uses by Philippines
- For the retail and labeled food market, only non-GMO soybean is being used
- Soymilk and tofu are being advertised as being produced from non-GMO soybean
- Pre-COVID 19, demand for soymilk and tofu is increasing because of the health benefits especially among the millenials
- Growth of the soy food industry is being hampered by the quarantine imposed due to COVID-19 as a result of food service downturn, closure and lack of mobility





Vietnam Soy Food Use Overview

A close-up photograph of several soybean pods on a stem, showing the fuzzy texture of the pods and the brown color of the stems.

U.S. SOY FOR A GROWING WORLD



Vietnam

Food Use Overview

1) Market size and U.S market share:

- 2019 soybean imports were 1.75MMt, of which US origin was 761,000 Mt accounting for ~ 43.5%,
- Import from Brazil 661,000Mt (37.8%), Canada 166,000Mt (9.5%) and others 161,000Mt (9.2%)
- Local soybean production in 2019 was at ~200,000 Mt or ~10% of country projected consumption of 1.8-2.2 MMt,
- Estimated total soybean imports for 2020 is at 2.0 MMt
 - with ~50% from the US and mainly GMO;
 - 80% of the imports is used in crushing,
 - 5% in feed
- **15% of Soybean import are for food uses, ~300,000 MT**



Vietnam

Food Use Overview

2) Breakdown of Market

- Soybean consumption for food use increases ~ 6% per year
- Tofu is the leading food use of soybean with about 55%,
- Soymilk accounts for 40% and others (soy skin, soy sauce) 5%

3) Recent trends to note (such as the growth in the natto market)

- Soymilk market growth estimate ranges from 5-7% per year
- UHT soymilk is the main product at 90% market share, with 10% being pasteurized soymilk
- Soymilk per capita consumption is currently at around 6.5-7.0 liters/year





Malaysia Soy Food Use Overview

A close-up photograph of several soybean pods on a stem, showing the fuzzy texture of the pods and the brown color of the stem.

U.S. SOY FOR A GROWING WORLD



Malaysia

Food Use Overview

1) Market size and U.S market share:

- There is no domestic production of soybeans in Malaysia
- Total soybean imported into Malaysia is forecast at 860,000 MT for FY19/20
- 75- 80% of the imported soybeans are crushed for livestock feed industry.
- U.S. dominate the Malaysia soybeans imports with 55% of the market share.
- 20-25 %, about 170,000 MT, of imported soybean is used for soy foods and beverages,
- GM vs non GM soybeans usage in the food industry is 60% to 40%. With GM soybeans going into the local traditional market and non –GM for modern retail trade products
- For IP food use non-GM soybean market Canadian dominates the market with 70% of market shares accounting for about 40-45,000 MT.



Malaysia

Food Use Overview

2) Breakdown of Market

- Soy milk is the main food use of soybean in Malaysia with about 45%,
- Tofu and other related product take up 45% and 10% for the rest.
- 90% of the soy products in Malaysia are for own consumption, exports contribute only 10% . Soy milk is the biggest in export market, mostly to the regional countries of SEAsia.
- The growth of soy food industry is about 6% per annum.

3) Recent Market Situation – Impact of COVID 19

- Since March 18 2020 when Movement Control Order came into effect, the market was badly affected with limited retail business and food hospitality services severely curtailed
- For soy food sector, it is estimate a 20% of drop of the market comparing to 2019





Key Drivers & Consumer Trends for Soybean and Soy food

In SE Asia

U.S. SOY FOR A GROWING WORLD

Key Drivers for Consumer Trends for Soy

- **Mega Trends - Key Influencers**
- **Innovation** in the food and beverage sectors
- **Disruptor** - 2020 COVID-19 'Black Swan'
- What will be the **Changed Behavior** of the consumers in SE Asia ?



SOY

USSEC
U.S. SOYBEAN EXPORT COUNCIL

ASA
International
Marketing

UNITED
SOYBEAN
BOARD

Key Influencers for the Future of Innovation in the Food and Beverage Sector ?

The 5 Mega Trends

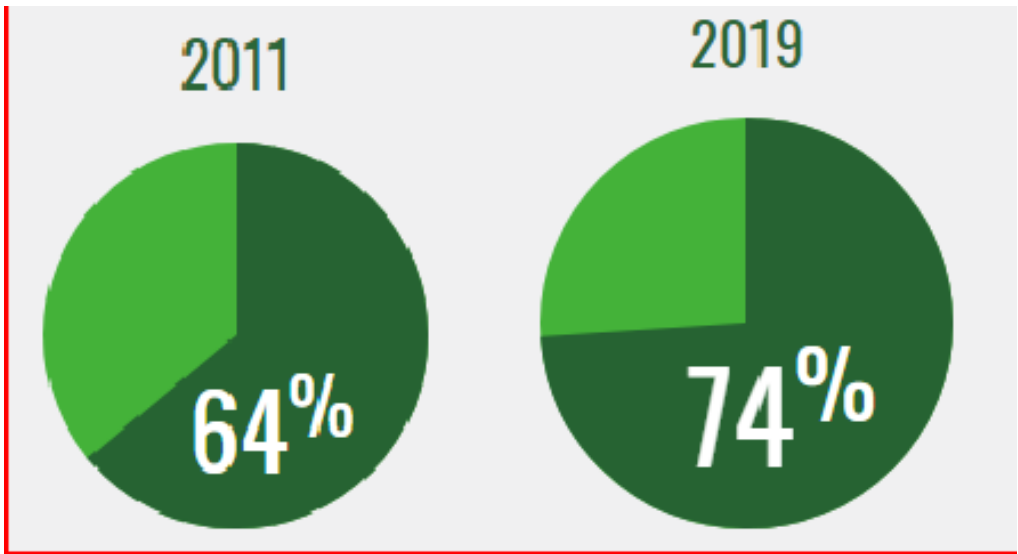
- Start Up vs Mega Food
- Health - Food as “Medicine”
- Less is more
- Plant base protein going main stream
- Transformation Technology



