



Olam

Guaruja
May 2018

Coffee market Overview – Importance of Brasil

- Introduction to Olam Coffee
- Key Coffee trends – Longer Term Consumption Trend
- Current Supply and Demand
- Importance of Brasil
- Viewing Brasil Coffee through the lens of Planetary Boundaries
- Conclusion

Olam's Coffee Footprint



Upstream

- Olam coffee plantations with focus on high quality Arabica
- Existing operations in Laos, Brazil, Zambia & Tanzania with current planted area of over 7,000 ha
- Continued investment in plantations with the aim to reach 15,000 hectares over next few years

Supply Chain

- Buying, Processing and Shipping about 14 m bags of Coffee
- Direct presence in 22 coffee growing origins
- Olam Specialty Coffee as an independent subsidiary to focus on Specialty segment primarily in US while expanding in EU and Asia

Midstream

- Total Capacity of 30,000 mt of Soluble coffee producing spray dried powder, Agglomerated, Freeze dried and Frozen Extracts
- One plant in Vietnam and one in Spain
- Vietnam focused on bulk and Spain focused on private label

Presence across the entire coffee value chain

Founding Members of GCP, Partnering with WCR on Varietal trials

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Key Trends in Coffee

Innovation Drives Continued Growth of Specialty Coffee



Mid 1900 to 90s

- At home consumption



1990's

- 2nd wave (Coffee Shop Chains)
- Curiosity about origins, sustainable/ traceable coffee



2000's

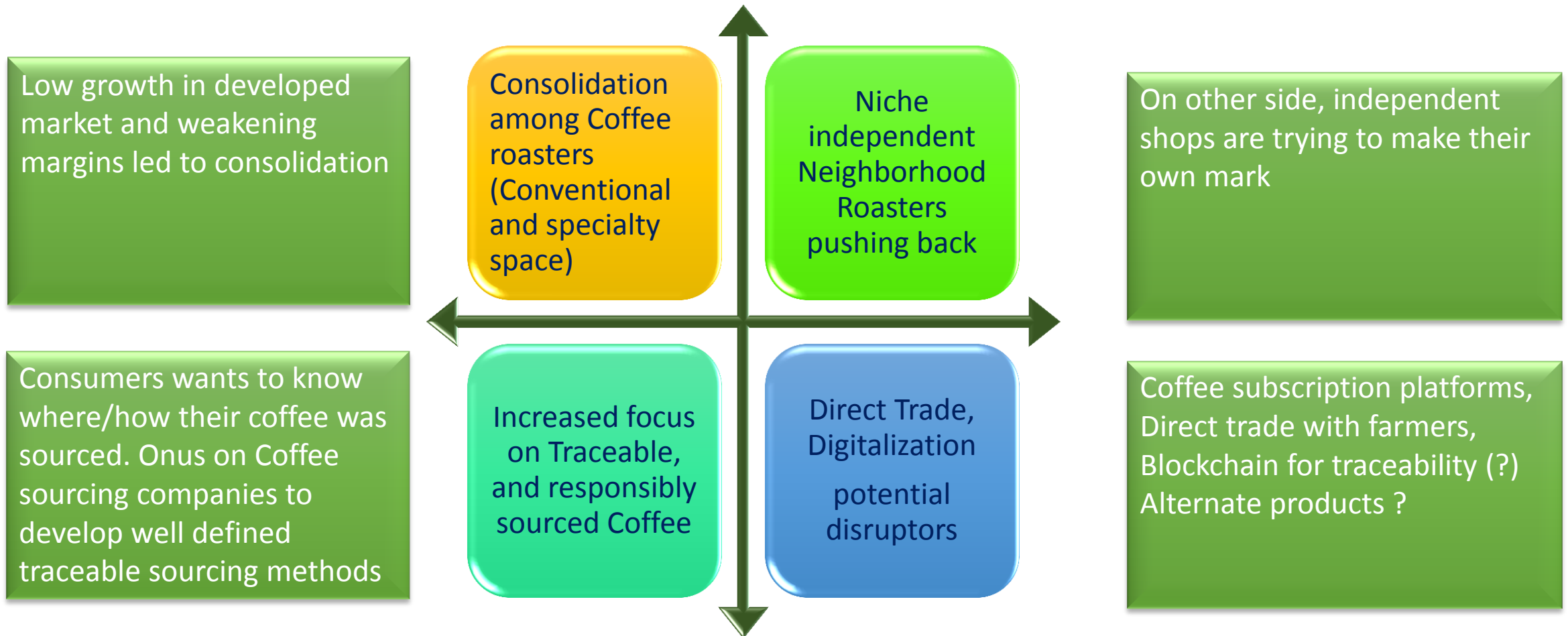
- 3rd wave (Artisanal coffee)
- Single serve / Capsules
- Responsible Sourced coffee became more important



Present

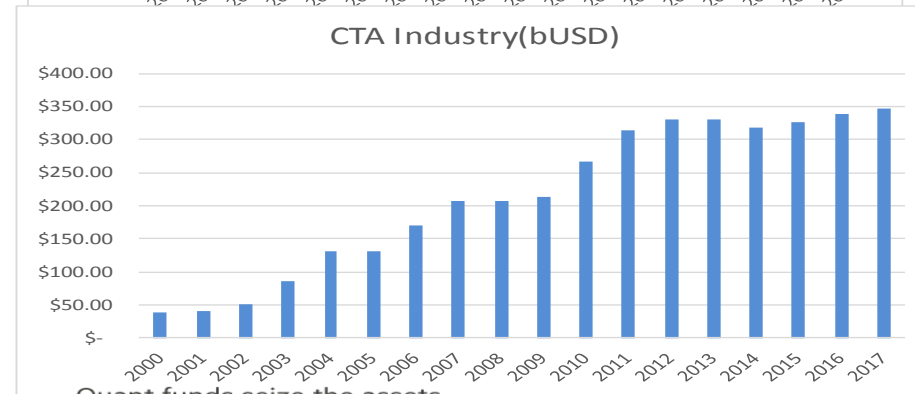
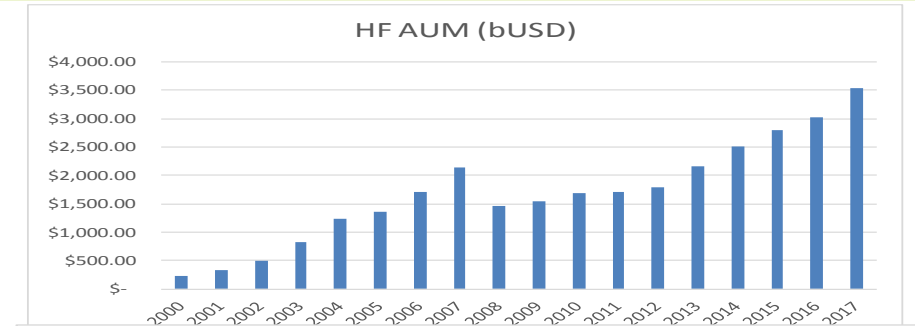
- 4th wave (Neighborhood Barista)
- Cold Brew/ Nitro coffee
- Consumers more aware & willing to pay for responsibly sourced, traceable coffee

