

United Nations Conference on Trade and Development

13th Multi-Year Expert Meeting on Commodities and Development

10-12 October 2022, Geneva

ICO Report – Coffee Market Overview

By

Gerardo Pataconi, Head of Operations, International Coffee Organization

The views expressed are those of the author and do not necessarily reflect the views of UNCTAD.

Multi-year Expert Meeting on Commodities and Development

thirteenth session

10 - 12 October 2022

Room XVII, Palais des Nations

Geneva and Online, Switzerland

Gerardo Pataconi
Head of Operations



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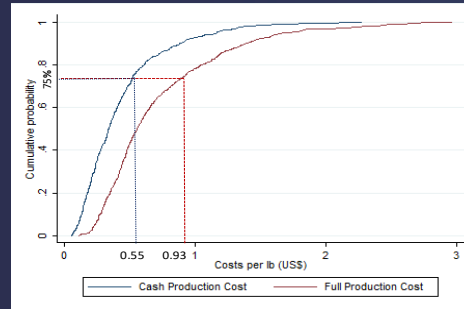
ICO Report – Coffee Market Overview

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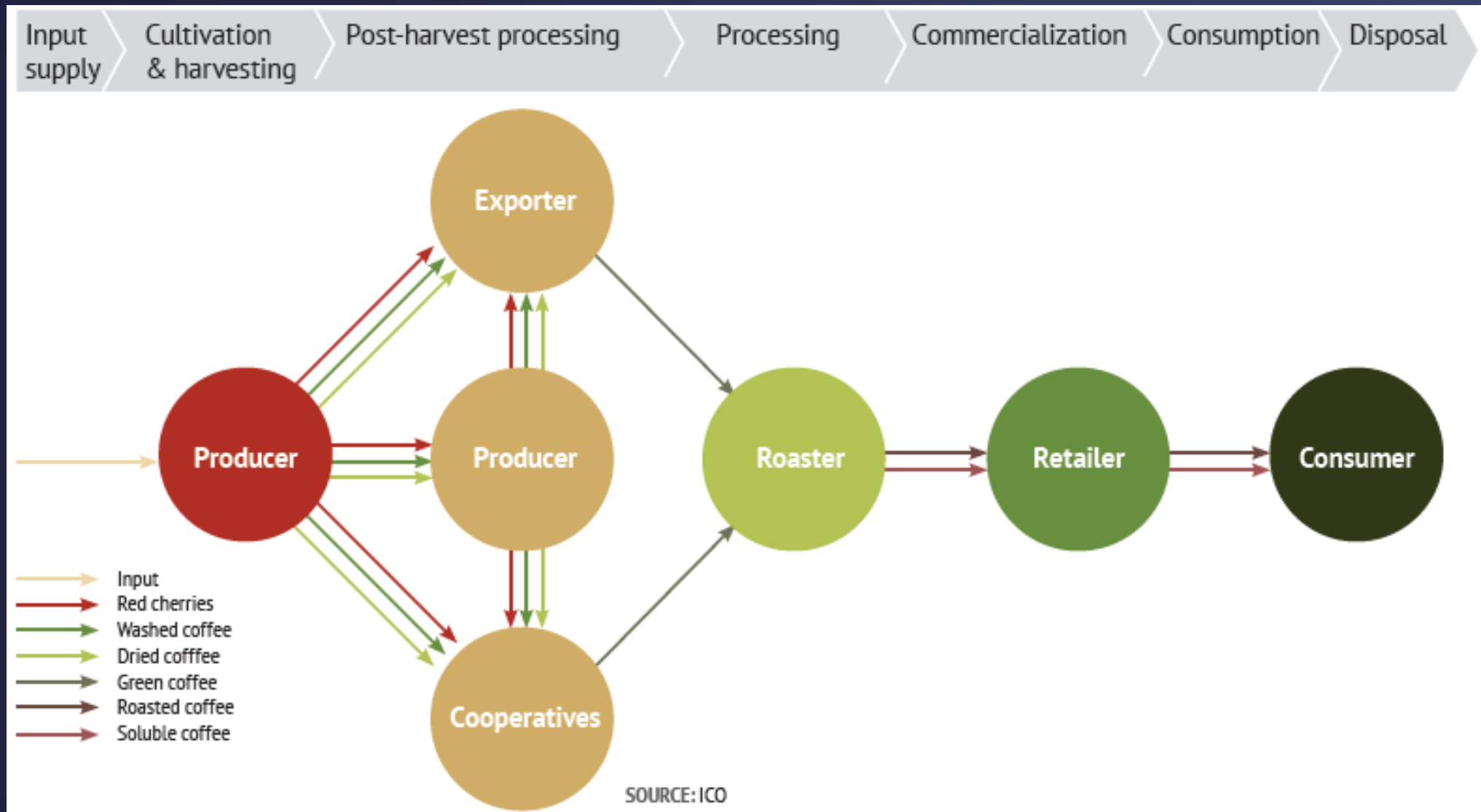




I. Coffee Market Trends



I.1 The Coffee Global Value Chain (C-GVC)



I.1 The Coffee Global Value Chain (C-GVC)

- Coffee is produced by **20-25 million** farms/mostly smallholders (coffee belt)
- Around **125 million** people **depend on coffee** production for their livelihoods
- Retail distribution of coffee value (**±200bn**):
 - Grocery/retail/discounters \$75-80bn
 - Coffee shops / internet \$65bn
 - Foodservice channels \$58bn
- **Average value of green coffee exports is around \$20bn**, i.e. $\leq 10\%$ of the over **\$200+ billion** revenues generated at retail level
- \$350+ million is invested annually in sustainability activities in coffee sector
- **As Average 3 billion cups of coffee are consumed daily**

I.2 COFFEE MARKET TRENDS: 2021-22 SUPPLY & DEMAND

Production and Consumption

- The provisional outlook for total production in coffee year 2021/22 remains unchanged at 167.2 million bags, a 2.1% decrease as compared to 170.83 million bags in the previous coffee year.
- World coffee consumption is projected to grow by 3.3% to 170.3 million 60-kg bags in 2021/22 as compared to 164.9 million for CY2020/21.
- In 2021/22, consumption is expected to exceed production by 3.1 million bags.