The World is Eating More Soyfoods -

More than Half of US Consumers Look for Products that Contain Soy

Consumers are Eating More Soy!



Soy is Very Popular with Younger Adults



More Consumers are Consuming Soyfoods at Least Once/Week



Other Drivers of Soyfood Growth

- An Abundance of New Soyfoods
- More diversified Consumers
- Desire to Eat More Healthfully
- Interest in Sustainable Foods

SOY

USSEC
U.S. SOYBEAN EXPORT COUNCIL

ASA
International
Marketing

UNITED
SOYBEAN
BOARD

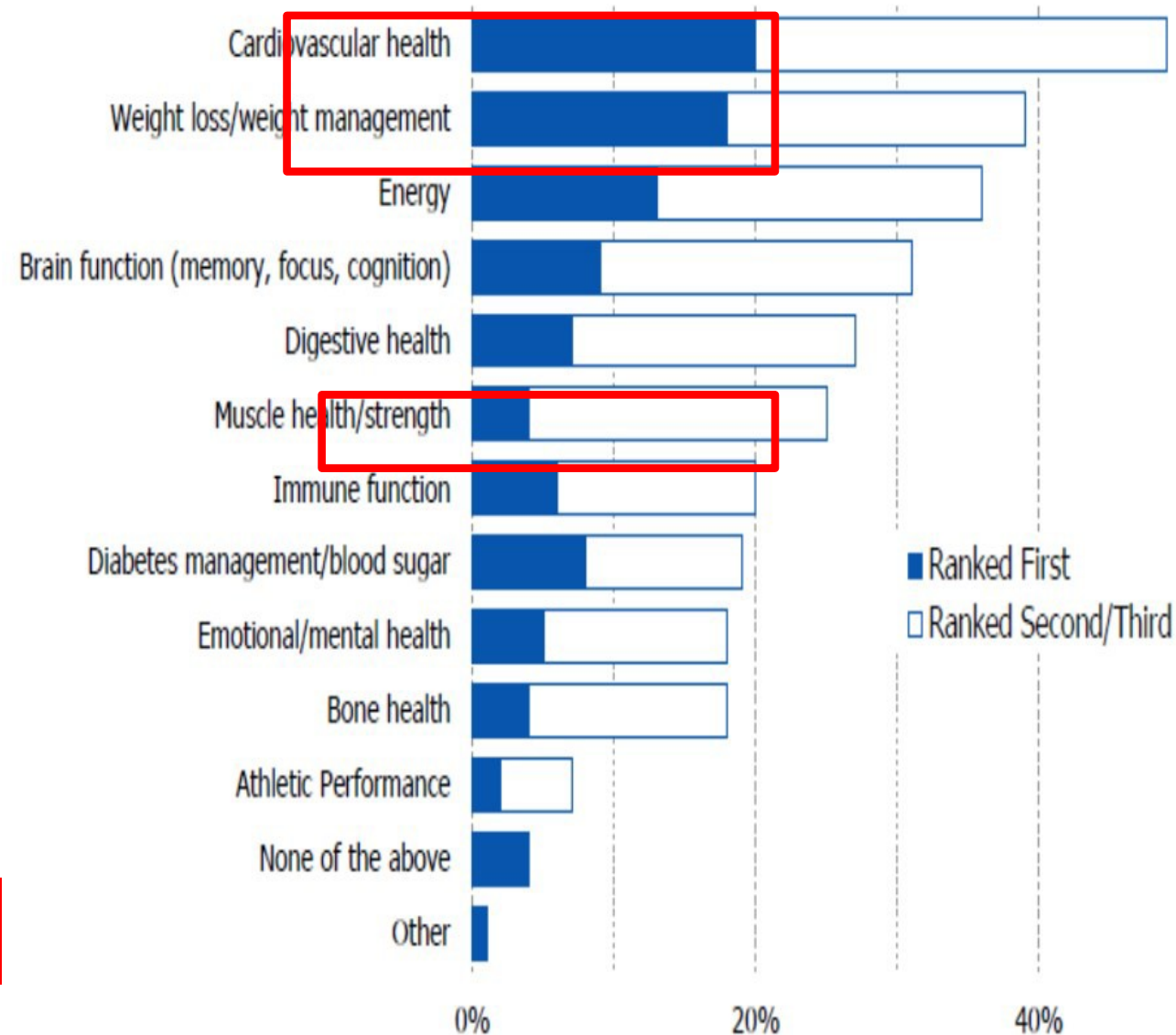
74% View Soyfoods as Healthy; May Reduce the Risk of Heart Disease is Soy's Most Recognized Benefit

