

# CHILD LABOR, FORCED LABOR, AND LAND USE IN BRAZIL'S SUGAR INDUSTRY

Prepared for: The Coca-Cola Company

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## **EXECUTIVE SUMMARY**

As the largest sugar producer in the world, Brazil's sugar industry contributes nearly 2% of the country's gross domestic product and generates 1.2 million direct jobs. This economic weight also generates certain social impacts. The U.S. Department of State 2014 Human Rights Report for Brazil finds that forced labor is one of the most significant human rights abuses in the country, along with exploitative working conditions. Child labor remains an issue in agriculture, including in the production of sugarcane. Brazil also has a high level of land distribution inequality, whereby an estimated 1% of the population owns 45% of all land, leading to land conflicts that plague agribusinesses.

Despite these challenges, stakeholders and this research show that working conditions in Brazil's sugar sector, specifically related to child and forced labor, have largely improved over the last 15 years and the industry continues to experience a high rate of professionalization, especially in the Center-South, contributing to better management systems to handle labor and environmental compliance.

This report provides a review of child and forced labor and land conflicts in The Coca-Cola Company's (TCCC or the Company) sugar supply chain in Brazil. The study was commissioned by TCCC to Arche Advisors in an effort to expand the Company's understanding of labor and human rights conditions in its supply chain. The research also responds to a commitment made by TCCC on November 2013 to zero-tolerance for land grabbing across its operations.

To carry out the study, researchers conducted extensive desk research on the issues, interviewed 111 stakeholder groups, and conducted 21 mill and 120 farm visits, where 929 workers were interviewed. The most relevant findings from the study are highlighted below:

Since the late 2000s, there has been a decreasing trend in the incidences of forced labor in Brazil.

According to the International Labor Organization, Brazil has been a leader in addressing forced labor through its pursuit of many creative and unique initiatives at the federal, state, non-governmental, and industry levels. These efforts, in addition to technological advancements that reduce the need for manual labor, have been successful as evidenced by the decreasing number of workers rescued from sugarcane plantations throughout the country.

**Forced Labor** 

Interviews with local stakeholders reveal that labor conditions have improved in their region, leading to fewer forced labor cases.

Though forced labor continues to be a problem in Brazil, including in agriculture, interviewed stakeholders agreed that the issue has improved in the last 15 years. When 48 local stakeholders, interviewed in 21 cities during onsite visits, were asked about slave labor, 84% stated that it was no longer a problem in their region. The remaining stakeholders stated the problem persisted, but none of the interviewees associated any of the mills included in the study to past or current occurrences of forced labor.

No incidences of forced labor were found during onsite field visits to

mills and farms, and interviewed workers, including migrant workers, did not report any incidents of slave labor.

Out of the 21 mills visited, 13 had policies on the prohibition of forced labor. Of the 13 mills with such policies, 11 had policies that applied to their supplier farmers. Mills that did not have policies in place had human resource and hiring processes that enforced compliance with forced labor laws within their operations. Most mills also included legal language around respect of labor laws in supplier contracts, but only a small number of companies had mechanisms in place to monitor supplier compliance.

Finally, none of the mills had formal procedures in place to deal with instances of forced labor in owned, leased, or supplier farms. All mills reported informal procedures that generally involved investigating the issue, escalating the problem to upper management, and, in the case of some mills, involving relevant stakeholders (e.g. unions). Despite this gap in management practices, researchers did not find any incidences of forced labor and interviewed workers were not aware of any cases of slave labor.

Despite the fact that researchers uncovered no forced labor incidents in TCCC's supply chain, forced labor continues to be a problem in the wider sugarcane sector.

Of the 575 entities listed among Reporter Brasil's compilation of companies and individuals found guilty of using slave labor, released in July 2014, 25 were involved in sugarcane production. These labor inspections freed a total of 2,661 workers from sugarcane producing operations. None of the mills and farms visited by researchers are listed in Reporter Brasil's list. The sub-contracting of labor management relations to other companies has been cited as a major contributing factor to issues of forced labor. Brazil's large size also poses challenges for inspections and enforcement of laws, in addition to lack of impunity for forced labor offenders.

There are several international, government, and civil society interventions aimed at addressing child labor, but poverty and lack of meaningful economic alternatives continue to be the largest driving factors for children to enter work in Brazil.

**Child Labor** 

Data on child labor for Brazil from 2013 reveals that 3.77 million of an estimated 42.2 million children between the ages of five and 17 were engaged in some form of child labor, of which 29% were employed in agriculture. Out of the 71,000 children aged five to nine working, 83% were engaged in Brazil's agriculture sector. Data from the Ministry of Labor and Employment (MTE) reported that 5,688 children and adolescents were found in situations that violated minimum-age laws in 9,838 unannounced inspections from April 2014 to April 2015.

Income from a child's work is oftentimes critical for his or her family's survival. Despite the existence of social interventions, such as conditional cash transfers, aimed at eradicating child labor, research continues to find that some vulnerable families still place a higher value on children's' work

than education.

The recorded number of children engaged in child labor in Brazil has been decreasing from year to year.

The number of children, aged 5 to 17, found engaged in child labor in 2013 is nearly 10% lower than the 2012 numbers. Similarly, MTE data on children and adolescents found in situations that violated minimum-age laws were lower in 2014 and 2015 than they were in 2012.

Field visits did not find any cases of child labor in owned or leased farms as well as in the farms of independent suppliers.

Out of the 21 mills visited, 16 had policies on employment of minors and, out of these, 14 mills had policies that applied to suppliers. Despite some mills not having written policies in place, all companies had robust hiring systems that included age verification mechanisms to avoid the illegal hire of young workers. Most mills also included language in supplier contracts that required compliance with labor laws. However, very few mills put in place mechanisms to verify if suppliers respected such laws in practice. Finally, none of the mills had formal procedures to deal with child labor in owned, leased, or independent farms, instead relying on informal processes if such incidents occur. Researchers did not encounter any incidents of child labor during mill and farm visits.

Stakeholders largely agree that child labor is no longer a problem in the sugar industry.

During visits to local stakeholders, 61 of the 63 groups replied positively when asked whether child labor had improved in the region over the last 15 years. The remaining two stakeholders believed not much improvement had been made to remove children from work. Similarly, the majority of stakeholders (66 out 71, 93%) said that child labor was no longer a problem in their region.

# Brazil has one of the highest levels of inequality of land distribution in the world.

Data from a 2006 census reveal that land concentration in estates with agricultural and livestock production larger than a thousand hectares did not change in the past twenty years. Brazil's legal framework and land management in the environmental and forestry areas divides governance responsibilities among various state, local, and federal-level institutions, which creates confusion and results in diverging information in state and federal-level institutions.

Although the government has implemented many land reform initiatives, efforts to expropriate and redistribute land continue to be a source of conflict in Brazil.

State-led land reform approaches, such as expropriation and redistribution, settlement on government lands, market-assisted land reform, and tenure regularization for indigenous and quilombo communities, are often marked by forced evictions and assassinations of rural workers. Land-

Land Use

owners have been known to hire armed gunmen to protect their properties, harass landless families, and hinder agrarian reform.

Field research found that, despite TCCC's adherence to the principles of Free, Prior, and Informed Consent and request for suppliers to do the same, none of 21 the mills visited had land rights policies related to land acquisition in place. Nine mills had already expanded their lands over the last 10 years and seven currently have expansion plans.

Interviews with workers and other stakeholders as well as desktop research found that land disputes persist in some states where the mills are located. However, only one of these land conflicts is associated with one of the mills involved in the study. Detailed information on this land dispute is included at the end of the report.

## INTRODUCTION

This report provides a country specific, factual baseline of child and forced labor and land conflicts in TCCC's sugar supply chain in Brazil, including mills, farms, and the sugar industry overall. The study, commissioned by TCCC to Arche Advisors, is part of the Company's continued effort to expand its understanding of labor and human rights conditions in its supply chain and provides an evidence-based tool for TCCC to mitigate the impact of these issues, where they exist, on workers' in its value chain. It delves deeper by analyzing the Company's agricultural value chain and complements the Company's system already in place to evaluate mills' performance—a system strongly guided by TCCC's Supplier Guiding Principles (SGP) that make part of the Company's commitment to continuously address human rights issues.<sup>1</sup>

The report is divided into four major sections. The first section presents the methodology employed in the study. The second part of the report describes the sugar industry structure in Brazil. The report then provides an overview of the Brazilian context around child and forced labor and land conflicts, summarizing the country's legal framework around each issue, how these problems have decreased or worsened over the last 10 years, and their current state, including evidence specific to the sugar industry. The fourth and last section of the report describes the findings on child and forced labor and land conflicts in TCCC's supply chain. It concludes with the main takeaways from the study.

### **METHODOLOGY**

## **Implemented Activities**

The study sought to draw a baseline of forced and child labor and land conflicts in Brazil and quantify these occurrences in TCCC's supply chain. To do so, it implemented the following activities:

## Desk research

- Researchers reviewed publications on forced and child labor and land rights and conflicts to understand root causes, efforts to eliminate these human right abuses, and to obtain national statistics on their incidence.
- Desk research also examined the prevalence of these issues in the sugar industry. The research also searched for specific links between the mills that are part of the study and these labor and land rights violations.
- The legal framework on child and forced labor as well as land rights was also reviewed.

Stakeholder interviews

Stakeholders at the national and local level were interviewed to corroborate and complement desk research findings. Researchers used a semi-structured questionnaire to guide interviews and the questionnaire was adjusted according to the stakeholder's area of work. Additional questionnaires directed at government officials and civil society organizations

<sup>&</sup>lt;sup>1</sup> Visit <a href="http://www.coca-colacompany.com/our-company/supplier-guiding-principles/">http://www.coca-colacompany.com/our-company/supplier-guiding-principles/</a> to learn more about TCCC's Supplier Guiding Principles

were drafted to enquire about land rights and conflicts in the region.

To all stakeholders researchers posed general questions around the existence, prevalence, 10 year trend of improvement or worsening, and root causes of the problem (child labor, forced labor, and/or land rights) in the sugar industry. When applicable, researchers asked directly about mills' involvement in these labor and land issues. Finally, researchers conducted interviews with notary offices responsible for the registration of land titles in all 21 cities visited and verified land ownership documents during these interviews for a sample of farms that were part of the study.

- A total of 14 organizations (see appendix A for a full list) operating at the national level were interviewed. Out of the interviewed organizations, one represented the private sector, two the government, eight were from Brazil's civil society, two were labor unions, and one was a multilateral organization.
- During each mill visit in 21 different cities, Arche Advisors consulted local community stakeholders to gather their perspectives on child and forced labor and land issues in their region. A total of 97 stakeholder groups (see appendix B for a full list) were interviewed. The breakdown of organizations interviewed was the following: 53 from the public sector, 12 from the private sector, five from non-governmental organizations, 23 from labor unions, and four from groups of local community members.

Mill visits were carried out to review sugar purchasing practices, child and forced labor monitoring protocols, and potential land use issues. Structured questionnaires were used to guide mill visits.

Out of the 28 mills that supply sugar to TCCC in Brazil, 21 were visited (75% of the supply chain) for the purposes of this study.

Site **visits to farms** that supply to sugar mills were conducted. Additional questionnaires for large- and medium-sized cane farm owners and operators and smallholder cane farmers were used to assess land rights issues. Additionally, researchers verified land ownership documents (e.g. land title) available during the visits at farms when the offices and/or homes of the farm owners were located nearby the farms visited. In the majority of farm visits, researchers were able to review proof of land ownership documents and/or some document that indicated the ownership of the land by the supplier.

The sample of farms to be visited was selected based on: 1) the farms that were being harvested at the time of the field visit; 2) the location of farms; and 3) the farms' ownership structure (mill owned, mill leased, and independent supplier farms). Regarding the last selection criterion, independent suppliers were given priority, as mills tend to have less oversight of the workforce in these farms. Researchers allotted eight person-days to each mill assessment and aimed to visit five to 10 farms per mill.

