Event Covered: Bonsucro Week held in Campinas & São Paulo, Brazil from October 26-29, 2015

SSI State of Sustainability Initiatives

# **The Standards Reporter**

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**B**<sup>®</sup>NSUCRO<sup>®</sup>

# Bonsucro Week 2015

This report documents Bonsucro Week 2015 held in São Paulo and Campinas, Brazil, from October 26-29, 2015, where 146 delegates

from 22 countries representing the sugarcane supply chain met over four days. Events included the annual conference, Certification Body Summit, stakeholder consultations, workshops and field visits to a sugar mill, farm and research centres. Since its creation in 2007, Bonsucro has certified 47 mills, representing nearly 4 per cent of the global sugarcane production and approximately 1 million hectares under cultivation. Bonsucro and Solidaridad announced a partnership to accelerate the PanAmericaña Initiative for sustainability in Latin America's sugarcane industry, with a new regional director position. Bonsucro plans to recognize farmers' sustainability efforts by the end of 2015 and create an Asian platform for transformational change in 2016.

Throughout the week, delegates discussed shifting the sector towards greater sustainability to situate Bonsucro as a global platform for transformational change along the sugarcane supply chain. Bonsucro Week showcased the rise of Brazil<sup>1</sup> to become the largest producer, exporter and innovator in the sugarcane industry in the world. Members recognize that Bonsucro must consider options that go beyond certification and collaborate with local organizations that work on continuous improvement of the production process. Bonsucro members agree on the need to improve productivity, maintain eco-systems that underpin sustainable farming and facilitate thriving producer communities by actively engaging with local farming communities and organizations.

# **Field Visits**

Delegates visited the São Manoel sugar mill in São Paulo state. This stateof-the-art mill,<sup>2</sup> founded in 1949, produces 230,000 tonnes of sugar and 150 million litres of ethanol per year from rainfed sugarcane cultivated on 46,000 hectares using precision agriculture. The mill has been Bonsucro certified since 2011. It has adopted mechanized harvesting and became energy self-sufficient via biomass energy co-generation. The visit to the Sugarcane Suppliers Association for the Bariri region (Assobari) allowed delegates to see how its farms are promoting continuous improvement. Acácio Masson Filho, Assobari's President, initiated a discussion on knowledge transfer between smallholder farmers and the importance of collaboration between producers, millers and buyers. At the Canavieira Sugarcane Technology Centre (CTC), the largest research and development (R&D) centre for sugarcane in the world, delegates were given an overview of Brazil's bioenergy sector, which has been consistently and comprehensively developed since the 1970s due to the concerted efforts of government, the private sector and research institutions to work together.<sup>3</sup> At the National Laboratory of Bio-ethanol Science & Technology (CTBE), established in 2005 to push for Brazilian leadership in areas such as second-generation ethanol, members toured a pilot bio-processing facility, where the CTBE is partnering with the private sector to add commercial value.

# **Technical Workshops**

Workshops were held to examine specific issues. Nicolas Viart, Head of Standards & Innovation, Bonsucro, said that Bonsucro is a platform for sharing technical information and collecting data, with the Bonsucro calculator used as a tool to track performance, demonstrate achievement and drive improvement. In Session I, regarding the management of agrochemicals, Lucas Trevizan, Grupo Guarani, noted that satellite imagery could be used to determine biomass profiles and allow precision insecticide use and Antonio Soares, Bayer, explained how technology could correlate plant varieties with losses from pests. Session II addressed the Bonsucro Production Standard to track losses. Peter Dibella, Director, Birkalla Sugar and Bonsucro Board member, addressed sugar loss costs and noted that most modern mills should recover over 90 per cent. Carlos Gregorio, Agronomist at Brazilian Fives Group, explained the CAMEO<sup>™</sup> software to help mill managers minimize losses. Session III examined green cane harvesting, with Rafaella Rossetto, an analyst at the Sugarcane Technology Centre, affirming retraining commitments for workers who would lose their harvesting jobs to mechanization through the phaseout of sugarcane burning mandated by law in the state of São Paulo by 2017. Australian sugarcane farmer and Bonsucro Board member Robert Quirk noted the win-win economic and environmental benefits of green cane harvesting on his farm. Session IV looked at the potential for the industry to innovate,

<sup>&</sup>lt;sup>3</sup> With over half its energy from renewable sources, Brazil is a leader in low-carbon solutions to climate change.