Benefits Consumers Want from Foods 2018

42% OF CONSUMERS

ARE AWARE OF THE FDA-APPROVED HEART-HEALTH CLAIM WHICH SAYS CONSUMING 25 GRAMS OF SOY PROTEIN A DAY MAY REDUCE THE RISK OF HEART DISEASE.

74%
**ARE MORE LIKELY
TO EAT SOY**



Soy is a Complete Protein

SOY

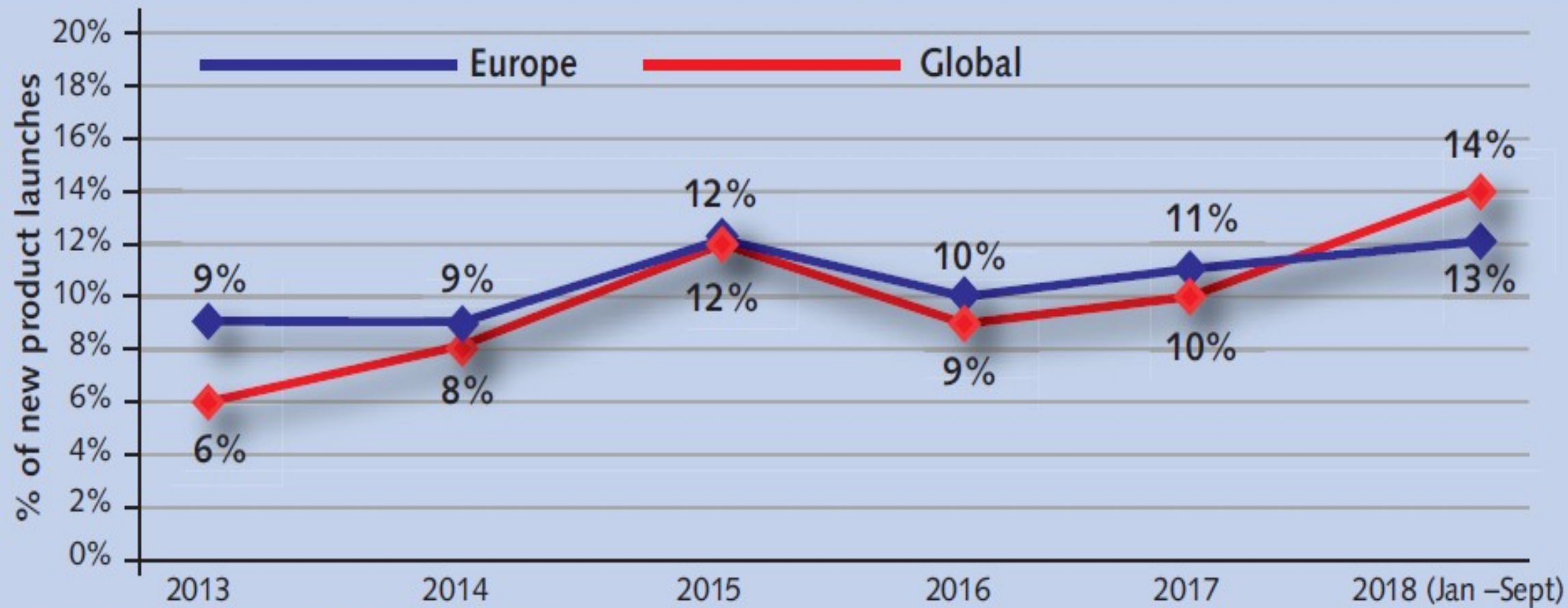
USSEC
U.S. SOYBEAN EXPORT COUNCIL

ASA
International
Marketing

UNITED
SOYBEAN
BOARD

Globally - Plant-based Meat Alternative Growing \$4.6B in 2018 to \$6.8B by 2023

Meat substitutes are on the rise globally
Meat substitute launches as % of meat* launches