I.3 COFFEE MARKET TREND – EXPORT BY COUNTRY GROUPS

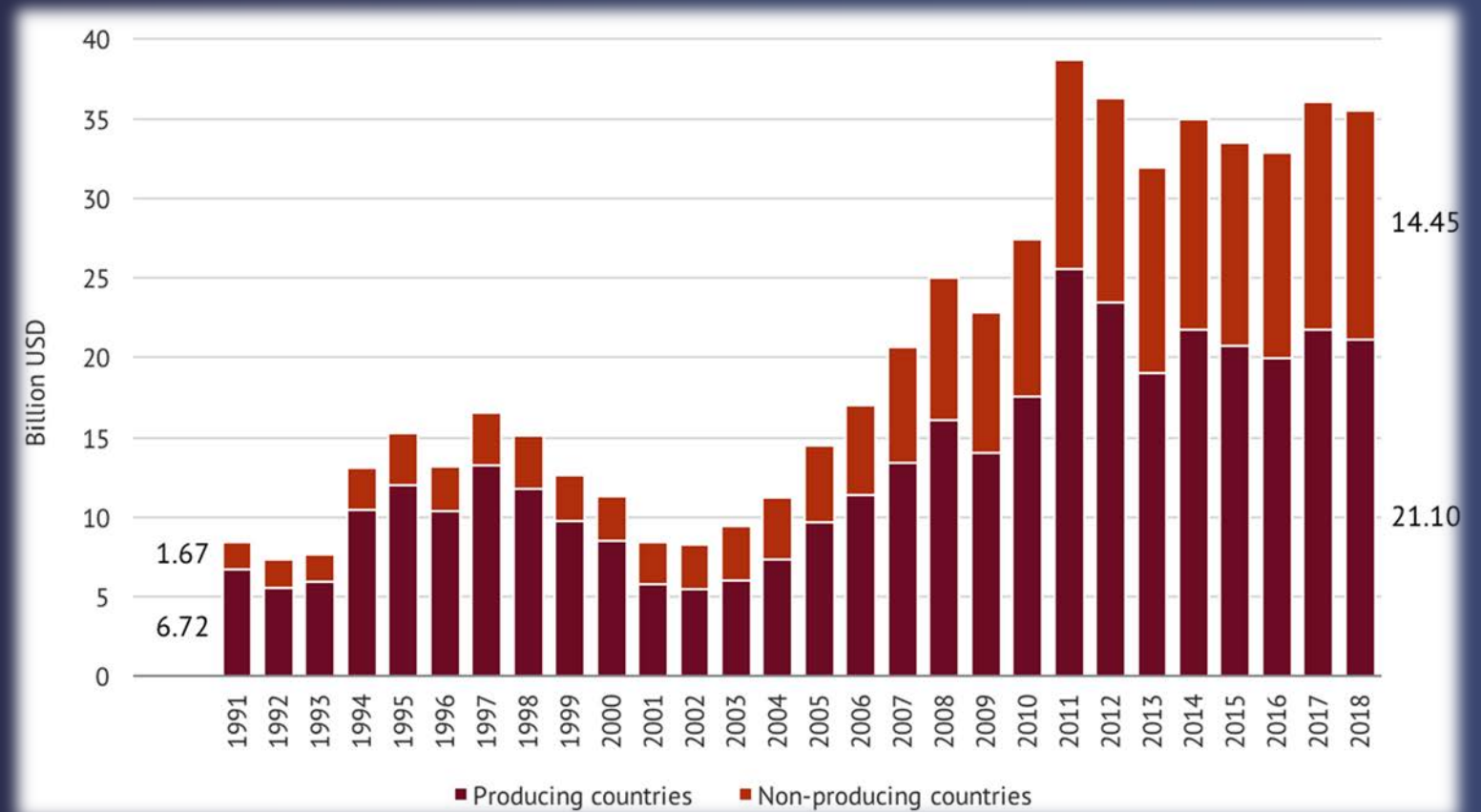
Non-producing countries have significantly increased exports of coffee
(All forms of coffee in in current value)

1991:

- Producing countries 80.1% of value of export
- Non-producing countries 19.9% of value of export

2018:

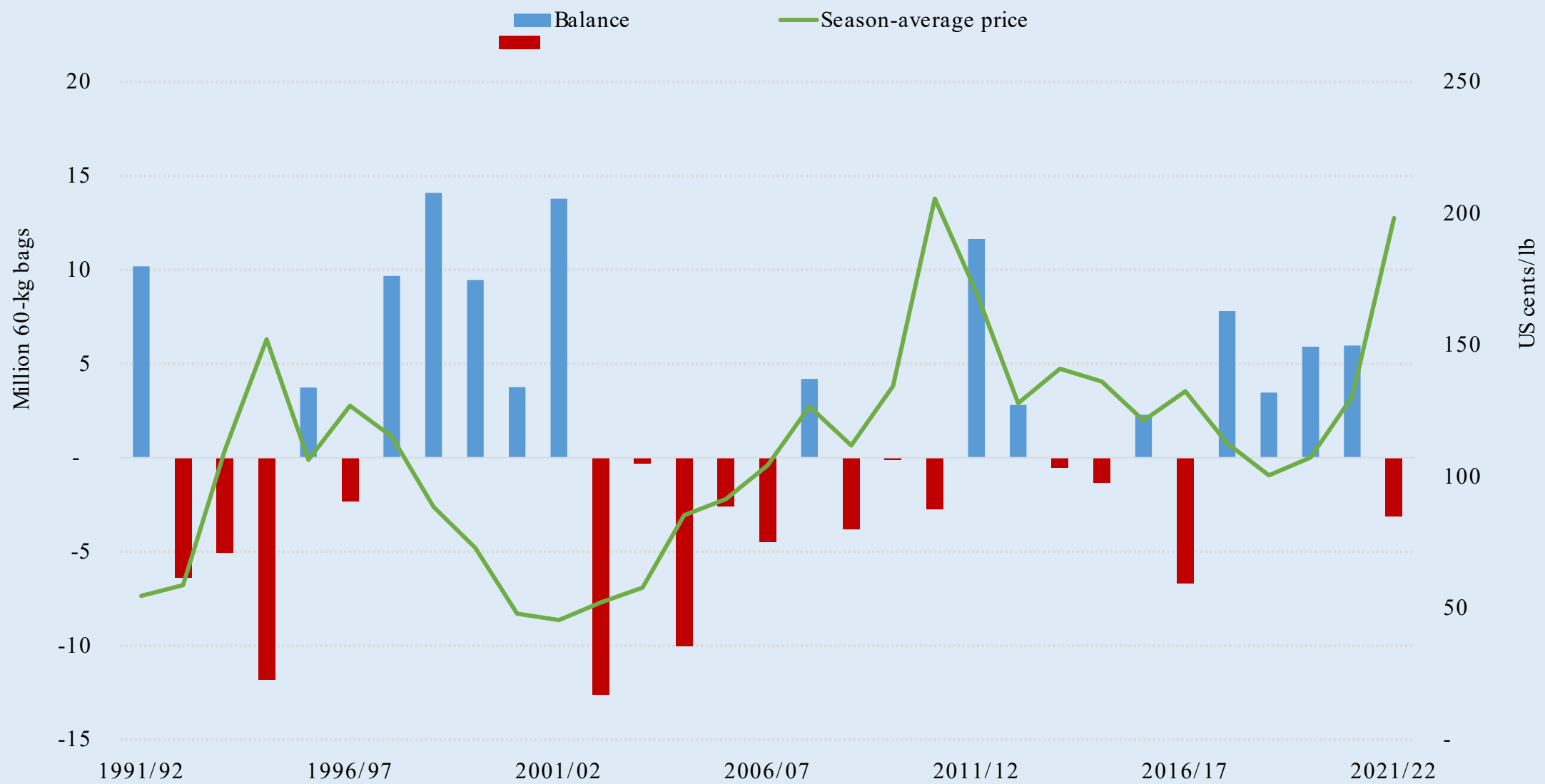
- Producing countries **59.4%** of value of export
- Non-producing countries **40.6%** of value of export