Consolidation, Fragmentation, Sustainability & Disruption



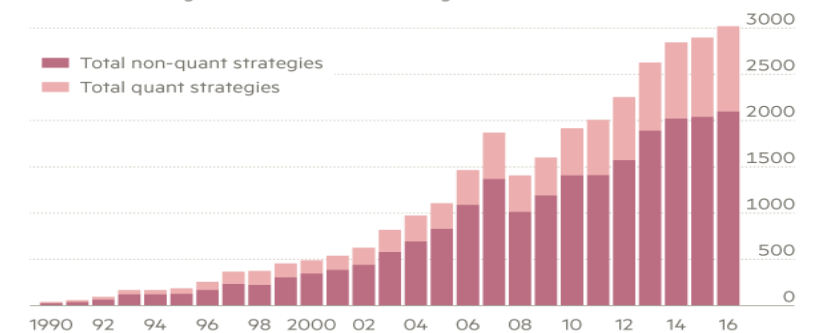
Increasing Role Of Financial Participants

- Huge inflows into Hedge fund space with CTA's at over 350 b usd
- Massive growth in Quantitative /algorithmic strategies
- Market moves are faster and amplified by the sheer speed and size of trading of these new players
- Traditional S&D based trading have to be adjusted to new realities



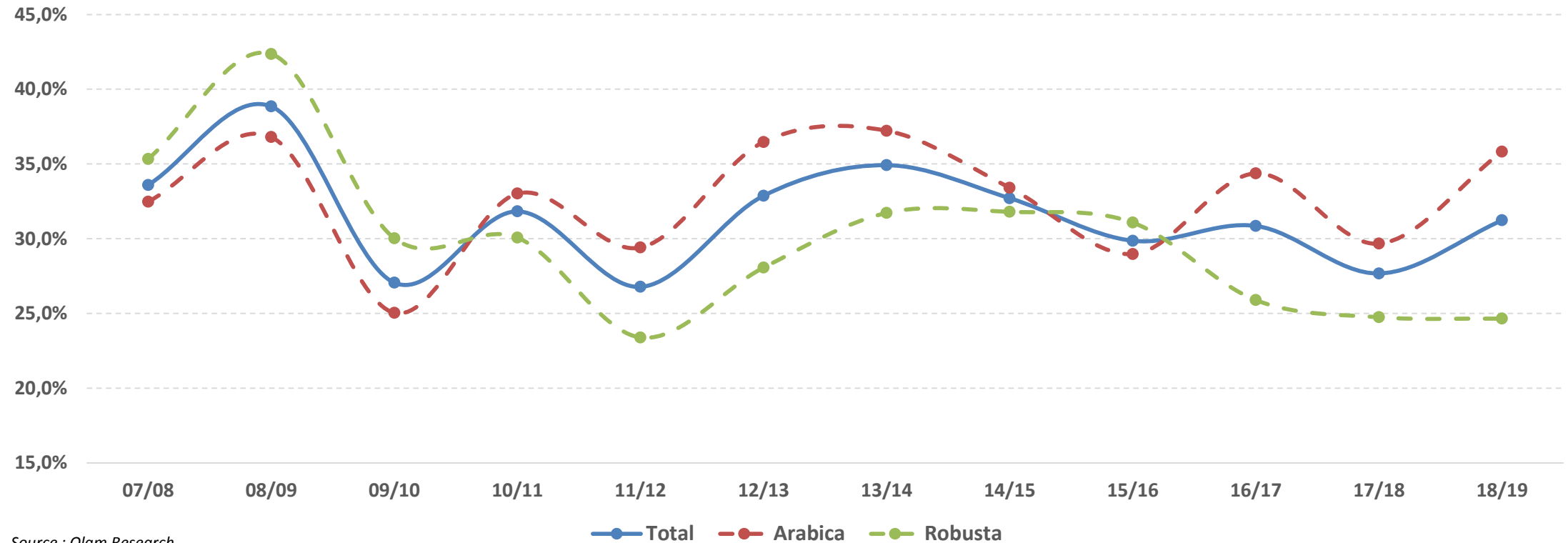
Quant funds seize the assets

Quantitative hedge funds assets under management (\$bn)



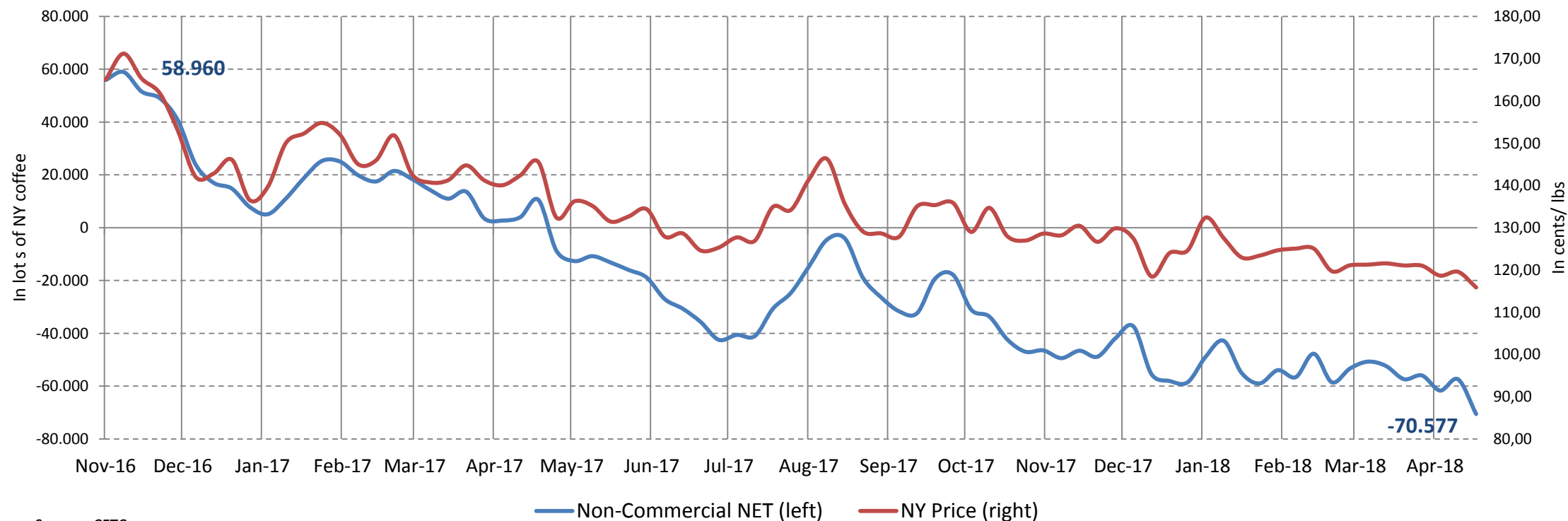
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Stock Consumption Ratios



