



COMMITTEE ON COMMODITY PROBLEMS

INTERGOVERNMENTAL GROUP ON TEA

TWENTY-FOURTH SESSION

23 February 2022

COVID-19 AND BEYOND: EMERGING TRENDS IN GLOBAL TEA MARKETS

Executive Summary

While the COVID-19 pandemic and the measures taken to contain it had only limited effects on tea markets, namely in terms of production and trade, there appear to be longer-term shifts in consumer preferences. With increasing incomes, per capita demand for tea is increasing in many developing and emerging economies. More mature markets can be characterized by three main trends in tea consumption: (i) increasing competition from herbal teas; (ii) demand for more variety in the traditional tea market; and (iii) increasing demand for sustainably sourced products.

At the same time, structural rigidities and lack of market information and transparency are seen as factors that may hamper the effective responsiveness of the tea industry to changing environments in traditional and new tea markets.

Suggested action by the Group

In order to capitalize on emerging market opportunities and pro-actively address upcoming trends, the Group is invited to:

- Take note of the emerging trends in tea consumption in both new and traditional markets.
- Discuss the possible scope for renewed international coordination of generic promotion for tea.
- Provide guidance regarding actions to respond to the emerging market trends, including the role of digital solutions.

Queries on the substantive content of the document may be addressed to:

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I. INTRODUCTION

1. The need for action to strengthen the sustainability of the tea sector is a recurring theme, in response to both periodic moments of price depression and longer term downward trends in the market. Tea is one of the commodities where global cooperation has a long tradition involving both the public and the private sectors of producing as well as consuming countries. At its last Session, the Intergovernmental Group on Tea (IGG/Tea) noted the necessity to examine the implications of emerging trends in tea markets and what needs to be done to capitalize on new opportunities. In response, the secretariat has produced this document (CCP:TE 22/CRS 3) to provide a brief overview of the impact of the COVID-19 pandemic on tea markets and trade and examine longer-term trends in global tea consumption. It also highlights some possible responses by the tea industry¹. The report was prepared for the 24th Session of the IGG/Tea, to be held virtually on 23 February 2022.

2. Like all economic activity, tea markets and trade have been affected by the COVID-19 pandemic. Through various channels, the pandemic has affected agricultural commodity supply, demand, trade and prices, although overall effects on the agrifood systems in 2020 remained generally limited to short-term disruptions of supply chains.

3. Beyond these short-lived disruptions, tea demand is undergoing some more fundamental and long-term changes. While tea consumption is on the rise in many emerging economies and tea-producing countries, per capita tea consumption has been declining in some traditional import markets. In some high-income markets, this has been accompanied by a shift in consumer preferences towards more sustainably produced tea and demand for a larger variety of tea products.

4. The next section of this document provides an overview of COVID-19 impacts on agrifood trade with a focus on the impacts on tea trade and prices. This is followed by discussion of the long-term trends in consumer demand affecting global tea markets. The subsequent section highlights a few focus areas for the tea industry to address in order to capitalize on new market developments.

II. COVID-19 IMPACTS ON TEA MARKETS AND TRADE

5. The COVID-19 pandemic has affected all dimensions of human life and has also led to disruptions in agrifood systems. The pandemic and the measures taken by governments around the world to contain it have affected both food demand and supply. They also had clear short-term effects on the patterns of food and agricultural trade particularly in the first half of 2020.

