

- EQUIPMENT TO IMPROVE THE SUSTAINABILITY OF DRY COFFEE MILLS... (PAGE 4)

INTERNATIONAL COFFEE WEEK SURPASSED EXPECTATIONS

Organized around the International Coffee Organization (ICO) meetings and 50th Anniversary Commemoration, Espaço Café Brasil, the largest coffee event in Latin America, held for the first time in Minas Gerais on September 9 to 12, exceeded expectations. More than 12,000 visitors, twice the audience of last year, attended events such as the IV Arabica Naturals Conference, the Cup Tasters Challenge and the DNA Coffee Seminar among others. The trade fair generated R\$ 20 million (US\$ 8.8 million) in direct business and R\$ 30 million (US\$ 13.3 million) in indirect deals.

Sources: ABIC and P&A



Ø BRAZIL TO TRIPLE ROBUSTA EXPORTS BY 2020

A study made by P&A for the Brazilian Coffee Growers Council (CNC) indicates that Conilon exports can exceed 5 million bags by 2020 making Brazil one of the leading Robusta exporters. Two Brazilian coffee business paradigms may change in coming years. Conilon growers will increasingly supply to foreign markets shifting from a great reliance on the domestic Brazilian market. In turn, Arabica growers, who have traditionally focused on foreign export markets, will have to target the Brazilian market more intensely since the country may account for the lion's share of the global growth in Arabica consumption. Other changes in coffee supply paradigms are likely to occur as emerging markets and producing countries champion consumption growth and the additional Robusta demand is likely to outpace Arabica's by a ratio of 3 to 1.

Sources: Valor Econômico and P&A

Ø VOLUME OF COFFEE EXPORTED INCREASES BUT INCOME FALLS

Although the volume of coffee exported is increasing, Brazilian growers are receiving less money. Excess supply and low coffee prices – the average price of the bag of coffee exported fell from US\$ 271 in 2011 to US\$ 152 in 2013 – are behind the problems the coffee sector is facing.

Source: Folha de São Paulo

AGRIBUSINESS ENSURES POSITIVE BRAZILIAN TRADE BALANCE

The 8 main Brazilian agribusiness products had sales 15% higher in January-August 2013 than in the same period of 2012, with soy as the main highlight. The value of soy exports totaled US\$ 25 billion until August, 28% greater than last year, according to MDIC, the Ministry of Development, Industry and Trade. Coffee, that reached 8% of total agribusiness exports in 2011, continued its downward trend and fell behind maize.

Source: Folha de São Paulo

AGRICULTURAL POWERHOUSE WILL CONTINUE TO GROW

A recent study by the Department of Agriculture of FIESP (São Paulo State Federation of Industries) estimates that agricultural production in Brazil may increase 38% over the next 10 years despite the country's bottlenecks in logistics and the lack of a strong trade policy based on bilateral agreements. The projections were based on past production figures that indicate that while the planted area expanded 40%, production increased 220%, resulting in a growth of 128% in productivity in 20 years.

Source: Peabirus



💋 FERTILIZER PRICES FALLING IN BRAZIL

Even though the US dollar gained value, most fertilizers used by Brazilian growers are about 20 to 25% cheaper. Global prices of fertilizers have decreased following the drop of commodities' prices such as soybean, corn, coffee and sugar.

Source: Valor Econômico

🖉 COFFEE GROWERS TO HAVE NEW FERTILIZER OPTION

After three years of tests, Epamig (Agricultural Research Institute of Minas Gerais) concluded that Thermopotash is efficient and can replace traditional potassium chloride in coffee plantations. Experiments indicated that the concentration of nutrients is higher in the new product, while the absence of chlorine in the formula can enhance cup quality. Verde Potash, the Brazilian fertilizer company that developed Thermopotash, will start its production by 2015 with an estimated output of 300,000 tons per year.

Source: Folha de S. Paulo

💋 "ALTA MOGIANA" BECOMES NEW INDICATION OF ORIGIN

The Brazilian National Institute for Industrial Property, INPI, awarded the Indication of Origin registry to Alta Mogiana, one of the most traditional coffee producing regions in Brazil, known for the high quality of its beans. The area grows only Arabica coffees, being Catuaí and Mundo Novo the main varieties cultivated. The Alta Mogiana region includes the municipalities of Franca, Pedregulho, Patrocínio Paulista and Altinópolis among others. The name "Mogiana" refers to the Mogiana Railway Company established at the end of the 19th century to transport the region's coffee to Santos harbor.



