

CONFIDENTIAL

YOUR BEST SOURCE OF INFORMATION ABOUT THE BRAZILIAN COFFEE BUSINESS. THIS ISSUE:

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REPORT ON NUTRITION OF SOILS IN MATAS DE MINAS RELEASED



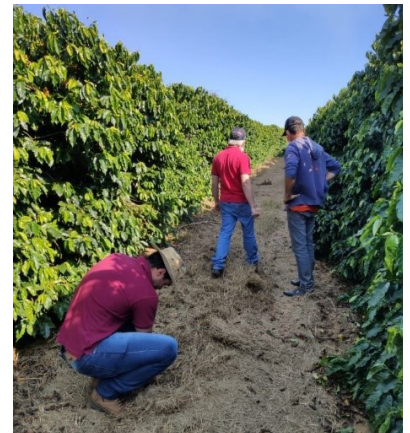
As coordinator of the Coffee Research Consortium, Embrapa released a report on the situation of soils in the region of Matas de Minas to guide growers on reaching the greatest productive potential of their coffee trees. Coffees from Matas de Minas region are mostly grown by smallholder growers for whom an efficient use of inputs is fundamental, specially at times of high fertilizer prices.

Source: Embrapa Café

SUSTAINABLE PRACTICES PROTECT NATIVE VEGETATION AT CERRADO MINEIRO

The Cerrado das Águas Consortium informed that the negative impact on native vegetation decreased from 25.5% to 9.4% last year whereas conservation of native vegetation increased substantially, from 96 to 143 ha in 2021 in relation to 2020. More than 48 thousand seedlings of native and fruit species have been planted.

Source: Notícias Agrícolas



EMBRAPA IMPLEMENTS REDE CAFÉ PROJECT IN RONDÔNIA

The Rede Café Project, a partnership between the Rondônia State Government and the State Secretariat for Economic Development (SEDEC) under the coordination of Embrapa Rondônia, is evaluating the agronomic features – nematode resistance, pest and disease tolerance, yield and bean size, uniformity of maturation, plant architecture for mechanized harvesting, cupping quality, etc. – of the main clones of Canéfora coffee planted in six properties in Rondônia. A technical report will be issued at the end of the project with agronomic and qualitative information.

Source: Embrapa Rondônia

FUNCAFÉ ALLOCATION APPROVED BY COFFEE COUNCIL

The Brazilian Coffee Policy Council (CDPC) has approved the amount and the allocation of R\$ 6.05 billion (US\$ 1.3 bn) of the Brazilian Coffee Fund (Funcafé) for the 2022/23 crop. Trading Financing received the highest allocation of R\$ 2.2 billion (US\$ 470 m) followed by Coffee Purchase Financing with R\$ 1.4 billion (US\$ 299 m), Working Capital with R\$ 775 million (US\$ 165.7 m) and Recovery of Damaged Coffee Plantations with R\$ 160 million (US\$ 34 m). Credit for Cooperatives increased from R\$ 30 to 50 million (US\$ 6.4 to 7.4 m).

Source: CNA

BRAZILIAN COFFEE MUSEUM EXPOSITION IN ITALY

"Viaggio nella terra del caffè", the Brazilian Coffee Museum exposition that was in the Brazilian Embassy in Rome last year, is now on display at the Accademia del Caffè Espresso, near Florence, in Tuscany. The exposition presents the trajectory of immigrants when they arrived in Brazilian lands and the Italian influences that shaped different aspects of the Brazilian culture including coffee preparation. The exposition also presents Brazilian coffee research, a key factor to increase productivity, protect native areas and diversify cultures. Finally, visitors can learn about coffee sustainability initiatives in Brazil.

Source: Museu do Café



PERMANENT AGRIBUSINESS EXPO CREATED IN SÃO PAULO

A scientific and cultural outdoor complex located in the heart of São Paulo city named Planeta Agro and commissioned by São Paulo's Agency for Agribusiness Technology (APTA) was created to inform the population about the real dimension of the agribusiness in the state. The complex counts with cultural spaces, technology center, exhibitions of different types, information about the region, gastronomic places, etc.

Source: CaféPoint

CONAB LAUNCHES WEB PORTAL WITH INFORMATION ABOUT BRAZILIAN WAREHOUSES



The Armazéns do Brazil portal, a web page created by the Ministry of Agriculture Agency in Charge of Warehousing and Crop Estimates (CONAB), will offer strategic information for the agribusiness sector. The new tool will facilitate the contact between demand and supply of storage services, improve logistics and enable better post-harvest planning.