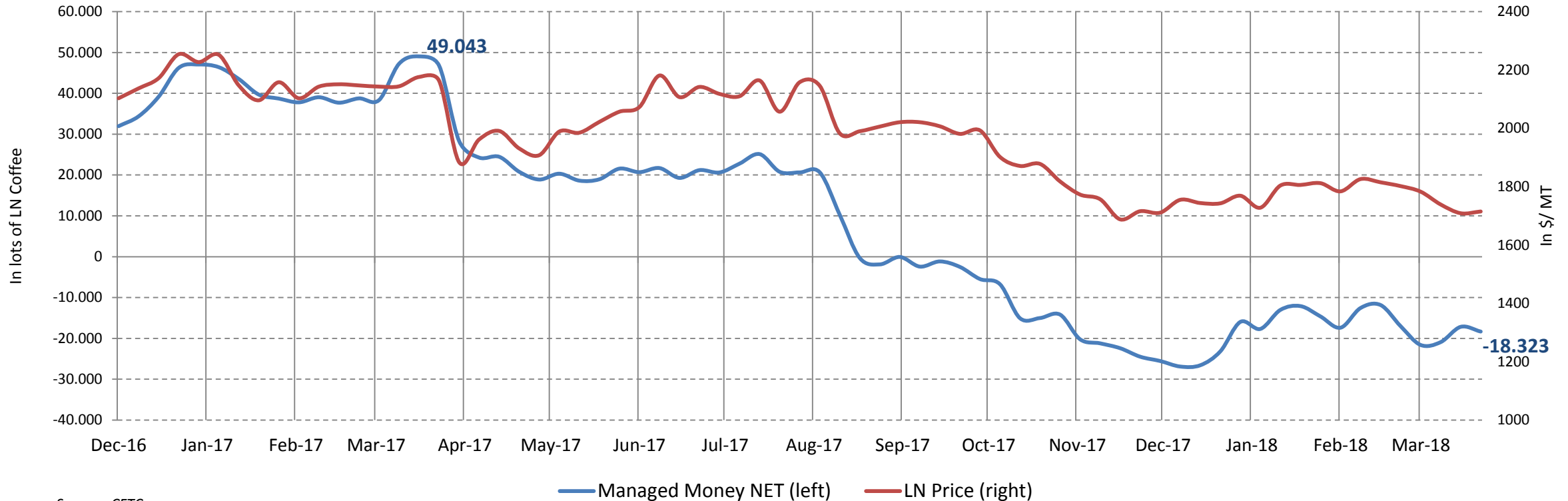
- While overall **stocks / use for Coffee** was definitely on the lower side in 17/18 prices have been under pressure on account of the surplus expected in Arabicas in 18/19
- However **Stock / use ratio close to record lows for Robusta in 17/18** and with **no relief in 18/19** as well

Fund Positioning – New York



- In the last 18 months, **the funds sold an equivalent of ~37 mil bags.**
- Prices came off by more than 30% in this period

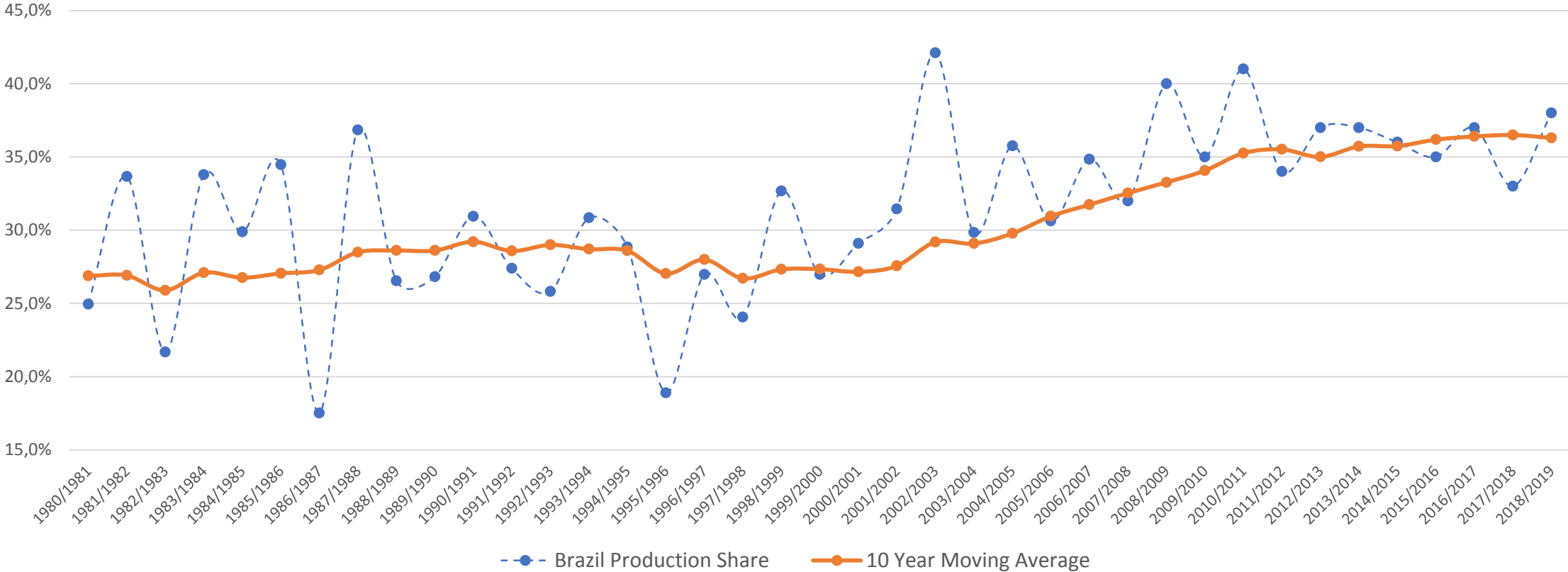
Fund Positioning - London



- Just in the last 12 months, **the funds sold an equivalent of ~12.5 mil bags.**
- Prices came off by ~25% in this period