Source: INPI

🖉 ROASTERS CAN NOW HAVE THEIR OWN COFFEE PLOTS IN BRAZIL

Ipanema Coffees, one of the largest Brazilian coffee growers, has started a new business model that grants exclusive access to the production of specific plots to direct buyers. The first partnership has been established with a Japanese roaster that will acquire approximately 7,000 bags of specialty beans from Ipanema per year. The strategy aims at expanding sales to Asia, the fastest growing market in the specialty coffee segment.

Source: Revista Espresso

💋 ILLY'S 100% BRAZILIAN ARABICA BLEND TO BE SHOWCASED AT EXPO 2015

Expo, the universal exposition held every five years in a different country, will be held in Milan in 2015. With the central theme "Feeding the Planet, Energy for Life", the event will highlight the great issues of sustainable development, and coffee will be one of the featured products. Illycaffé, the well-known Italian roaster, will be in charge of the pavilion dedicated to coffee, showcasing its new blend of 100% Brazilian Arabicas.

Sources: Folha de São Paulo and P&A



Pictures of the Month

INITIAL FLOWERING IN BRAZIL



Sources: CaféPoint and 8º Espaço Café Brasil

INTERNATIONAL COFFEE WEEK - BRAZIL





SUSTAINABILITY IN DRY MILLING

Sustainability at the production level has been at the top of the coffee business agenda for many years now. Such concerns have subsequently spilled over the whole supply chain but actions in the chain of custody seem to have been more oriented to ensuring traceability and that price premiums reach growers than to addressing sustainability itself beyond farm gate. As sustainability moves from niche to mainstream markets, it is only fair that dry millers who embrace sustainable practices be rewarded accordingly. Sustainability at the dry milling level should focus on working conditions, environmental protection and efficient use of scarce resources.

Ensuring good working conditions and workers' safety starts with equipment layout. Enough space must be allowed around machines to minimize the risk that parts that vibrate or rotate may come in contact with operation and maintenance personnel. The servicing of equipment should not expose technicians to undue risk; sturdy service platforms and ladders should be standard components of dry mills with rails and protection compatible with the height of the items to be serviced. Last but not least, the mechanical transport of coffee in dry mills and warehouses has a great impact on sustainability as it transfer to conveyors, elevators, blowers and fork-lifts the burdensome tasks of carrying coffee bags by workers employed in dry coffee milling.

Dust control is associated with workers' health and well-being as well as with damage to the environment and adverse impacts on neighbors and community. Dust control starts with aspiration at key dust generation points, involves proper design of fans and piping, and finishes with separation to ensure that dust is retained and clean air is released into the environment. Failure to capture and convey dust will impact workers' well-being directly and become a medium to long term liability for persons and company. The release into the environment of air that is not free from dust will affect people living and businesses operating near the mill and the community at large depending on how inefficient the dust separation and retention systems are. Fire risk may increase at extreme cases, especially when bigger dust particles and/or coffee husk are released into the environment and accumulate on roofs and other surfaces.

Noise should be kept at reasonable levels – most countries have specific legislation and maximum acceptable limits – primarily to ensure a healthy working environment. It is needless to say that high noise levels are also a liability for companies and, in extreme cases, become a negative externality, i.e., a reason for neighbors and community to complain.

The combination of unacceptable dust and noise levels has in many countries led municipalities to prohibit the installation of dry mills near residential areas or restricted them to industrial zones designed for "unclean" industries. Most often this derived from the inefficient management of these potential hazards that ended up by including dry coffee milling in a high environmental risk group where it does not belong.

Energy is a scarce resource everywhere and electricity is not only scarce but often sold at high prices in coffee producing countries. The availability of electricity is often restricted and subjected to fierce competition from other uses that are more relevant than coffee milling for their sustainability impacts. Modern equipment consumes substantially less electricity than conventional machinery with differences as high as 20 or 30% in a full coffee mill. The consumption of electricity also tends to increase when maintenance is poor, key parts are not timely replaced and equipment is overloaded or misused.

