Pacific Horticultural & Agricultural Market Access Plus Program

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COFFEE COMMODITY MARKET UPDATE

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KEY POINTS

- Commodity market coffee prices remain extremely volatile
- Frost damage to Brazil's crop caused a 37% price increase in July within a two-week period
- Internal market prices will rise in PNG and other smallholder coffee producers, but quality and trade relationships may suffer from increased competition for cherries
- Small processor/exporters will be the most challenged group, as they lack capital needed to compete with larger businesses to buy more valuable coffee cherries
- Markets will fall again as production is returned. "When," not "if," is the question
- Now is the best time to invest in infrastructure, relationships, quality, and marketing that will provide future stability.

BACKGROUND

Coffee prices worldwide are experiencing significant volatility driven by unfavourable growing conditions in Brazil. This briefing is provided for CIC and other PNG coffee stakeholders to provide information on the international market situation and implications for PNG coffee exports. Management actions are proposed for consideration by CIC.

SITUATION

Extreme volatility experienced in the global coffee market for the past year intensified in July, with a strong price rally late in the month on news of potentially severe frost damage to Brazil's crop. Brazil is the largest coffee-producing nation, responsible for approximately 35% of global supply.

The benchmark "C" futures contract for commodity Arabica coffee began the month trading in a range of approximately 150-160 US cents per pound (11.57-12.34 kina/kg) – a level held for the past three months following a choppy 50% climb beginning in the pre-pandemic days of 2020.

In the last days of June, low temperatures affected much of the coffee growing area of Brazil for three nights. Frosts formed on crops across the country but was concentrated mainly in Paraná, which is a smaller coffee-producing state in Brazil's south. Light damage was reported but had little impact on trading activity.

Freezing temperatures cause the jelly-like cytoplasm in plant leaf cells to freeze and expand, which causes the cell walls to rupture. Frozen leaves then die and fall, rendering the plant unable to photosynthesize. Survival and regrowth of the plant is possible but unlikely in severe cases.

Forecasts of frost conditions remained as July continued, leading to anticipation of another frost period returning soon. With each new weather report, coffee buyers and institutional speculators purchased more futures contracts in anticipation of additional crop damage. Prices began to rise quickly, spurring the ICE Futures Exchange to increase margin requirements for trading activity. Short traders (i.e., coffee producers hedging against possible falling prices) were then faced with the dilemma of doubling trading account funding overnight or to close their positions. Short positions are closed with a buy order, which drove up the market further – an effect called a "short squeeze."

A second frost settled over much of Brazil's coffee area, including its primary growing region in Minas Gerais state on July 19th. As reports and photos of damage emerged online, the market jumped in a frenzy of new activity – 5 cents on July 20th to 165 cents (12.69 kina/kg), then rocketed over the next two days to close at 193 cents (14.85 kina/kg) on Friday, July 23.

Over the weekend, leading industry experts estimated damages at between 4.05 to 5.2 million bags, nearly 10% of Brazil's crop. Worse still, more frost was coming. In frantic trading on Monday 26th, coffee hit an intraday high of 215 cents (16.54 kina/kg), eventually closing at 207 cents (15.93 kina/kg). These were the highest intraday prices since 2014 and highest close since 2012. Calming and profit-taking caused a slow and unsteady decline through the week, eventually closing at 180 cents (13.84 kina/kg) on Friday, July 30th – despite a third frost settling the same morning. Prices continued falling after trading hours on speculation that previously damaged crops were most affected by the latest freeze. The full severity and accounting of losses from these combined events, however, remains unknown. At the close of business Tuesday, August 3rd, the C price was 175 cents (13.51 kina/kg), up slightly from the prior day.

ANALYSIS

Three Brazil frosts in a single growing season is an unprecedented occurrence in recorded history dating to 1882 (let alone within a single month). Two severe frosts occurred in June and July of 1994, causing the C price to briefly reach 263 cents (20.24 kg/kina[1]). The next frosts were in 2000 and again nearly two decades later in 2019. While neither was as severe as 1994, both were followed by years of increasing commodity prices.