The 21 mills in the study reported that they source from around 8,000 owned, leased, and independent farms. Researchers visited 120 farms, an average of nearly 6 farms per mill.

Farm visits focused on interviews with farm workers and farm management personnel and observation in the fields to understand gen-

# Onsite observations



Prior to publication, TCCC and key external stakeholders reviewed this study. The inputs provided by these organizations helped improve the report's organization, presentation, and clarity but did not impact the study's outcomes.

## **Additional Methodology Considerations Around Land Rights**

In November 2013, TCCC committed to zero-tolerance for land grabbing across its operations and added land to the scope of a broad assessment effort to make its sugar supply chain transparent from a labor perspective.

The combined land and labor studies began in 2013 with Colombia and Guatemala, and the land components of these assessments were subsequently workshopped with stakeholders, including land rights and human rights non-governmental organizations (NGOs), and land experts from several bi- and multi-lateral donor organizations, as draft documents in 2014. Valuable input was received from the workshop participants on the research methodology and on the characterization of the results. The first two studies, for Colombia and Guatemala, were revised and publically released in early 2015. At this time, the land assessment methodology was also revisited and revised for use in this Brazil research.

TCCC's revised land assessment methodology is intended to provide a diagnostic snapshot of a supplier's past sugar supply chain land-related practices (to the extent possible), with the goal of informing and shaping future sugar supplier (mills and cane farms) land use and acquisition practices. Specifically, the land assessments are intended to:

- Flag significant diagnostic findings for use in shaping future supplier land-related conduct.
- Permit TCCC to make suggestions or provide concrete guidance to sugar suppliers about how they can acquire land in a transparent and socially responsible way.
- Identify the types of land-related grievances (if any) that may have arisen in response to past land acquisition practices, and that may arise during future land acquisitions.
- Be used to inform the shape and implementation of future land-related grievance identification and resolution mechanisms that can be put in place when sugar supply chain actors acquire land or otherwise affect land access, use, and tenure security.

Importantly, the land assessments are not intended to identify historic, problematic land acquisitions made by suppliers, except to the extent that information about past acquisitions can inform better future practices. It is difficult or impossible, under almost all assessment scenarios, to perform forensic examinations of supplier land acquisition practices. Indeed, the literature published by expert land practitioners often comments on the difficulties inherent in any attempt to characterize and parse land claims, adjudicate decisions, and provide for remedies (including in-kind or money damages), and/or restitution, whether the displacement/claims are a product of government takings, an unfair land deal, or civil conflict. Additionally, only in a limited number of samples did researchers compare the deeds and/or leases attached to mill or cane farm land with land registration records maintained by INCRA or another government entity. The assessment methodology used for future country research may include a protocol for sampling mill/farm land

deeds and leases and then comparing these to the land records maintained by a government land registration system.

The refined land assessment methodology uses a series of questionnaires to permit researchers to obtain land-related information from a number of stakeholder groups, including:

- Mill owners and operators
- Large- and medium-sized cane farm owners and operators
- Smallholder cane farmers
- Government officials
- Representatives from civil society organizations
- Smallholder land users adjacent to or near mills and large- and medium-sized cane farms

It is important to stress that TCCC does not directly or indirectly acquire land as it obtains sugar from suppliers. That is, TCCC does not own or lease land for sugar cane farming or for sugar mill operations. In no case does TCCC purchase all of the sugar produced by any single sugar supplier. That is, TCCC is one of the customers of any single supplier.

## **Limitations of the Study**

The main limitations of the study are related to the onsite observations. In most cases, researchers received the aid of mills to locate and reach farms, many of them located in remote and hard-to-reach areas of Brazil. As such, these visits were not entirely unannounced. Additionally, farm visits were tied to the harvest schedule and researchers could only visit farms that had harvest activities scheduled during the time of the visit.

Nevertheless, the various activities implemented as part of the methodology provided opportunities to triangulate information and obtain an accurate diagnostic of child and forced labor as well as land conflicts in TCCC's sugar supply chain. Detailed desktop research uncovered a number of reports on these issues that relied on representative population surveys and the work of stakeholders that have been on the ground for numerous years. Additionally, and more importantly, the extensive stakeholder engagement process conducted, especially at the local level, allowed for information to be provided on these issues and on the related mills' operations without any interference from mill management. These stakeholder interviews and the information collected during mill visits matched onsite observations and farm worker statements collected during visits to sampled farms, validating the methodology of the study. Finally, onsite visits are reliable in the assessment of physical infrastructure related to the working conditions in question as well as the evaluation of processes and standards put in place by mills and then enforced or not at the farm level to avoid child and forced labor and land conflicts.

#### **Research Team**

Arche Advisors is a corporate responsibility consulting firm specialized in labor and human rights in global supply chains. Arche's research team for this study was comprised of local field experts with decades of experience in monitoring and supply chain work across Brazil. The team included experts in monitoring human rights, environmental management, community engagement programs, and workers' needs assessments as well as sugarcane ethanol supply-chain traceability. The field teams were supported by a Brazilian researcher who conducted desk research, stakeholder outreach and field data analysis, as well as a project manager who has led CSR supply chain studies in numerous countries.

## **BRAZIL'S SUGAR INDUSTRY**

Brazil is the largest sugar producer in the world, with an output of 36,800,000 metric tons of sugarcane<sup>2</sup>. The industry contributes to nearly 2% of the country's gross domestic product.3 It has 430 mills and 70,000 farms, generating 1.2 million direct jobs. <sup>4</sup> The Companhia Nacional de Abastecimento (CONAB), a public company linked to the Ministry of Agriculture, estimates that around 186,000 cutters participated in the 2011/12 harvest, a 18.7% decrease from the prior year. This is in line with research findings, where 15 out of 21 mills reported that the number of laborers and cutters involved in their operations has decreased over the last 10 years. Anecdotal evidence obtained during field research indicated that the number of women in the sugarcane fields is very low and

Key Statistics							
Number of operating mills	430						
Number of farms	70,000						
Number of cutters	186,205 (2011/2012)						
Harvest season	South-Central: April-December North-East: September-March						
Area Harvested	9,752,328 hectares (1% of total land)						
Origin of Harvested Sugarcane	South Central: 63% from mill-controlled farms; 37% from independent farms Northeast: 71% from mill controlled-farms; 29% from independent farms						

decreased even more after the mechanization of harvesting. Researchers observed a small number of female farm workers doing manual cutting or driving tractors in the field.

Sugarcane is grown primarily in the South-Central and Northeastern regions, but the South-Central region is responsible for nearly 90% of production and the state of São Paulo alone accounts for 60% of the country's total sugarcane production. Sugarcane plantations cover 9.7 million hectares of Brazil's land or a little over 1% of the country's total area. The sector continues to expand as the demand for agrofuels increases globally. A World Bank study found that from 1990 to 2007 land area for sugarcane production increased by 5.9 million hectares globally and that Brazil was responsible for 47% of that increase. Data collected by CONAB for the 2011/2012 harvest season shows that there was an expansion of 594,526 hectares in the land destined to sugarcane production in the South-Central region, equivalent to 8.3% of the total production area for the region. In the Northeast, expansion was more moderate, with only 23,176 hectares of new land destined to sugarcane production. CONAB concludes that the sector usually does not expand into "virgin" lands, with most of the growth happening into areas previously used for other crops or, in the majority of times (68%), for raising livestock.

According to CONAB, data for the 2011/2012 harvest shows that in the South-Central region of Brazil, 63% of the sugarcane refined by mills came from mill-owned or leased farms and 37% came from farms that belonged to a third party. For the Northeast region, 71% of the sugarcane originates from mill-owned or leased farms and 29% from third party farms. Additionally, the ma-

<sup>&</sup>lt;sup>2</sup> United States Department of Agriculture

<sup>&</sup>lt;sup>3</sup> Biosev Company

<sup>&</sup>lt;sup>4</sup> Union of the Sugarcane Industry (UNICA)

<sup>&</sup>lt;sup>5</sup> Companhia Nacional de Abastecimento

<sup>&</sup>lt;sup>6</sup> Union of the Sugarcane Industry (UNICA)

jority of the sugarcane in the South-Central region is harvested mechanically (72%), while in the Northeast, the process is predominately manual (87%).

## FORCED LABOR, CHILD LABOR, AND LAND USE IN BRAZIL

#### **Forced Labor**

The U.S. Department of State 2014 Human Rights Report for Brazil continues to list forced labor as one of the most significant human rights abuses in the country, along with poor and at times life-threatening conditions in some prisons, sex trafficking of children and adolescents, and exploitative working conditions.

## Legal Framework

The International Labor Organization (ILO) has recognized Brazil as a leader for addressing forced labor with "vigor and determination." Brazil has pursued many creative and unique measures to

#### **ILO Conventions Ratified**

Forced Labor Convention – No. 29

Abolition of Forced Labor Convention – No. 105

combat an issue that is not only difficult to identify but also to effectively punish through law enforcement, especially in remote areas.

In Brazil, national forced labor laws were challenged by the need to deconstruct the notions of "slave labor" and "slave." The term "slave labor" is based on Brazilians' notion of slave labor through the legacy of the colonial form of slavery, which existed in the country until 1888. To differentiate slave labor from colonial slavery, other expressions such as *trabalho escravo contemporâneo* (modern-day slave labor) or *trabalho escravo por dívida* (debt slavery) are used.

Brazil's Penal Code (BPC) was amended in 2003 to break down the stereotype of "slave labor." Section 149 of the BPC defines slave labor as "reducing someone to a condition analogous to slavery," including subjecting someone to forced labor as well as to exploitative working conditions in general, such as long workdays, unhygienic work conditions, extremely arduous labor, and labor performed in degrading working conditions. The BPC criminalizes any practice that causes workers to work in degrading conditions, exhausting working hours, in conditions of forced labor, or in situations whereby their freedom is restricted through debt or isolation. The penalty for anyone accused of slave labor is two to eight years of imprisonment, together with a fine, on top of any sentence handed down for violence.

In May 2014, the Brazilian Congress approved the Constitutional Amendment Proposal (PEC) on Slave Labor (*PEC do Trabalho Escravo*). The PEC allows for the confiscation of property of owners found using slave labor, which is turned over to the government's agrarian reform program in the case of rural land or to social initiatives (e.g. urban housing programs) in the case of urban real estate. The confiscation of land/real estate without the right to compensation represents a significant achievement in the fight against forced labor and related criminal offences. However, lawmakers are currently debating the definition of slave labor, as the PEC, as it was passed, requires a specific description of forced labor. Supporters of the law say it should simply repeat the definition of slave labor established in current legislation, but other lawmakers

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<sup>&</sup>lt;sup>7</sup> National Supply Company (Companhia Nacional de Abastecimento, CONAB)

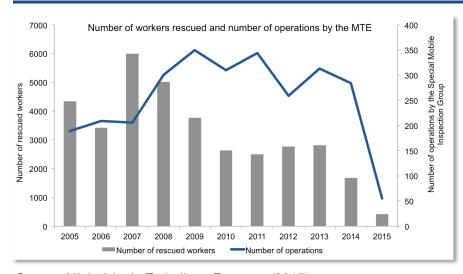
<sup>&</sup>lt;sup>8</sup> Reporter Brazil

would like to see the definition exclude items like exhaustive work for the purposes of the PEC. Activists say the change in the definition is an effort to weaken the law. Until the definition is signed into law, expropriations cannot be made.<sup>9</sup>

Brazilian legislation – along with the amended Section 149 of the Brazilian Penal Code, and ILO Conventions, numbers 29 and 105, – provides the legal basis for actions to combat slave labor in the country.

#### **Current Context**

Forced labor is driven by historical and complex issues, including poverty and deforestation in the Amazon region. Poverty affects a significant portion of the Brazilian population (23.8%, according to the World Bank's 2011 statistics), especially those in rural areas and the Northeast region. According to research by Repórter Brasil, the North has the highest incidence of slave labor, in an area known as the "deforestation arch."