Source: CaféPoint

GROSS VALUE OF PRODUCTION IN SÃO PAULO STATE INCREASES 30% IN 2021

According to the São Paulo Federation of Agriculture and Livestock (FAESP), the Gross Value of Agricultural Production (GVP) in the state of São Paulo reached R\$ 121.9 billion (US\$ 26 bn) in 2021, an increase of 30% over 2020. Agricultural crops corresponded to R\$ 82.1 billion (US\$ 17.5 bn) and livestock to R\$ 39.8 billion (US\$ 8.5 bn). In spite of adverse weather in 2021 – prolonged droughts and frosts –, coffee production in São Paulo state had a significant performance and reached 4 million bags (8.4% of the country's total).

Sources: Faesp and Senar

Brazilian Prices

Main Producing Regions / Farm Gate

March 31, 2022

Arabica Naturals (R\$/ 60 kg bag)		Conilon / Robusta (R\$/ 60 kg bag)	
Cerrado MG	1235,00 ↓	Colatina-ES fair average price	835,00 ↑
Mogiana	1230,00 ↓		
South Minas	1230,00 ↓		
Arabica Pulped Naturals (R\$/ 60 kg bag)		BM&F (US\$/60kg Arabica bag)	
Cerrado MG	1285,00 ↓	Mar 2022	281,65 ↓
South Minas	1280,00 ↓	May 2022	281,65 ↓
		Jul 2022	280,40 ↓
		Real R\$ / Dolar US\$	
		Mar 31, 2022	4,76 ↓

+ 4.06%

Source: www.qualicafex.com.br

HOW CENTRAL POST-HARVEST PROCESSING CAN INCREASE GROWERS' INCOME AND PROMOTE SUSTAINABILITY*

The disadvantages of being a small coffee farmer are many. There is limited access to technology and little or no access to financing. The fixed costs are too high for the size of the operation. There is “unfair” trading of inputs and tools, equipment and coffee itself because small farmers usually pay more for inputs and equipment and sell their coffee for less than their larger competitors. Altogether, it is what economist call diseconomies of scale. Worse yet, the tendency is for the size of the farms to become even smaller as they change hands from generation to generation.

An important way to address the problems above is for small farmers to work together to gain economies of scale. Together it is easier to access technology to become more productive and even to access financing. Small farmers may buy inputs and equipment together to get better prices and terms. They can process coffee together to lower investment and costs of operation and, very important, they can sell coffee together not only to get higher prices but also to deliver consistent qualities and the products that clients want. Processing coffee together may be a good start for all this to happen.

Small central wet mills and even drying facilities may be an important first step to bring growers together in the same way that dry milling is usually the main function of coffee cooperatives of all sizes. Buying inputs together may come next and selling coffee together usually comes last because it is more difficult to convince growers to blend their coffees.

To use central ecological wet milling requires moving from small individual pulpers used for each farmer to compact larger machines that offer additional features, may include a mucilage remover, have greater efficiency and save water. There are huge savings in investment when wet milling is centralized as shown in the table below where:

- a manual pulper costs X and a motor-driven one 2X,
- a pulper with an unripe cherry separator costs 25X to process the coffee for 100 small farmers and 38X for 200 small farmers, and
- a pulper with an unripe cherry separator and a mucilage remover cost 38X for 100 farmers and 53X for 200 farmers.

INVESTMENT IN WET MILLING

NO. OF FARMERS	SMALL PULPER		CENTRAL PULPER	CENTRAL PULPER WITH MUCILAGE REMOVER		
	MANUAL	MECHANICAL				
100	100X		25X	- 75%	38X	- 62%
100		200X		- 88%		- 81%
200	200X		38X	- 81%	53X	- 74%
200		400X		- 91%		- 87%