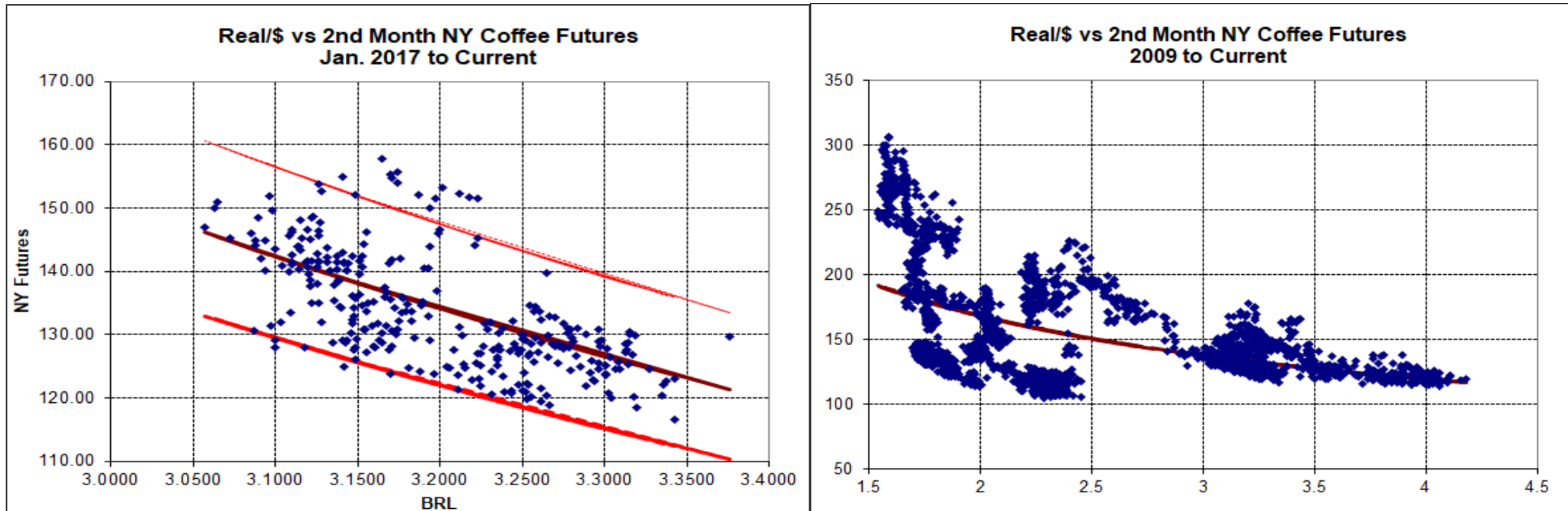
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Share Of Global Production



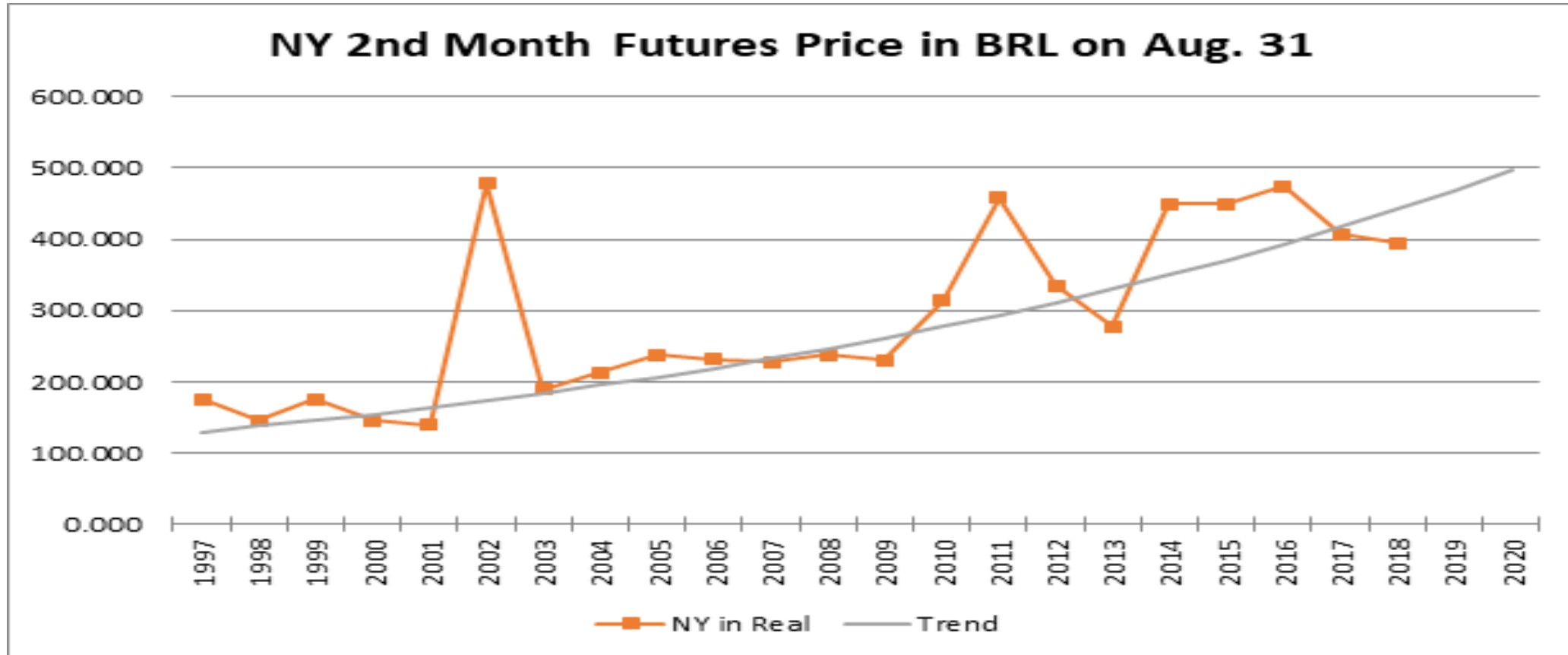
- Till around the 2000 Brasil's share of production was between 25 and 30% but in the last two decades share has increased and appears to be stabilizing around 37 / 38 %