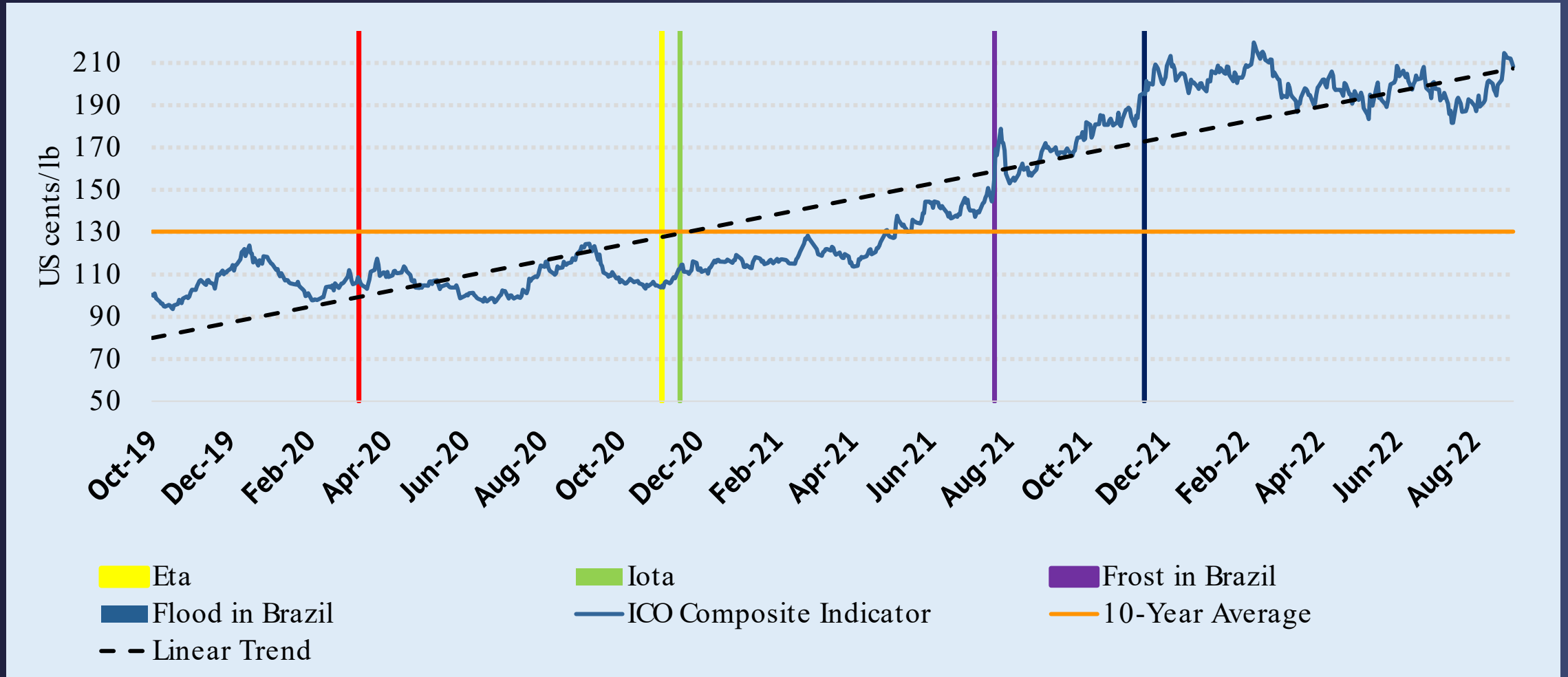
I.3 COFFEE MARKET TREND – SUPPLY/ DEMAND

- High-income countries have expanded exports of roasted coffee. Significant industrial base and established brands are key driver (e.g. EU, Switzerland, US).
- Some Robusta-producing countries and dual Arabica-Robusta producers have successfully entered soluble production. Producing countries increasingly engage in functional upgrading thereby contributing to global supply of soluble coffee in a competitive, low-margin market environment (e.g. Ecuador, Vietnam).
- Arabica-producing countries engage in product upgrading or ‘decommodification’ of green coffee. Increased product quality, integrated supply chain relationships between farmers and traders or roasters (for example in Peru, Rwanda).
- Tariffs deter functional upgrading activities of those seeking to capture higher value added. Higher import tariffs on processed coffees and NTBs limit producing countries to access lucrative export markets.

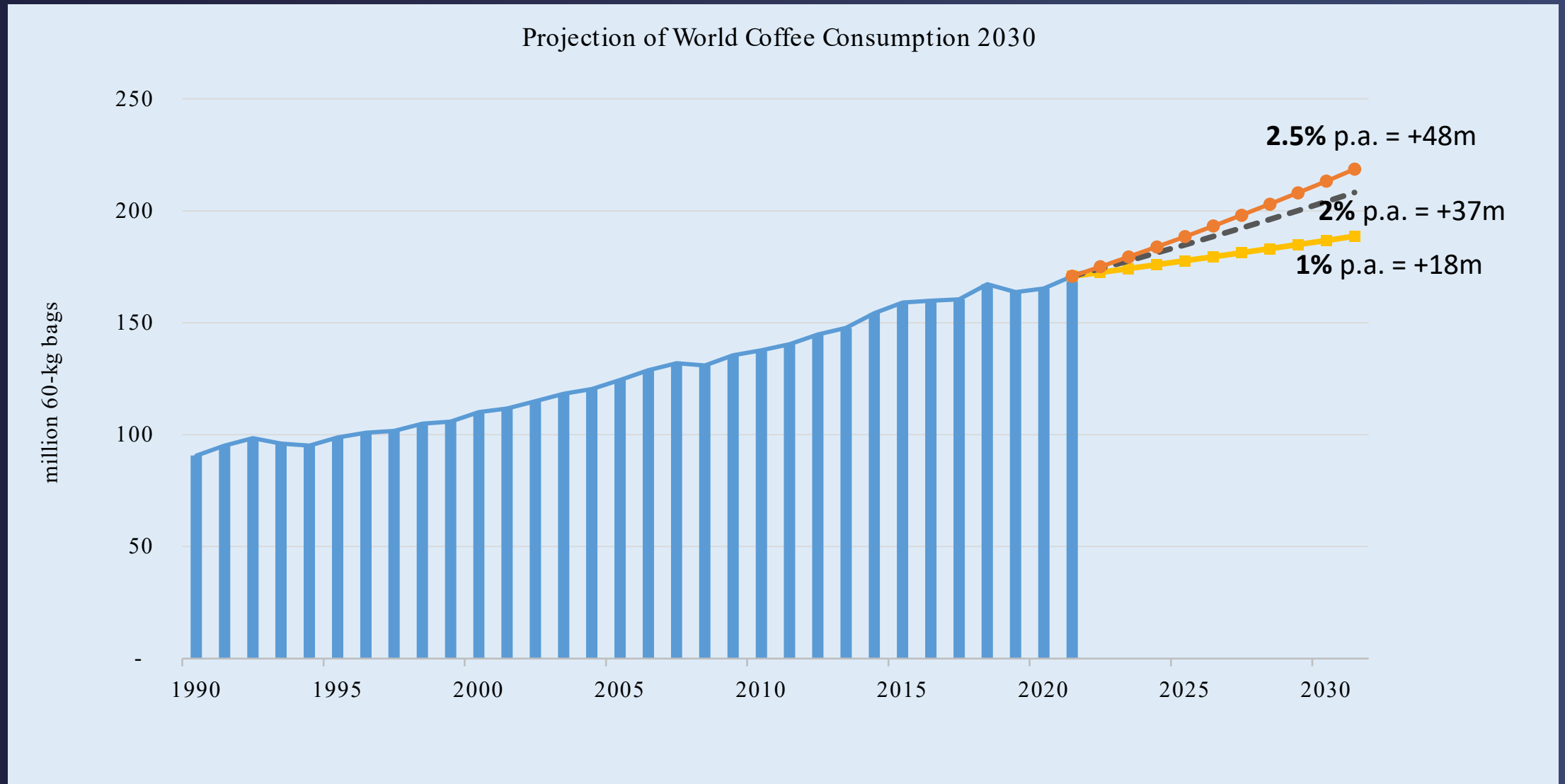
1.3 COFFEE MARKET TRENDS - PRICES & NET GLOBAL BALANCE