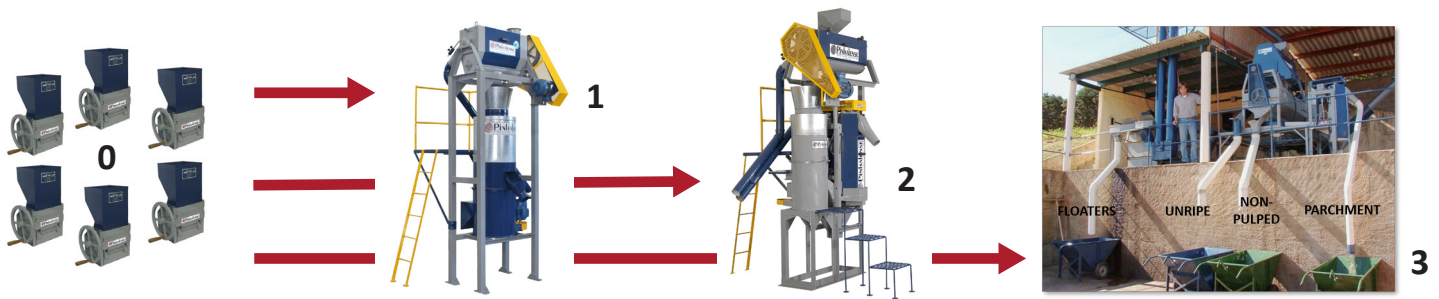
Modern technology central wet milling is closely associated with greater sustainability for many reasons. Greater processing efficiency and product customization increase farmers’ income as does better management. Less time required for milling means more time for farmers to look after their coffee trees or to spend with their families. Less water consumption and contamination are good for the environment, that may also benefit from more advanced waste treatment technology and recycling. Finally, there will be less weather-related risk of losses if drying is added to central wet milling.

There is increasing demand for micro lots today and, contrary to what many think, many small growers are not large enough to produce micro lots. This is another advantage of central wet milling: to produce micro-lots of consistent quality that meet market demands. Yet another advantage of central wet milling is to bring together lower quality coffees otherwise treated as rejects and that can be further processed and marketed instead of discarded in each small farm.

There are of course challenges to implement central wet milling. The logistics behind bringing coffee to a central station depend on the availability of roads and means of transportation because cherries must be pulped not too long after they are picked. The use of coffee pulp on the farm requires taking it back to where coffee is produced. Bringing growers together requires a mind change. But these hurdles can be overcome, specially with community work and demonstration units.

* The Outlook above was extracted from the homonymous presentation made at SCA’s EXPO 2022 whose slides are found in the link <https://bit.ly/3rBxpEY>.

ADVANTAGES OF CENTRALIZING ON-FARM MILLING



- 0.** Small individual pulpers are simple machines that have remained the same for many years.
- 1.** Low-water-consumption Pinhalense ECO pulping set with immature cherry separator before the pulper in order to separate not only unripe cherries but also semi-ripe ones, if required, without damage to them.
- 2.** Pinhalense pulper with immature cherry separator and mucilage remover. The Pinhalense DMPE mucilage remover may be attached to the ECO pulper or separated from it to allow for fermentation, in which case the mucilage remover can be used after partial fermentation or to wash parchment after full fermentation. Fermentation tanks can also be bypassed if wanted.
- 3.** Complete small Pinhalense wet mill with mechanical siphon, pulper with immature cherry separator and mucilage remover. The Pinhalense mechanical siphon LSC removes impurities and stones from incoming coffee cherries and separates them in floaters (over-ripe and dry cherries) and sinkers (unripe and ripe cherries). The little water used in the process is recycled by the mechanical siphon itself in a “closed circuit”.

The advantages of using a Pinhalense mucilage remover are: much lower water consumption, less risk of quality losses than in fermentation, continuous processing, no weight loss (that take place in fermentation and is higher the longer the fermentation time is and the higher the temperatures are), consistent quality and full control of the process.

Options 1, 2 and 3 above can be used to reprocess under-ripe and over-ripe cherries after they have been separated to improve the quality of top-quality parchment, that derives from 100% ripe cherries. Washed under-ripe and over-ripe cherries may have good market value.



Small drum drier SRE

Central wet milling facilitates centralizing the drying of micro, small, mid-size and large coffee lots. This is a weather-proof, quality-controlled solution to obtain reliable- consistent-quality coffee lots. Small and divided Pinhalense SRE drum driers enable the separate drying of micro and small lots. Pinhalense overhead pre-driers shorten drying time without affecting coffee quality. Pinhalense digital controls CSP and drying curves are the most advanced way to preserve the quality of coffees being dried.



Overhead pre-drier



Divided drum drier SRE



Digital drying control system CSP