



T · E · A

Tea Exporters Association
Sri Lanka

NEWSLETTER

DECEMBER 2020



Wishing all members a Very Happy New Year with Good Health and Success!!!

New Year with Challenges

While wishing all members a prosperous New Year free of pandemic, Chairman states that tea exporters will continue to face numerous challenges both locally and abroad due to slow global economic recovery that has been caused by the second wave of COVID 19.

The New Year should be welcome with positive approach and commitment. The industry should look at new opportunities created in the value chain and explore them with new strategies. All stakeholders should work together when addressing the challenges under the current pandemic situation.

Chairman requests all members to avail of the incentive schemes that have been approved by Sri Lanka Tea Board to enhance the volume and value of tea exports.

Tea Board welcomes Ukrainian Tourists

While MRI Airport authorities made huge efforts to welcome the two flights consisting of Ukrainian tourists, Sri Lanka Tea Board made arrangements to welcome them with a cup of Ceylon Tea including traditional sweets and savories.

Further, well-choreographed cultural performances were organized related to tea for conveying the legacy of over 150 years of Ceylon Tea including Prashanthi Tea Ceremony and Tea Pluckers' Dance. The dance performance was conducted by Chandana Wickramasinghe and Dancers Guild.

The Ceylon Tea ceremony concept was based on the Sri Lankan hospitality within a setting of a king of Sri Lanka welcoming his noble audience of visitors and summoning the ladies of the court to proceed with serving the guests the finest Ceylon Tea and refreshments. The tea was served by damsels dressed in traditional ancient attire of a royal palace.

The Ukrainian tourists got a chance to enjoy traditional Sri Lankan sweets along with the Ceylon Tea. The Ceylon Dimbula tea was freshly brewed and served to Ukrainian tourists by Sri Lankan Catering. During the Ceylon Tea ceremony performance by the dancers, the visitors were briefed on the history of Ceylon Tea, seven regional tea varieties, and the special taste and health benefits of tea.

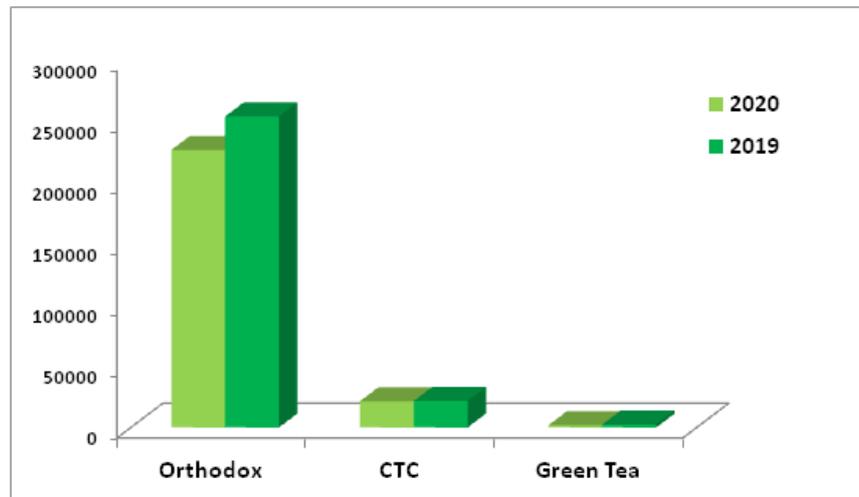


(Daily FT)

SRI LANKA TEA PRODUCTION - JANUARY TO NOVEMBER 2020- in MT

Category	2020	2019	Variance
Orthodox	226,691	254,113	(27,422)
CTC	21,375	21,607	(232)
Green	1,838	2,507	(669)
Total	249,904	278,227	(28,323)

(SLTB)



WORLD TEA CROP

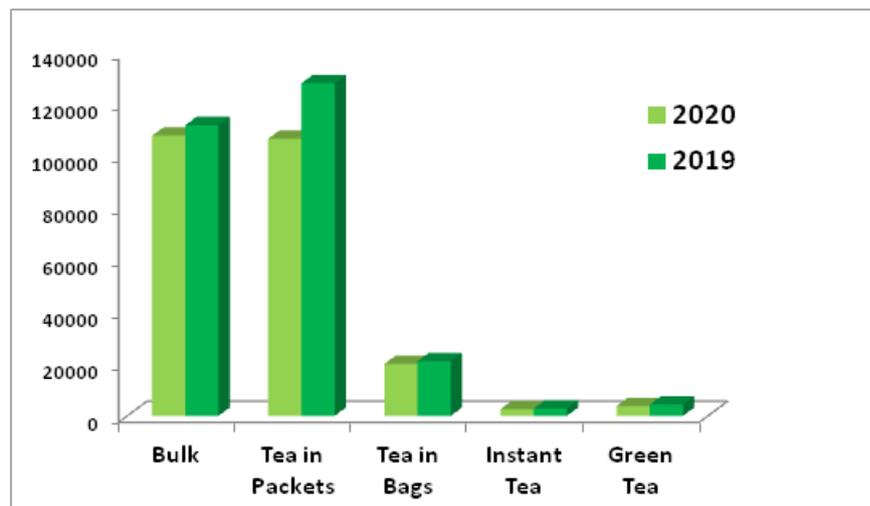
The latest tea crop figures of some leading tea producing countries are furnished below (in million Kg).