In the 20 years of action of the Ministry of Labor and Employment's Special Mobile Inspection Group, the government has freed 49,353 workers from conditions analogous to slave labor.

Source: Ministério do Trabalho e Emprego (2015)

Slave labor persists in select sectors, such as mining, seasonal work in forest clearance, charcoal production, and a range of agricultural activities, including cane-cutting, cattle, grass-seed sowing, and cotton and coffee harvests. Since the late 2000s the number of workers rescued from sugarcane plantations has been falling. According to Reporter Brasil, companies from the sector were once the majority in the "Dirty List", a compilation of companies and individuals found guilty of using slave labor, a position now taken by cattle-raising farms. This is largely due to increased inspections by the Ministry of Labor and Employment (MTE for its acronym in Portuguese) in the sector, civil society action, and pressure from international buyers on local producers who have responded with better management systems and improved labor conditions.

Stakeholders also cite the progressive mechanization of the harvest process, especially in the South-Central region, as well as public commitments and changes to the supply chain made by companies in the industry as key to this reduction. It is expected that the mechanization of the harvest in South-Central Brazil will continue to accelerate due to the resulting productivity gains.

<sup>&</sup>lt;sup>9</sup> Locatelli, Piero. Carta Capital.



Sugarcane harvest mechanization

Additionally, the state of São Paulo, responsible for the majority of sugarcane production in the country, has passed a law prohibiting the burning of sugarcane fields by 2017.

Despite the falling number of rescued workers and improvements to labor conditions in the sugarcane sector, the U.S. Department of State lists forced labor as a persistent problem in Brazilian cane production. According to the July 2014 publication by Reporter Brazil of the "Dirty List", out of the 575 entities in the list, 25 were involved in sugarcane production. These inspections freed a total of 2,661 workers from sugarcane producing operations. In 2014, approxi-

mately 30% of the names on the list were farmers and/or companies in the northern state of Pará, a predominantly cattle-raising area, and 40% were businesses in the agriculture sector. While researchers cannot cross-reference all farms listed in the 2014 list to the supply chain of the mills involved in the study, as the name of all farms that supply to mills is considered confidential and therefore were not given to researchers, none of the farms or mills visited are included in the list.

The MTE, during an interview for this research, also reported that about 3% of those found in conditions analogous to slavery are found again in such conditions during subsequent audits, a demonstration of this population's vulnerability. The Pastoral Land Commission (CPT for its acronym in Portuguese) believes this recidivism rate is a lot higher.

Stakeholders often cite the sub-contracting of labor management relations as contributing to the forced labor problem. Additionally, the country's size poses a challenge to the Special Mobile Inspection Unit's audits, driving up costs and straining personnel. According to Luis Machado, from the ILO, only about 50-60% of the complaints that reach the MTE receive a response in the form of an audit. Lack of impunity also contributes to the problem. To this date, there is no one in jail for forced labor crimes.

## **Initiatives Combatting Forced Labor**

The prevalence of forced labor in Brazil has led to the implementation of various efforts to combat this human rights violation. The table below lists some of the most noteworthy initiatives.

The Executive Group to Eradicate Forced Labor (GERTRAF) In 1995, the government created an inter-ministerial body to coordinate action against forced labor. Various stakeholders are involved including different government agencies, employers' and workers' organizations, civil society, the media, and academic institutions to name a few. The GERTRAF includes the cooperation of seven ministries under the coordination of the Ministry of Labor and Employment.

<sup>&</sup>lt;sup>10</sup> Staffing Industry Analysts

The GEFM, under the Ministry of Labor and Employment, was created in 1995 and utilizes the efforts of specially trained and equipped labor inspectors and police to lead rescue missions. GEFM coordinates labor inspectors, labor prosecutors, and the Federal Police to investigate slave labor, to free workers, and to prosecute estate owners where workers have been found in conditions analogous to slavery.

Special Mobile Inspection Group (GEFM) The GEFM also covers the payment of labor compensation to freed workers with respect to labor offences as well as payment of unemployment benefits. The GEFM is responsible for maintaining the "dirty list". Employers are listed on the "dirty list" if they have been found to violate labor legislation regarding forced labor. The list, updated every six months, is made public via the website of the Ministry of Labor and Repórter Brasil. An employer on the list is monitored for two years. If the employer does not commit any offence during this time and has paid all fines, its name is removed from the list. The list has proved to be an effective means of eradicating slave labor in the country.

In December 2014, Brazil's Supreme Court suspended the publication of the "dirty list", after the association of construction companies challenged its constitutionality. Since then, the MTE and the Secretariat for Human Rights of the Presidency of the Republic have taken steps to reestablish the list. Civil society organizations have been able to compile an alternative list of companies found to be employing workers in conditions of forced labor, under a freedom of information law, that is very close to what the updated "dirty list" would be. Interviewed stakeholders hope the list to be publicly available again sometime in 2015.

Pastoral Land Commission and other organizations The Pastoral Land Commission (CPT), an organization run by the Catholic Church, which campaigns for human rights and land reform, the Federal Police, Rural Workers' Unions and workers' cooperatives have also been active in the area of forced labor. These groups have immediate contact with forced labor victims and receive complaints that are then investigated by the GEFM. These groups also report cases to the MTE and regional delegations in the Brazilian states.

Pact for the Eradication of Slave
Labor

Launched in 2005, the Pact is as initiative involving the Ethos Institute, the Social Observatory Institute, the International Labor Organization, and NGO Reporter Brasil, which combines efforts to engage national and international companies that have signed the Pact to maintain their supply chain free of forced labor. The Pact foresees commercial restrictions on enterprises that employ slave labor, promotes decent work, social integration of rescued workers, and raises awareness of the issue. To date, 250 companies are signatories to the Pact, including TCCC.<sup>11</sup>

<sup>&</sup>lt;sup>11</sup> Ethos institute

National Commission to Eradicate Slave Labor (CONATRAE) CONATRAE was established in 2003 with the responsibility to develop and monitor national plans to prevent and eradicate forced labor. The development of the first National Plan included the active involvement of the ILO, which allowed for the incorporation of the ILO's Fundamental Principles and Rights at Work. The Brazilian government continues to partner with the ILO in projects to eradicate forced labor and promote decent work in the states of Mato Grosso, Bahia, and São Paulo.

Other efforts for the eradication of forced labor by the federal government have been supported by a number of state initiatives. Several states in Brazil have established state commissions for the eradication of forced labor, including Tocantins, Bahia, Rio de Janeiro, São Paulo, Mato Grosso do Sul, Pará, Maranhão, Mato Grosso, and Rio Grande do Sul.

Finally, stakeholders cite the work of meat exporting companies as an example of transparency that could help in the fight against forced labor, though the sector is still plagued by slave labor cases. Stakeholders interviewed from the Ethos Institute and Reporter Brasil mentioned that many meat firms have made their list of suppliers publicly available, allowing advocacy groups to query various government databases to check on labor and environmental compliance, as well as land rights issues. This increased transparency is helpful to uncover these complex issues in the supply chain.

#### **Child Labor**

The U.S. Department of State 2014 Human Rights Report for Brazil reported that child labor is found in agriculture, including the production of sugarcane, among other crops such as cashews, coffee, cotton, manioc, pineapple, sisal, soybeans, rice, and tobacco.

## Legal framework

Brazil has ratified all key international conventions concerning child labor and the government has established relevant laws and regulations related to child labor, including its worst forms. The minimum age for work is 16, which is higher than the international standard of 15 years (14 years for developing countries). The law includes an exception for apprenticeships at age 14. Other exceptions allow children ages 14 to 15

#### **Key Conventions Ratified**

ILO C. 138, Minimum Age

ILO C. 182, Worst Forms of Child Labor

**UN CRC** 

UN CRC Optional Protocol on Armed Conflict

UN CRC Optional Protocol on the Sale of Children,

Child Prostitution and Child Pornography

Palermo Protocol on Trafficking in Persons

to work under parental (or guardian) supervision as long as the work is not harmful to the child's development and is vital for the family's survival. The minimum age for hazardous work is 18 years old. Hazardous work includes work in domestic service, garbage scavenging, and fertilizer production as well as other activities included in an extensive list within 13 occupational categories. National law also prohibits all minors under the age of 18 from work that constitutes a physical strain or occurs in unhealthy, dangerous, or morally harmful conditions.

The MTE is in charge of inspecting worksites to enforce child labor laws. In 2013, the MTE had 2,800 labor inspectors who worked in all 26 states of Brazil. Penalties for violations range from \$165 to \$828 (from 402 reais to 2,013 reais), doubling for a second violation and tripling for a third. The U.S. Department of State Human Rights 2014 Report found that the penalties were

sufficient to deter violations and were generally enforced. NGOs, however, claim that fines are usually too small to serve as an effective deterrent. Furthermore, most child labor inspections were complaint-driven, usually brought by workers, teachers, unions, NGOs, and the media. Labor inspectors are also unable to enter private homes and farms, where much of the nation's child labor is found. 12

#### **Current Context**

According to the ILO, poverty is the largest driving factor for child labor, as income from a child's work is oftentimes critical for his or her family's survival. Additionally, lack of meaningful alternatives, such as affordable schools and quality education, make child labor an attractive option. Many stakeholders also cite sub-contracting of the labor force as a risk factor for child labor.



The latest Brazilian Institute of Geography and Statistics (IBGE) survey from 2013 found that 3.77 million of an estimated 42.2 million children between the ages of five and 17 were engaged in some form of child labor, of which 29% were employed in agriculture. It is also important to note that out of the 71,000 children aged five to nine working, 83% were engaged in agriculture.

MTE data revealed that 5,688 children and adolescents were found in situations that violated minimum-age laws in 9,838 unannounced inspections from April 2014 to April 2015. The state of Pernambuco had the highest number of children found at work (19%), followed by Minas Gerais (10%), Mato Grosso do Sul (8.5%), Goias (7.7%), and Sergipe (6.2%).

The numbers recorded by IBGE have been lower year to year. For example, the numbers uncovered by the 2013 survey for children aged five to 17 at work is nearly 10% lower than the 2012 numbers. Similarly, the MTE statistics abovementioned are lower than the 2012 numbers, when the ministry conducted a total of 7,393 inspections and 7,124 children and adolescents were discovered as employed in violation of minimum-age laws.

According to stakeholders, like the National Confederation of Workers in Education, the government's integrated policy agenda, which includes programs around education, income generation and transfer, enforcement of laws, and raising awareness is a key success factor in the fight against child labor and has led to the reduction in child labor numbers in the country. Stakeholders also mention that the high professionalization of the country's sugar industry and subsequent improvements in working conditions have taken place during a period of economic stability and growth for the country. Brazil has made specific commitments to eliminate the worst forms of child labor by 2016 and all its forms by 2020.

#### **Initiatives Combatting Child Labor**

The government has established several policies related to child labor. In 2013, it hosted the Third Global Conference on Child Labor, which brought together 1,500 participants from more than 150 countries. Country participants signed a non-binding declaration, the Brasilia Declaration, which urges countries to bolster efforts to combat the worst forms of child labor and cooperate to achieve this goal.

<sup>&</sup>lt;sup>12</sup> U.S. Department of State

Brazil has implemented several noteworthy initiatives to combat child labor. Some of them are described in the table below.