1 2021 USD/PGK exchange rate, unadjusted for inflation

Conditions in 1994, however, were fundamentally different than today. First, Brazil and other producing countries had large inventories of green coffee on-hand leftover from the post-International Coffee Organization quota suspension. Large stocks on-hand helped to offset crop losses (Brazil: 3m bags today vs. 22.5m then). Second, Brazil of 1994 did not produce as much coffee as it does today (58m bags today vs. 28m then), as much per hectare, nor did it produce as large a share of the world's supply (35% today vs. 30% then). Brazil today is more influential on the global coffee market than it was in 1994. Third, 2021/22 is a down year in the biannual coffee crop cycle of Brazil, where trees recover from the prior high season. Additionally, Brazil has experienced drought conditions this year[2], which further weakened plants and reduced yield.

Experts have not completed comprehensive damage estimates at the time of writing, but it seems likely that many seedlings and skeleton-pruned trees affected by frost will need to be replanted. This means that pre-2021 yields may not be met again for two or three seasons. As the situation unfolds, volatility with probability of sustained higher prices.

IMPACT

Rapidly rising coffee futures prices create a "race to the bottom" in quality and will test the strength of trading relationships throughout the value chain. Internal market prices for cherry and parchment will rise with rising international prices.

- **Larger exporters and mills** with access to capital will have the capacity to purchase more coffee than smaller export competitors and will thus be better able to meet contracted sales commitments.
- **Small farmers** will earn more for their labour in the short term but may require that they break supply commitments with under-capitalized exporters to opportunistically achieve the highest market prices. This will test or damage relationships with exporters who rely on them.
- **Small exporters** may default on sales commitments or be unable to reach quality goals, due to sudden reduced availability of supplies. This will test or damage relationships with buyers who rely on them.
- **Estates** owning their land with salaried workers will fare better, as labour costs will be less affected.
- **All domestic businesses** with cherries and coffee stocks on-hand will be impacted by increased crime as stocks become more valuable. Heated business disputes may lead to violence.
- **Buyers** will have less capital to purchase high-value coffee and establish trading relationships with new suppliers.

Higher global prices will incentivize new planting and reactivation of farms that were previously not economically feasible in down markets. More coffee supply will enter the global market from other countries as Brazil recovers. Massive losses this season in Brazil will also incentivize ingenuity to develop new technologies and processes that will protect future crops from frost damage. Coffee demand will continue to increase as it always has but at a relatively slower pace than supply recovery. At some point in the not-too-distant future, coffee supplies will outweigh coffee demand, leading to declining prices as the market attempts to reach equilibrium. The question to ask is not "if," it is "when" prices will fall.

SPECIFIC RECOMMENDATIONS FOR PNG COFFEE INDUSTRY

While higher prices soon will bring good fortune to small farmers in PNG, it is important to remember this sudden windfall of new earning is a symptom of a commodity market that is fundamentally skewed in favour of the largest and most-efficient producing origins. Smallholder farmers win today only because a large and efficient producing nation has lost today – they will recover.

The best strategy for long-term sustainability of PNG's coffee industry in this market is to invest high-market earnings into initiatives that increase productivity and differentiate future value. Combined, these will take advantage of short-term opportunities and provide stability for the future.

- Coffee berry borer pest abatement and enforcement of good agricultural practices (specifically pruning) will ease internal market tension and allow the country to capitalize on high profits in the next few seasons.
- Honouring buyer contracts and renegotiating terms that recognize new market conditions will improve the strength of a mutually beneficial supplier/customer relationship. Consider that good buyers will do the same for producers when the tables are again turned.
- Invest in internal quality control to ensure that national standards are maintained, demonstrating PNG's reliability as a quality producer through difficult times. Continue with quality improvement initiatives that will increase premiums when commodity prices fall again.
- Promotional marketing initiatives will make PNG's differentiated offerings more visible, valuable, and less interchangeable than unbranded commodities, improving the country's market position when large global harvests return.

SOURCES REFERENCED

- Bloomberg News
- ICE Exchange data
- International Coffee Organization data
- Jonas Ferraresso, Brazilian Coffee Agronomist
- Judith Ganes, Soft Commodity Expert, J Ganes Consulting
- Ryan Delaney, Founder, Coffee Trading Academy

2 **Low air moisture contributes to higher dew points that create frost conditions**