6. By the end of March/beginning of April 2020, most countries in the world had implemented various forms of COVID-19 containment measures, including closures of business activities, curfews, quarantines, regulations on physical distancing and mobility restrictions². With the imposition of global movement restrictions, global food and agricultural imports also declined significantly in April

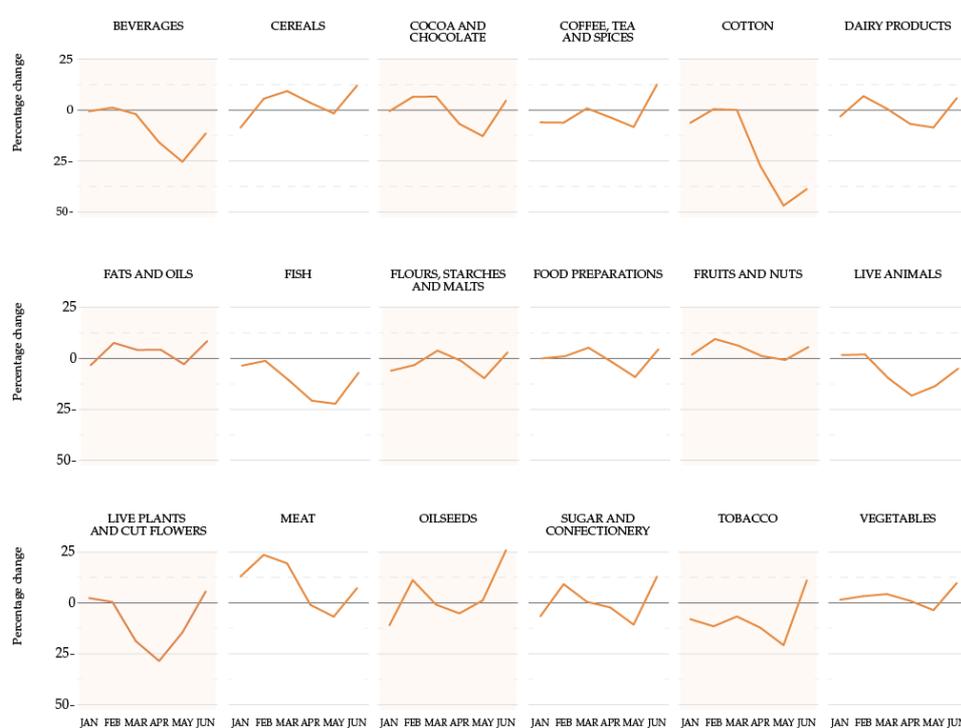
¹ Sections 3, 4 and 5 of this document are based on analysis provided by John Snell (tea industry expert) and Shabnam Weber (President, Tea and Herbal Association of Canada).

² Hale, T., Boby, T., Angrist, N., Cameron-Blake, E., Hallas, L., Kira, B., Majumdar, S. *et al.* 2020. Variation in Government Responses to COVID-19, Version 9.0. Blavatnik School of Government Working Paper. (also available at www.bsg.ox.ac.uk/covidtracker).

(-5 percent as compared to the 2018/19 average), followed by an even greater reduction in May (-10 percent). Around mid-May 2020, many governments started easing restrictions, and economic activity, at least partly, started to resume. This was accompanied by a rebound of global trade values in June 2020 (+5 percent above the 2018/19 average)³.

7. While overall trade values and flows declined in April and May 2020, there were pronounced differences at the commodity level (Figure 1). For instance, effects on trade values of many major commodities and staple foodstuffs such as cereals, oilseeds, fats and oils, as well as foods important for a healthy diet such as fruits, nuts and vegetables, remained rather limited⁴, even at the height of the trade disruptions in May. Other commodity groups, especially non-food commodities such as beverages, cotton and flowers and animal-sourced products such as fish, meat and dairy products, were significantly affected, often owing to a reduction in demand for these products. In fact, some product categories were affected by shifting consumption patterns due to the closure of restaurants, drop in tourism and the reduction in social gatherings.

Figure 1. Percentage change in global import values of agricultural and food products in January to June 2020 compared to the same month average in 2018/19, by commodity group



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8. For coffee, tea and spices, despite a short disruption of trade in May 2020, trade values for this commodity group were hardly affected by the pandemic (Figure 1). A closer look at global trade values shows that tea import values were subdued in January to May 2020 compared to the average of 2018/19, increased sharply in June and remained around pre-pandemic levels (as measured by the

³ FAO. 2021. Agricultural trade and policy responses during the first wave of the COVID-10 pandemic in 2020. Rome, FAO.