National Committee for the Elimination of Child Labor	The committee leads the implementation of the National Plan for the Prevention and Elimination of Child Labor and the Protection of Working Adolescents. Coordinated by the MTE, it includes 17 gov- ernment agencies, along with representatives from trade unions, business associations, and civil society organizations
Program to Eradicate Child Labor (PETI)	PETI was established in 1996 and is coordinated by the Ministry of Social Development and Fight Against Hunger with state and local authorities. It implements a series of actions to remove children from work, including conditional cash transfers, family assistance, and social services. The conditional cash transfer program provides monthly cash stipends to families with children seven to 15 years of age working in selected hazardous activities to keep their children in school. PETI transfers are now done through <i>Bolsa Familia</i> , a larger national cash transfer program. PETI has reached more than 820,000 children in 3,500 municipalities <sup>13</sup> .
Bolsa Familia	Bolsa Familia is another conditional cash transfer program, also offered through the Ministry of Social Development and Fight Against Hunger, which provides a monthly stipend to low-income families to keep their children up to age 17 in school and meet certain child health requirements. Bolsa Familia has reached more than 13 millions households nationwide. <sup>14</sup>
Brasil Sem Miseria (Brazil without Mis- ery)	Seeks to lift people out of extreme poverty in rural and urban areas by expanding access to social protection programs, improving productivity and job skills, and providing access to basic services.
Brasil Carinhoso (Caring Brazil)	Combats extreme poverty among participants of the <i>Bolsa Familia</i> program. It targets families with children ages 0 to 15 and benefits 16.4 million people. <sup>15</sup>
"Child Friendly Com- pany" Seal	The seal was created by the Abrinq Foundation, an organization that defends the right of the child, and is awarded to companies that have made three commitments: 1) not to exploit child labor and not allow it in their value chain; 2) promote professional development and access to decent work to adolescents; and 3) implement social programs to benefit children and adolescents. To date, 876 companies have received the seal.

The government also partners with the ILO on projects to eradicate child labor in the state of Mato Grosso. The Federal Police has also expanded funds to respond to criminal cases involving forced child labor.

<sup>&</sup>lt;sup>13</sup> U.S Department of Labor <sup>14</sup> U.S. Department of State <sup>15</sup> U.S Department of Labor

While PETI and *Bolsa Familia*, and other initiatives have reduced child labor in Brazil, some challenges remain. For example, research has found that some vulnerable families still continue to place a higher value on children's work than education. The PETI and *Bolsa Familia* programs have since been decentralized and local communities lack the resources to fully implement and monitor the programs. Finally, many stakeholders now cite the involvement of children in violence and drugs as a more pressing concern than child labor for the country.

#### **Land Use**

## Legal Framework

Below is a description of the major laws that govern land use, transfer, purchase, ownership, and government allocations in Brazil. Most of this information is derived from the US Agency for International Development (USAID) land tenure profile for Brazil with additional research for clarifications:

- The Constitution guarantees land ownership as a fundamental right, also recognizing customary land rights of indigenous groups. Specifically, the Constitution guarantees to indigenous peoples permanent possession and exclusive use of their traditional lands including soils and waters, but excluding subsurface such as minerals.
- The Constitution also guarantees ownership rights of Afro-Brazilian communities to their traditional lands, quilombo (villages established by former slaves). The state is obligated to issue titles to these communities. However, of the 743 remaining communities, few have been legally recognized and even fewer titled.
- Brazilian law, through the Constitution and the 1916 Civil Code, allows acquisition of land through unchallenged possession for a specified number of years (usucapio or usucapt). The right to acquisition of land through long occupation has existed in rural Brazil since 1916. In the event of a land-taking through these means, owners are often entitled to meager compensation.
- The 1964 Land Statute (Law No. 4504) regulates rural lands and governs Brazil's redistributive land reform program and the related issues of transfer and acquisition. The law strengthens the rights of tenant farmers and sharecroppers as it permits land expropriation for land uses that do not fulfill a social function, which, according to the law, includes reaching satisfactory levels of productivity, respecting labor rights and the wellbeing of those that live in the land, and preserving natural resources. However, the law fails to further define what uses constitute a social function, creating property rights insecurity on rural lands. Effectively, the productivity factor of the law has been the one used to determine whether the land fulfills a social function. The National Institute of Colonization and Agrarian Reform (INCRA) is responsible for establishing productivity indices that determine whether the land is productive or not. The index is criticized as favoring large-scale production as it is often difficult for farmers to meet productivity requirements.
- Brazil's legal framework provides some form of protection to an estimated 3.7 million square kilometers of public and private lands in the form of conservation units (protected areas), indigenous lands, permanent preservation areas (APPs), and legal reserves. The Law on Union Land (Law No. 9,636) deals with regularization, administration, alienation and leasing of union lands (i.e., government lands) (UN-Habitat 2005).
- New environmental legislation (Law 12.651/2012 or the Forest Code) created an important tool, the rural cadastre, an electronic register of all rural properties, which, if implemented thoroughly, would lead to huge advancements in land protection. Interviewed

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<sup>&</sup>lt;sup>16</sup> Dávila, Renata.

stakeholders believes that in five to 10 years there will be great improvements in registration of rural lands, but it requires states to respect the law.

The capacity of the government to provide tenure security is limited by inaccurate land registry, overlapping titles for the same parcels, and by the limited capacity to ensure protection from eviction even when boundaries are properly recorded and formal titles issued. Brazil's legal framework in the environmental and forestry areas also spreads governance responsibilities among a number of state and federal-level institutions, which can create confusion, resulting in disputes between the state and federal-level institutions.

Similarly, the responsibility for management of land is divided among the federal union, the state, and the municipalities. Rural records are collected and managed by INCRA, while municipal records are collected by the local public administration mainly for tax collection purposes. The municipality property records typically include those residing in informal settlements to facilitate collection of taxes. This causes further discrepancy between municipality records and the federal and state records.

Additionally, land registry is based on a descriptive system of property, lacking definition of the geographic location. This imprecision facilitates overlap in registrations. The institutions charged with registration and titling also remain inadequate and require significant revamping in terms of titling and the creation of a national cadaster and registration system. Much of Brazil's land, around 20%, according to Sampaio et al.'s 2003 study, has no formal register in any of the official instruments of land ownership or instruments that determine it to be protected, indigenous, or public lands, often leading to cases of legal appropriation of vacant lands.<sup>17</sup>

#### **Current Context**

According to a publication on the land tenure profile for Brazil by USAID, the country has a total land area of 8.5 million square kilometers made up of: agricultural land (31%), forests (56%), and grasslands (13%). Protected areas (including forests) account for 18% of this total land area.



Though the country has an abundance of land, it has one of the highest levels of inequality of land distribution in the world. According to USAID, an estimated 1% of the population owns 45% of all land.

This land inequality has remained largely unchanged. Data from the 2006 Agricultural and Livestock Census shows that land concentration in estates with agricultural and livestock production larger than a thousand hectares did not change in the past twenty years. The Gini coefficient for land, a measure of inequality of distribution, which attributes a value between 0, representing perfect equality (all land equally shared between farmers) and 1, representing total inequality (all land occupied by one individual), has been almost static. Calculated by IBGE, the Gini for Brazil's land distribution was 0.857 for 1995/96 and 0.856 in 2006.<sup>18</sup>

Government efforts to expropriate and redistribute land continue to be a source of conflict in Brazil. They often lead to forced evictions and assassinations of rural workers, peasants, lawyers, union leaders, and religious supporters involved in land rights advocacy. Cattle ranchers

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<sup>&</sup>lt;sup>17</sup> Sampaio, P. A. et al.

<sup>&</sup>lt;sup>18</sup> Hoffmann, R.; Ney, M.

and estate owners have been known to hire armed gunmen to protect their properties, harass landless families, and hinder agrarian reform. The state of Pará has a history of the worst violence and some of the greatest human rights violations against rural populations and land rights advocates. Massacres of Landless Workers' Movement (Movimento Sem Terra or MST) members—one of the largest social movements in the region, with 1.5 million informal members <sup>19</sup>—by the state police in Corumbiara in the state of Rondônia and Eldorado dos Carajas in the state of Pará in 1995 and 1996 exemplify the tensions over land disparity in the country.

Gender issues have also gained prominence in land reform efforts, as during early land reform programs, women were largely excluded from the process. According to interviews with INCRA officials, measures are now being taken in the land registration process for settlements established by INCRA in order to secure the right over the land for both the husband and the wife. When reviewing land ownership documents at farms or at notary offices, field researchers noted the land was seen to be also owned by women in several cases.<sup>20</sup>

According to stakeholders, in Brazil's sugar industry, land conflicts are not prevalent but still occur. Most of the prominent land disputes, beyond cases of land squatting that happen throughout the country, are related to indigenous lands. States like Mato Grosso do Sul for example have had longstanding land conflicts for which resolution is made more difficult due to the value of productive lands that would require expropriation for the creation of indigenous reserves.

## **Initiatives to Promote Land Rights**

As mentioned, the government has taken many approaches to land reform, including state-led approaches through expropriation and redistribution, settlement on government lands, market-assisted land reform, and tenure regularization for indigenous and quilombo communities. Below are examples of these approaches.

Market-assisted land reform	The World Bank's pilot project, <i>Cedula de Terra</i> , promoted land sales to groups of landless workers financed by 20-year loans. Many argue the project inflated land prices and poor participants became highly indebted with no means to generate wealth to pay their debts. Proponents argue that the majority of program participants are paying their loans on time. Nevertheless, there is widespread agreement that the project will not result in large land redistribution.
State-led approaches through expropriation and redistribution	Government settlements, led by INCRA, have also seen high levels of abandonment. This is mostly due to poor site selection and lack of access to credit for farmers. As previously mentioned, confusing jurisdiction between the federal, state, and the municipality level has also inhibited agrarian reform.
Management of indigenous lands	The National Indian Foundation (FUNAI), which has the responsibility for managing indigenous lands, continues to be criticized by indigenous groups who accuse the institution of approving development projects on indigenous lands. According to the US 2013 Human Rights Report, in May 2013, President Rousseff's chief of staff stated that FUNAI did not have the capacity to mediate conflicts between indigenous people and rural landowners and that the gov-

<sup>&</sup>lt;sup>19</sup> Dave Hill & Ravi Kumar, eds.

<sup>&</sup>lt;sup>20</sup> INCRA interview.

ernment would explore including other government agencies in the decision-making process for demarcating indigenous lands.

Quilombo communities

**Subsidy programs** 

The government has also ramped up efforts to settle quilombo populations in the last 15 years. In 2003, there were 29 recognized quilombos in Brazil and, as of 2013, this number had grown to more than 2,400, totaling more than a million people. The land claimed by these communities totals about 4.4 million acres. Critics say that the Brazilian government has shown little sign that it will deliver the land titles promised by the Constitution. According to INCRA representatives, the constant delays are due to the need to negotiate a settlement and indemnification with property holders and the cost of the initiative. By mid-2014, only 217 quilombos have received land titles, with only three land titles actually being issued in 2013.<sup>21</sup>

Another example of a government led program to promote land rights was the anti-hunger program, *Fome Zero*. The Brazilian government aimed to eradicate hunger and extreme poverty by 2006 by: providing food subsidies to the vulnerable and support for family-based agriculture, increasing the availability of credit for food production, and providing a guarantee from the state marketing agency to purchase all production from land reform settlements and other family farmers at a guaranteed minimum price.<sup>22</sup>

## FINDINGS FROM ONSITE OBSERVATIONS



Map with location of visited mills

Visits were made to 21 mills that supply sugarcane to TCCC, the mills were located in the states of São Paulo (11), Minas Gerais (2), Alagoas (2), Goias (2), Mato Grosso do Sul (1), Rio Grande do Norte (1), Pernambuco (1), and Mato Grosso (1). During mill visits, onsite observations of farms that supply to the mills were also conducted. A total of 120 farms were visited where 920 workers were interviewed. Additionally, 97 local stakeholder groups were interviewed.