I.3 COFFEE MARKET TRENDS - ICO Composite Indicator (I-CIP) – Daily Prices

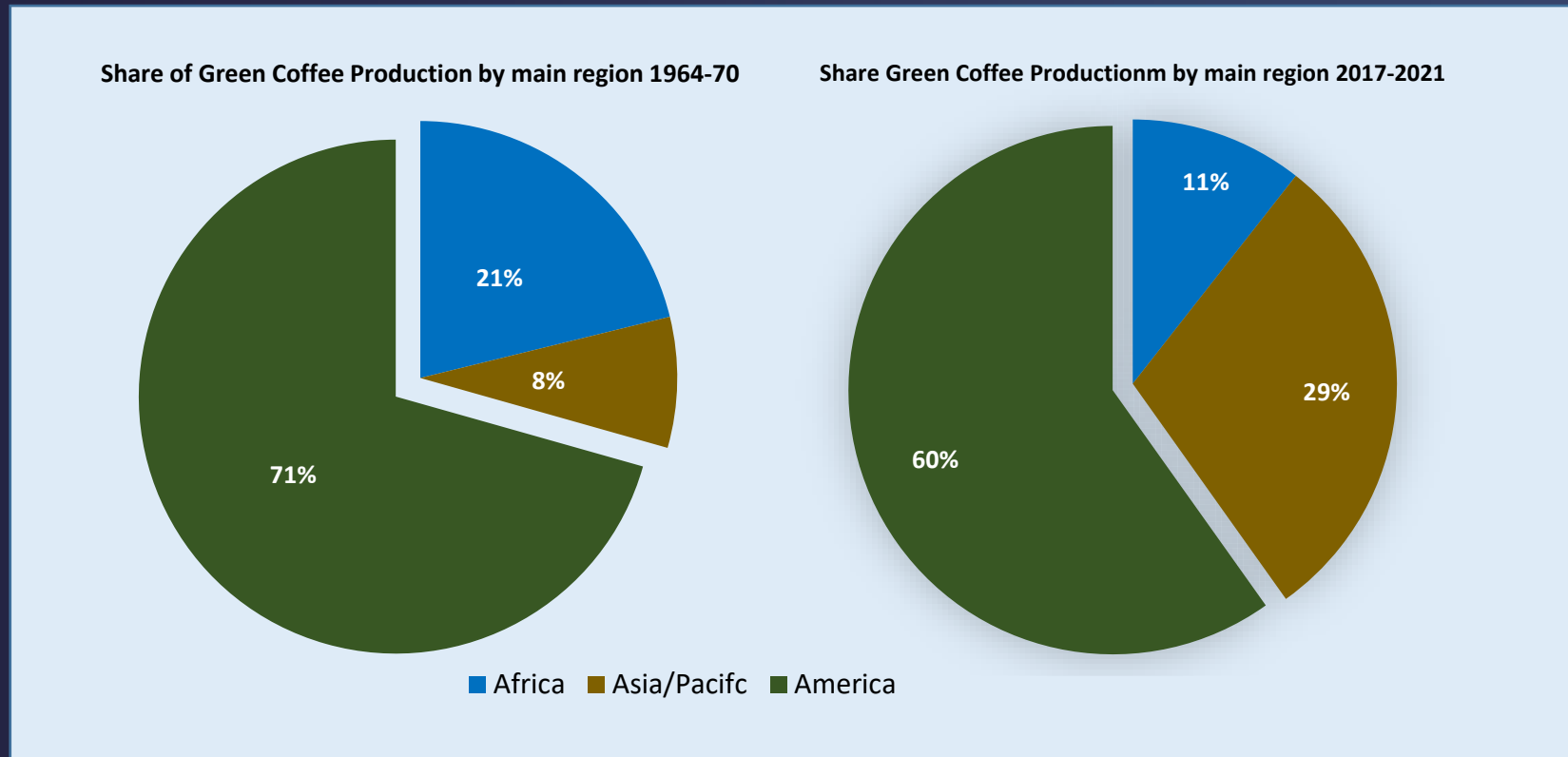


I.3 COFFEE MARKET TREND – CONSUMPTION 2030

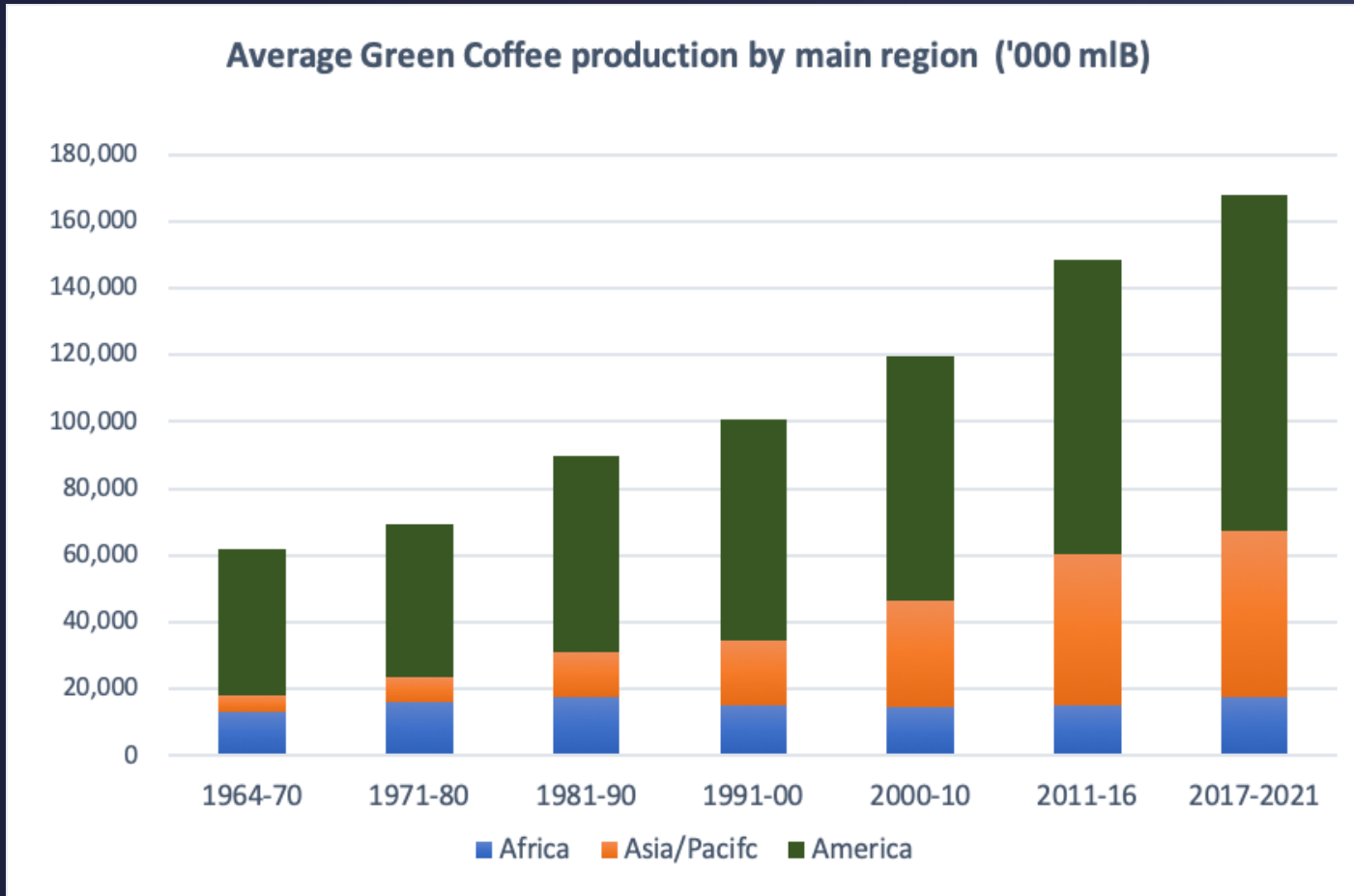


I. 4 COFFEE MARKET CONSOLIDATION

- **SUPPLY-SIDE:** the production pattern from the 60s to today has dramatically changed.
- In the period **1964-70 America** (South and Central and the Caribbean) avg **71%** of production/2017-21 **60%**.
- Shift between **Africa** (From **21%** of the 60s to **11%** in recent years) towards **Asia** (From **11%** to **29%** in 2017-21)

