

CONFIDENTIAL

**YOUR BEST SOURCE OF INFORMATION ABOUT THE BRAZILIAN COFFEE BUSINESS...
AND MUCH MORE. THIS ISSUE:**

- SERVICE DELIVERY MODELS TO INCREASE PROFITABILITY AND TO IMPROVE SUSTAINABILITY (PAGE 3)
- THE FUTURE OF DRY MILLING – PART TWO (PAGE 4)

GREATER YIELDS (AND PROFITS) IN MECHANIZED VS. MANUAL AREAS

Mechanized Arabica coffee areas in Brazil had 26% higher productivity – average of 36.25 bags of 60kg per hectare – than those where manual labor predominates, shows the annual study “Campo Futuro” (Contryside of the Future) based on analyses of production costs in 12 municipalities of six Arabica and Conilon producing states: Minas Gerais, Espírito Santo, São Paulo, Paraná, Bahia and Rondônia. The Total Operating Cost, or COT, that includes direct costs, asset depreciation, rent and profit was 30% higher in regions with manual work. Of all analyzed areas, Luis Eduardo Magalhães, in Bahia, where production is highly mechanized, showed the largest profit.

Sources: Portal do Agronegócio and MidiaNews



DROUGHT IN ESPÍRITO SANTO AFFECTS CONILON PRODUCTION

The drought that recently hit the southeast region of Brazil and the El Niño phenomenon may impact 2016 Conilon coffee production and lead to an increase in coffee prices if the dry weather persists. In Espírito Santo, the drought has already affected the crop with potential losses aggravated by irrigation restrictions in the state. Espírito Santo produced 10.85 million bags of Conilon/Robusta in the 2015 season compared to 13.04 million bags the previous year.

Source: Reuters

COLLECTIVE TECHNICAL ASSISTANCE TO SUPPORT MORE GROWERS



Brazil has approximately 287,000 coffee properties, 80% of them with less than 20 hectares of coffee. It is known that growers who receive technical assistance have a Gross Production Value 3.6 times greater than those who do not receive it. However, as the one-to-one assistance model adopted in Brazil is very costly, only 22% of the farms – mostly mid-size and large growers – access the service regularly. To improve this situation, IDH’s Sustainable Coffee Program (SCP) used the pioneering experience of the Neumann Foundation in Brazil – over 5,500 coffee growers assisted in 17 municipalities with only 20 technicians – to develop a collective technical assistance methodology to help more growers with fewer technicians. The goal is that each agronomist will work with 300 to 400 growers to be compared with the current 60 to 80. Theoretical & practical training sessions with technicians in different municipalities of Minas Gerais have already been carried out; participants will be able to use the methodology in their own institutions and train more agronomists.

Sources: P&A and CaféPoint

☉ BRAZILIAN COFFEE EXPORTS TO GROW

Brazilian coffee exports may grow in 2016 and surpass the expected 36 million bags of 2015 in response to the increase in world consumption. The significant appreciation of the US dollar against the Brazilian real (R\$) has been a positive factor for local growers whose income is expected to increase even with the decline in international coffee prices.

Sources: Globo Rural and O Estado de São Paulo

☉ FROM NEW VARIETIES TO SPECIALTY COFFEES AT IAC



Approximately 90% of all the Arabica coffee cultivars planted in Brazil were developed by IAC, the Agronomical Institute of Campinas, part of the Agriculture and Food Supply Secretariat of the state of São Paulo. The institute has already developed 66 Arabica cultivars, including Mundo Novo and Catuaí that account for most of the coffee grown in Brazil and are known for their high yields, ability to adapt to different environments and quality in the cup. IAC has greatly contributed to advancements in the area of coffee genetics and is currently engaged in a new program focused on specialty coffees. The goal is to develop new varieties that can produce coffees with differentiated aromas and tastes sought after by the specialty segment, such as citric, chocolaty and spicy notes, among others.

Source: Agronomical Institute of Campinas (IAC)

☉ MINISTRY OF AGRICULTURE TO EXPEDITE REGISTRATION FOR AGROCHEMICALS

The Ministry of Agriculture has announced a Program of Temporary Experimental Registration of Agrochemicals that will be less bureaucratic and reduce the time for approval and release of new products. Products imported for studies of molecules and new products under development will now be treated as conventional chemicals, making the process a lot easier. The number of agronomists working in the sector should also be doubled in order to hasten the analyses before commercial release. Brazil has one of the most rigorous legislations and procedures for this type of registration in the world.