Correlation between New York and Real



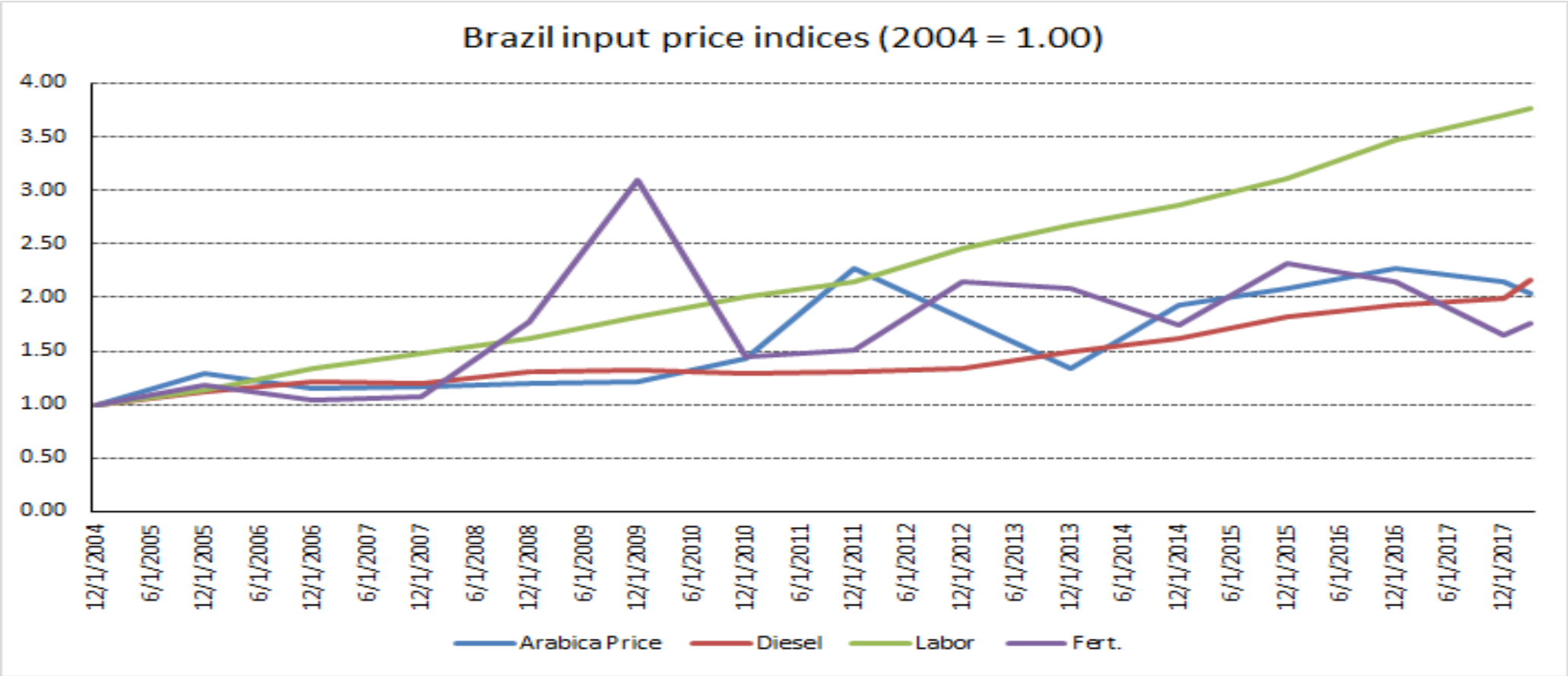
- The BRL/USD rate is an important determinant of the futures market price of coffee.
- Presidential elections this fall and the ensuing uncertainty could lead to added volatility in the price of NY futures.