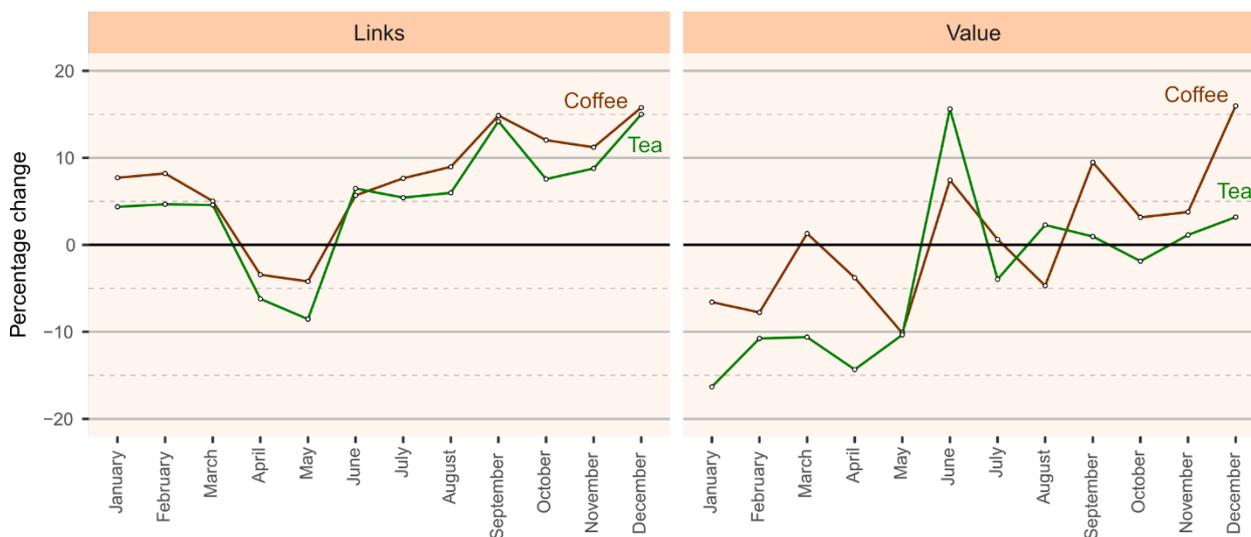
⁴ Schmidhuber, J. & Qiao, B. 2020a. Recent trends in food imports bills and export earnings: the COVID-19 challenge. In FAO. 2020. Food Outlook - Biannual Report on Global Food Markets: November 2020, pp. 17–23. Rome, FAO. <https://doi.org/10.4060/cb1993en>

⁵ FAO. 2021. Agricultural trade and policy responses during the first wave of the COVID-10 pandemic in 2020. Rome, FAO.

respective monthly average levels in 2018 and 2019) throughout the second half of 2020 (Figure 2, right panel).

9. In terms of trade links, that is the total number of trade flows by type (at HS 6-digit level) and by country pair, the coffee and tea trade followed a similar pattern (Figure 2, left panel). The number of trade flows declined sharply during the main months of the lockdowns (April and May 2020) and increased thereafter, remaining well above the 2018/19 average levels in the same months.

Figure 2. Percentage change in global import links and values of tea and coffee in 2020 compared to the same month average in 2018/19, by commodity group



Source: Estimates based on Trade Data Monitor (accessed October 2021)

10. The FAO Tea Composite Price, a weighted average price index for black tea, which includes crush, tear, curl (CTC) and Orthodox teas in the four major auctions (Mombasa, Colombo, Calcutta and Cochin), declined in the first quarter of 2020 to USD 2.28 per kg, on the back of large availabilities and the measures imposed by many countries to contain the spread of COVID-19. The sharp retreat in prices was mainly on account of CTC tea quotations. However, since April 2020, prices recovered to an average of USD 2.60 per kg, as increased “in-home” consumption of tea more than offset the decline in “out-of-home” consumption. Despite the decline in the first quarter of 2020, prices over the whole of 2020 averaged higher than in 2019, at USD 2.52 per kg, registering a year-on-year increase of 4.2 percent⁶.