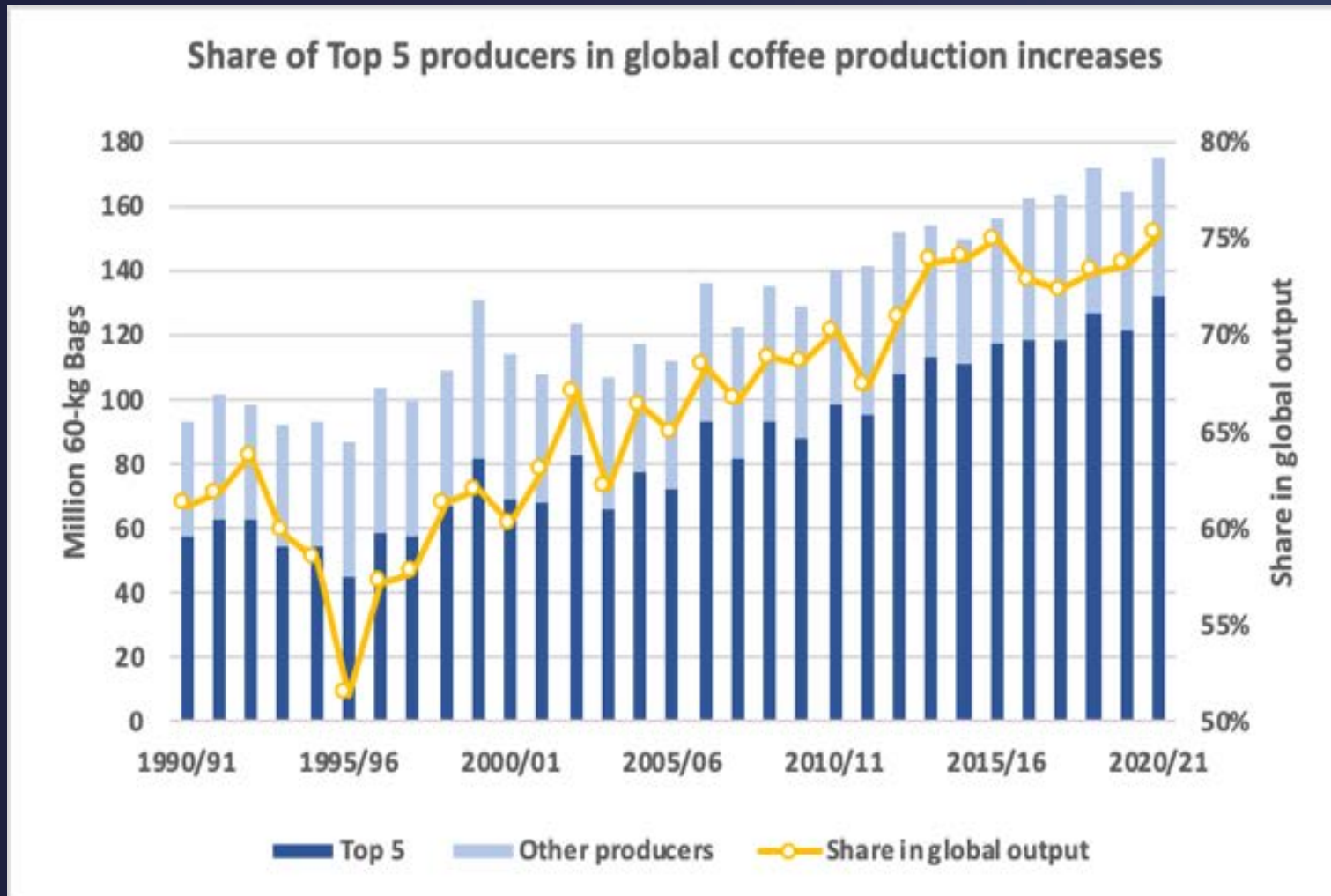


I. 4 COFFEE MARKET CONSOLIDATION



- In 2020-21 **four** countries, **Brazil, Vietnam, Indonesia and Colombia**, with >5% of world output each
- Together **71.2%** of global green coffee production. (**Adding Honduras, Ethiopia and Uganda**), these **seven** countries are responsible for almost **79%** of world production.
- In **1964-65**, **five** with >5% of production each abd reached 61.9% of total world production (**Brazil, Colombia, Angola, Côte d'Ivoire and Mexico**)

I. 4 COFFEE MARKET CONSOLIDATION



- The “coffee-champions” are 13 coffee producing countries with over 1.5 million 60kg bags produced in 2017-21, which together accounted for 93.7% of global output in the last five years.
- The remaining 40+ countries account for a mere 6.3% of total coffee production! Among them, some may not be top producers in volume but have increased their coffee earnings by successfully upgrading focusing on both the highly profitable specialty coffee market segment and/or through value addition.

I. 5 COFFEE MARKET TREND – INDUSTRY CONSOLIDATION

Concentration at the other end of value chain (Industry) is increasing but is not necessarily linked with price levels.

- Coffee trading & processing undergone a process of market concentration.
- A small number of very large roasters dominates the coffee market, all but one of which have their headquarters in Europe or the United States.
- The 5 largest trade houses handle a total of 62.5 million bags, an equivalent of half of the total green coffee export production in 2019.
- Further downstream the value chain, the top-10 roasting companies process 35% of global coffee output.

II. Key Issues



II.1 Factors affecting the coffee GVC

UNCERTAINTY

- *Demand*
- *Supply*
- *Logistics*
- *Inputs costs & availability*
- *Prices*
- *Income/*
- *Consumption patterns*

SUPPLY

- Disruption of supply chains & international trade
- Inputs and production costs/availability
- Climate change
- Lack of liquidity hampering investment in C-GVC...