New York Prices In Real



- Prices in Real show a long term positive trend

Input Pressures in Brasil

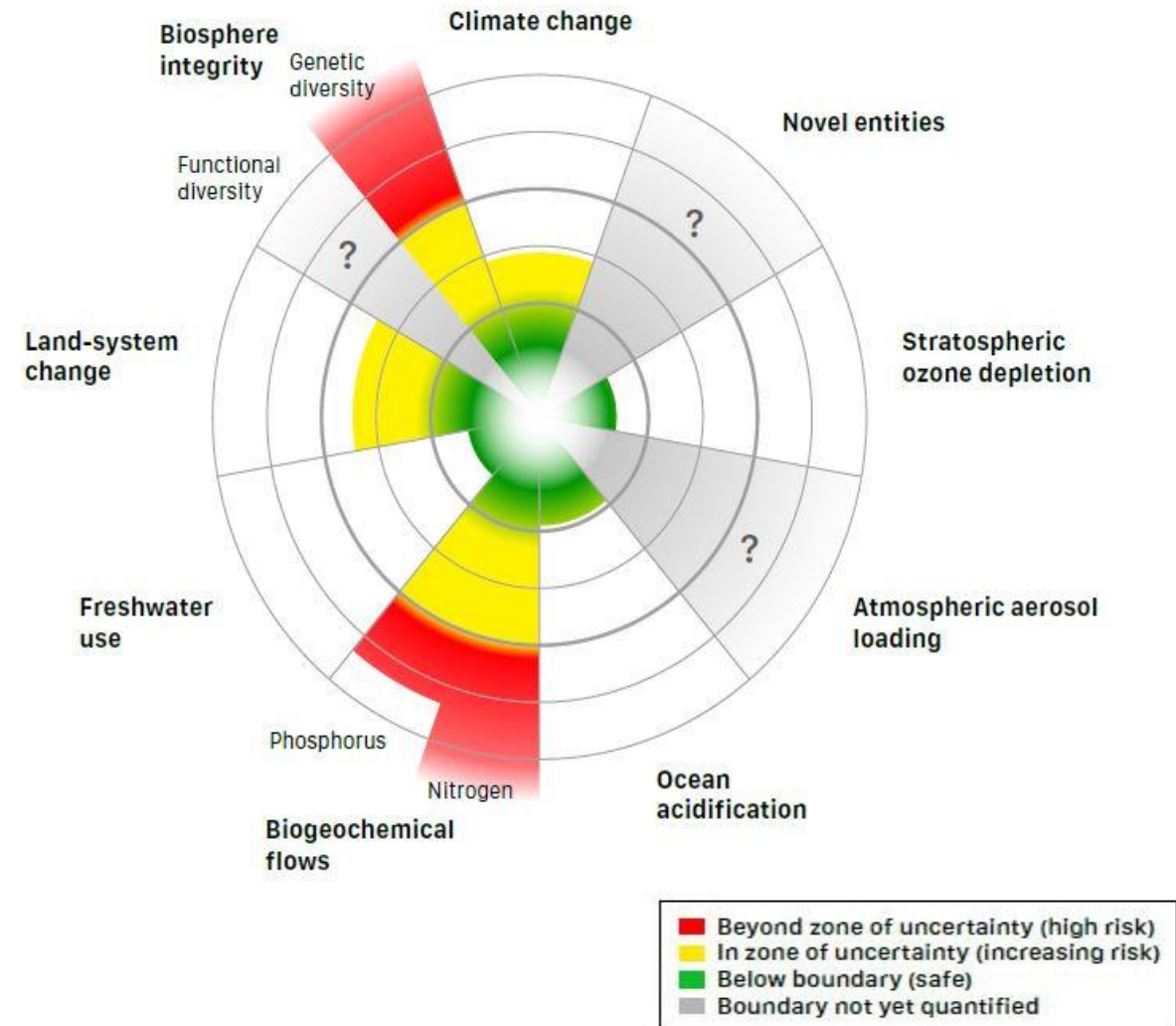


- Input cost pressure are reducing producer margins

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The Framework

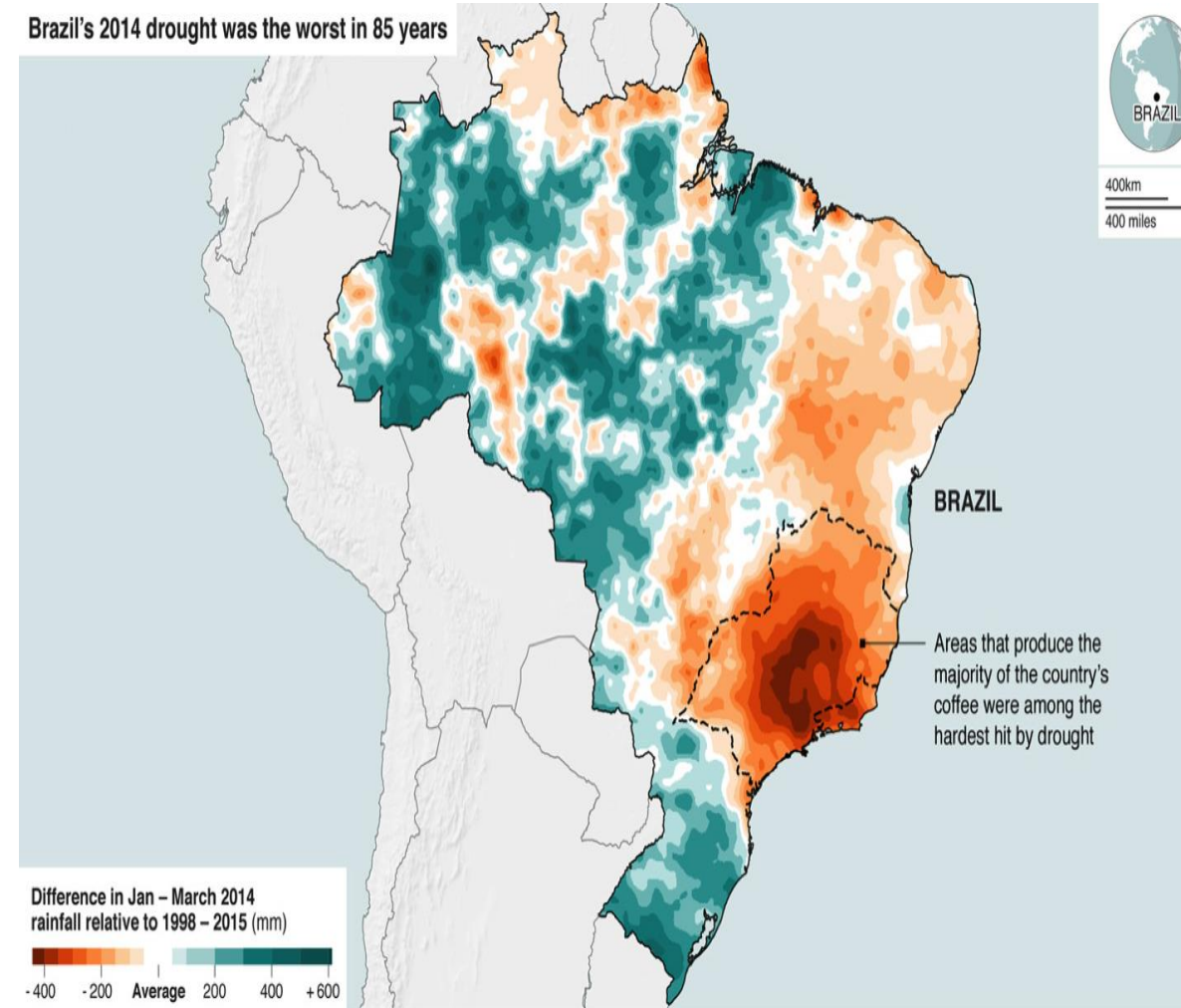
- The Planetary boundaries framework first proposed in 2009 basis work done at the Stockholm Resilience Centre
- When First proposed it was suggested that three of the planetary boundaries had been crossed.
- In the 2015 paper further developing and updating the concept it was asserted that four of these boundaries had now been crossed
 - Climate Change
 - Biosphere integrity
 - Land System change
 - Biogeochemical flows – Phosphorus and Nitrogen



Climate Change

- Number of Extreme weather events increasing every year for last 4 decades
- Accelerating Climate Change with almost subsequent year posting records on global mean temperatures.
- From Heat waves in Russia , to Flooding In South Asia, to Record temperatures in Africa – Once in 50/100 year events seem to happen with increasingly regular frequency.

Brazil's 2014 drought was the worst in 85 years



Source: Tropical Rainfall Measuring Mission (TRMM), Ramiro Ruiz Cardenas, Coffee and Climate Initiative

Climate Change impact on Brasil

- Climate Change is real and Now !
- Coffee faces a major threat from climate change with
 - Almost 50 % of current land under coffee will not be suitable by 2050
 - Models predict that coffee in Central America will have to move up in altitude by almost 400 mts
- Brasil is not being spared the impacts of climate change.
- Area suitable for coffee in Brasil is expected to shrink dramatically as shown.