Sources: Canal Rural and O Estado de São Paulo

☉ COFFEE CONSUMPTION TO GROW DESPITE CRISIS

Domestic coffee consumption should grow at an annual pace of 4.3% in Brazil until 2019 when it will reach a volume of 24 million bags indicates a recently released survey by Euromonitor International. Consumption growth is attributed to increased preference for coffee beverages as compared to other products, including soft-drinks, higher volumes bought at a lower cost and the increase in sales of capsules, a market that should triplicate in size until 2019. Online stores are aggressively entering this market as smaller roasting companies and coffee growers launch new capsules. Café Store, with over 25,000 registered online clients, offers 26 types of capsules and plans to double that offer in 2016. The Lombas website, also specialized in coffee, currently sells an average of 3,000 capsules per month.



Sources: Folha de São Paulo and Valor Econômico

☉ GOVERNMENT EVALUATES REQUEST TO IMPORT COFFEE FROM ETHIOPIA

Nestlé has filed a request with the Ministry of Agriculture to import green coffee from Ethiopia. A positive decision by the Ministry's Technical Department is expected by the roasting company to meet the needs of its new capsule manufacturing facility soon to start operations in Minas Gerais. Nestlé claims that the volume to be imported from Ethiopia will be less than 5% of all coffee used in its blends.

Source: Valor Econômico

SERVICE DELIVERY MODELS TO INCREASE PROFITABILITY AND TO IMPROVE SUSTAINABILITY*

The Outlook section of November's Confidential No. 100 concluded that productivity, efficiency of the coffee supply chain and average size of the coffee holding constitute a good road map to guide programs to improve the economic sustainability of coffee growers. Although the most obvious way to address these bottlenecks seems to be government programs and actions, there is a lot of room for private intervention as companies realize that for their operations to be profitable and sustainable they must participate in the process. Even if a company assumes a leadership role, some of the actions and costs may be beyond its own capacity and it will need to develop partnerships to share the risks with other companies along the supply chain, development agencies, financial institutions and governments themselves.

These partnerships require new ways of thinking and operating. Companies can be behind the creation of service delivery models that help small coffee growers to invest in their farms to increase productivity and to become more profitable. Companies will in turn benefit from increased volumes and more sustainable supply. Innovation is key to reaching more cost effective and scalable service delivery models.

Service delivery models are the mechanisms or structures in which support services are channeled through a supply chain to improve performance and value creation. Buyers sometimes invest in weak value chains, offering services to farmers as a means to secure the required volume and quality of supply. Value chains are typically weak if they include many smallholder farmers, who often face challenges in meeting the increasing demands of buyers and in making the transition from subsistence farming to market-oriented production.

The type of services that can make up a service delivery model include:

- Training: quality and productivity training, as well as training on farm management practices, such as record keeping and business planning.
- Inputs: planting seed, fertilizer, crop protection products, pesticides, insecticides.
- Financial services: inputs on credit, cash advances, pre-harvest finance.
- Marketing: bulking of produce and creating access to markets.
- Value adding services: services that add value to the product of smallholder farmers, such as mechanization (use of tractors), processing, post harvest handling and storage services.

Training, inputs and farmer credit are interdependent, as extension and training inform and affect which inputs are used, which is in turn shaped by access to credit. Hence, ideally, only smallholder farmers who have adequate knowledge of input usage would also get access to inputs on credit. These services are often delivered together (bundled) to optimize their effectiveness. However, despite significant investment in service delivery, there is still scant evidence on proven models or mechanisms, and few established benchmarks and best practices.

Socially inclusive business models, in which the private sector works with their smallholder supply base, have tremendous development potential. They can create shared value for companies, producers and consumers alike, with economies of scale lowering risks and costs. They can also provide opportunities for farmers to become more productive and profitable by capturing and adding value to their products.

However, as new trends emerge in the development of socially inclusive business models, in some cases smallholders are seen as "suppliers", working solely to fulfil the obligations of a contract. In these instances, buyers often find their supply chain is unsustainable or unreliable. Farmers on the other end struggle to continue to supply cash crops and are unable to transition into commercial farming. They often have a range of unmet household needs such as food security, payment for school fees and healthcare, and are exposed to uninsured lifecycle risks that often lead to increasing indebtedness.

Achieving a holistic farming system in which smallholder farmers are well embedded, able to uphold their contractual obligations and engaged in a mutually profitable relationship with buyers and investors therefore requires a deeper understanding of smallholder farm dynamics and the services available. Increasing the productivity of smallholders through technical assistance, inputs and finance is starting to be understood as an integral piece of the overall profitability of the buyer. If a smallholder farm is more viable, farmers are better able to make use of services delivered by a buyer effectively as well as to repay them without default. They also potentially have more resources (time, effort, and funds) to invest in the contract crop because their other needs are adequately met.