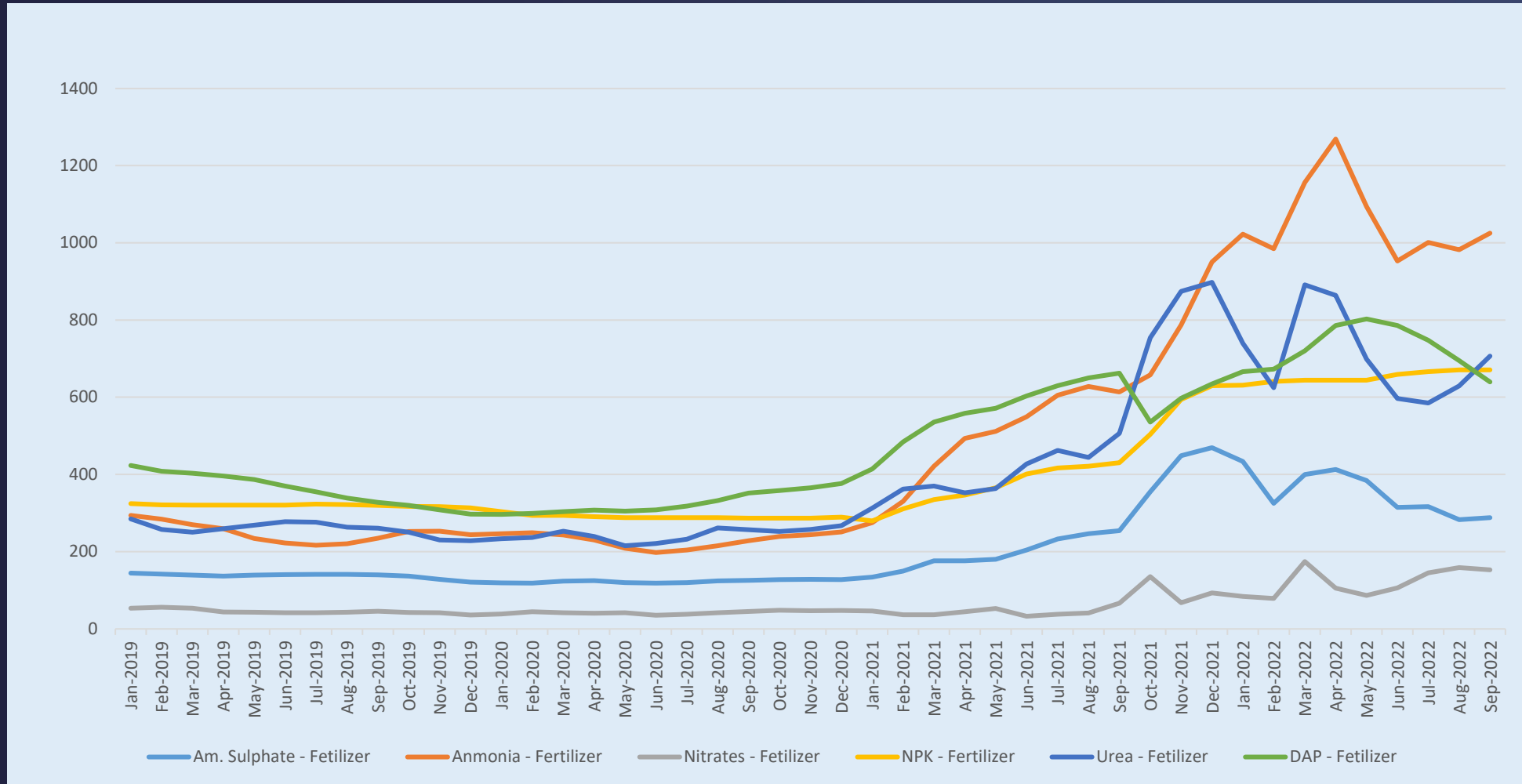
DEMAND

- Reduced world economy's growth
- Decrease of the out-of-home consumption
- Consumers price sensitive
- Demand reduction in conflict areas
- Robusta/Arabica demand.....

CO-FACTORS

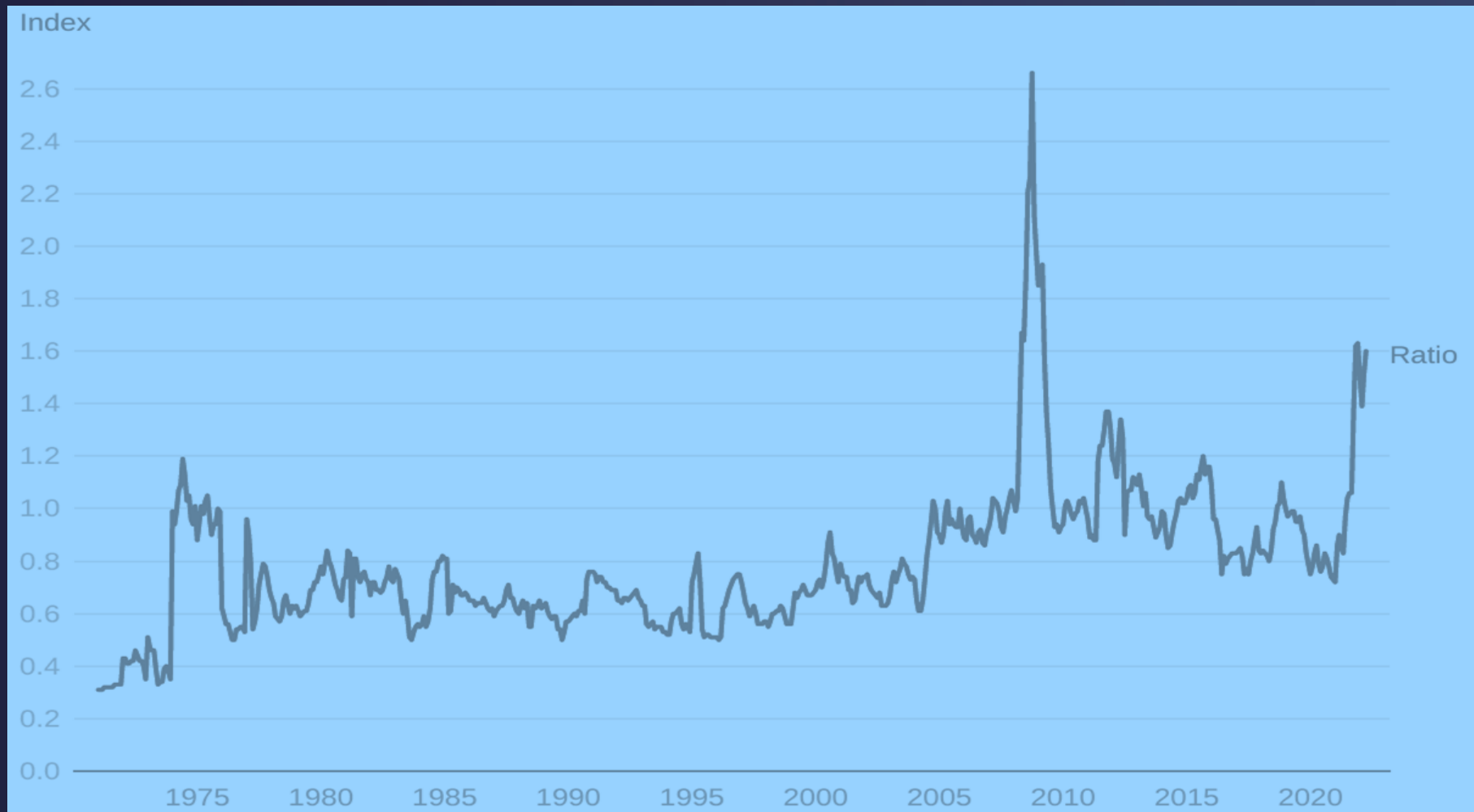
- Currencies devaluation/exchange rates
- Inflation
- Non-commercial traders in the futures market
- New regulations/standards
- Climate
- Pest & diseases...

II.2 INPUTS: Monthly Average of Fertilizer Price in USD/Tonne



• Source: ICIS

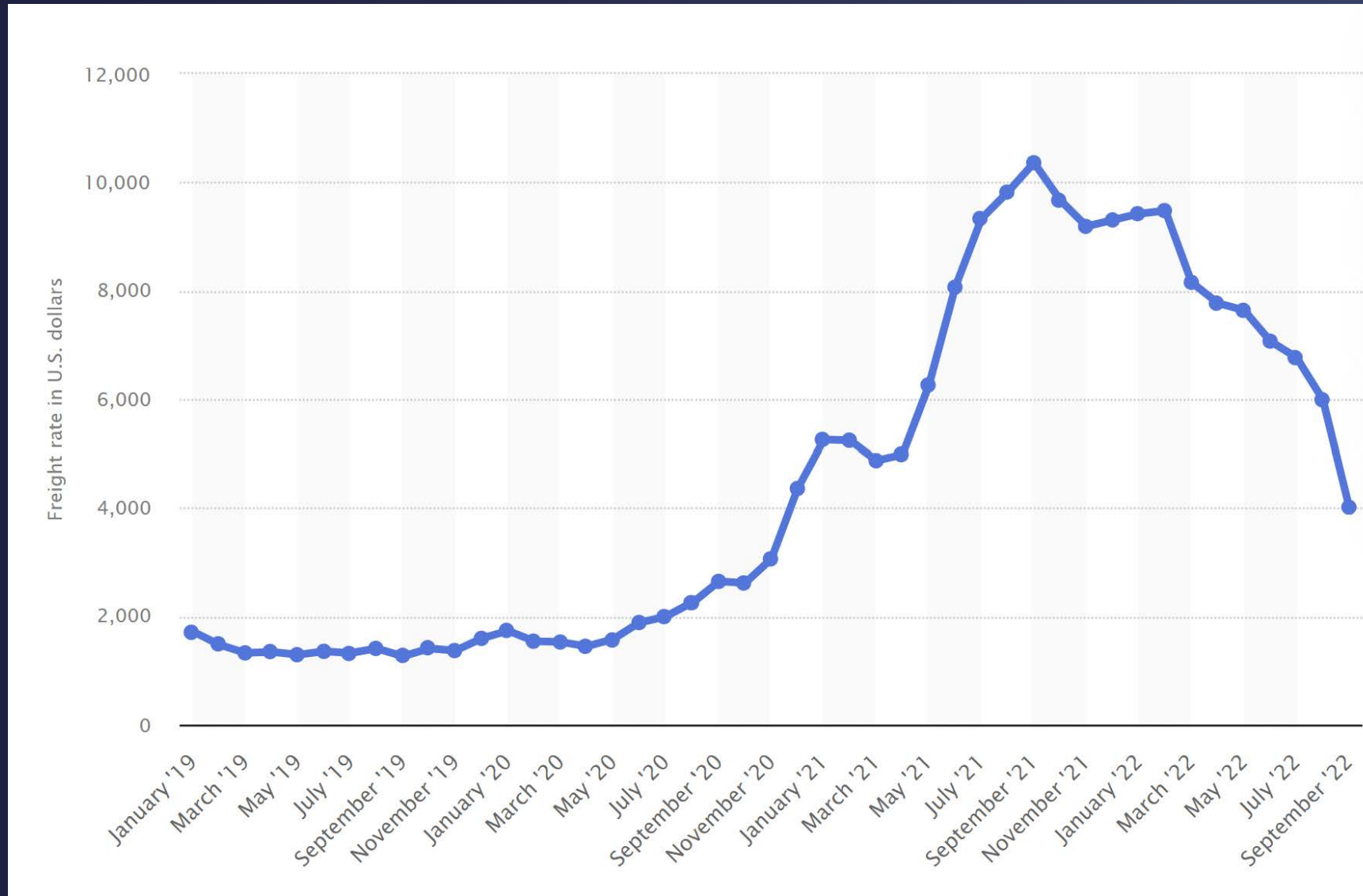
II.2 INPUTS: Fertilizer Affordability Index