*Meat = meat, poultry and meat substitutes

Source: Innova Market Insights

SOY

USSEC
U.S. SOYBEAN EXPORT COUNCIL

ASA
International
Marketing

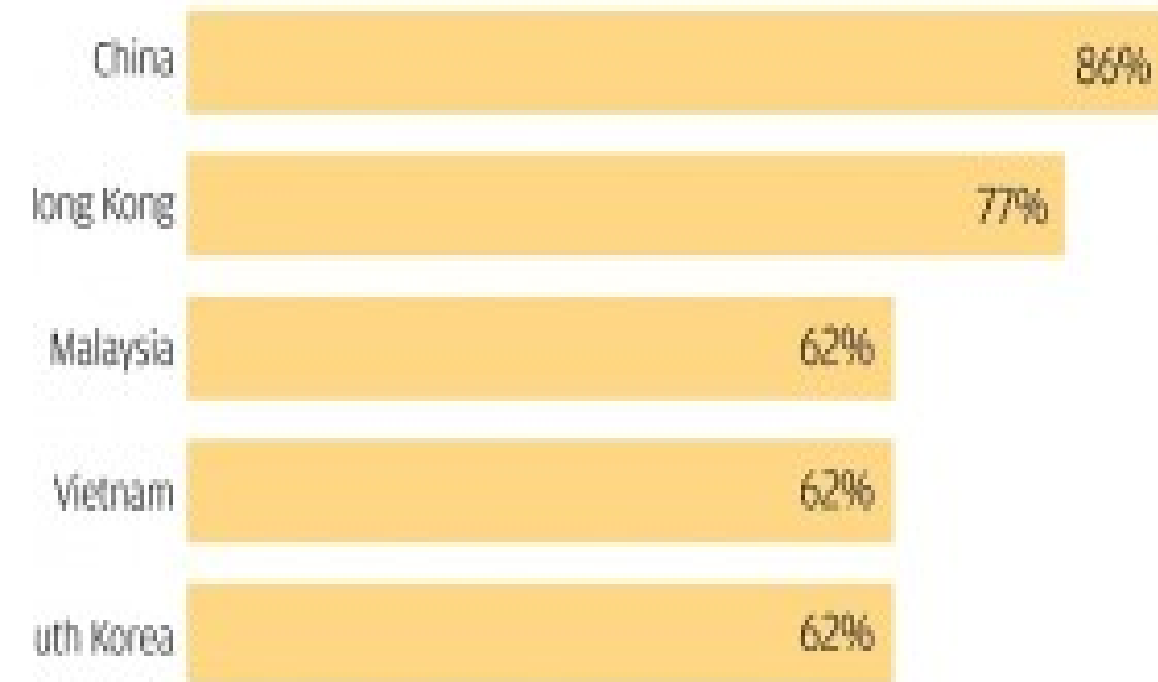
UNITED
SOYBEAN
BOARD

'Black Swan' Disruption Changing Behavior

COVID-19, 2020

Coronavirus pandemic likely to **permanently change dining habits of Asian consumers** - "expected to **eat less out and more at home**" as Covid-19 changes attitudes and behaviours of consumers" - **Nielsen study**

Top Asian markets re-prioritising eating at home
of respondents who said they would eat at home more post-pandemic



The shifts from out-of-home dining to at-home food delivery, takeaway and home cooking

Indonesia Netizens

- 98% use smartphone devices to access the internet
- 42% for Food and beverage
- 81% of netizens use e-wallet to pay for their food and beverages