Country	Period	2019	2020	Variance
Malawi	January to October	42.10	38.50	(3.60)
Bangladesh	January to November	89.65	79.43	(10.22)
Kenya	January to October	363.10	467.40	104.30
North India	January to November	1,122.9	980.5	(142.4)
South India	January to November	200.9	201.2	0.30

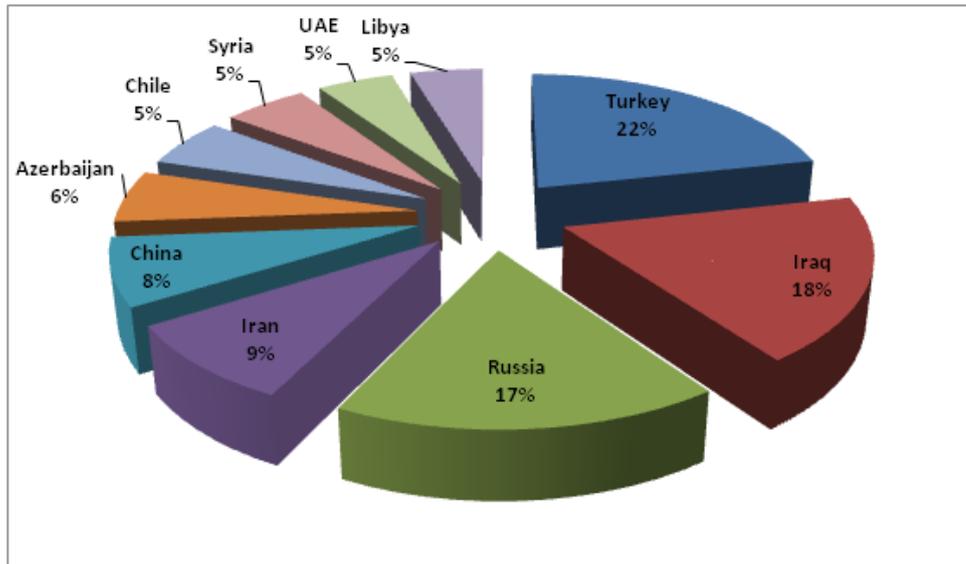
SRI LANKA TEA EXPORTS - JANUARY TO NOVEMBER 2020- in MT

Category	2020	2019	Variance
Bulk	108,169	112,211	(4,042)
Tea in Packets	106,993	128,389	(21,396)
Tea in Bags	20,055	21,111	(1,056)
Instant Tea	2,602	2,840	(238)
Green Tea	3,819	4,370	(551)
Total	241,638	268,921	(27,283)

(SL Customs)



MAJOR IMPORTERS OF SRI LANKA TEA - JANUARY/NOVEMBER 2020- in MT



(SL Customs- courtesy Forbes & Walker Tea Brokers)

Summary of developments in the major producing countries during December

China

Across China it is understood that production is lower this year in Hubei, Hunan, Yunnan and Fujian provinces, whilst production in Anhui and Zhejiang provinces have remained steady. As witnessed in recent years, the phenomenal growth in Guizhou province is known to be continuing.

India

In India, monthly crop in October was quite healthy, but the cumulative crop deficit for the year remains 13%. An export from India at the end of the third quarter reflects a decline of 19%. Recently published reports indicate the encouraging growth of many start-up business ventures of young entrepreneurs in India who are introducing tea blends of locally sourced herbs, fruits and flowers that contribute to increased demand for tea.

Kenya

Kenyan crop at the end of October records a growth of 29% (104 m. kgs.). It is reported that Kenya will position tea tours as part of a tourism experience and tour operators have been instructed to incorporate such tours into the range of diverse travel packages that are offered to potential future tourists. In the meantime, the government has passed a Tea Bill approving the implementation of changes within the tea industry that is expected to tighten regulation with the revival of the Tea Board of Kenya.



Weekly Auctions

Mombasa

There was less demand at the first sale of the month with Pakistan packers maintaining interest along-with Sudan, Kazakhstan and other CIS countries. An easier market prevailed in the following two weeks with interest maintained by the principal buyers who were active in the first week of the month. Stronger demand was witnessed at the final sale of the month where top-end teas appreciated in value and led by Pakistan, Kazakhstan, rest of the CIS countries, UK and Egypt showed increased interest.