Note: Ratio of World Bank's fertilizer price index to food price index. A higher ratio represents lower fertilizer affordability, and vice versa. Last observation is April 2022.

Source: World Bank.

II.2 INPUTS: Global container freight rate index

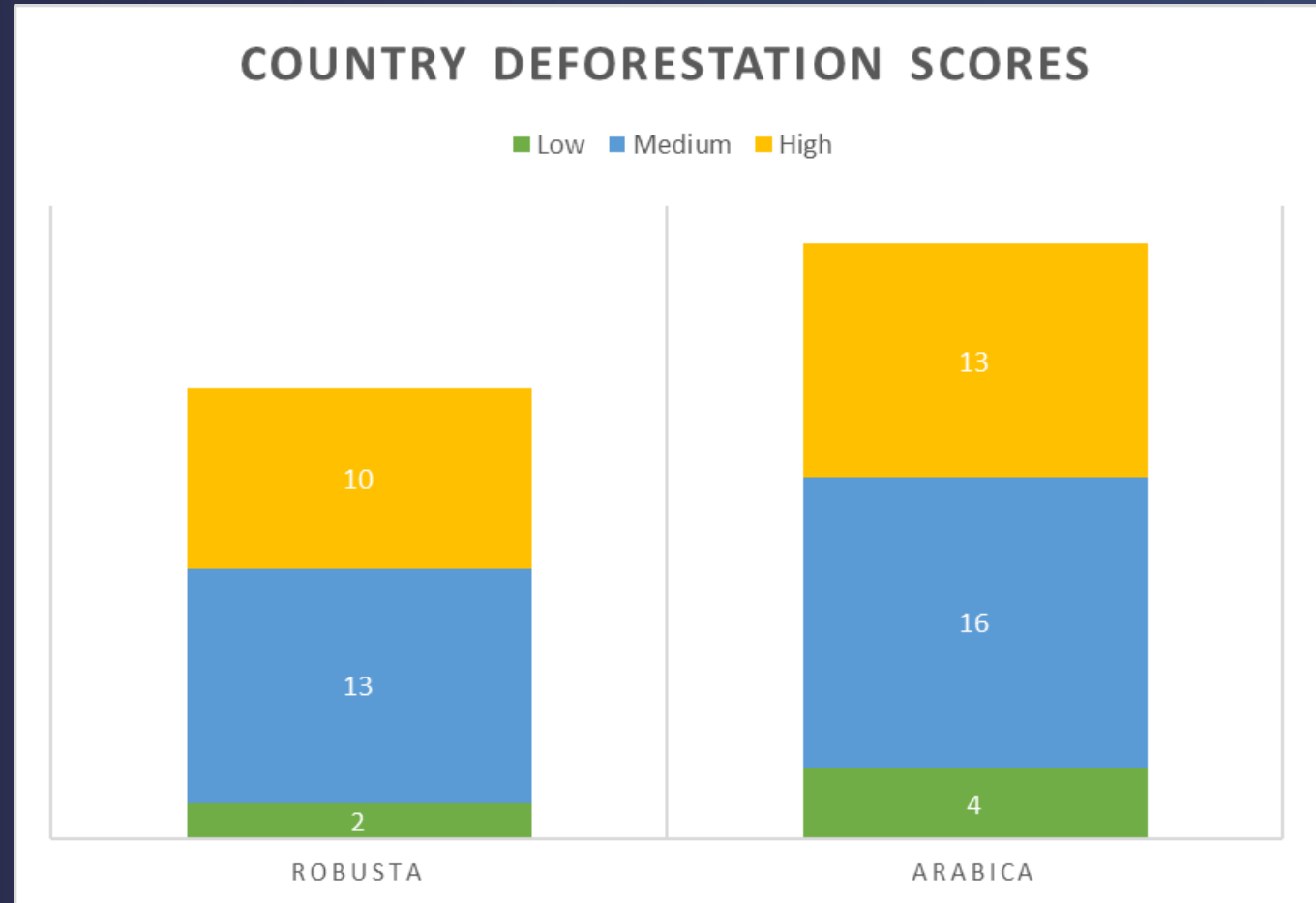
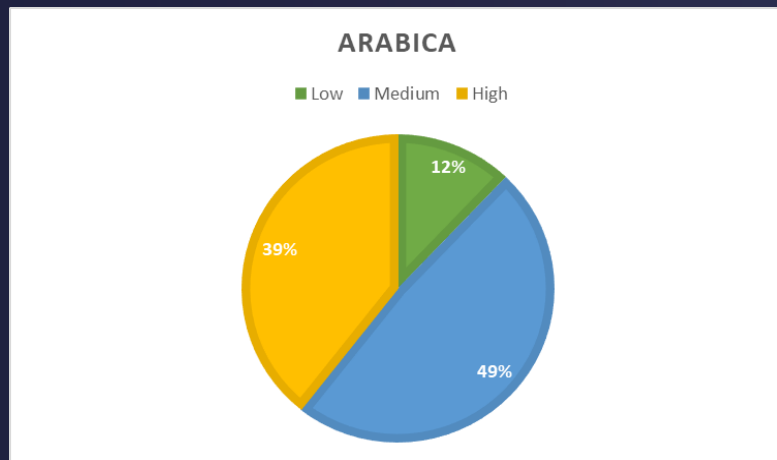
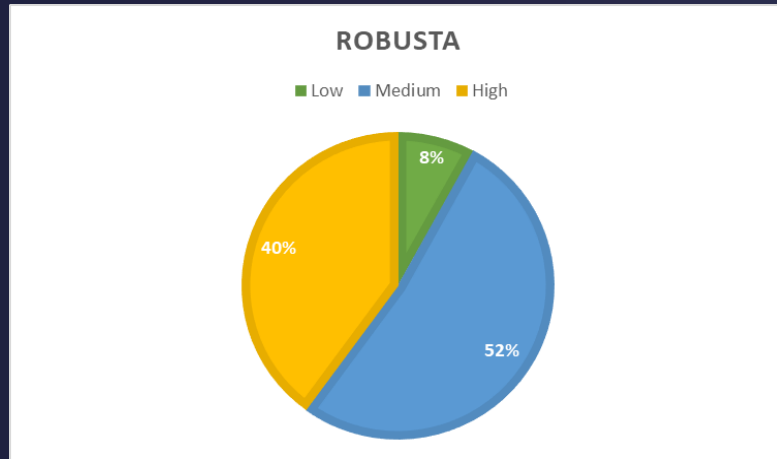