SOY

USSEC
U.S. SOYBEAN EXPORT COUNCIL

ASA
International
Marketing

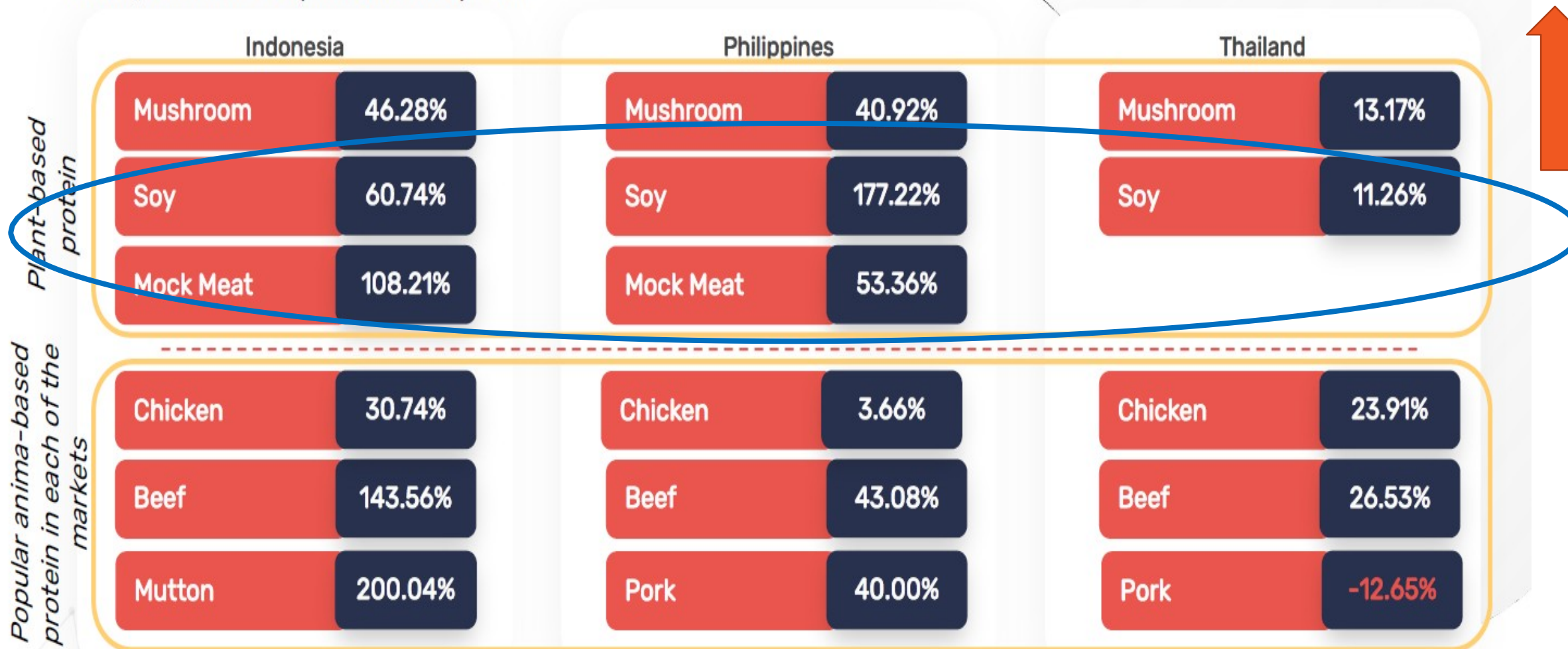
UNITED
SOYBEAN
BOARD

Change in Demand for Plant /Animal Protein

Indonesia, Philippines, Thailand

2019 and 2020 (Jan – April CoVID-19 Home Stay)

Growth/Decline in Jan-Apr 2020 vs Jan-Apr 2019



Surge in Soy

- Health
- Plant based
- Immunity
- Pref for local home prepared food
- Food Delivery
- Availability
- Affordability
- Hygiene/ Safety of food

Data from study conducted by AI Pallette –FIA, Singapore Jan- April 2020

SOY

USSEC
U.S. SOYBEAN EXPORT COUNCIL

ASA
International
Marketing

UNITED
SOYBEAN
BOARD

Soy & Plant Protein – From Tradition Market To Digital Platform and in Food Service



SOY



SOY FOOD & BEVERAGE MARKET TREND IN SE ASIA

- **Population Paradox** – Some Countries have highest **Aging Trend** While Others have a **Large Under 40 Population**
- **Triple Burden of Malnutrition** Increasingly Dictating **Health Policies** eg. Stunting vs Diabetes, Obesity and Aging Related Diseases
- **Sophisticated Urban population**, Diet **Modernized** and Westernized
- Looking for **Innovative Products**
- **Health and Sustainability** Gaining Traction
- **Convenience & Social Media /E-Commerce** Drive Technology Use & Purchase



SOY

USSEC
U.S. SOYBEAN EXPORT COUNCIL

ASA
International
Marketing

UNITED
SOYBEAN
BOARD

Global Soy Food Market Shaped by Grow in Asia/SE Asia

- Global soyfoods projected to **Grow 5.6% to Reach \$55.6 billion in 2025** up from \$36.67 billion in 2017 with an impressive compounded annual growth rate (CAGR) of 5.6% from 2017 to 2025.
- Soyfood sales to remain dominated by Asia to 2025, Europe strong gains
- **Asia Pacific** remains the largest consumer of soyfoods, followed by N. America and Europe. **Asia Pacific accounted for 40% share of the global soyfoods market in 2017 and is expected to grow at a CAGR of 5.9% to 2025.**





South Asia Soy Food Market Update

U.S. SOY FOR A GROWING WORLD



Indian Nutritional and Health Status

- More than 25% people below poverty line
- High incidence of malnutrition
 - Ranked 2nd in the number of children suffering from malnutrition
 - The prevalence of underweight is among the highest in the world
 - Over 225 million Indians remain chronically under nourished.
- Health Problems of Indian Population
 - Obesity, Diabetes, Heart disease, Cancer, Osteoporosis, Digestive problems
- World's largest feeding program
 - School lunch program (110 million); ICDS (90 million)

Protein Status in India

- Very high Prevalence of protein deficiency
 - More than 90% vegetarians and 85% non vegetarians
 - Gap in availability of pulses and milk
 - Leading to growth and development problems
- Protein quality deficiency
 - Cereals contribute more than 70% protein
 - Cereals have relatively low digestibility and quality
- Globally protein demand will increase by 70% by 2050
 - Indian requirement will be even higher