Kolkata

There was an irregularly easier market at the first sale of the month, which weakened further at the following week's auction for both Leaf and Dust categories. Market remained steady at the next sale with better Assams and Dooars in demand. There was healthy demand in week 4 with good liquoring Assam Fannings and Dust varieties fetching improved prices. This was continued at the final sale of the year with Leaf teas attracting sound interest.

Guwahathi

Market was barely steady at the first sale of the month with most teas tending irregularly easier. Good liquoring teas were dearer at the next sale. There was fair demand at steady to easier rates in Week 3 with price levels for the better teas remaining steady. There was improved demand at the next sale with all good liquoring teas selling at firm to dearer rates.



Kochi

There were more withdrawals than in recent times at the first sale of the month with prices tending easier though orthodox teas enjoyed good demand. The following sale saw a continuation of this trend with prices declining further. There was improved demand for both CTC and orthodox teas but at easier rates in Week 3. Most Leaf teas eased in value whilst all Dust teas were firm to dearer at the final sale.

Chittagong

There was improved demand at the sale held on 30th November with CTC Dust teas gaining in value. The following sale also witnessed strong demand, particularly for the Dust varieties. There was healthy competition for all varieties of teas in week 3 and demand was strong as a result. Bright liquoring Broken, Fannings and Dust teas continued to be well supported and were often dearer, the week after.

Jakarta

There was good demand for the smaller quantity on offer at the first sale of the month, particularly for the brighter orthodox teas. The increased quantity on offer met with improved demand at the next sale. The following week witnessed even stronger demand for all teas. There was good demand at the final sale of the year with orthodox teas appreciating in value and more lots of teas sold during the auction than is normally the case.

Limbe

An easier market prevailed at the first two sales of the month though secondary teas were dearer. Only half of the quantity on offer was sold in week 3 where there was selective demand only.

(International Tea Committee and Courtesy: Forbes & Walker Tea Brokers)

Forex restriction extends for six more months

Government has extended the period of validity of the measures introduced in July to restrict the outflow of foreign currency by a period of another six months effective from 2 January 2021.

The Ministry of Finance issued the relevant Gazette notification extending the validity of the order made under the Exchange Act, No. 12 of 2017 in July.

The measures have been taken to preserve the foreign currency reserve position of the country due to the possible negative impact to the economy due to the outbreak of the COVID-19 pandemic.



These include the suspension of general permission granted to make outward remittances for investments overseas through the outward investment accounts by persons resident in Sri Lanka.

The Order also suspends the outward remittances through Business Foreign Currency Accounts (BFCAs), or Personal Foreign Currency Accounts (PFCAs) held by persons resident in Sri Lanka, other than for the remittances on current transactions up to any amount or capital transactions up to a maximum of \$ 20,000.

(Daily FT)

Kenya to Re-Establishes Tea Board

Kenyan president has signed into law the Tea Bill which was passed previously by Members of the National Assembly.

The Tea Bill contains several reforms among them the re-engineering of the Tea Board of Kenya to oversee the development, promotion and regulation of Kenya's tea sector.

The legislative journey, which started in June last year, culminated in overwhelming support by the senators, paving the way for the revival of the Tea Board of Kenya and adoption of new regulations to govern the multi-billion-shilling industry.

While a majority of senators did not agree with some of the amendments as proposed by the National Assembly, they said that for the sake of the farmers, they will pass them and address the anomalies through amendments and regulations.



With the new Bill, tea brokers, buyers and auction organizers' will have to ensure that the proceeds from the sale of tea are paid within 14 days while factories will now pay 50 per cent of sales to farmers.

This will mean that Kenya Tea Development Agency (KTDA), which has been holding a huge chunk of the proceeds for a year, will no longer have access to the tea billions since the money will now be controlled at the factory level.

The balance of the money will be paid at the end of the financial year. The Tea Research Foundation, which used to carry out research on the sector, will also come back in the proposed law.

Management agents will no longer enter into any agreement with a tea factory without the approval of the Tea Board.

The law will also give the Cabinet Secretary Powers to prescribe regulations for the registration of management agents such as KTDA and the appeal process.

(Standard Media)

Green Tea Blocks SARS - Cov-2 Enzymes

Chemical compounds in some foods and beverages – such as green tea, muscadine grapes and dark chocolate – can bind to and block the function of a particular enzyme, or protease, in the SARS-CoV-2 virus (which causes the corona virus disease, or COVID-19), according to a new study by plant biologists at North Carolina State University.

Proteases are important to the health and viability of cells and viruses, according to the professor of plant and microbial biology at NC State and the corresponding author of the study. If proteases are inhibited, cells cannot perform many important functions – like replication, for example.

“One of our lab’s focuses is to find nutraceuticals in food or medicinal plants that inhibit either how a virus attaches to human cells or the propagation of a virus in human cells,” he said.

In the study, the NC State researchers performed both computer simulations and lab studies showing how the so-called “main protease” (Mpro) in the SARS-CoV-2 virus reacted when confronted with a number of different plant chemical compounds already known for their potent anti-inflammatory and antioxidant properties.