<sup>&</sup>lt;sup>1</sup> According to the Brazilian Sugarcane Industry Association (UNICA), Brazil accounts for approximately 25 per cent of global sugar production, with two thirds of its sugar production exported to over 100 countries, accounting for 50 per cent of global sugar exports.

<sup>&</sup>lt;sup>2</sup> In 2014 the sugar mill was chosen by the Canavieira Sugarcane Technology Centre to pilot a second-generation ethanol plant, with USD180 million in funding from Brazil's Development Bank (BNDES) for bagasse and cellulosic ethanol (producing 20,000 litres per day).



#### Box 1: Fostering Continuous Improvement Along the Supply Chain

Bonsucro's objective is to provide the tools to enable a thriving, modernized sugarcane sector that serves as part of the solution to the sustainable agriculture challenge.

Bonsucro has developed two international standards: the *Bonsucro Production Standard* (Version 4.1.1) and the *Chain of Custody Standard* (Version 4.0). Bonsucro-certified sugar and ethanol have been available since June 2011. The *Production Standard* sets measurable objectives that mills and their sugarcane suppliers must meet to address five sustainability issues associated with sugar production: legal compliance, biodiversity and ecosystem impacts, human rights, production and processing, and continuous improvement. All sugarcane-derived products are able to be Bonsucro Certified.

With a majority of sustainability issues occurring at the farm level, it is pivotal to provide support to farmers to achieve continuous improvement. Simon Usher, CEO of Bonsucro, emphasizes that "one of the most effective ways to achieve transformational change in the sector is to engage farmers to ensure strong, thriving farmer communities."

Sven Sielhorst, Global Programme Manager, Sugarcane, Solidaridad and Bonsucro Board member, notes that there are approximately 40 million sugarcane farmers, out of which about 95 per cent are smallholders who farm on less than 2 hectares and produce one third of the world's sugarcane. Based on her involvement since the outset, Natasha Schwarzbach, Head of Engagement, Bonsucro, is convinced that "local leadership and collaboration of all actors of the supply chain will enable real change in the industry."

Cooperation along the supply chain is also vital to putting in place sustainable practices. According to Peter Dibella, Director, Birkalla Sugar, Bonsucro Board member and former representative of the New South Wales Sugar Mill Cooperative,<sup>4</sup> "by establishing a robust standard based on performance and continuous improvement, growers and millers can use the standard as a tool to increase efficiency, reduce input costs and improve productivity."

From a buyers' perspective, Diane Stevenson, Director of Sustainability, CSC Sugar and Bonsucro Vice-Chair, considers that "Bonsucro is attractive because it has the credibility through its global, multistakeholder approach to transform the industry and impact people's lives for the better."

with Bruno Martins, President, Sosicana, referring to yield improvements from transgenic varieties and Sonia Slavinski, Standards Manager at Bonsucro, expanding on the costs and benefits of lignocellulosic ethanol from sugarcane biomass.

## Stakeholder Consultations and Certification Body Summit

Simon Usher, CEO, Bonsucro, opened the stakeholder consultations with an overview of the revised Bonsucro strategy and highlighted its successes to date, including the first certified mill in India and the first formal recognition of the contribution of Australian farmers in producing sustainable sugarcane. The revised Production Standard includes the possibility for certification bodies to issue certificates of recognition to farmers who are part of a certified mill. This development represents the first level of formal recognition available to farmers and is an important acknowledgement of their contribution to producing certified sustainable sugarcane.

At the **Certification Body Summit**, the Bonsucro strategy was well received by the Licensed Certification Bodies.

#### Strategy Consultation Session

Stakeholder consultations were held to better understand what "continuous improvement" entailed for land under production, mills and buyers. There was feedback from all groups on the need to support local improvement schemes to enhance sustainability. There was equally strong feedback on the need for Bonsucro to offer value above and beyond certification, as it may not be the first entry point to change farming practices and improve sustainability. That is why it was noted by many that the key going forward was to build on Bonsucro's role in addressing the broader landscape of sustainability in the sugarcane sector (through a "jurisdictional approach"). Members were asked to fill out a survey to rate the importance of various objectives for success in achieving Bonsucro's objectives.