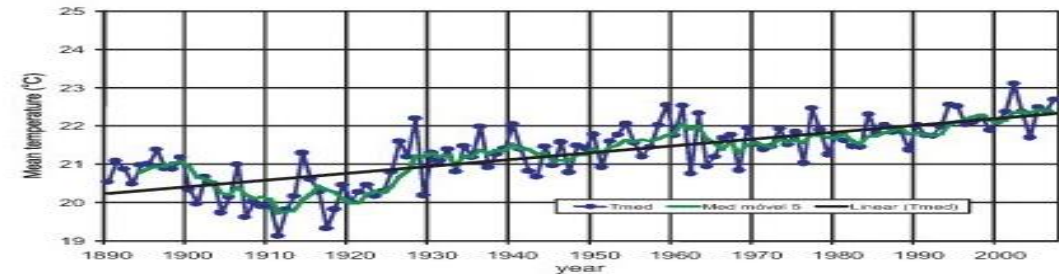
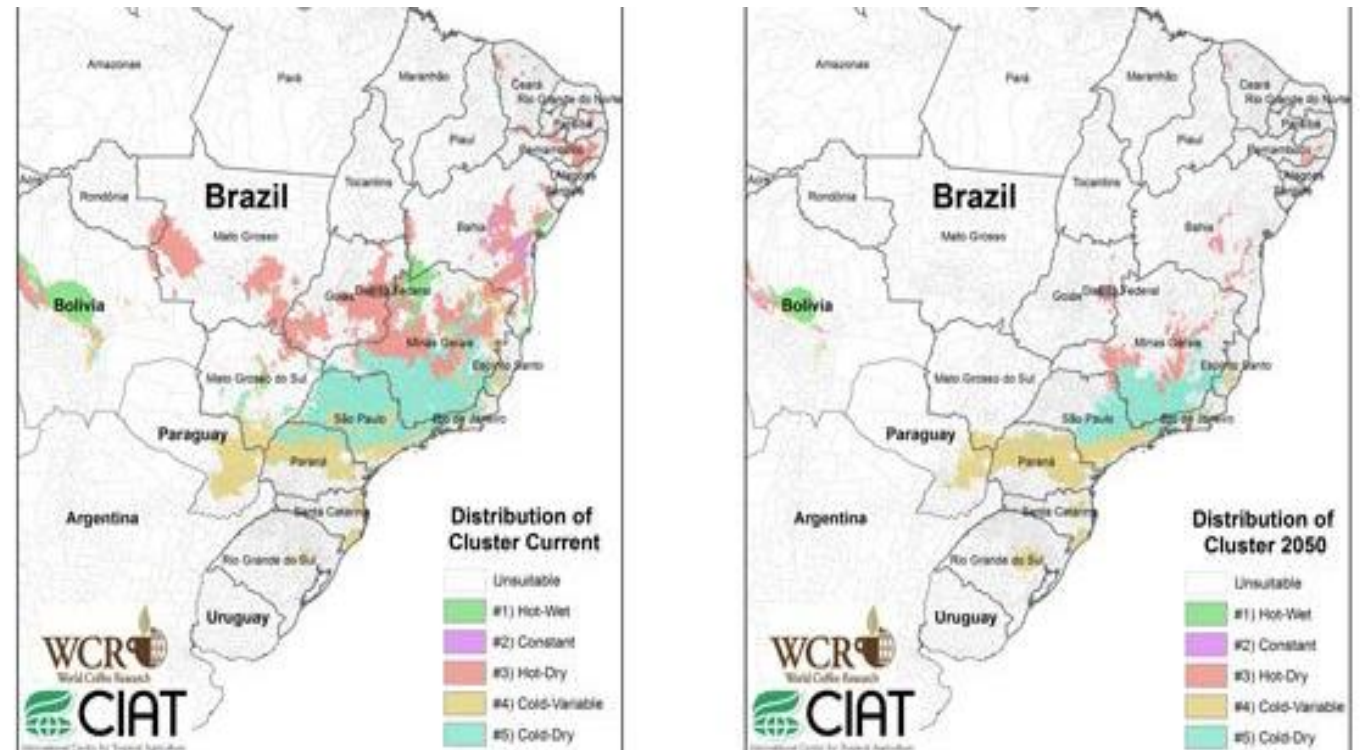


Figure 2. Annual mean air temperature for Campinas, São Paulo State, Brazil, from 1890 to 2008.



Reducing GHG gasses to combat climate change

Climate change is a global problem but all of us including the coffee sector contribute to it.

- Agriculture accounts for 25% of global GHG emissions
- 5-15 t CO₂ emissions to produce 1 t green bean
- The main reasons of this are :
 - Land clearing → loss of plant biomass
 - Soil health loss → loss of soil carbon
 - Fossil fuel for fertilizers, mechanization, irrigation
 - Wet processing → large methane emissions`



What can we do ?

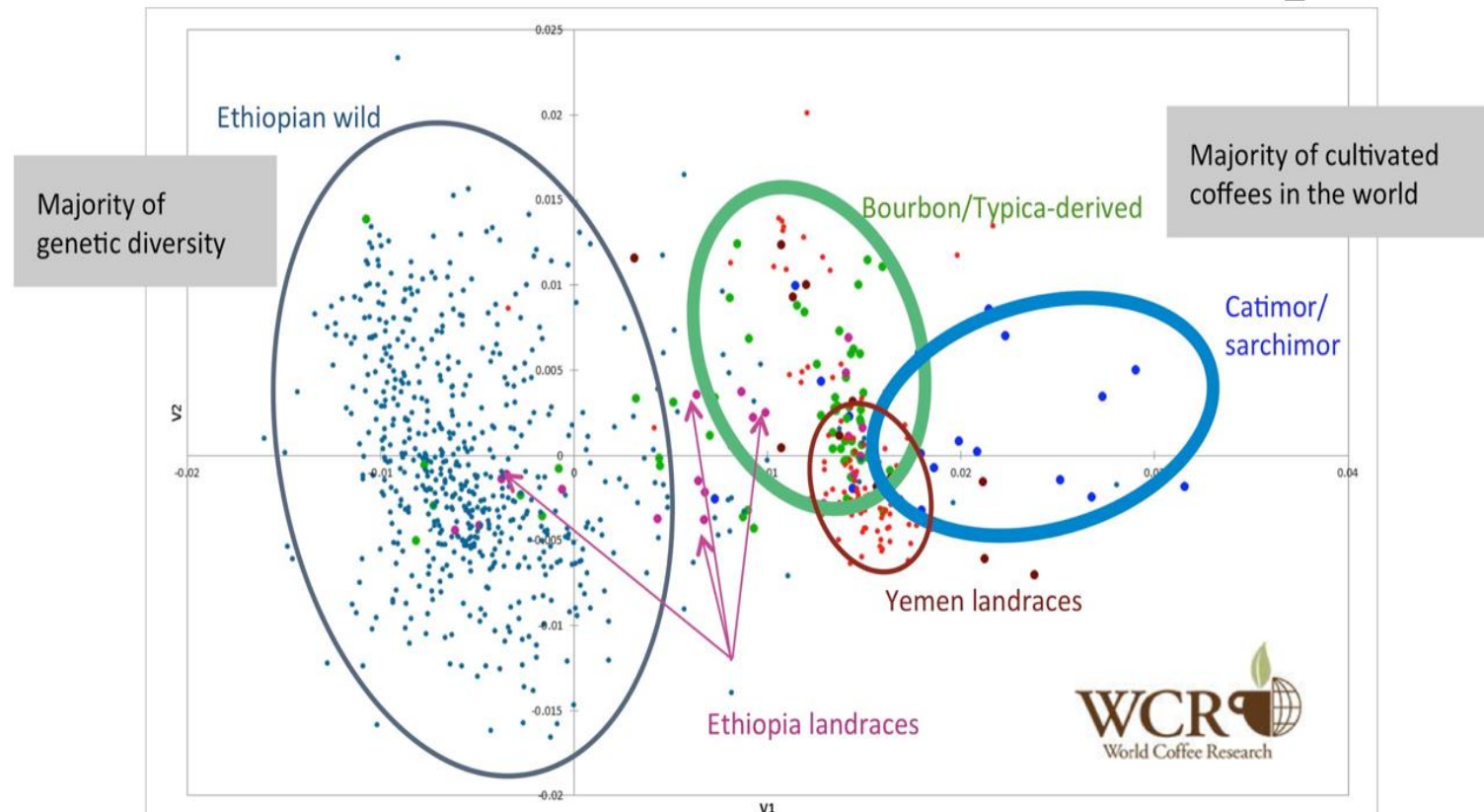
- Quantify your carbon footprint. We have started using the Cool Farm Tool of the CFA .
- Avoid deforestation, particularly of high carbon/biodiversity hotspots
- Encourage tree planting in agricultural landscapes
- Re-carbonize the soil by recycling biomass, reducing tillage, using biochar
- Improve fertilizer use efficiency using the 4R approach - right quantity, source, time, place
- Avoid anaerobic waste by spreading wet pulp, irrigating waste water