“Mpro in SARS-CoV-2 is required for the virus to replicate and assemble itself,” he said. “If we can inhibit or deactivate this protease, the virus will die.”



Computer simulations showed that the studied chemical compounds from green tea, two varieties of muscadine grapes, cacao powder and dark chocolate were able to bind to different portions of Mpro.

“Mpro has a portion that is like a ‘pocket’ that was ‘filled’ by the chemical compounds”. “When this pocket was filled, the protease lost its important function.”

“Green tea has five tested chemical compounds that bind to different sites in the pocket on Mpro, essentially overwhelming it to inhibit its function,” he said. “Muscadine grapes contain these inhibitory chemicals in their skins and seeds. Plants use these compounds to protect themselves, so it is not surprising that plant leaves and skins contain these beneficial compounds.”

The research paper appears in a recent edition of *Frontiers in Plant Science* and the research was supported by the U.S. Department of Agriculture.

(US-Plant Science)

Tea Flavor Trends in 2021

People are getting more aware of what they consume and how it affects their health and wellbeing. Due to these current developments, the following major trends emerging in the tea sector have been identified:

Functionality

The latest trend in functionality is strongly focused on the idea that what you eat has a direct influence on your body and its functions. That’s why ingredients with additional benefits, such as energy, relaxation or support for digestive health have been on the rise the past few years and the demand for high-quality ingredients is on a constant high. In addition to that, the demand for immune system supporting ingredients is expected to grow. People are seeking for ways to support their body and their wellbeing.

That’s why especially in the herbal tea section, consumers are looking for supporting ingredients. Yet, the taste is the most important factor when developing functional foods and beverages. Plants are perfectly suited to this, as they taste great on the one hand and offer a wide range of functional properties on the other.

Trendy botanicals

Another trend emerging for 2021 is the use of new, trendy botanicals. In addition to the classic ingredients for herbal tea such as chamomile, lavender or ginger, more and more traditionally used and in western countries less familiar plants are appearing on the market.

Turmeric, typically used as spice in the Asian and Indian cuisine, is becoming increasingly important for drinks and especially tea. It is said to be anti-oxidative and immune system supporting, as well as good for digestion. In combination with ginger, such tea is popular against colds and stomach aches. Similar to turmeric, holy basil also derives from India and is the most widely used medicinal herb in herbal teas there. Due to its purported stress reducing and health supporting benefits, it is now also on the rise outside India. It is considered as an adaptogenic, which are natural plant substances, often herbs, roots or fungi, which are supposed to help the body to adapt to stressful situations. This includes Moringa, is called by many a miracle cure the plant is considered a miracle cure for different complaints. Moringa contains many ingredients which the human body needs, such as vitamin A and C, calcium and iron. For hot infusions, it can be used pure or blended with green tea, rooibos, as well as herbs and spices.



Flavors That Tingle

Burning, cooling or otherwise tingling their way across our tongues, drinks with flavors that stimulate unique sensory experiences are set to become more prominent in the coming year.

Flavors like Ancho chile, habanero and Indian peppercorn are expected to make their way into everything from Ready-to-Drink (RTD) cocktails to tea and lemonade. Meanwhile, menthol-heavy pairings – think peppermint-mocha cream and lemon-coconut eucalyptus – will contribute a cooling element to seltzers, premium coffee, juice drinks, and more.

Flavors That Comfort

The need for comfort has taken on a whole new meaning within the current social and political climate, but flavors continue to provide a soothing constant. Staples like grapefruit, lemon, and lime will continue to be popular; but there is an opportunity to elevate these familiar profiles by grounding them in specific locations of interest.

Delivering on consumer cravings for nostalgia and indulgence, 2021 will also see the return of classic favorites but in unexpected, more sophisticated forms.

“When you think about childhood flavors re-imagined for premium applications, you get something like a smoky vanilla cold brew, bubble gum seltzer, or a fruit punch gin cocktail”. “We’re experiencing a renaissance of these nostalgic flavors— peanut butter, orange creamsicle, grape cotton candy – in concepts like hard coffee, energy drinks, and craft soda.”

Flavors That Function

The concept of “functional plus” was introduced in 2020, those beverages that provide consumers with a multitude of health and wellness benefits. As the world grapples with a global pandemic, consumers have found ways to take their health into their own hands and stomachs.

Beverages that offer immunity, cognitive, and mood-boosting benefits will be especially significant. Expect fragrant flavors like hibiscus, elderflower and orange blossom to be combined with other berry, botanical and citrus elements to emphasize functional ingredient blends in naturally positioned teas, enhanced waters, flavored kombucha and more.