Flowing from the **workshop on land under continuous improvement**, Rob Cocco, CEO, Reef Catchments Group and Bonsucro Board Director, and Kevin Ogorzalek, Head of Impact Partnerships, Bonsucro, noted the need for diagnostic analyses to further partnerships and build trust throughout the supply chain. On tracking and improvement, there was consistent feedback on the need to benchmark activities and work towards continuous improvement.

<sup>4</sup> The NSW Mill was the first mill in Australia to receive Bonsucro Production Certification in 2011 and the first refinery to receive Bonsucro Chain of Custody Certification.

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To address productivity gaps between countries (which ranged between 40 and 120 tonnes per hectare per year), suggestions were put forward to create mechanisms to exchange knowledge and best practices. To this end, Bonsucro and the Sugarcane Suppliers Association for the Bariri region (Assobari) announced a partnership to exchange best practices.

Gabriela Toscano, Sustainability & Quality Manager, Copersucar and Bonsucro Board Director, and Nicolas Viart, Head of Standards & Innovation, Bonsucro, identified the key points from discussion in the **workshop on mills under continuous improvement**, including the need for capacity building for middle management to empower mill workers and for improved tools to analyze mill operations. Bonsucro was encouraged to increase the focus and frequency of training, including through online courses, to support regular coaching, to empower mills to use their knowledge, and to develop a mechanism to facilitate information exchange and data collection. Members emphasized the need for Bonsucro to engage with independent farmers and to integrate in the management systems of mills. To this end, reference was made to the pivotal role of sugarcane industry associations, such as UNICA in Brazil.

From the **workshop on buyers supporting transformational change**, Gabriel Guzman, Global Director, SAB Miller and Bonsucro Board Director, and Natasha Schwarzbach, Head of Engagement, Bonsucro, reported on the barriers to change identified in the discussions and how buyers can facilitate solutions to align incentives to the mill from different sources to improve sustainability, for example, by decreasing audit burdens and increasing contract length. In order for these incentives to be put in place, it was key for buyers to identify priorities and map out the supply chain. Reference was also made to the need to ensure consistent core messaging from buyers about their expectations for sustainability at the mill level.

# Strengthening Governance and Funding: Feedback Requested

Michel Santos, Global Sustainability Director, Bunge and Bonsucro Board Chair, reiterated the need for Bonsucro to provide a platform for the entire supply chain to exchange experiences and best practices to enhance sustainability in the sector. At a Q&A session with the Bonsucro Board of Directors, members raised issues related to the need for transparency in Bonsucro Board meetings, the interface of voluntary certification standards in regional trade agreements and the value of mutual recognition of standards. There was discussion about the proposed new governance structures and funding models for Bonsucro. Members gave initial comments and were asked to provide further feedback.

## **Annual Conference**

The final day was dedicated to Bonsucro's Annual Conference, including presentations and space for networking. Michel Santos, Global Sustainability Director, Bunge and Bonsucro Board Chair, said it was a strategic moment in the development of Bonsucro to envisage a broader platform to facilitate sustainability throughout the supply chain. Elizabeth Farina, CEO of the Brazilian Sugarcane Industry Association (UNICA), outlined the challenges to improving sustainability for UNICA, with over 100 members representing 60 per cent of Brazil's sugarcane and ethanol production (369 mills, 70,000 growers). Brazil has maximized value creation in the sector and is a sustainability success story with agro-ecological zoning and guidelines to exclude expansion in ecologically sensitive areas. To improve sustainability, UNICA partnered with the government of São Paulo state, where 60 per cent of Brazil's sugarcane is grown, to create a Green Protocol to reduce greenhouse gas emissions by phasing out cane burning. With mechanization advancing and rapidly replacing manual harvesting, the Brazilian industry is focused on retraining workers.5

### Inform: Leaders of Change

Plinio Nastari, CEO, DATAGRO, referred to Brazil's successful diversification away from petroleum to ethanol and to the importance of targeted regulation of the industry, whereby the Brazilian government had put in place a regulatory framework for ethanol with the market to determine the price. A number of speakers referred to Brazil's national ethanol program (called "Proálcool"), which was launched by the government in 1975. Sugarcane ethanol consumption had increased significantly in Brazil since 2003 with the introduction of Flex Fuel Vehicles, which run on ethanol, gasoline or a blend of both. Several speakers referred to the potential for innovation to increase efficiency of production through the cogeneration of electricity from sugarcane mills and generation of biogas from sugarcane residuals.