<sup>21</sup> Huffington Post

<sup>22</sup> Ibid

## **General Supply Chain Characteristics**

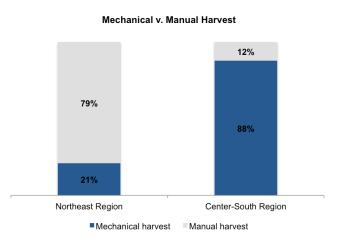
The 21 mills purchase nearly **58 million tons of sugarcane per year**, sourcing from just over **8,000 farms**. In TCCC's supply chain, like for the industry in Brazil as a whole, production is concentrated in the Center-South region, with mills in that part of the country responsible for 86% of the sugarcane volume.<sup>23</sup>



Two mills engaged in the purchase of sugarcane through spot contracts purchase around 36% of the sugar refined in the facility this way. One additional mill was also planning on purchasing sugarcane through spot contracting during the season. Spot contracting is a practice adopted by sugarcane suppliers (farms) that decide not to sign a contract with one specific mill, instead selling their sugarcane to the mills that offer the highest price during the harvest season. Mills may choose to access the spot contract market when they are unable to fulfill their production requirements with the farms they hold a relationship with or for other production reasons.

15 out of 21 mills reported hiring fewer workers for their operations, as the process of mechanization of the harvest accelerates. 11 mills reported mechanization levels of 90% or above for their owned and leased farms. Only three mills reported that their harvest is done almost entirely manually.

During farm visits, researchers found that, for the most part, mills hire farm workers directly to harvest their owned or leased farms. The only four exceptions were: one mill which used a labor provider for one of the leased



farms visited; two mills which assign leased and owned farms to different "partners" (or suppliers) to manage the entire harvest process, including the labor force; and one mill which hires a separate company to handle all farms and only manages the industrial processes of the mill.

<sup>&</sup>lt;sup>23</sup> These and other numbers reported in this section of the report were gathered during mill visits and were provided directly by the mills.

Mill Allocation of Production Process (based on a sample of 15 mills)									
		Northeast (as % of sugar- cane volume) (3 mills)	Center-South (as % of sug- arcane volume) (12 mills)						
(1) Soil prep	Mill	20%	23%						
and planting	Supplier	80%	77%						
(2) Crop	Mill	0%	15%						
treatment	Supplier	100%	85%						
(3) Harvest	Mill	28%	44%						
(3) Harvest	Supplier	72%	56%						
(4) Transport	Mill	65%	62%						
(4) Transport	Supplier	35%	38%						

Out of the 19 mills that purchase cane from independent farms, seven managed the production processes in independent farms, including the labor force involved in the harvest process, that yielded half or more of the sugarcane purchased from suppliers. Visits to independent farms, managed by suppliers, found that suppliers for four mills also use labor providers to staff sugarcane fields.

During farm visits, researchers interviewed sugarcane cutters working through labor providers and verified employment and payroll records for these farms. According to researchers, the companies that manage the harvest process, and therefore the labor force, in the mills' leased or owned farms (i.e. the four abovementioned cases) have well established accounting and human resource systems to ensure compliance with labor laws.

All mills have their supply chains mapped and have systems to track suppliers' farm names, owner names, address (including GPS coordinates), total farm area, total planted area, and area to be harvested for the current season.



Twelve mills had valid Food Safety System Certification 22000, nine had current ISO 9001-QMS certifications, nine had Bonsucro certifications, eight had ISO 22000 certificates, five had Abrinq's "Child Friendly Company" seal, three had valid ISO 14001-EMS certificates, and one had a OHSAS 18001-H&SMS certification.



All mills have community investment programs in educational, environmental, and sports initiatives. The companies also make general community donations. Out of 21 mills, 19 belong to an association or community group, but in only four instances did belonging to these associations or groups involve work around forced labor, child labor, and/or land rights.



All 21 mills had their workers organized through labor unions. However, in some mills, workers were unaware of the unions' role and had very little contact with union leadership. Similarly, out of the 21 mills, 15 stated they had grievance systems for workers and 13 for the surrounding community. Some workers were unaware of these communication channels.



During high season, the mills employ 36,410 workers, 22% of which are seasonal. Mills located in the Northeast employ nearly twice the number of workers as the mills located in the Center-South region of the country. Mills in the Northeast also rely more heavily on seasonal workers, with about 30% of the workforce hired as temporary workers during high season, compared to 20% in mills located in the Center-South region. It is important to note, however, that four mills included in the study are responsible for the bulk of the hiring of seasonal work-

ers. These four mills hire 80% of all employed seasonal workers. These same mills are very reliant on manual labor to harvest their crops. Three of the mills rely on manual power to harvest nearly 100% of their sugarcane and the fourth to harvest 79% of the crop.

## **Forced Labor Findings**

Local stakeholders interviewed generally perceived the issue of forced labor as improving in their region. All stakeholders (31 in total) who acknowledged that forced labor was a historical issue in their region believed the problems have improved in the last 15 years. Similarly, 47 stakeholders were asked if forced labor was still a problem in their region and 80% of them said no. Stakeholders stated the increased automation of the harvest process as contributing to this improvement. While this automation has contributed to better working conditions, many stakeholders said that unemployment has increased and mechanization has brought other social challenges for displaced workers. Additionally, stakeholders stated that migrant workers still travel to work in sugarcane harvest and often rent accommodations that lack basic infrastructure and hygiene. None of the interviewees linked the mills in the study to past or current cases of forced labor.

Results from the mill visits show that out of the 21 mills in the study, 13 had policies on the prohibition of forced labor. In most mills, the policies are embedded in the companies' hiring and human resource practices, managed by a professional staff. Mills also generally have codes of conduct (CoC), which state the company's position against forced labor. Employees are trained on and receive the CoC during their induction training and are usually required to sign a statement that they have received the policy. Some mills take further steps to avoid forced labor situations by hiring employees directly, without using labor intermediaries, limiting or prohibiting the use of seasonal workers, and, when seasonal workers are needed, by also hiring them directly, and by requiring labor contracts to be signed by all employees.

Out of the 13 mills that had policies against forced labor, 11 had policies that applied to supplier farms. Mills enforced these policies mostly by including related legal clauses in their supplier contracts. A few mills took additional steps to implement the policy in their supply chain and imparted formal or informal policy trainings to all suppliers, requested that suppliers sign the company's CoC, held annual supplier events to discuss production updates and policies and procedures, and carried out annual visits to supplier sites to conduct visual inspections. One of the mills hires a third party company to conduct annual compliance audits at all sugarcane supplier sites. These audits assess suppliers' compliance with labor, health and safety, and environmental laws. The mill also has an incentive program to promote improvements in the supply chain. The mill provides a premium payment of BRL 1 per ton for suppliers that achieve or pass the 85% compliance mark during the audits.

Though eight of the mills did not have actual written policies prohibiting forced labor, the companies' position against the practice is exemplified in other management processes, such as their hiring practices and human resource systems. Hiring practices are also communicated to employees through trainings during the onboarding process. Additionally, even in the absence

of formal policies, many mills require compliance with labor laws in contracts with suppliers and some also hold supplier meetings to discuss production, policies, and procedures, which could include environmental and labor issues.

None of the mills had formal procedures in place to addresses cases of forced labor identified in owned, leased, or supplier farms. Nevertheless, all mills stated that informal procedures would be followed in such cases, such as investigating the issue, escalating it to upper management, and, in some mills, involving the worker's union.

During visits to farms owned or leased by the 21 mills, researchers did not find any current or recent incidents of forced labor and workers, including migrant workers, were not aware of any cases of slave labor. However, desk research did uncover three past instances of forced labor involving mills in the study. The mills are not currently implicated in forced labor cases and are not on the "dirty list". These cases are explained below:

- One mill was included in the "Dirty List" in 2011 for the alleged employment of 67 workers in conditions of slave labor, but removed a month later as per a judicial order.<sup>24</sup>
- The holding company of another mill was accused in 2009 of employing 530 workers in conditions analogous to slave labor. The Public Ministry of Labor (MPT) stated that workers did not have access to potable water, sanitation facilities, a canteen or place to purchase food, and were not provided with adequate protective equipment (PPE), among other violations. The workers had been hired indirectly, through a sub-contractor. The holding company was fined R\$ 2 million for collective damages and the mill was temporarily shut down by the government.<sup>25</sup>
- In 2006, another mill owned by the same holding company was sentenced by the public prosecutor's office for employing workers in conditions analogous to slave labor. The mill implemented corrective actions and received a "socially responsible company" certification in 2012.<sup>26</sup> <sup>27</sup>

According to TCCC, the company closely followed these cases and several departments, including procurement and legal, closely monitoring the cases in 2009 and 2001 and confirmed that these issues were resolved.



Resting area for farm workers at a mill-owned farm

Because in Brazil conditions analogous to slavery can, for legal purposes, include lack of access to potable water, sanitary facilities, and PPE, among other things, special attention was given to these issues during farm site visits. Two cases of note were observed on visits to leased or owned farms. First, during visits to leased or mill-owned farms of one sugar mill, workers reported that water is not provided to workers in the mechanical harvest section of the farms. Workers must bring their own water and thermic bottles from home. The same workers stated that this is not an issue as they work in air-conditioned vehicles and drink water during their daily breaks. Workers in the manual harvest area also

<sup>&</sup>lt;sup>24</sup> Reporter Brasil

<sup>&</sup>lt;sup>25</sup> Folha de São Paulo

<sup>&</sup>lt;sup>26</sup> Ministério Público Federal

<sup>&</sup>lt;sup>27</sup> Teixeira, G. (2013)

stated they bring their own bottle, but that the mill provides water in sufficient quantities. Second, in another mill, researchers observed that the toilet facility available in the field was not adequate for use and one worker reported having to purchase his own water container.

Visits to independent farms that supply to 19 of the mills (two of the sample mills obtain all of their sugarcane from owned or leased farms only) did not uncover any incidences of forced labor and workers, including migrant workers, were not aware of any cases of slave labor. Nevertheless, the following situations were uncovered among independent suppliers:

- Several supplier farms had no restroom facilities available while two farms were observed to have restrooms facilities that were not properly maintained.
- No potable water was available in several of the farms.
- Some of the workers in one farm were not sure who their employer was, with one worker
  describing the farm supervisor as their "gato," an informal intermediary who, in the past,
  was often used by the industry to recruit workers. However, a review of employment
  records confirmed that workers were registered as employees of the farm owner.

When researchers encountered issues during the visits at the mills regarding the lack of formal policies and procedures, and labor issues in the scope of the research during the visits in mill-owned or leased farms or at supplier farms, these were discussed with mill management during the course of the visits and also at closing meetings that were held with all of the mills on the last day of the visit at each mill. Mills are aware of these challenges and recognize areas for improvement.

## **Child Labor Findings**

Out of the 21 mills visited, 16 had policies on the employment of minors. As with the implementation of forced labor policies, mills imbed these policies in hiring and human resource practices. One mill utilized a software system that automatically calculates the age of workers based on their birth date and blocks the registration of workers when it identifies that a candidate's age is below 18. Company CoCs also state the mills' position against child labor and employees are trained on and receive a copy of the CoC. Some mills take further steps to avoid hiring minors by hiring employees directly and not using labor intermediaries.

Of the 16 mills with formal policies, 14 had policies that applied to suppliers. As in the implementation of forced labor policies, mills enforced this policy mostly by including related legal clauses in supplier contracts. Some mills took additional steps to implement the policy in their supply chain and imparted formal or informal trainings on the companies' policies to all suppliers, requested that suppliers sign the company's CoC, held annual supplier events to discuss production updates and policies and procedures, and carried out annual visits to supplier sites to conduct visual inspections. One of the mills hires a third party company to conduct annual compliance audits at all sugarcane supplier sites. These audits assess suppliers' compliance with labor, health and safety, and environmental laws. The mill also had an incentive program in place to promote improvements in the supply chain. The mill provides a premium payment of BRL 1 per ton for suppliers that achieve or pass the 85% compliance mark.

Mills that did not have written policies on child labor exemplified their stance against the issue through other processes and management systems, for example in the hiring practices for mill workers (e.g. requiring various forms of identification to register workers). And while none of the mills had formal procedures to deal with child labor if identified in owned, leased, or independent

farms, managers stated that they follow informal procedures to investigate the issue, communicate it to upper management, and involve relevant stakeholders (e.g. unions).