(Martin Bauer)

Major Currencies - 2021 OUTLOOK

- **USD** -Despite the assumption that global economic recovery extends into 2021 and 2022, boosted by the quick, mass deployment of vaccines, the overvalued US dollar may continue to weaken. The safe-haven demand for the US dollar could remain muted as rebound in the US growth is unlikely to be strong enough relative to the rest of the world to provide the same level of support to the US dollar as in previous years. The US dollar is still deemed roughly 10% overvalued compared to its long-term equilibrium level based on purchasing power parity. The 12-month projection for the EUR/USD rate is USD1.26 compared with a rate of USD1.21 in early December 2020.
- **EUR** – The European Central Banks are expected to continue to pump large amounts of funds in to their financial systems to stimulate economic growth and employment. EU does not want see USD/EUR rate over the 1.20 mark due to possible negative impact of a strong Euro on its competitive trade position and its inflation rate.
- **GBP**- Sterling claim to be undervalued is highly dependent on the questionable assumption that the UK’s long-term growth potential will not be hindered significantly by Brexit. The UK’s heavily services-reliant economy, hard hit by the pandemic, could rebound strongly in 2021, especially as effective vaccines are rolled out. Overall, sterling would be able to match the performance of the Euro against the US dollar. The 12 month projection is USD1.40 per GBP compared with a rate of USD1.33 in early December.
- **CNY** - The Chinese Yuan has emerged stronger from the pandemic thanks to economic growth and interest rates differentials. Given the recent push from China to make the Yuan more market driven, it is expected that the currency to gradually appreciate towards CNY6.25 by end 2021 from about CNY6.54 in early December, even if any significant de-escalation in trade tensions with the US is not expected. Nevertheless, China may not allow the continuation of appreciation of its currency as it could endanger the economy.
- **Ruble** – The Russian currency is expected to be stronger in 2021 while economy will return to growth with increase in oil prices. It lost more than 20 % in 2020 due to sanctions, drop in oil prices and economic crises. The Ruble may hold at around 70 per USD next year.

The Scandinavian currencies are especially attractive as they have the added advantage of being significantly undervalued. Furthermore, the Swedish economy is highly sensitive to the German manufacturing sector, which is expected to perform well in the current global recovery, while the Norwegian krone should be supported by higher oil prices and attractive interest rates.



The currencies such as the New Zealand, Australian and Canadian dollar are expected to perform well. The Australian dollar should stand above others, as its main exports are more sensitive to the global recovery than dairy products, New Zealand’s main export. Like the Australian dollar, the Canadian dollar should be helped by rising commodity prices, but Australia’s closer relationship with China should give the former an advantage.

The defensive Japanese Yen and Swiss Franc as more attractive than the US dollar, with structurally low inflation in Japan and Switzerland making real rates more attractive than in the US. The Yen's significant undervaluation means it is preferred over the Franc. Our 12-month forecasts for the USD/JPY and USD/CHF rates JPY100 and CHF0.89, respectively.

Global economic recovery, a weaker US dollar, higher oil price and a stronger Yuan should offer supportive external conditions for Emerging Market currencies. The currencies linked to China and those with robust external buffers as the most attractive in terms of risk-adjusted performance. The currencies of countries with a current account surplus and adequate FX reserves are less risky over the long term than the currencies of countries with weak external buffers.

Undervaluation will also be a factor in differentiating EM currencies. However, undervaluation alone may not be a sustainable driver of performance, as some undervalued currencies are weighed down by structural financial imbalances that are unlikely to be settled in the next quarters. For that reason, we remain cautious on the Brazilian real and the South African rand in 2021, although they are likely to outperform temporarily during the course of next year. The Turkish lira looks a bit more attractive given Turkey's recent push for financial stability and the large carry it offers.

The prospect of a robust recovery in global growth has weighed on gold through reduced safe-haven demand. However, there are other, more important long-term drivers for gold. For example, the opportunity cost of owning gold and its proven track record as a store of value are key to investment demand for gold, explaining the importance of US real rates.

(World Currency Watch)

Challenges in Ocean Shipping in 2021

COVID 19 effect on ocean shipping has been fundamental and in many areas, 2020 has had permanent effects – some of which are positive – on the shipping industry. When the pandemic first began and countries started to close back in mid-March, there was a big unknown and many question marks. However, the biggest fear, a total shipping slump, didn't happen. After brief volume decreases in April, there was a quick rebound as we forecasted during the worst time of the pandemic when there were too many unknowns to plan too far ahead.

The latest vaccine news is definitely good news, but it will test the strength of supply chains once more as some vaccines require extremely low temperatures to keep them effective. This will be a huge challenge for developing countries. U.S.-China trade tensions are still a big shadow on trade, as well as the planned U.S. tariffs on some certain commodities from Vietnam and elsewhere.