# Improve: Leaders of Change – Engaging Farmers and Mills in Improvement Schemes

Manuela Czinar, Engagement Manager, Bonsucro, moderated a panel that explored how to address the challenges of incorporating sustainability in the industry. Claudio Oliveira, Director of Sustainability, Raizen, said his company had invested in integrating ethanol production with distribution and trading. Mike Matsebula, CEO, Swaziland Sugar Association, said it is vital to incorporate small-scale farmers into the supply chain by addressing education, youth migration to cities and business management skills, as well as train extension officers. Miguel Angel Yagüe, General Manager, Azunosa Mill Honduras, said his company's use of the Bonsucro platform demonstrates that sustainability can also be achieved in small mills; certification has also

Email: info@ssianalytics.org

Twitter: SSI News

<sup>5</sup> To retrain workers, Farina cited the example of RenovAção, a program recognized by the Food and Agriculture Organization of the United Nations for combining renewable energy production and social inclusion.

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led to enhanced employee retention and confidence, as well as increased the mill's reputation. Manuel Ortolan, President, Orplana (the Organization of Sugarcane Suppliers in South-central Brazil), said that mechanization is a key issue, especially for small-scale farmers.

#### Inspire: Making Progress, Driving Change

Diane Stevenson, Director of Sustainability, CSC Sugar and Bonsucro Board Vice-Chair, led the discussions on the way forward for sustainable procurement. Valeria Michel, Environmental Manager, Tetrapak, highlighted efforts to target progress in the supply of sustainable bioplastics. Terence Baines, Sustainable Sourcing Manager, Unilever, said Unilever had developed a Sustainable Agricultural Code through which 87 per cent of its sugar purchases were certified as sustainable. To change the way of doing business, Luiz Andre Soares, Sustainability Manager, Coca-Cola Brazil, emphasized Coca-Cola's "Shared Value Approach" to enable positive social impacts in local communities.

#### The Future: A Cane-Based Bio-Economy

The aim of this session was to demonstrate how sustainability is driving demand for new cane-based products, such as bioplymers as alternatives to petrochemicals. Alfred Szwarc, Emissions & Technology Consultant, UNICA, led the discussions on innovation, citing Brazil as an example in investing in pioneering biotech R&D, which had generated a portfolio of opportunities for ethanol, bagasse, and cogeneration of electricity and vinasse (biogas). Breno Brasil, Ethanol Intelligence, Braskem, noted the developments underway in petrochemical products from renewable energy and highlighted the need for Bonsucro certification for biopolymers. Wilfedo Linhares, General Manager, Solazyme Brasil, said biotechnology for microorganisms (microalgae-based fermentation) has the potential to create a new class of renewable products.

#### Partnerships for Change

Bonsucro and Solidaridad announced a partnership to accelerate the PanAmericaña Initiative to engage Latin America's sugarcane industry on continuous and inclusive improvement to lead and catalyze change and to ensure that good practices travel across borders. Continuous improvement requires investment in facilities, people and knowledge. To this end, a Bonsucro regional director position was established to expand partnerships in Latin America. Sven Sielhorst, Global Programme Manager, Sugarcane, Solidaridad and Bonsucro Board member, called on members to provide the resources to develop this initiative into an effective platform to drive sustainability.

#### The Way Forward: Transformational Change

Simon Usher, CEO, Bonsucro, said that Bonsucro Week had been held in Brazil to highlight how change flowed from strategic policy design to incorporate ethanol as a key component in the national energy mix; significant academic involvement with industry; and strong cooperation with the Brazilian Sugarcane Industry Association (UNICA). He also referred to several recent highlights for Bonsucro, including the adoption of the revised Production Certification, compliance of Bonsucro-certified second generation ethanol with the Renewable Energy Directive of the European Union, and strategic engagement with the CEOs of other Sustainability schemes. At this stage, Bonsucro was well placed to double its membership. At the core of Bonsucro's strategic thinking was recognizing the value of certification and independent verification, while creating a platform for transformational change towards a thriving, modernized, sustainability Awards to recognize excellence among the membership.

Author: Sabrina Shaw (IISD) Photo credits: Joe Woodruff (Bonsucro)

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