11. Except for short-lived impacts on trade and prices, the tea sector appears to have been resilient under COVID-19. However, changing market environments in tea-consuming countries may have more lasting impacts on the tea sector and demand, requiring a coordinated response by the tea industry. These are looked at in the following sections.

III. BEYOND COVID-19: CHANGING PATTERNS OF TEA CONSUMPTION

A. The evolution of tea consumption

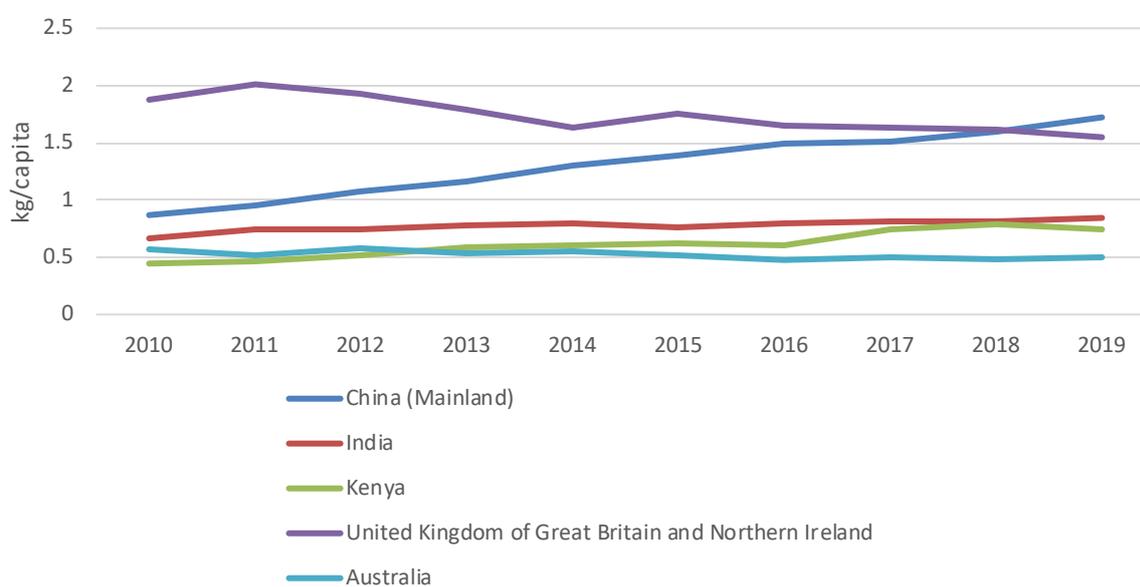
12. World tea per capita consumption increased by an average rate of around 3 percent per annum over the last decade (2010-2019), with marked expansions in tea producing countries.

⁶ FAO. Forthcoming. Medium-term prospects for raw materials and tropical products.

13. Similarly to the increase of caloric consumption per capita with rising incomes at initial steps of development⁷, per capita tea consumption has been growing fastest with increasing per capita incomes in many developing and emerging economies. For example, tea consumption per capita grew strongly and steadily in China between 2010 and 2019, and India and Kenya also exhibited a positive trend in per capita tea consumption (Figure 3). However, per capita caloric consumption growth typically levels off at high income levels⁸. Reflecting these patterns, tea intakes have also witnessed declining volumes in the more mature European markets and other developed countries⁹. For example, per capita tea consumption between 2010 and 2019 decreased in traditional markets such as the United Kingdom of Great Britain and Northern Ireland (Figure 3).

14. Consumers in high-income markets typically prefer more varied foods and also diversify their demand for beverages. This is reflected in the markets of Europe and Northern America, where per capita tea consumption is already relatively high and only niche markets for high-value specialty teas are still growing.