Indian Soy Food Industry

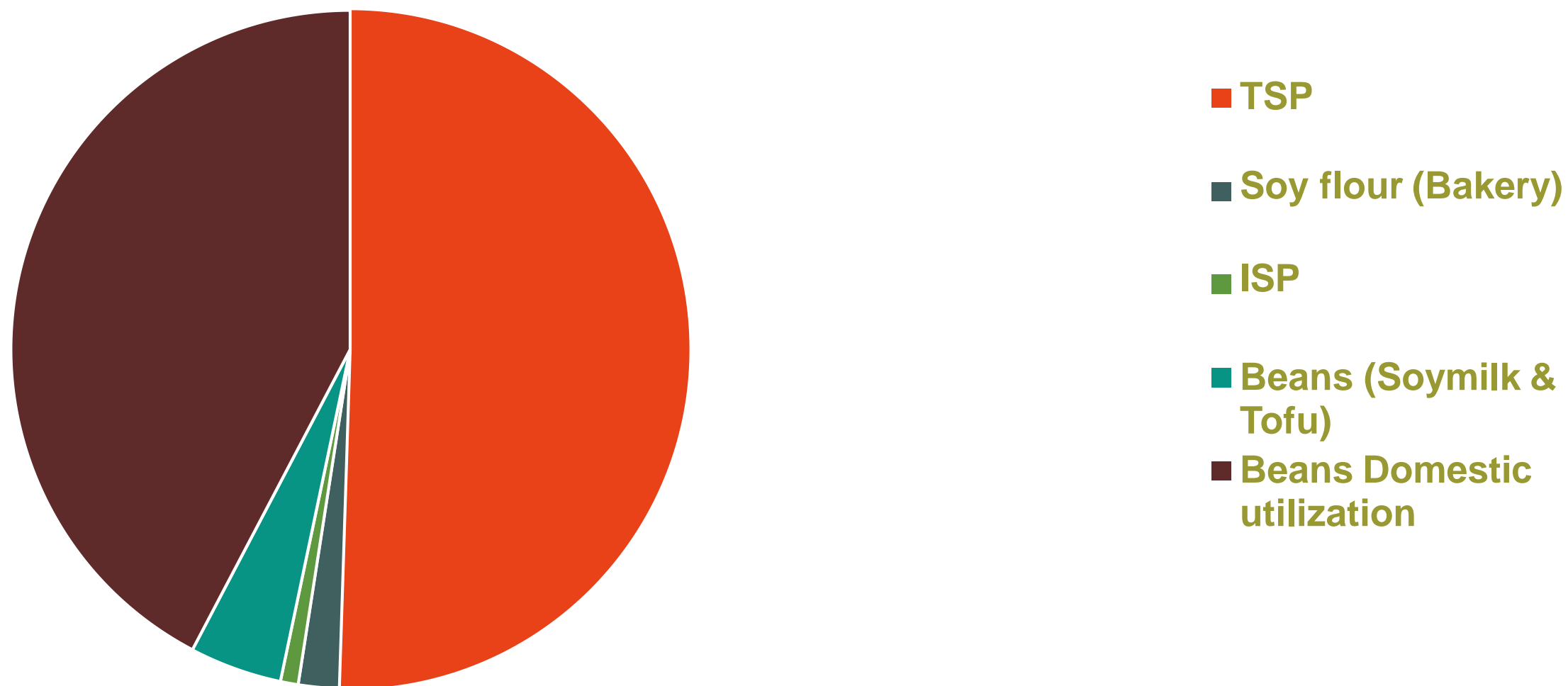
- Soy food is the one of the fastest growing segment
- Consumption increased from about 100,000 MT (2000) to almost 1.5 MMT
- Soymilk, tofu and TSP markets continue to have healthy growth
 - More than 3,000 cottage scale operations soymilk & Tofu
 - More than 300 TVP (single-screw) manufacturers
- North-eastern states have Traditional Soy Foods
 - Similar to Tempe, Highly unorganized
- Mainly driven by health-conscious consumers
 - Consumer interest in healthy foods
 - Cost effectiveness of prevention over cure
 - Increase in disposable income
- Awareness about Goodness of soy is there but needs more education
 - Myths of soy consumption pops-up now and then