1. Freight rates

Due to increased demand and successful capacity management compared in December 2020 vs. December 2019, ocean freight rates from Shanghai to USWC tripled from average \$1,500/40hc levels to \$4,500+ levels. Ocean carriers published record profits in 2020 after so many years. However, this type of extraordinary increase is not sustainable and it will not continue the same way. However, carriers have now found another tool to implement higher rates under premium services; when it was first introduced; premium services received mix reviews from industry stake holders. Right now, almost every carrier offers it, where they charge up to \$2,000 per container and still add subject to roll cause. There are a limited number of new vessels coming into the market in 2021 and there won't be much change on the currently-offered capacity. Carriers also took extraordinary measures to keep up with the demand in TP trade and address the equipment shortage by allocating equipment from other trades to the profitable Asia trade. Its effects are felt worldwide as other trades now suffer from the equipment shortage.

It is predicted that negotiated freight rates will be much higher than the 2019-2020 contract season. Based on the initial discussions that large BCOs are having with the ocean carriers, it is understood that importers are ready to pay higher freight rates and rather have vessel space than saving on freight costs. Carriers have the upper hand right now.

2. Increased carrier discipline

At the beginning of 2020, there was a big difference with the carriers in terms of how they managed capacity compared to past years. An increase in efficiency of capacity management is also a result of industry consolidation and there are only a handful of carriers that can make an impact on the market rather than twenty different carriers. In 2020, during the worst times of the pandemic, when cargo volumes went down the same type of decrease didn't happen with freight rates, thanks to more disciplined carriers which managed the capacity much better by cutting capacity by blank sailings, reducing costs, taking advantage of lower fuel costs and focusing on the profitability rather than market share.

Consequently, spot rates were stable even at the peak of the pandemic when there was less cargo. These tested and so far working strategies will continue in 2021. Blank sailings come with a cost to carriers, as it costs about 40 percent of the operating cost of a vessel and have an impact on revenue due to capacity withdrawals. In spite of this, carriers will continue with their working strategy.

3. Carrier differentiation

Different service offerings increased end-to-end logistics solutions. After Maersk's decision to offer end-to-end logistics solutions and offer more value-added services, we will see more differentiated service offerings from carriers. One size fits all types of services are coming to an end. Guaranteed loadings, early and faster discharge with a specific area to pick up the chassis in ports, and increased customer service support for premium services have been tested and are already in place. Although it is not working perfectly now, it will be more widespread and eventually will lead to other more value-added services in an industry where change happens very slow and rarely.

4. Regulatory involvements

More regulatory involvements including the FMC as volumes grow and importers and all other stakeholders suffer from the consequences of extraordinary volume increases. Recent applications to the FMC regarding port demurrage and detention charges may be the start of broader regulatory interventions including recent carrier pricing practices. China's Ministry of Transportation and Communications has also got involved in order to prevent further price hikes from carriers and has asked carriers to try to increase capacity rather than freight rates from China. COSCO and OOCL immediately followed this along with other carriers. This type of interventions will prevent rates from climbing to even-higher levels than their current levels. This is something to watch in 2021.

5. Embracing technology

One positive effect of the pandemic was the push to embrace technology in ocean shipping just like many other industries. There have been very exciting technological developments which will further accelerate in 2021. Slowly but surely the industry has embraced technological developments. Digitization of the supply chain and increased and more reliable platforms where real-time tracking and tracing is offered are almost a given at the moment. Smaller-size companies that cannot keep up with this trend will lose their competitive edge. In addition to the widespread usage of shipping platforms, more discussions about the implementation of block chain, Big Data and AI in the shipping industry may be witnessed. New advanced technologies will increase efficiency and also give an extremely competitive edge to those that embrace these developments.

6. Cleaner shipping and sustainable shipping

Carriers are forced to address sustainability and it will be an important driver eventually similar to cost-cutting, profits, and market share increases. Greenhouse gas emissions from international shipping are still one of the top contributors of global pollution. The IMO has put ambitious goals in place to reduce total greenhouse gas emissions by at least 50 percent by 2050 compared with 2008 levels and become less dependent on traditional energy sources. The IMO 2020 low sulphur fuel usage regulation was one of the major initiatives towards this goal and over the next years, sustainability will be one of the major discussion points in the industry.

The year 2021 will be continuation of 2020. With volumes reverting to a more organized manner, importers and all industry stakeholders will be more prepared. Once the vaccine is in widespread use, we the commodities that have not been shipped as much will come into play and in the end it will balance against possible drops from other commodities that got shipped during the pandemic.

(World Maritime News)

UK-EU struck a Brexit Deal

The UK and EU have struck a Brexit deal that will have many implications for everyday life and the UK's future relationship with other countries. The deal has to be formally approved by the EU parliament in January 2021. Some key points of the agreements are;



Trade

- There will be no extra charges on goods (tariffs) or limits on the amount that can be traded (quotas) between the UK and the EU from 1 January.
- However, there will be extra checks at borders, such as safety checks and customs declarations, so businesses that rely on transporting goods to and from the EU will need to be ready.
- For services, including finance - which is very important to the UK economy - the situation is still slightly unclear. Services will lose their automatic right of access but the UK said the agreement "locks in market access across substantially all sectors".
- There will no longer be automatic recognition of professional qualifications such as doctors, nurses and architects.