Land is also becoming a scarce resource in and around urban areas in coffee producing countries. Land prices are increasing as availability falls. Dry coffee mills are not necessarily land intensive but the storage of raw material and finished product is, especially if done in traditional ways, in jute bags that are kept in separate lots according to origin, grade, client and destination. Modern warehouse management, big-bags, bulk storage and logistics can save substantial space, release labor from heavy tasks (e.g.: carrying bags on shoulders) and have positive impacts on sustainability. Higher capacity dry mills and modern equipment also tend to require less land. There are "economies of scale" in floor area usage because modern high capacity machines tend to use the same if not less space than small capacity ones. Equipment research and development, the way machines are laid out in a mill and how the mill integrates with the warehouse and coffee reception and dispatching, including bulk container loading, all affect floor space requirements.

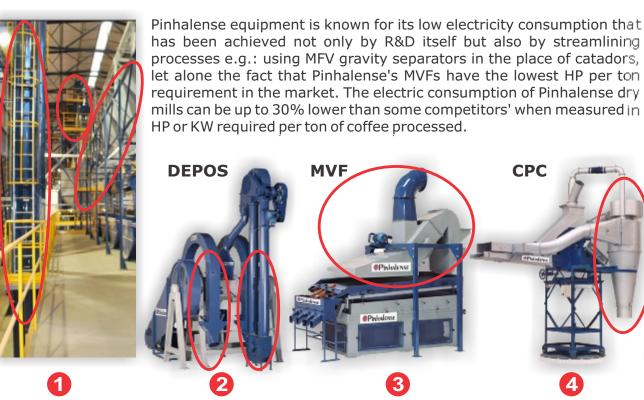
Brazilian Prices					Septe	mber 30, 2013
Main Producing Regions / Farm Ga	te					
Arabica Naturals (R\$/ 60 kg bag)			Conilon/ Robusta (R\$/ 60 kg bag)			
Cerrado-MG fair average quality T.6	275,00 🕴		Colatina-ES fa	ir average qua	lity	230,00 🍦
Mogiana-SP fair average quality T.6	270,00 🍦	← _	BM&F (US\$/ 60 kg)		Real R\$/ Dolar US\$	
South Minas fair average quality T.6	270,00 🍦		Dec 2013	137,20 🖡	September 3	
Arabica Pulped Naturals (R\$/ 60 kg bag	g)	+ 12.9%	Mar 2014	141,30 🖡		
Cerrado-MG	305,00 🍦		Sep 2014	143,20 🛔		
South Minas	300,00 🏺			Sou	irce: www.qualio	afex.com.br
CØFFIDENTIAL						3

EQUIPMENT TO IMPROVE THE SUSTAINABILITY OF DRY COFFEE MILLS...

Pinhalense has always striven to make the dry coffee mills it supplies more sustainable. Such efforts start at the layout of the mills, include machines and dust control development and design, and incorporate workers' safety and well-being features.

The scope of Pinhalense dust control solutions comprise less dust generation and better separation at machines (e.g.: DEPOS huller-polisher 2), specific dust aspiration devices (e.g.: hoods at CPF destoners, and MVF gravity separators 3), aspiration at critical dust generation points, and equipment to retain dust and discharge clean air into the environment ranging from state-of-the-art 5 to less sophisticated systems that meet different specifications and budgets.

Solutions that improve workers' safety and well-being include all those above, that ensure a clean-air working environment, as well as those related to the operation and maintenance of the equipment, e.g.: space around machines, service platforms and ladders **1**, belt protection, etc. Other solutions relate to the elimination of the manual handling of coffee and to the alleviation of the burden of bag carrying e.g.: the use of bag conveyors, big-bag scales and fillers, equipment to load containers in bulk with full dust control **4**, etc.



... AND THE ROLE OF NPV

Dry millers interested to incorporate and improve sustainability features often argue that this implies substantial initial investment. This is indeed often the case but it must be compared with a stream of benefits over time, some very tangible (e.g.: lower electricity consumption and fewer accidents) and others less tangible (e.g.: decreased liability from working conditions claims, better relations with the community, etc.). The proper way to evaluate if this stream of benefits compensates the higher initial investment is the concept of Net Present Value (NPV) that is today a key tool of project evaluation. In fact, the use of NPV goes beyond sustainability alone and should be used anytime that an investment introduces a competitive advantage that expresses itself by means of a stream of benefits or savings, e.g.: less labor, less electricity and, most importantly, superior performance (less product loss, better product quality, greater volume of marketable coffee, etc.).

Investments on sustainability should not be necessarily offset by a stream of benefits but it helps to know that these benefits can help amortize the initial outlay. On the other hand, the stream of benefits of a superior project should definitely help justify the investment as NPV invariably shows in the case of Pinhalense dry mills.