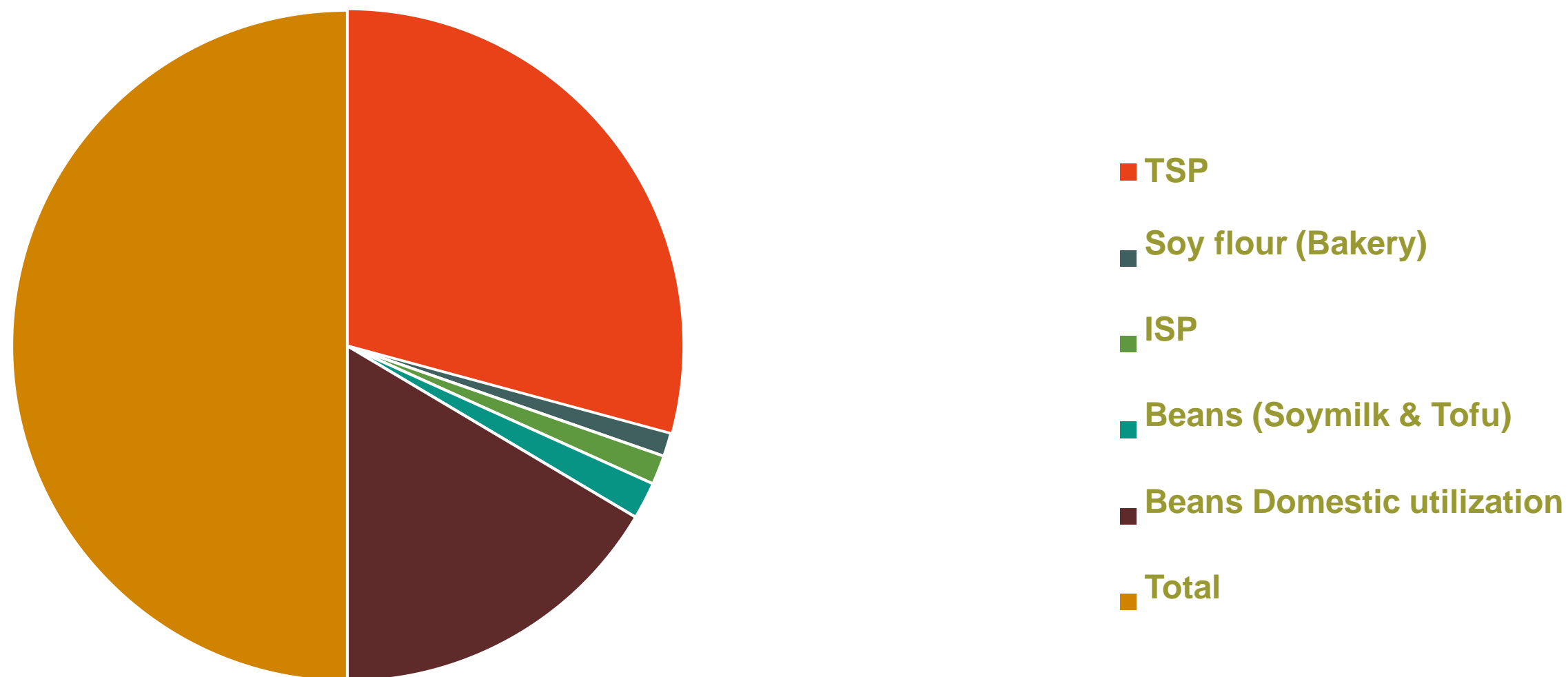
Current Soy Product Categories

- Soy Milk
- Tofu
- TVP (Nuggets, Granules..)
- Soy nuts
- Wheat soy flour
- Fortified gram flour
- Soy Papad
- Soy-based traditional snacks
- Lentil analogue
- Whole soybeans
- Bakery products
- Extruded Snacks
- Protein Bars
- Soy Fortified noodles
- Fruit juice based beverages
- Breakfast cereals
- Defatted soy flour
- Frozen disserts
- Soy Yogurt /buttermilk
- Protein Supplements
- Soybean Oil

Soybean consumption in India ('000 MT)



Soybean consumption as Human Food in India (Soybean Equivalent '000 MT)



Soy milk & Tofu Market

- About 380,000 MT of soymilk produced in 2019
 - Up from 400 MT in 2000
 - About 3,000 soymilk manufacturers
- 15% of the total soymilk is marketed as beverage
 - 10% as powdered beverage mix (soymilk powder & isolate based dry blended product)
- 2019 registered 15% growth in soymilk production over 2018
- Tofu production growing significantly (~20%)
 - 85% soymilk is converted into tofu
- Few value added products are being produced
 - Soy yogurt/buttermilk, frozen dessert, cheese spread

Textured Soy Protein Market

- Most widely accepted product soy food product
- Current market size is about 600,000 MT
 - Almost 75% going as bulk unbranded product
 - Branded products increasing
 - More than 25% increase each year
 - More than 300 extruders in operation
 - Almost 99% single screw extruders
 - Growing interest in Twin-Screw Extrusion technology
- Very poor and inconsistent product quality
- Available as nuggets/chunks, mini chunks and granules
- Frozen meat analogues are new and growing



Soy Nuts Market

- Dry roasted soy nuts are becoming popular
- US food specialty soybeans have already been tried in this category with appreciable outputs
- About 60 manufacturers
 - Currently producing about 2,000 MT
 - New medium capacity (2-5MT/day) project are coming
- Great opportunity in feeding programs
- Being promoted as nutritious and healthy alternate to peanuts / tree nuts
- Adapted into traditional foods

Protein Supplements

- Nutraceutical market is growing significantly
- Mostly Isolated Soy Protein based
 - Currently 10,000 MT of ISP (US has about 70% market share)
 - Mostly imported
 - One manufacturers started local production
- Protein bars market is one of the fastest growing sector
- Protein supplements
 - Disease specific nutritional supplements
 - Sports and performance nutrition
 - Child nutrition products
 - Weight management

New Focused Soy Products

- High Protein Reconstituted Rice - Diabetic rice
- Lentil analogue
- Textured vegetable protein - Meat analogues
- Process ingredients
 - Bakery (Bread improver, Egg-less cake)
 - dairy alternates (Soy ice cream, Soy yogurt, Non-dairy cream)
 - Food processing (traditional snacks, noodles)

High Protein Reconstituted Rice

- Reconstruction of rice kernel using extrusion technology
- Improve nutritional composition
 - Protein, Vitamins, Minerals
- High Protein Rice
 - Improvement in protein quantity and quality; lower glycemic Index; Better management of blood glucose;
- Indian Diabetes status
 - Indians and South Asians have high risk of diabetes
 - India is home to the world's largest number of diabetics (~73 mil.)
 - India will have more than 80 mil diabetics by 2030
 - Nearly 90% of these individuals have type 2 diabetes