Figure 3. Development of per capita tea consumption, selected countries, 2010-2019



Source: FAO

15. However, stronger growth in per capita tea consumption is still expected in emerging economies and developing countries, including in tea producing regions. For example, the largest expansion in black tea consumption within the top five producing countries is forecast in China, where black tea, pu'er tea and dark tea are enjoying great popularity due to the increasing awareness of the health benefits linked to drinking tea. Strong growth is also expected in many producing countries in Africa and Asia over the next decade, such as Uganda (8.1 percent annual growth by 2029), Rwanda (5.1 percent), Kenya (4.3 percent), Malawi (4.0 percent), Zimbabwe (3.8 percent), Bangladesh (2.8

⁷ FAO. 2020. The State of Agricultural Commodity Markets 2020. Agricultural markets and sustainable development: Global value chains, smallholder farmers and digital innovations. Rome, FAO. 164 pp. (also available at <https://doi.org/10.4060/cb0665en>).

⁸ Popkin, B.M. 2006. Global nutrition dynamics: the world is shifting rapidly toward a diet linked with non-communicable diseases. *The American Journal of Clinical Nutrition*, 84(2): 289–298.

⁹ FAO. Forthcoming. Medium-term prospects for raw materials and tropical products.

percent), Nepal (2.4 percent), India (2.1 percent), Indonesia (1.5 percent) and Sri Lanka (1.4 percent)¹⁰.

B. Key trends in tea demand

16. At higher incomes and overall stagnating demand in terms of volume, consumers increasingly seek more diversified and specialty products. These changes in preferences are associated with three major trends affecting tea markets. These trends include: (i) increasing competition from herbal teas; (ii) demand for more variety in the traditional tea market; and (iii) increasing demand for sustainably sourced products. These trends are briefly discussed below.

17. Faced by increasing competition from herbal teas, the traditional tea market has been shrinking in some countries. In fact, herbal teas now enjoy the largest share of tea sales by value and represent the most dynamic growth segments in some developed markets. For example, in the retail market of the United States of America, herbal and rooibos/red teas have exhibited significant growth rates, while traditional tea segments have declined¹¹. This development is also reflected in decreasing tea imports in major developed markets.

18. Within the traditional tea segment, an increasing demand for more diversified products is evident as well. In mature markets, the demand for specialty teas and for sustainably sourced teas is growing. For example, in the United States of America, dried tea sales in traditional markets, such as supermarkets, drug and mass stores declined between 2017 and 2019, while sales in the specialty tea segment continuously grew between 2016 and 2019¹². In fact, specialty tea has overtaken the traditional (black teabag) market in value since 2018. The largest share in United States of America tea sales is held by ready-to-drink tea.

19. While the specialty tea movement can allow for higher returns through higher prices, it also bears challenges for producers. As formats change, so does the demand by grade of tea. Specialty teas (in packed or loose form) often require larger leaf particles than traditional teabags. This adds complexity for tea producers¹³. Sustainability for the tea producer relies on the sale of all grades, large and small. However, a survey conducted in the United States of America in 2019 showed that even the specialty tea segments appear to be losing ground as consumers of specialty teas are turning to increased consumption of flavoured soft drinks and cold beverages¹⁴.

20. The tea industry will have to pro-actively address these trends in order to benefit from the overall increasing consumption of beverages and to remain relevant in the long term. Examples could include addressing and exploiting the demand for premium and regional products, more diversified flavours, and health and wellness trends in the marketing of tea, taking the marketing of coffee as an example. The trend for ready-to-drink cold beverages has also resulted in a rapidly growing extraction business. In fact, extraction facilities for the production of dried tea solids, concentrates or volatiles offer value-creation also for lower quality origins.

21. Moreover, an increasing share of young consumers demand ethically and sustainably sourced products. For example, a survey conducted in the United Kingdom of Great Britain and Northern Ireland in 2019 indicated that buying ethical tea is important, particularly amongst the 25-34 year olds, while the 18-24 year olds are most concerned about environmental sustainability attributes such as lower environmental impact and reduced plastic and packaging¹⁵. After cocoa and coffee, tea is the

¹⁰ FAO. Forthcoming. Medium-term prospects for raw materials and tropical products.