During field visits, researchers did not observe any cases of child labor in owned or leased farms as well as in the farms of independent suppliers. Workers also did not report any instances of child labor in the farms. When visiting local stakeholders, researchers asked 63 of the groups interviewed if they thought issues of child labor had improved in the region over the last 15 years and 61 believed the situation has become better. Similarly, out of the 71 stakeholders asked if child labor was still a problem in their region, only five said the problem persisted. Local stakeholders attributed this improvement to the following factors:

- Strengthening of the role of unions and implementation of collective bargaining agreements. Unions also play a role in alerting the MTE about worker complaints.
- Increased inspections from the MTE.
- The implementation of campaigns against child labor, which has led to increased awareness that the practice is illegal as well as changes in cultural attitudes toward children at work.
- The disbursement of *Bolsa Familia*, which has generated income for families and made school attendance a requirement.
- Collaboration among local schools, tutelary councils, and other government organizations to ensure that children are in school. Schools usually notify tutelary councils if a child is missing school often and the council reaches out to parents or legal representatives to understand the causes for the child's absence.
- The proactiveness of the sugarcane industry to ensure compliance with the law in their supply chains.
- Mill's improved human resource and hiring practices.

## **Land Conflict Findings**

None of the mills visited had policies in place on land rights related to land acquisition, even though TCCC has recently adopted a policy stance on the principles of Free, Prior, and Informed Consent and has asked suppliers to do the same. Of the 21 mills visited, nine reported having expanded their lands over the last 10 years and seven stated they currently have expansion plans. Five mills were also aware of expansions in the size of supplier farms within the same timeframe. Though written policies were not in place, mills reported that when they intend to purchase a farm, the mill conducts a verification process to ensure the property is in good legal standing regarding property, labor, and environmental laws. Additionally, the land records examined by researchers appeared, on their face, to be generally complete, accurate, and in conformance with the laws and regulations governing transactions in land.

During field visits, workers and mill managers did not report any instances of land conflicts in lands related to the 21 mills and 120 cane farms assessed by the study. Workers mentioned three cases of land squatting or conflicts in nearby lands in the states of São Paulo and Pernambuco, but these were not part of the mills' harvest or operations and therefore not linked to TCCC's supply chain.

Desk research found that the group Bunge Brasil, who owns several sugar mills including one in TCCC's supply chain, has been associated with land rights issues in the state of Mato Grosso do Sul, involving a different mill that does not supply to TCCC. The company has been accused

of illegally operating in the indigenous land Jatayvary, of the Guarani Kaiowá ethnic group.<sup>28</sup> Bunge recently made new commitments to "respect local and indigenous community rights and apply free, prior and informed consent for land purchases and use."<sup>29</sup>

In addition, Cosan, a Brazilian sugar company that owns mills including two in the TCCC supply chain, was mentioned in a November 2015 report by the non-profit organization GRAIN. In the report, US investment company TIAA-CREF is accused of evading foreign land ownership limits through its joint venture with Cosan. Regarding land grabbing, the report stated that "[Activists] say the companies bought land that had already been cleared and obtained by speculators who may have used ruthless tactics." Cosan acknowledged buying land from a businessman accused of land grabbing but stated that an exhaustive review at the federal, state and municipal levels had not found "any criminal suit in the name [said businessman]." The GRAIN report focused on the states of Maranhão and Piauí, which do not produce sugar.

During stakeholder interviews, 13 organizations reported that land conflicts were present in their region, which include land squatting by the MST, but these were not directly linked to the mills in the study. Stakeholders reported that when mills shut down, oftentimes squatters invade the now unproductive lands of the company. At the same time, mills try to use their land to pay outstanding debts with the government or with the national development bank, but the government refuses to accept lands that are occupied by squatters as part of these debt cancelation agreements. These situations lead to conflicts between company owners and those that entered the land. Stakeholders in Pernambuco and Alagoas stated that a significant number of mills have been deactivated in their region, leading to these land issues.

Finally, according to stakeholders, another big challenge faced by companies in Brazil in regard to land is related to compliance with environmental requirements, such as the need to maintain a certain percentage of lands as preservation areas within a property.

Stakeholders, when asked about the mill and farmland used by 20 of the 21 assessed mills that were part of the study, provided no indication that this land was obtained inappropriately, illegally, or without the consent of the sellers and lessors. Three local stakeholders and national organizations interviewed by Arche did mention land conflicts directly involving Trapiche S.A. The case is only briefly summarized below, but, in addition to the introduction outlined below, TCCC has gathered a variety of information about the case and has engaged with several stakeholders to hear their perspectives on this specific conflict.

<sup>&</sup>lt;sup>28</sup> Movimento dos Trabalhadores Sem Terra (2014)

<sup>&</sup>lt;sup>29</sup> Bunge

<sup>30</sup> New York Times (2015)

#### Trapiche and the Sirinhaém Estuary

The Sirinhaém estuary is a complex of 17 islands designated as Permanent Preservation Area. Reporter Brasil states that the exploitation rights of the land were granted to an agricultural company in 1898 and the Trapiche mill took over that grant in 1997. 31 Informal settlements emerged on the islands beginning around 1915 to access the mangroves for fishing and other subsistence activities. According to the Pastoral Land Commission (CPT), land disputes with the local community began as early as 1980. In 1997, Trapiche called for the removal of all people living in the islands, claiming they were causing environmental degradation to the protected area.

Some community members claimed that mill representatives harassed 57 families that inhabited the land and burned down their houses in 1998. According to Oxfam reports, in 2002 Trapiche obtained a legal order to expel the families from the land. In 2003, according to information obtained through interviews with CPT, the families continued to be harassed and their homes were destroyed by police and mill personnel. Trapiche denies these accusations. The mill relocated the families to the peripheries of Sirinhaém, two hours away from the estuary.<sup>32</sup> According to interviews with CPT, Trapiche gave the families money and construction materials to build homes but they live in poverty, poor conditions, and away from the estuary. In 2007, the 2002 expulsion order was suspended based on a petition from IBAMA to establish an extractive reserve (RESEX) in the area.<sup>33</sup>

Throughout the resulting turmoil and legal battles surrounding the Sirinhaém estuary, there have been numerous allegations of use of force and illegal activities involving the Trapiche mill, including local environmental organizations, and ex-community members. A large number of documents, legal and technical, were reviewed, and onsite interviews were conducted with ex-community members and mill management. Collected testimonies often contradicted one another. It was not possible within the scope of this research for Arche's field teams to definitively determine a factual account of these past events but this summary attempts to describe the current status of on-going legal developments related to the RESEX.

#### Creation of a RESEX

The process for the creation of the RESEX (extractive reserve), a legal status that would allow previous community members to continue exploitation of the land, was launched by local organizations, including CPT, the Bishop of Palmares, the Association of Environmental Defense of Pernambuco, The Association for Ecological and Social Cooperation, and the Social Network for Justice and Human Rights. Signatures from 207 inhabitants and fishermen from

<sup>&</sup>lt;sup>31</sup> Reporter Brasil (2008) <sup>32</sup> Oxfam (2013)

<sup>&</sup>lt;sup>33</sup> Ibid

the islands were also collected to petition for the creation of the RESEX. Trapiche opposes the creation of the RESEX alleging the return of inhabitants to the islands would lead to environmental degradation. This position is challenged by stakeholders like Oxfam, who believe it is unlikely that Trapiche is concerned about the environmental damages to the area given its long history of environmental fines issued by various state and federal entities.

As a result of the RESEX request, in 2006, IBAMA filed the first process for the creation of the reserve and performed the first analysis of the area to collect preliminary information. Socioeconomic and biological studies were carried out by IBAMA in 2007. These studies concluded that there were no impediments to the creation of the RESEX. The study further concluded that the study further concluded the study further conclu

- "At a first glance, the return of the families to the region of the islands, with the offer of basic infrastructure conditions, would be the most appropriate measure to rescue their lifestyle as well as to provide the social and economic benefits to which the families had access. However, caution is required when analyzing if human presence in the islands is compatible with the conservation of the local biodiversity and environmental sustainability [...]."
- "Even if the technical studies conclude that, for the sustainability of the fishing activities in the Sirinhaém estuary, the islands should not be occupied again, it is recommended that stakeholders involved in the case discuss the settling of these families in areas closer to the estuary, with easier access to the mangroves and available space to perform complementary activities, traditionally practiced by the ex-inhabitants of the area, and to afford them basic infrastructure conditions."
- "[...] the reality presented in this study exposes the gravity of the present crisis experienced by the ex-inhabitants of the islands and other users of the Sirinhaém estuary, a product of poor interventions implemented in the region and of an environmental conservation model that excludes the communities that use the natural resources of the estuary from decision making and that does not act to manage fishing activities, therefore justifying the creation of a Unit of Sustainable Use in the category of Extractive Reserve for the studied area, as a way for the public sector to contribute to the shared management of these protected spaces with their real users."

In 2012, the Chico Mendes Institute for Conservation of Biodiversity (ICMBio) approved the RESEX at the federal level, but stated that requests previously sent to Pernambuco's environmental agency in 2010 and 2011 had received no response and that the lack of approval from the state government was impeding the creation of the RESEX. According to the institute, while the creation of the RESEX does not legally require state agreement, the lack of consent could lead the Ministry of Environment and the Presidency of the Republic to reject the creation of the RESEX. Pernambuco's State Secretary for the Environment and Sustainability has

Arche Advisors 31

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<sup>&</sup>lt;sup>34</sup> IBAMA (2006)

since stated that there are parallel plans to create a conservation unit in the area and has criticized ICMBio for carrying out the RESEX process unilaterally. Similarly, the State Environmental Agency states that it had not been consulted regarding the creation of the RESEX.<sup>35</sup>

Additionally, not all community representatives support the RESEX. Arche Advisors was provided with copies of 19 letters directed to the sponsor of the RESEX project at ICMBio and to the Ministry of Environment dated 2009. These letters express opposition to the RESEX based on environmental impacts as well as failure to include major stakeholders in the dialogue. Entities who drafted these letters include: Conversation International (CI), Pernambuco State Environmental Council, Pernambuco State Science, Technology and Environmental Secretariat, Municipal Council of Economic and Agrarian Development, and the Sirinhaém Municipal Council of Environmental Protection.

While not all these stakeholders were interviewed to enquire whether their opinion on the RE-SEX has changed, Arche Advisors interviewed CI in August 2015 to enquire about the issue. The organization explained that at the time it indeed opposed the creation of the RESEX. CI believed a small area such as the Sirinhaém Mangrove has a huge value for the protection of the ecosystem, but it would not be able to bear the inherent disturbances of extractive exploitation. CI stated that then studies on Extractive Reserves in the Amazon showed problems maintaining the original biodiversity of the region. CI understood that other forms of preserving the area could be more effective. Finally, CI said it is now difficult for the organization to assume a position on the RESEX, given that it no longer has activities in the region. The organization stated it now has a better understanding of RESEXs and the capacity and use of mangrove ecosystems, but it does not have a formulated opinion on the Sirinhaém case. Other stakeholders, like Oxfam and CPT continue to strongly support the creation of the RESEX and the return of the families to the estuary.

In April 2015, the federal prosecutor's office filed a civil lawsuit against ICMBio and the union, represented by the chief prosecutor of the state of Pernambuco, urging a conclusion to the RESEX issue. The lawsuit states that the lack of decision on the RESEX by the government generates insecurity for the environment and for the communities of the island. The federal prosecutor's office concludes that the lack of position by the state government is not a legal impediment for the creation of the RESEX and that there is no incompatibility between the creation of a federal conservation area and any expansion of the state's conservation unit. The lawsuit further states that all procedures for the creation of the RESEX had been concluded and only decisions from the Ministry of Environment and the Presidency of the Republic were now missing. The lawsuit requires that the union and ICMBio conclude the administrative procedures related to the RESEX proposal in 60 days<sup>36</sup>.