Genetic Diversity in Coffee

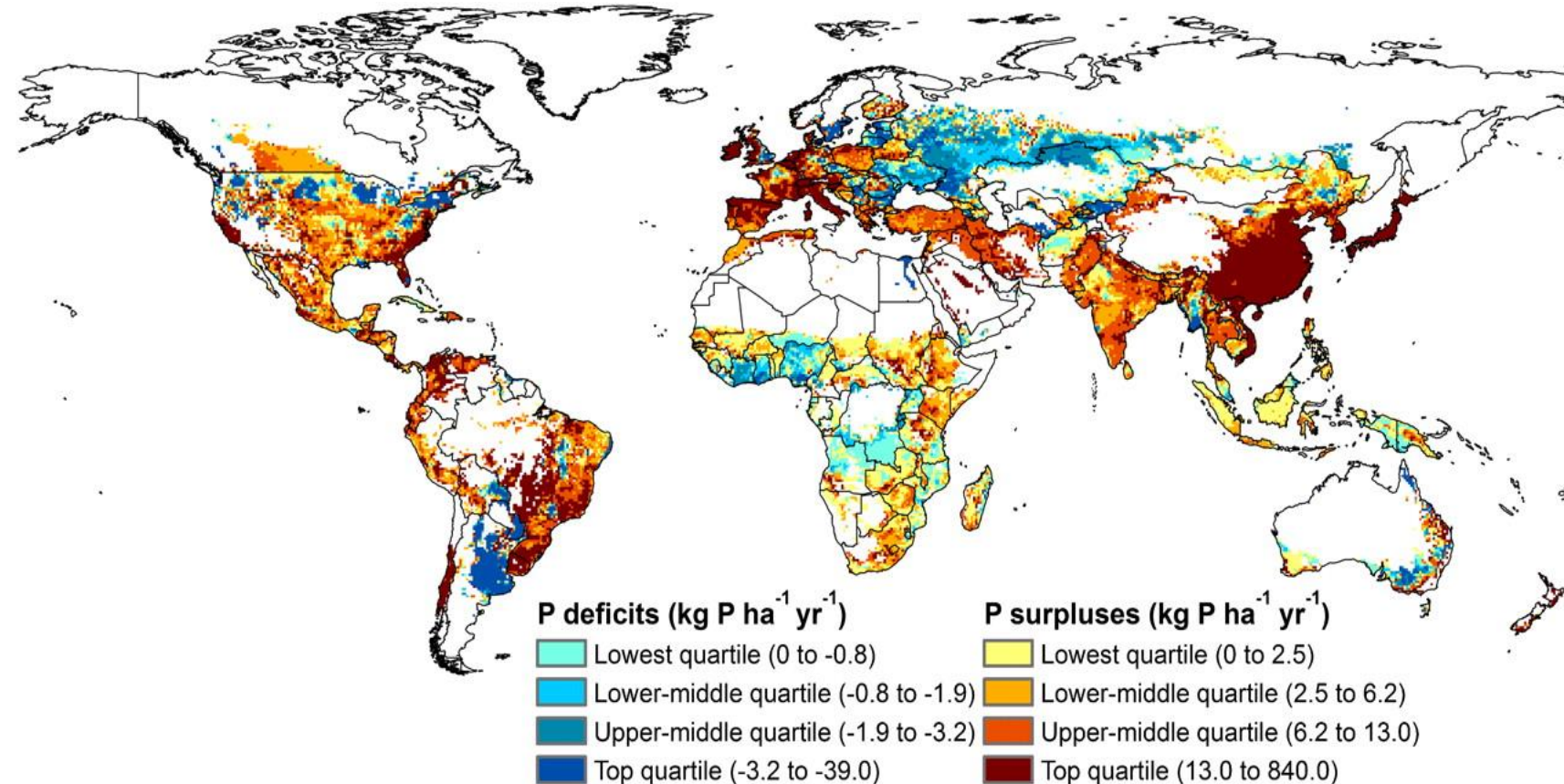
- Majority of Cultivated species in the world come from a fairly small genetic pool
- With climate change and the resulting increase in pest and disease occurrence poses a serious threat to world coffee production
- Research into increasing genetic using the large genetic pool of Ethiopian wilds is critical for the future of coffee
- The commercial varieties in Brasil have even lower genetic diversity
- This not only increases risk of pest and disease but also reduces the possibility of adapting to climate changes

Arabica Genetic Diversity



Tackling Biogeochemical Flows

- Nitrogen Usage is not a problem in Brasil
- But China and Brasil have the highest Phosphorus applications and amongst the lowest P efficiencies.
- Not only does this excess P create a potential environment problem but is an additional cost.
- And since P is a finite resource with depletion increasing this cost is only expected to increase.



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Conclusion



- Some of the key trends in Coffee – Increasing consolidation in the industry, Increasing participation of financial players in the futures markets, Consumers demanding more traceability and sustainably sourced coffees and finally the continued pace of innovation in coffee driving specialty volumes
- While growth in conventional roast and ground is flattening out, specialty, Single serve, soluble are still growing at high rates leading to coffee consumption expected to grow at close to 2.5% pa – 40 m bags additional production required in the next 10 years
- In the short term the impact of prices of the current tightness in coffee has been offset by the extreme fund positioning brought about by the expectations of a good 18/19 Crop in Brasil. However in Robusta, with close to historic low stocks to use, we expect tightness to continue till the end of the 18/19 crop.
- This it self illustrates the importance of Brasil. Brasil's share of production has gone to just under 40%. Its weather ,its currency and it's cost structure are key to determining NY prices.
- However with this comes the responsibility of leading the world of coffee in the area of sustainability – of showing the world what it can do to combat climate change by controlling the GHG gasses in coffee production, making it's coffee sector is more adaptable to climate change through research and diversity in varietals & other agricultural practises, reducing excessive use of fertilisation esp phosphates and overall doing it's bit in ensuring that planetary boundaries are not breached



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Thank You