¹¹ Nielsen Total USA and Canada. 2018.

¹² Information provided by the Tea Association of the U.S.A. Inc.

¹³ It is worth noting that, in fact, all grades come from the same leaf, plucked on the same day and differ only in oxidative levels. Quality is relative to use and to consumer preference but inherently these grades have the same chemistry.

¹⁴ Nielsen Homescan. 2019.

¹⁵ The Grocer. 2019. Tea addicts, gender splits and the love of a traditional cuppa.
<https://www.thegrocer.co.uk/download?ac=169654>.

crop with the highest share of land being certified under at least one of the most important sustainability schemes¹⁶. When Unilever sold its tea division in November 2021, two of the three final bidders reportedly withdrew over concerns about working conditions in some of the plantations¹⁷. However, it should be kept in mind that despite increasing demand for sustainability-certified products, global market shares overall remain small and are concentrated in high-income countries¹⁸.

IV. SYSTEMATIC CHALLENGES AND POSSIBLE SOLUTIONS WITHIN THE TEA INDUSTRY

22. The trends for innovation, diversification and premiumization on the consumer side face an industry on the supply side that has to keep up with a dynamically changing market environment in both traditional and new markets. Structural challenges to change emerge from an industry dominated by small-scale farms with limited flexibility to adapt and other supply chain rigidities.

23. Currently, around 60 percent of world tea production is produced by smallholders¹⁹. These farmers face a plethora of challenges that impede their ability to easily adjust to new market trends. Plot sizes are often too small to sustain a living wage and invest into new operational practices. Produce can often be sold to only one processor; extension services, institutional support and financial services are limited and sometimes lacking. Furthermore, smallholder business activities are often constrained by limited financial literacy, low capacity in the application of modern farming practices and limited access to non-family labour. Under limited market prospects and high uncertainty, younger generations appear to be leaving the sector, giving way to structural reformation and consolidation.

24. Increased cooperation at farm level could be a way to overcome structural barriers posed by the prevalence of smallholder farms. An example of a successful smallholder cooperation is the more than 600 000 smallholder membership administered by the Kenya Tea Development Authority. As part of this programme, farmers, inter alia, benefit from collective procurement of farm inputs, access to centralized expertise and planting material, a guaranteed sales outlet and access to a vertically integrated supply chain, cooperatively managed education and management of criteria required by international markets, and acceptance by all major sustainability certification and/or verification programmes.

25. The challenges faced by smallholders reflect challenges throughout the tea supply chain. Common concerns in the industry appear to regard structural rigidities and a lack of transparency in the supply chain. Both may impede the exchange of information between different supply chain actors and prevent the industry from pro-actively responding to changing market environments.

26. There are several ways to improve the information flow at all stages of the supply chain. Upstream, at the levels of primary production and aggregation, tea boards and associations can help collect, aggregate and analyse data to provide targeted market analysis and advice. Transparent trade platforms, based, for example, on digital solutions are seen as promising pathways to improve the

¹⁶ Meemken, E.-M., Barrett, C.B., Michelson, H.C., Qaim, M., Reardon, T. & Sellare, J. 2021. Sustainability standards in global agrifood supply chains. *Nature Food*, 2(10): 758–765. <https://doi.org/10.1038/s43016-021-00360-3>.

¹⁷ Financial Times. 2021. Bidders for Unilever's tea business pulled out on plantation concerns. *Financial Times*, 19 November 2021. Cited 9 December 2021. <https://www.ft.com/content/5c7bbed1-c0ce-4767-a275-530b8ab9a1fc>

¹⁸ Meemken, E.-M., Barrett, C.B., Michelson, H.C., Qaim, M., Reardon, T. & Sellare, J. 2021. Sustainability standards in global agrifood supply chains. *Nature Food*, 2(10): 758–765. <https://doi.org/10.1038/s43016-021-00360-3>.