II.3 - DEFORESTATION

- Estimated by FAOSTAT:
 - Globally agricultural land area is approximately five billion hectares (38% of the global land surface)
 - About 1/3 is used as cropland, while the remaining 2/3 consist of meadows and pastures) for grazing livestock.
 - Coffee production uses 10.5 million hectares (decline compared to a decade ago)
- With climate change, coffee production is shifting to more suitable regions/higher altitudes
- The increasing demand for coffee could lead to higher levels of land use change or deforestation exacerbating the effects of emissions and climate change.
- It was estimated that in next 30 years 75% of available, un-forested land suitable for Arabica lost due to climate change, & 63% of similarly suitable land for Robusta (Sachs et al. 2019).
- Vastly more land suitable for coffee (over 9 times is estimated to be suitable for Arabica production in 2050 than the total of land currently under its cultivation, largely in Brazil).

II.3 – DEFORESTATION Ico/WUR Preliminary results: country-level deforestation scores

Similar scores for Robusta and Arabica producing countries



II.3 Arabica: Country deforestation Propensity Scores

Angola	0.33	1.00	0	1	0	0.00	1
Bolivia	0.37	0.03	0.02	0.01	0.99	0.09	27,687
Brazil	0.54	0.55	0.05	0.5	0.98	0.09	1,613,803
Burundi	0.63	0.73	0	0.73	0.87	0.30	49,255
Cameroon	0.53	0.82	0.02	0.8	0.61	0.18	3,959
Central African Rep.	0.39	0.92	0	0.92	0.31	0.00	5
Colombia	0.65	0.93	0	0.93	0.96	0.08	491,294
Costa Rica	0.67	0.94	0	0.94	1	0.08	96,239
Cuba	0.58	0.48	0	0.48	1	0.25	8,812
Dem. Rep. Congo	0.54	0.96	0.01	0.95	0.52	0.14	3,412
Dominican Rep.	0.76	0.94	0.01	0.93	1	0.33	28,863
Ecuador	0.69	0.88	0	0.88	1	0.19	7,458
El Salvador	0.73	0.91	0	0.91	1	0.28	90,344
Ethiopia	0.60	0.61	0	0.61	1	0.22	337,569
Honduras	0.72	0.93	0	0.93	1	0.24	253,563
India	0.07	0.02	0	0.02	0.16	0.02	87,391
Indonesia	0.64	0.90	0.28	0.62	1	0.01	90,480
Jamaica	0.72	0.96	0	0.96	1	0.20	9,880
Kenya	0.25	0.35	0	0.35	0.99	0.08	45,629
Laos	0.35	0.04	0.04	0	1	0.00	18
Malawi	0.31	0.24	0	0.24	0.66	0.03	4,577
Mexico	0.63	0.85	0	0.85	1	0.04	247,786
Nepal	0.39	0.01	0.00	0.01	1.00	0.16	334
Nicaragua	0.75	0.96	0	0.96	1	0.27	91,278
Panama	0.68	0.85	0	0.85	1	0.19	11,688
Papua New Guinea	0.53	0.45	0	0.45	0.98	0.16	65,378
Peru	0.68	0.91	0.08	0.83	1	0.14	278,811
Rwanda	0.21	0.38	0	0.38	0.18	0.20	20,437
Tanzania	0.46	0.57	0	0.57	1	0.08	29,900
Thailand	0.63	0.88	0	0.88	1	0.00	1
Timor-Leste	0.69	0.93	0	0.93	1	0.14	10,235
Vietnam	0.56	0.63	0.39	0.24	1	0.05	32,664
Zambia	0.44	0.82	0	0.82	0.48	0.01	6,288
Zimbabwe	0.20	0.42	0	0.42	0.16	0.01	801

II.3 Robusta: Country deforestation Propensity Scores

Country	Environmental Risk (mean)	Deforestation (CDD + SH)	Commodity-driven deforestation (CDD)	Small-holder driven deforestation (SH)	Biodiversity risk	Agricultural Water Risk	Production (tonnes)
Angola	0.24	0.52	0.01	0.51	0.16	0.05	10,518
Bolivia	0.53	0.60	0.60	0.00	1.00	0.00	1
Brazil	0.54	0.55	0.05	0.50	0.98	0.09	1,067,974
Cameroon	0.53	0.83	0.02	0.81	0.60	0.16	42,801
Central African Rep.	0.45	0.65	0.00	0.65	0.58	0.12	3,963
Colombia	0.67	1.00	0.00	1.00	1.00	0.00	0
Côte d'Ivoire	0.67	0.98	0.01	0.97	0.78	0.24	89,560
Dem. Rep. Congo	0.48	0.96	0.02	0.94	0.34	0.14	28,595
Ecuador	0.71	0.89	0.00	0.89	0.99	0.25	22,250
Guinea	0.51	0.99	0.06	0.93	0.36	0.17	28,924
Honduras	0.67	1.00	0.00	1.00	1.00	0.00	27
India	0.06	0.02	0.00	0.02	0.15	0.02	194,533
Indonesia	0.67	0.76	0.39	0.37	1.00	0.26	574,112
Kenya	0.33	1.00	0.00	1.00	0.00	0.00	247
Laos	0.56	0.58	0.22	0.36	1.00	0.11	47,891
Liberia	0.73	0.99	0.06	0.93	0.98	0.23	1,190
Madagascar	0.69	0.96	0.02	0.94	1.00	0.12	57,675
Papua New Guinea	0.47	0.81	0.00	0.81	0.42	0.17	347
Sierra Leone	0.74	1.00	0.03	0.97	0.96	0.25	26,137
Tanzania	0.26	0.74	0.02	0.72	0.03	0.01	24,145
Thailand	0.51	0.38	0.30	0.08	1.00	0.15	49,254
Timor-Leste	0.33	0.00	0.00	0.00	1.00	0.00	3
Togo	0.43	0.93	0.00	0.93	0.14	0.23	11,467
Vietnam	0.56	0.59	0.39	0.20	1.00	0.09	1,113,207
Zambia	0.62	0.85	0.00	0.85	1.00	0.00	19

II.3 Country deforestation Propensity Scores

Commodity driven deforestation (CDD): commodity-driven deforestation. The percentage of a given commodities production region that occurs in an area where long term, permanent conversion of forest and shrubland to a non-forest land use (agriculture, mining, or energy infrastructure) was detected.

Small-holder driven deforestation (SH) Smallholder deforestation: The percentage of a given commodities production region that occurs in an area where small-to-medium-scale forest and shrubland conversion for agriculture that is later abandoned and followed by subsequent forest regrowth was detected.

Biodiversity risk (BIO) biodiversity risk. The percentage of a given commodities production region that occurs in either a high priority ecoregion (animal biodiversity) or a biodiversity hotspot (plant biodiversity)

Agricultural water risk (AG) agricultural water risk. The percentage of a given commodities production region that occurs in an area that contains a water-related risk in the categories of based on quantity (physical), quality(physical), or regulatory. See data sources for more information.

Source: <https://sustainabilityconsortium.org/commodity-mapping/>
Note: 25 Robusta producing countries; 33 Arabica producing countries



**A COFFEE CUP
A DAY KEEPS
THE POVERTY
AWAY**

T H A N K S



**INTERNATIONAL
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**THANKS
MERCI
GRACIAS
OBRIGADO**