** IMPORTANT ACKNOWLEDGMENT: the content of this Outlook was extracted with full consent from the IDH, the Sustainable Trade Initiative / Grow Africa publication **From Smallholder to Small Business: Private sector insights on service delivery models that boost profitability and improve farmer livelihoods**. In addition to this body of insight, IDH has developed a methodology to assess the economic sustainability of Service Delivery Models. Interested parties can contact IDH via vandervelden@idhsustainabletrade.com and access the publication at www.idhsustainabletrade.com/news/new-insights-into-effective-service-delivery-models-for-strengthening-smallholder-inclusion-in-value-chains.*

THE FUTURE OF DRY MILLING – PART TWO

The Future of Dry Milling - Part One stated that a new dry milling world is being created and the bulk of change is in layout / design, handling / logistics, accountability / weight control, and better environment / work conditions, and machines have diversified and evolved to adapt to these new requirements. A state-of-the-art dry mill is composed not only of machines but also transport equipment to interconnect the machines, silos to hold coffee at various stages of the process and husk and dust removal systems. Most importantly, the efficiency and success of a dry mill depends on the equipment layout, i.e., how the process is engineered to respond to the product flows and products required. Pinhalense has a noteworthy experience in projects and layouts for coffee processing acquired from the design of over 20,000 coffee mills in over 60 countries on the 5 continents.

The list and descriptions of Pinhalense equipment and services below complements the list of machines presented last month.

- **Elevators:** three different lines of cup-and-belt elevators – ELSS, EAS and EVU – the former two for dry mills. The high-speed ELSS elevators are for dry parchment or cherry coffee and the physical-damage-proof EAS elevators are for green coffee, with the exclusive self-cleaning devices that enable quick exchange of coffee qualities and minimize idle time.

- **Conveyors:**

- for dry parchment, cherry and green coffee and husk – belt (inclined roller and tubular) and screw conveyors for different applications and capacities, for installation at ground level or overhead, inclined or not, with optional dust suction at critical points.
- for bags – mobile and stationary, at ground level or overhead, inclined or not, including vertical stackers.
- for big-bags – to work with electronic-scale.

- **Storage (raw material, intermediate and finished product):** multiple configurations of silos with different shapes, sizes and features, at ground level, overhead or over machinery and scales, all with dust cover and aspiration and innovative mechanization options.

- **Dust aspiration and disposal:** positive and negative pressure systems with aspiration at critical dust generation points of machines, transport equipment and silos, self-cleaning dust filters, disposal silos, conveyance and bag/big-bag filling devices.

- **Product flow and machinery layout:** complete projects that respond to the type of incoming raw materials, processing steps required and finished products requested by clients. Pinhalense projects incorporate the latest technological solutions that result from its lengthy experience in the most relevant coffee producing countries of the world with Arabica and Robusta coffee, parchment and cherry, high capacity, mid-size and micro-lots. Customized projects that respond to each and every client and market needs.

- **Drawings:** floor plan, cross-sections, foundations and location of motors to enable civil and electric engineers and architects to design the civil and electric works.

- **Site layout and civil works:** P&A cooperates with engineering companies that may advise clients and develop full architectural and civil and electric projects to accommodate Pinhalense equipment (according to the drawings in the previous item), storage areas required for bags, big-bags and silos, weighbridge, cupping area, office, truck and car parking, etc. . Such companies may also manage the implementation of the works it has designed or advised clients on.

- **Assembly:** the preferred option is supervision by a Pinhalense technician leading and coordinating a local assembly crew provided by the local agent or commissioned by the client. Pinhalense may also depute the full assembly crew if required.

- **Local support (service and spare parts):** a network of commercial agents that covers the most important coffee producing countries in the world.

The wide array of machines and solutions available and the growing complexity of the market – micro-lots, capsules, differentiated coffees, ready-to-roast blends, etc. – have rendered dry mill design a highly complex activity that is mastered by only a few and at which Pinhalense excels. Not only Pinhalense engineers and designers understand in detail the equipment options but also know how to put them together to create highly efficient and versatile processing lines. Count on Pinhalense, P&A and their network of agents for your next dry milling project.

Brazilian Prices

Main Producing Regions / Farm Gate

November 30, 2015

Arabica Naturals (R\$/ 60 kg bag)		Conilon / Robusta (R\$/ 60 kg bag)	
Cerrado MG	485,00 ↓	Colatina-ES fair average price	382,00 ↑
Mogiana	480,00 ↓		
South Minas	480,00 ↓		
Arabica Pulped Naturals (R\$/ 60 kg bag)		BM&F (US\$/60kg Arabica bag)	
Cerrado MG	555,00 =	Dec 2015	140,35 ↓
South Minas	550,00 =	Mar 2016	146,40 ↓
		Sep 2016	146,95 ↓
		Real R\$ / Dolar US\$	
		Nov 30, 2015	3,85 ↓

Source: www.qualificafex.com.br