Lentil Analogue

- Made from defatted soy flour and wheat/corn/rice
- Contains about 50 percent soy
- More than 30% protein
 - 30% more than traditional dals
- Easy to cook
- Perfect vehicle for micronutrient fortification
- Locally available raw materials
- Economical and Healthier



Off-take for Soybean ('000 MT) in India

	2019	2020	2021	2022	2023	2024	2025	2026
TSP	597	641	692	748	808	872	942	1,017
Soy flour (Bakery)	23	25	28	31	34	37	41	45
Lentil analogue	0	15	60	121	215	312	443	643
ISP	10	10	11	13	15	20	27	36
Total	629	691	791	912	1,072	1,241	1,453	1,741
SBE	848	919	1,024	1,147	1,299	1,470	1,681	1,951
Soybeans (Soymilk & Soynuts)	52	57	63	72	85	98	119	139
Beans Domestic utilization	500	525	551	579	608	638	670	704

MARKET ACCESS CONSIDERATIONS

- Import of GMO products is challenging under the compliance of “labelling requirements”
- “0” tolerance (for the non GM soybeans import)
- Recent SPS issues for whole beans
- High import duties on oil seeds

QSP - 3. US Food Specialty Soybeans

- US food specialty soybeans have been imported to India as trial and commercial shipments between 2016-17
- Imported in 2018 under USDA's Quality Samples Program
- Provided to about 50 Soymilk & Tofu manufacturers
- Beneficiaries were highly satisfied with the quality of soymilk and tofu
- Very keen on using US speciality beans
- Very positive feedback from the industry

Outcomes of Quality Sample Program QSP

Parameters	Comments % “YES”
Beans cleanliness	100
Overall convenience in handling and processing of U.S. Soybeans	100
Value addition through U.S Soybeans	100
Quality improvement in final product	87
Customer feedback about the final product	100

Outcomes of Quality Sample Program QSP Cont..

Parameters	Comments % "YES"
If commercially available would you prefer U.S. Soybeans for your product processing	100
Are you aware that these soybeans in U.S. are grown under most environmental sustainable manner in order to conserve the nature	72
Can you assign premium value to the taste, color and quality of the resultant end product	100 about 15 to 20% premium
Did you experience a better market demand of your products made by using the U.S. beans	74
Based on your experience with U.S. Soy on quality and other criteria are you willing to launch premium products in the market using U.S Soybeans in your processing	100

Soybean Oil

- Position soy oil as a healthier commodity compared to other oils (palm etc)
- Soy oil currently has no barriers on the biotech front.
- Soy oil from Argentina is imported into India regularly.
- Opportunity for high Oleic oil to create a niche for the health-conscious consumers.

Sri Lanka Soy Food Market

- Significant production of nutritional supplement
 - Triposha (made from local beans)
- Significant import of soy products
 - EAFFS (IN), DSF (IN, CH US), SPI (US, CH), Soymilk (SG, VN), Soy sauce (CH, HK, IN, SG, US.), SBO (CH, IN, NL, SG, US), Soybeans, SPC, lecithin (US)
- Good meat processing industry
- Very good TSP (~25,000 MT)
- In general positive perception about soy
 - Now and then myths on soy consumption pop-up

Pakistan Soy Food Market

- Processed meat industry uses ISP
- Protein supplements as nutraceutical products
- Made from ISP
- Mostly imported Soymilk and Tofu
- Soybean oil
 - Local production, growing
- Limited awareness on goodness of soy

Bangladesh Soy Food Market

- Primarily protein supplements
 - Made from ISP, few FFS products
- Textured Soy Protein
 - Mostly imported from India
- Soymilk and Tofu
 - Mostly imported
- Soybean oil
 - Local production, growing
- Limited awareness on goodness of soy

Nepal Soy Food Market

- Fermented soy products
 - Kinema is an indigenous fermented soybean product (similar to Tempe)
- Traditional foods
 - Bhatta, bhatmas, sadeko, soybean, soybean salsa
- Tofu is produced by small manufacturers
- Soy nuts are also available
 - Cottage scale
- Texture soy protein is also available
 - Few local manufacturers and retail products imported from India
- Refined soybean oil is also available in retail outlets



US SOY.ORG

U.S. SOY FOR A GROWING WORLD

USSEC
U.S. SOYBEAN EXPORT COUNCIL

While the U.S. Soybean Export Council (USSEC) does not guarantee the forecasts or statements of USSEC Staff or Contractors, we have taken care in selecting them to represent our organization. We believe they are knowledgeable and their presentations and opinions will provide listeners with *detailed* information and valuable insights into the U.S. Soy and U.S. Ag Industry. We welcome further questions and always encourage listeners to seek a wide array of opinions before *making any financial decisions based on the information presented. Accordingly, USSEC will not accept any liability stemming from the information contained in this presentation.*

USB
UNITED SOYBEAN BOARD

ASA
International
Marketing