<sup>36</sup> Ibid

<sup>&</sup>lt;sup>35</sup> Ministerio Publico Federal (2015)

In an interview with ICMBio on August 2015, the organization provided Arche with an update on its response to the lawsuit. It stated that in response to the complaint from the public prosecutor's office ICMBio conducted a review of the process for the creation of the RESEX and decided to halt the process at the federal level, that is, the process of creating the RESEX at the federal level is now closed. ICMBio stated that it made this decision based on the following three factors:

- The inhabitants no longer live in the islands of the estuary;
- There is already a State Environmental Protection Area covering part of the area and the existence of the State Law # 9.931 of December 11, 1986 that states that 14 estuary areas in the coastline of the state of Pernambuco are Permanent Preservation Areas (APA), including the estuary of the Sirinhaém River;
- The Pernambuco state government has expressed interest in expanding the protected areas of the state or creating state extractive reserves.

ICMBio's response was sent to the federal prosecutor's office in early August 2015. ICMBio believes that the federal prosecutor's office may query the Pernambuco state government about the creation of the RESEX and depending on the state government's response there may be a new public hearing on the issue.

Parallel to the creation of the RESEX there has been an ongoing legal process regarding the estuary and its use by Trapiche. According to Trapiche, when the mill acquired the land grant in 1997, they undertook a legal process to ensure the property of the mill did not include any marine land. In 2011, the State court of Pernambuco ruled in favor of Trapiche, requiring the federal government to exclude the estuary from its registry of marine land. Judges ruling on the appeals filed by the federal government in 2012 at the state level and in 2014 at the federal level stated that the onus was on the union to redo the studies to demarcate the land and determine whether the territory was or was not part of marine land. In the meantime, Trapiche can maintain its use of the land, currently deemed to be a Permanent Protection Area where, by definition under the Forest Code, no human activity is permitted. According to Oxfam, the ruling does not preclude the process of the creation of a RESEX nor guarantees legal ownership of the area by Trapiche.

The position that the ruling does not impede the creation of the RESEX is in accordance with the public prosecutor's opinion. In its lawsuit, the public prosecutor states that even if the territory is not deemed to be marine land, this creates no impediments for the creation of the RESEX. If the land is deemed to belong to Trapiche, it would simply require an expropriation and that indemnifications be paid to the owners so that the RESEX can proceed.<sup>37</sup>

At this point, with the RESEX process stalled and with a number of organizations for and against the RESEX, it is difficult to predict the future of the RESEX in the Sirinhaem estuary.

<sup>&</sup>lt;sup>37</sup> Ibid

## CONCLUSIONS

The incidence of forced and child labor in Brazil has decreased across the country and in the sugar industry. Additionally, while land use continues to be a challenge for the country's sugar sector, some stakeholders expect the incidence of land conflicts to decrease due to better management of the country's rural cadastre, implemented through the new Forest Code. Stakeholders like Bonsucro see Brazil as a global reference in the implementation of legislation to combat child and forced labor and land conflict. Despite the most recent political and economic crisis plaguing the country, Brazil's macroeconomic stability and economic growth have contributed to reductions in poverty levels and improvements in working conditions, specifically around child and forced labor.

The government's multi-pronged approach to tackle child labor including investments in education, income generation and transfer, enforcement of laws, and raising awareness, has had an effect in decreasing the number of children at work. Despite this progress, Brazil will not reach its goal of eliminating the worst forms of child labor by 2016 and will continue to work to meet its goal of eliminating all child labor by 2020. It is important to note that out of the 71,000 children aged five to nine working, 83% are engaged in agriculture (2013 estimates). This study found that child labor was not a significant problem in the sugar industry and in TCCC's supply chain. Mills have established formal systems to verify employees' ages in mill-owned farms. In most cases, mills also hire the labor force employed in the sugarcane harvest directly, without relying on intermediaries, increasing their control over labor conditions and thus reducing the risk of child labor incidences. Mills also tend to communicate their position against child labor to their suppliers, but mostly lack monitoring systems to verify compliance. This is a point for improvement in the supply chain.

Regarding forced labor, while Brazil has made strides to combat this human rights violation, especially through government monitoring of companies and farms, the problem is still prevalent in the country. While researchers did not encounter any forced labor instances during mill and farm visits, desk research showed that three mills in the study have been involved in forced labor cases in the past. And while the number of workers rescued from forced labor situations in Brazil has decreased, the problem continues to occur, including in the sugar industry and requires continued attention. In TCCC's supply chain, the risk for the occurrence of forced labor is more pronounced in supplier-owned farms, as most mills have not employed monitoring mechanisms to ensure adherence to their own codes of conduct. Although mills tend to communicate their expectations around labor conditions to suppliers, including on forced labor, either formally or informally, the findings of the study highlight the need for all mills to have written policies against both forced and child labor and disseminate these policies accordingly. Grievance systems for the surrounding community could also help alert mills of labor non-compliances and other issues that may arise from their operations.

Finally, land use continues to be a challenge for Brazil's sugar industry. While the sector tends to expand into geographies previously occupied by other crops and cattle raising farms, land squatting and land disputes are still present. The ongoing conflict in the Sirinhaém Islands in Pernambuco with the Trapiche mill has brought international attention to the issue and to Brazil's sugar companies. Research findings show that none of the mills have policies in place on land expansion of their operations, which highlights the need for TCCC to promote the adoption of its guidelines around land use more broadly.

# **APPENDIX A: NATIONAL STAKEHOLDERS INTERVIEWED**

	Organization Name	Interview Date	Name	Title
1	Abring Foundation - Save the Children	11/28/2014	Denise Cesario	Executive Director
2	CONTAG (National Confederation of Agricultural Workers)	11/30/2014	Elias D'Angelo Borges	Secretary for Salaried Rural Workers
3	International Labor Organization, Brasil	10/27/2014	Luis Machado	Project Director, Special Action Program to Combat Forced Labor
4	Ministry of Labor	11/29/2014	Alexandre Lyra	Chief of Forced Labor Unit
5	Oxfam Brazil	10/24/2014	Gustavo Ferroni	Policy and advocacy advisor
6	Reporter Brasil	10/21/2014	Marcel Gomez	Executive secretary
7	Ethos Institute	07/16/2015	Caio Magri	Director of operations, company practices, and public policy
8	National Confederation of Education Workers	06/08/2015	Fatima Silva	Secretary of international relations
9	UNICA (Sugarcane Industry Association)	11/11/2014	Elimara Sallum	Labor union and labor rela- tions consultant
10	ICMBio	08/19/2015	Aldizio Oliveira	Coordinator for the Creation and Management of Preservation/Protected Units
11	Conservation International	08/20/2015	Guilherme Dutra	Director of Coastal and Marine Strategy
12	WWF Brasil	09/04/2015	Edegar de Oliveira Rosa	Head of Agriculture and environment program
13	Solidaridad Brasil	09/04/2015	Fatima Cardoso	Country Manager
14	Bonsucro	08/26/2015	Manuela Czinar	Engagement Manager

# **APPENDIX B: LOCAL STAKEHOLDERS INTERVIEWED**

	Organization name	Date	Name	Title	Sector	State	City
		<b>D</b> 4.0	1100		000101	Otato	J.,
1	Local fishermen	10/27/2014		N/A	Community members	São Paulo	Sao Joaquim da Barra
2	Local farm workers' union	10/29/2014	Mr. Valdecir	Vice President	Union	São Paulo	Sao Joaquim da Barra
3	Local Tutelary Council	10/29/2014	Mrs. Vania	Counselor	Government	São Paulo	Sao Joaquim da Barra
4	Pastoral do Menor	10/29/2014	Mr. Rita		NGO	São Paulo	Sao Joaquim da Barra
5	FAMASUL	12/1/2014	Rogério Beretta/Josiel Quintino dos Santos	Institutional & Technical Director/Land Affairs Technical Director	Union	Mato Grosso do Sul	Campo Grande
6	Escola Estadual Comandante Mauricio Coutinho Dutra	12/4/2014	Valtedon Mar- tins de No- vaes	School Director	Government	Mato Grosso do Sul	Sonora
7	Local Tutelary Council	12/4/2014		Counselor	Government	Mato Grosso do Sul	Sonora
8	Public Prosecutor's Office	12/4/2014		Assistant	Government	Mato Grosso do Sul	
9	Sindicato dos Trabalhadores nas Industrias do Açúcar e Álcool de Sonora	12/2/2014	Daniel Tomé da Silva	President	Union	Mato Grosso do Sul	Sonora
10	INCRA (Instituto Nacional de Colonizacao e Reforma Agraria)	2/10/2015	Herbert Alen- car	Rural Real Estate Registarion In- spector	Government	Rio Grande do Norte	Ares
11	Comunidade Catu da Estrada	2/12/2015	Various community members		Community members	Rio Grande do Norte	Catuzinho
12	Mayor's office	2/13/2015	Manuela Oliveira	Secretary of communication	Government	Rio Grande do Norte	
13	Rural Worker's Union	2/13/2015			Union	Rio Grande do Norte	
14	Ministry of Labor and Employment	2/13/2015	Calisto Torres Neto	Labor Inspector	Government	Rio Grande do Norte	
15	Federacao dos Tra- balhadores Rurais do Rio Grande do Norte	2/10/2015	Francisco Jose da Silva	Agriculture Policy Coordinator	Union	Rio Grande do Norte	
16	Local Public Prosecutor's Office	2/25/2015	Roseli Matias	General Prosecutor	Government	Alagoas	São José da Laje
17	Sindicato dos Trabalhadores Rurais de São José da Laje	2/25/2015	Maria Lúcia Candido Vi- ana	President	Union	Alagoas	São José da Laje
18	Fundacao Nacional do Indio (FUNAI)	2/19/2015	Amilton Diniz Botelho	Technical Assistant	Government	Alagoas	Maceio
19	Comissao Pastoral da Terra (CPT)	2/19/2015	Carlos da Silva Lima	General Coordinator	NGO	Alagoas	Maceio
20	Federation of Rural Workers of the State of Alagoas (FETAG-AL)	2/19/2015	Cicero Do- mingos de Oliveira/Joao Carlos Costa	Secretary of Employed Rural Workers/Legal Advisor	Union	Alagoas	Maceio
21	Sindicato da Industria do Acucar no Estado de Per- nambuco (SINDACUCAR)	2/19/2015			Union	Alagoas	