Travel

- UK nationals will need a visa for stays of longer than 90 days in the EU in a 180-day period, and there will be extra border checks for UK travellers.
- British travellers will still be able to access emergency healthcare in the European Union. European Health Insurance Cards, (EHIC) cards will remain valid until they expire. According to the UK government, they will then have to be replaced by a UK Global Health Insurance Card.
- The UK and the EU will co-operate on "fair and transparent rates for international mobile roaming" but there is nothing stopping British travellers being charged for using their phone in the EU, and vice versa.

EU Court of Justice

- The UK will no longer be bound by judgments made by the European Court of Justice, Prime Minister Boris Johnson said.

Security

- The UK will no longer have automatic access to key databases, but should be able to gain access upon request.
- The UK will not be a member of Europol - the EU's law enforcement agency - but it will have a presence at its headquarters. This will be similar to the arrangement the US currently has.

(BBC)

Turkey-UK Free Trade Deal

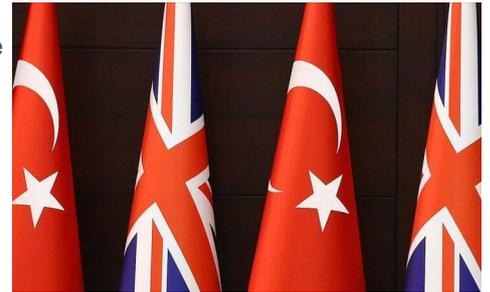
Turkey and the U.K. have signed a historic free trade agreement, set to go into effect from 1st January 2021.

"This is a historic day for Turkish-U.K. relations," Turkish Trade Minister said in a speech at the signing ceremony.

The landmark deal will ensure stronger trade between Turkey and the U.K. in the days to come, adding that it leaves no uncertainty in the trade structure between the two countries.

"We are taking the first step towards further deepening our ties, while maintaining 25-year gains from the Customs Union," she further stated referring to Turkey's 1995 Customs Union with the EU, which Britain is making its final exit from this week.

"With the new deal, Turkey and the U.K. are pleased to meet business people's expectations and to keep our promises," she added.



Absent a deal, about 75% of Turkish exports to U.K. would be subject to tariffs, causing losses of some \$2.4 billion, but the deal eliminates this risk.

"We reached a tariff-free agreement, as planned, which includes all industrial and agricultural goods," she said.

The deal may provide an opportunity for British Tea companies to expand their presence in the Turkish market.

(Turkey News)

Use of Tea Waste



Tea waste has many properties that can be turned into a commercial asset. The innovations exploit the chemical and molecular richness of the tea bush and its leaf. Waste retains polyphenols, antioxidants, catechins, flavanols, cellulose, amino acid, non-soluble proteins, caffeine, fiber, sugars, lignin, zinc, and tannic acid that make tea so rich in flavors, textures, and nutrients. The waste is easily processed to extract, mix, and shape these to create value instead of burning or burying it.

Nutrients

The caffeine nutrient in the waste has a broad market with substantial export potential. It is extracted for use in many products, including cosmetics, fertilizers, instant teas, medical, and nutritional supplements. Tea waste makes a high protein cattle feed after removal of the tannic acid that interferes with protein metabolism. The high fiber count makes it suitable for ruminants. It tastes pretty awful, but is improved by adding molasses.

The caffeine is also the base for poultry and pig feed. Some Japanese specialty farmers market their pork as green tea fed. Another report points to waste being a superior ingredient for manufacturing supplements, with black tea waste matching cultivated green leaf in meeting quality and functional requirements, at a far lower price.

Adsorption

Adsorption is one of the growing areas of opportunity for tea waste. It is the collecting of molecules by a substance that retains them on its surface. They don't enter its interior (that is absorption). The difference is like spilling ice cream on your wrist (adsorption: it stays there and can be wiped off and your skin is unaffected) versus eating it (it's absorbed in your stomach and can't be recovered or reconstituted.)

The need for adsorption reflects the widespread environmental damage caused by waste created in manufacturing across the globe. It's the base for removing stuff that runs off into fields and waterways, accumulates in the soil, and is non-degradable.

Here are a few examples.

Mixed with clay, tea waste forms adsorptive membranes for removing toxic effluents from ponds that are generated as a factory byproduct.

Black tea waste powder is an effective dye adsorbent. Dyes are a core ingredient in textiles, printing, papermaking, and cosmetics. The 2% that are directly fed into water resources are concentrated, health hazards, and seriously toxic. Try oolong waste: one study recorded 98% efficiency in removing methylene blue dye by using it. By and large, waste made in processing any type of tea will do the job. It will match more complex and expensive techniques, such as catalytic oxidation and membrane separation.