¹⁹ The definition of a smallholder tea farm generally refers to farm size in hectares and/or varieties of farm operations (for example, ownership of a processing facility). The exact definition is subject to national characteristics and varies by tea-producing country.

information flow within the industry and between business and consumers. Digital solutions can also help overcome information asymmetry with respect to various sustainability criteria.

27. Shared ledger technology (DLT), such as blockchain, offer a digital and widespread solution for improved transparency. A shared ledger system allows creating a single, complete and immutable record of all stages in the transaction of selling tea from green leaf farmer to final consumer. DLT has already been adopted or is being tested by major grocery chains to trace products throughout the food supply chain. The increased transparency and safety offered by DLT can enhance trust within the tea trade. Examples of successful implementations of DLT in other industries are given in Box 1.

28. While DLT is not yet widely applied in the tea industry, industry stakeholders appear to see a clear need for technological advancement in trading tea. Several examples at different stages of the value chain show that successful innovation and technology adoption in the tea industry are possible. For example, high-yielding clones have been introduced to reduce the land use for tea and self-propelled harvesters allow for up to 100-fold increases in productivity. Technology is also widely used in tea processing and delivers considerable labour savings.

Box 1. Examples of DLT to improve market transparency

1) Business-to-business (B2B) transparency: Many retailers have adopted DLT to manage challenging decentralized food supply chains. For example, Walmart can now trace over 25 different foods from five different suppliers in seconds using IBM Blockchain that builds on Hyperledger Fabric²⁰.

2) Business-to-consumer (B2C) transparency: An increasing number of brands share their sources of food and the conditions under which products are grown, harvested and produced. Provenance is an example for a public blockchain solution that allows any company to build transparency, from source to customer, implemented through smart codes on packaging²¹.

3) Business-to-business-to-consumer (B2B2C) transparency: Consumers are increasingly willing to pay for quality foods that satisfy certain sustainability criteria. In recognition of this, Yave trialled a coffee auction that used DLT to set out pre-conditions for market access to certain supply chains. In this case the DLT ensured that a minimum buyer and producer price were met, thus creating a symbiotic supply relationship which satisfied the consumers need for quality and their desire to see producers rewarded for this²².

V. CONCLUDING REMARKS

29. While the COVID-19 pandemic and the measures taken to contain it had only limited effects on tea markets, namely in terms of production and trade, there appear to be longer-term shifts in consumer preferences. With increasing incomes, per capita demand for tea is increasing in many developing and emerging economies. However, more mature markets can be characterized by three main trends in tea consumption: (i) increasing competition from herbal teas; (ii) demand for more variety in the traditional tea market; and (iii) increasing demand for sustainably sourced products.

30. At the same time, structural rigidities and lack of market information and transparency are seen as factors that may hamper the effective responsiveness of the tea industry to changing

²⁰ Hyperledger. 2019. How Walmart brought unprecedented transparency to the food supply chain with Hyperledger Fabric. https://www.hyperledger.org/wp-content/uploads/2019/02/Hyperledger_CaseStudy_Walmart_Printable_V4.pdf.

²¹ Provenance. 2021. <https://www.provenance.org/solutions>.

²² Yave. 2018. <https://www.yave.io/>.

environments in traditional and new tea markets. In order to capitalize on emerging market opportunities and pro-actively address upcoming trends, three main areas of action can be proposed for the consideration of the industry:

- 1) Invest in marketing to increase the value proposition of tea for the consumer. Develop a common industry narrative. The Group may wish to consider whether there is scope for renewed international coordination of generic promotion for tea under its auspices.
- 2) Invest in market monitoring and research to improve the evidence base and support decision-making processes.
- 3) Create transparent, verifiable supply chain mechanisms that can build trust and minimize uncertainty for all actors in the tea industry. Digital solutions can help in this process.