Activated tea waste charcoal adsorbs lead, antibiotics, and heavy metals such as zinc, at a lower cost. This is a form of carbon processed to increase the surface area available for adsorption of other compounds or stimulation of chemical reactions. This micro-porosity can make a single gram of carbon provide 30,000 square feet of surface.

Activated carbon has largely been made from charcoal. This is complex and relatively expensive to produce. Biomass tea waste is growing as an effective substitute. Lightly treated with sulfuric acid it offers a widely available and highly environmental-friendly resource. It also has added properties that enable broader water purification, through advanced technologies like nanoparticles and capacitative deionization.

Fertilizer

Tea waste is packed with the compounds that make for a superior fertilizer: nitrogen, potassium and phosphorus. Indian tea garden firm operates a biogas plant that takes black and green tea spent leaf as input from its farms and discharges it into a slurry lagoon to be used as a soil fertilizer for timber locations, new field clearing and tea plantations. The digester can hold 7,000 metric tons of organic tea waste.

Energy

Tea dust and stalks and all the other little bits of waste can be easily processed and turned into liquids and bricks as biomass fuel, bio-char, and bio-oil. The waste is decomposed using fluidized bed pyrolysis, a thermal decomposition process that occurs in the absence of oxygen. Tea waste pyrolyzes at high temperatures of 500-700°C and through gasification to produce bio-oil and biochar. The char can be converted into briquettes or mixed with biomass. This provides a highly efficient solid fuel for use in ovens and boilers across many industries – including tea. The techniques can be fine-tuned to optimize the yield of char, liquid, and gas.

The cellulose in tea waste is the same as that of timber. The high levels of this plus sugar, starch, and pectin are encouraging the use of fuel briquettes to replace wood fuel for ovens. The waste is even able to generate battery-power electric charges via vermicomposting.



The use of tea waste to make a fuel for tea making illustrates the circular economy, a framework for reducing waste through recycling, packaging, safety procedures, process, and production innovation to end the linear sequence in production and consumption of take-make-dispose.

Tea Factory in Kenya initiated a program that shows the scale of direct energy savings by replacing firewood with briquettes made of biomass waste. Its energy expenses fell from \$542,000 to \$295,000. It has entirely eliminated the use of timber.

The market

The total volumes of waste produced globally is completely unclear. Figures generally lack sourcing references and may or may not include spent tea waste, the waste at the end of the bush to cup chain. Pakistan produces 100 billion tea bags, with thousand metric tons of waste. These do not share the value-creation opportunities, since they are largely depleted of nutrients.

How much waste is there that can be used? The simplest answer is “lots and lots.”

An opportunity not to be wasted

Tea waste is an opportunity to create products that have many uses in many potential markets. Given the immense financial pressures tea growers face in every major region, turning waste into income is a step forward on the business innovation front. The trick is to make use of what is already in place, without adding heavy investment and risks.

Tea waste is best thought of in terms of an innovation opportunity that is a natural extension of the core.

(STiR Tea & Coffee)

Chinese Tea gets EU GI

European Union recently granted China Protected Geographical Indication (GI) for 100 products, including 28 teas, concluding 15 years of negotiations.

China, in turn, will grant an equal number of European goods similar market protections. Indications, represented as a seal printed on product labels and in marketing materials, are designed to prevent fraud and preserve traditional production methods.

The EU commissioner for agriculture and rural development said at the signing ceremony, “I am proud to see this agreement getting one step closer to its entry into force, reflecting our commitment to work closely with our global trading partners such as China.” Enforcement in both countries begins with the new year-2021.

In 2012 China and the EU agreed to list ten products from each country as the first step toward protections for an additional 100 products. In four years, an additional 31 teas will be added to the protected list.

The European list mainly includes wines, beer, and regional cheese and Italian meats (prosciutto) and a single fruit: Pêra Rocha do Oeste.

The Chinese list of protected goods includes both famous teas such as Pu'er, Huoshan Yellow Bud Tea, Lapsang Souchong, and Fuzhou Jasmine Tea, and modern teas such as Fenggang Zinc Selenium Tea and Anji Bai Cha.



The Chinese purchased \$17 billion worth of European food and drinks in 2019, ranking third among trading partners. China is also the second-largest buyer of EU products qualifying for Geographical Indications, accounting for 9% by value. These include wines, agri-foods, and spirits. The market for food and drink products qualified for protection makes up 15.4% of EU exports.

(Euro News)

UK Tea Brands go plastic free

Most UK tea brands have introduced plastic free tea bags and plans to do away with plastic tea bags by the end of this year. They are re-placing oil based plastic tea bags with plant based plastic called PLA. The full launch of new tea bags has been delayed by COVID 19 issues.

PLA tea bags are plastic free but most brands do not use that name. The plant based plastics are made from renewable energy sources like Corn Starch. PLA tea bags are industrially compostable which means they can go in for food waste or garden waste bins for compost.

(UK Tea News)