22	Convento Sao Francisco	2/26/2015	Frei Sinesio Araujo	Frei	NGO	Pernambuco	Sirinhaem
23	7 former inhabitants of the islands of the estuary in Sirinhaem	2/25- 2/27/2015		N/A	Community members	Pernambuco	Sirinhaem
24	Instituto Nacional de Colo- nizacao e Reforma Agraria (INCRA)	2/20/2015	Elizabete Rafael/Isaias Leite/ Zildomar Lopez	Agrarian Om- budsman/Chief of the Land Pro- curement Division/ Advisor	Government	Pernambuco	Recife
25	Comissao Pastoral da Terra (CPT)	2/20/2015	Marluce Me- lo/Placido Junior	Coordina- tor/Pastoral Agent	NGO	Pernambuco	Recife
26	Comissao Pastoral da Terra (CPT)	2/20/2015	Tiago Thorlby	Pastoral Agent	NGO	Pernambuco	Recife
27	Ministerio do Trabalho e Em- prego	2/24/2015	Rubens Mes- quita Jamir	Labor Inspector	Government	Pernambuco	Recife
28	Sindicato dos Trabalhadores, Trabalhadoras e Empregados Rurais de Coruripe	3/12/2015	Jorge da Sil- va San- tos/Joanicio Silva	Presi- dent/Financial Secretary	Union	Alagoas	Coruripe
29	Associacao dos Produtores (Sugarcane Produced Association - ASPROVAC)	3/12/2015	Joao Ebrahim Melquiades		Private sector	Alagoas	Coruripe
30	Conselho Tutelar da Criança e Adolescente de Coruripe	3/12/2015	Antonio Lessa Satil da Silva	Counselor	Government	Alagoas	Coruripe
31	Carmo do Rio Verde Mayor's Office	5/8/2015	Pedro Hen- rique Santos da Silva	Secretary of Administration and Environmental Management	Government	Goiás	Carmo do Rio Verde
32	Promotoria de Justica de Primeira Instancia Cartorio de Registro de	5/8/2015	Franciele C. de Souza	Assistant for the Public Prosecutor	Government	Goiás	Carmo do Rio Verde
33	Imoveis, de Registro de Titu- los e Documentos, Civil das Pessoas Juridicas e Civil das Pessoas Naturais e de Inter- dicoes, Tutelas e Protestos	5/8/2015	Kenia Cristina Alves	Office Administrator	Government	Goiás	Carmo do Rio Verde
34	Carmo do Rio Verde Tutelary Council	5/8/2015	Aderlindo Gomes da Silva Filho	Employee	Government	Goiás	Carmo do Rio Verde
35	Sindicato dos Produtores Rurais de Lagoa da Prata	5/14/2015	Carlos Hen- rique Rezende Lacer- da/Sergio Resende	President/Legal Advisor	Union	Minas Gerais	Lagoa da Prata
36	Sindicato dos Trabalhadores da Industria de Lagoa da Prata	5/14/2015	Lázaro Guil- hermino	President	Union	Minas Gerais	Lagoa da Prata
37	Promotoria de Justica da Vara da Infancia e Juventude das Comarcas de Lagoa da Prata e Japaraiba	5/14/2015	Luiz August de Rezende Pernal	Public Prosecutor	Government	Minas Gerais	Lagoa da Prata
38	Sindicato dos Trabalhadores Rurais de Lagoa da Prata	5/14/2015	Nelso Rufino de Paula	President	Union	Minas Gerais	Lagoa da Prata
39	Alto de Vista Alegre Tutelary Council	5/15/2015	Susy Adriana Boaro Ma-	President	Government	São Paulo	Vista Alegre do Alto

			gorno				
			90110				
40	Centro de Referência de Assistência Social	5/15/2015	Patricia Bizari	Social worker	Government	São Paulo	Vista Alegre do Alto
41	Coordenadoria de Assistên- cia Técnica Integral	5/15/2015	David Ro- drigues		Government	São Paulo	Vista Alegre do Alto
42	Promotoria de Justica da Infancia e Juventude da Comarca de Catanduva/SP	5/21/2015	Antonio Ban- dera	Public Prosecutor	Government	São Paulo	Catanduva
43	Sindicato dos Empregados Rurais de Catanduva	5/22/2015	Walter Hipo- lito	President	Union	São Paulo	Catanduva
44	Associacao dos Fornece- dores de Cana da Regiao de Catanduvas	5/22/2015	Jose Dias	Legal Department	Private sector	São Paulo	Catanduva
45	Conselho Tutelar da Criança e Adolescente de Catanduva	5/28/2015	Manuela Christiane Elias	Counselor	Government	São Paulo	Catanduva
46	Promotoria de Justica de Primeira Instancia	5/28/2015	Ethel Cipele	Public Prosecutor	Government	São Paulo	Jaboticabal
47	Sindicato dos Trabalhadores e Trabalhadoras Rurais de Jaboticabal	5/29/2015	Lineu No- bukuni /Valdeci da Mata	President/General Secretary	Union	São Paulo	Jaboticabal
48	Conselho Municipal dos Direitos da Criança e do Ado- lescente de Jaboticabal	5/29/2015	Isilda Sarti Comar	Counselor	Government	São Paulo	Jaboticabal
49	Oficial de Registro de Imoveis, Titulos e Documen- tos e Civil de Pessoa Juridica da Comarca de Jaboticabal	5/28/2015	Alvaro Benedito		Private sector	São Paulo	Jaboticabal
50	Promotoria de Justica de Itumbiara – Promotoria de Primeira Instancia (Infancia e Juventude)	6/3/2015	Clayton Korb Jar- czewski/Gers on Miranda da Silva Jr	Public Prosecu- tor/Assistant for the Public Prose- cutor	Government	Goiás	Itumbiara
51	Oficio do Registro de Imoveis 2a. Circunscricao	6/3/2015	Beatriz de Paula Xavi- er/Wagner Nunes Garcia	Owner	Government	Goiás	Itumbiara
52	Sindicato Rural de Itumbiara	6/3/2015	Rogerio San- tana de Araujo		Union	Goiás	Itumbiara
53	Conselho Tutelar da Criança e Adolescente de Itumbiara	6/3/2015	Denisia de Lourdes Oliveira		Government	Goiás	Itumbiara
54	Asociação dos Fornecedores de Cana do Vale do Rio Par- aguai	6/11/2015	Gilvan Mar- tins da Silva	Administrative and Financial Manager	Private sector	Mato Grosso	Nova Olímpia

55	Secretaria do Desenvolvi- mento Rural de Nova Olimpia	6/11/2015	Edson Noel da Sil- va/Kathiuscia de Arruda Medeiros Chieron	Secretary of Rural Development at EMPAER – Em- presa Ma- togrossense de Pesquisa, As- sistencia e Exten- sao Rural S/A/Staff member	Government	Mato Grosso	Nova Olímpia
56	Sindicato dos Trabalhadores e Trabalhadoras Rurais de Nova Olimpia	6/11/2015	Waldeni Francisco dos Santos/Cicero Alandre da Silva	Presi- dent/Treasurer	Union	Mato Grosso	Nova Olímpia
57	Sindicato dos Trabalhadores e Trabalhadoras Rurais de Denise	6/11/2015	Angelino de Oliveira Primo	President	Union	Mato Grosso	Nova Olímpia
58	Conselho Tutelar da Criança e Adolescente de Nova Olím- pia	6/11/2015	Conceição Alves de Araujo	Coordinator	Government	Mato Grosso	Nova Olímpia
59	Centro de Referência Especializado de Assistência Social	6/12/2015	Marcela Far- jani	Social Assistant	Government	São Paulo	Sertãozinho
60	Centro de Referência de Assistência Social	6/12/2015	Ana Paula Mardegam	Program Director	Government	São Paulo	Sertãozinho
61	Municipal Environmental Secretary Office	6/12/2015	Carlos Alex- andre	Secretary of envi- ronment	Government	São Paulo	Sertãozinho
62	Sertãozinho Tutelary Council	6/12/2015	Brás Carmo- na	Team Coordinator	Government	São Paulo	Sertãozinho
63	Sindicato dos Trabalhadores Rurais de Sertãozinho	6/12/2015	Natal Honorio Garcia	President	NGO	São Paulo	Sertãozinho
64	Secretaria Municipal de Desenvolvimento Economico e Geracao de Emprego e Renda	6/19/2015	Leonardo Dias	Secretary	Government	São Paulo	Araras
65	Registro de Imóveis e Anexos - Araras	6/19/2015	Rogério Natal Uccella/José Roberto de Oliveira Fran- co		Private sector	São Paulo	Araras
66	Sindicato dos Trabalhadores Rurais Assalariados de Araras	6/19/2015	Luciana Christina Gomes San- tos	President	Union	São Paulo	Araras
67	Conselho Tutelar da Criança e Adolescente de Araras	6/19/2015	Marcos Aparecido Bento/Celia Regina Bar- ros da Silva Pinto	President/ Counselor	Government	São Paulo	Araras

68	Municipal School of Vila Coqueiros	6/19/2015	Mrs. Sonia Maria	Vice Director	Government	Minas Gerais	Itapagipe
69	CRAS (Centro de Referência Assistência Social)	6/19/2015	Rejaine Tavares	Program Coordinator	NGO	Minas Gerais	Itapagipe
70	EMATER	6/12/2015	Gleicon R. Soares		NGO	Minas Gerais	Itapagipe
71	Sindicato de Produtores Rurais	6/12/2015	Anésio Leodel da Silva	union coordinator	Union	Minas Gerais	Itapagipe
72	Ministerio Publico de Minas Gerais	6/19/2015	Renato Bar- celos		Government	Minas Gerais	Itapagipe
73	Itapagipe Tutelary Council	6/19/2015	Paulo Onézio da Silva		Government	Minas Gerais	Itapagipe
74	CRAS Maracaí	6/26/2015	Leine Mara Sebastião	Social assistant	Government	São Paulo	Maracaí
75	Secretaria da Agricultura e do Meio Ambiente de Maracaí	6/26/2015	Luiz Augusto de Souza	Secretary of Agri- culture and Envi- ronment	Government	São Paulo	Maracaí
76	Sindicato Rural patronal de Macaraí	6/26/2015	Ubaldo Ber- mejo Bernardi	President	NGO	São Paulo	Maracaí
77	Cartório Maracaí	6/26/2015	Rodrigo José Maia Bolfarini		Private sector	São Paulo	Maracaí
78	Secretaria Municipal de Promoção a Assistência So- cial	6/26/2015	Rita de Cássia/Rober to Carlos Si- queira Gon- çalves Luciana		Government	São Paulo	Maracaí
79	Maracaí Tutelary Council	6/26/2015	Aparecida Francis- co/Reginaldo Augusto Vaz	Counselors	Government	São Paulo	Maracaí
80	Sindicato dos Trabalhadores Rurais de São Manuel	6/26/2015	Ernando Pe- reira de Mraes Filho Cristiane	Legal Advisor	Union	São Paulo	São Manuel
81	Conselho Tutelar do Mu- nicípio de São Manuel SP	6/26/2015	Domingos de Oliveira/Lucia na Pupo Per- es/Claudete Fogaça dos Santos	Counselors	Government	São Paulo	São Manuel
82	Local Public Prosecutor	6/26/2015			Private sec- tor	São Paulo	São Manuel

	Local Real Estate Registrar's						
83	Office	6/26/2015			Government	São Paulo	São Manuel
84	Conselho Tutelar da Criança e Adolescente de Macatuba	7/3/2015	Luziane Mar- tins de Souza	Counselor	Government	São Paulo	Macatuba
85	Servico de Convivencia e Fortalecimento de Vinculos	7/3/2015	Thaisa Hele- na Dare		Government	São Paulo	Macatuba
86	Centro de Referencia de Assistencia Social e Protecao Social Especial	7/3/2015	Fernanda Laziri Costa de Souza		Government	São Paulo	Macatuba
87	Associacao dos Fornece- dores de Cana de Acucar	7/3/2015	Pedro Lo- renzetti	Director	Private sec- tor	São Paulo	Macatuba
88	Coordenadoria de Assistên- cia Técnica Integral	7/3/2015	Rita de Cas- sia de An- drade	Director	Government	São Paulo	Macatuba
89	Sindicato dos Trabalhadores Rurais de Pederneiras	7/3/2015	Ademir Jose Moleiro	President	Union	São Paulo	Pederneiras
90	Registro de Imóveis e Anexos - Macatuba	7/3/2015	Priscilla Cor- reia	Official Register of Real Estate	Private sec- tor	São Paulo	Macatuba
91	Conselho Tutelar de Lençóis Paulista.	7/17/2015	Glauber Ri- cardo Oliveira Woida	Counselor	Government	São Paulo	Lençóis Pau- lista
92	Sindicato dos Trabalhadores e Empregados Rurais de Lencois Paulista	7/17/2015	Amavel Coe- lho Vaz	President	Union	São Paulo	Lençóis Pau- lista
93	Cartorio de Registro de Imoveis de Lencois Paulista	7/17/2015			Private sec- tor	São Paulo	Lençóis Pau- lista
94	Conselho Tutelar de Quatá	7/24/2015	Maurício Alves Reis/Rosilda Ribeiro de Mello	Presi- dent/Counselor	Government	São Paulo	Quatá
95	Sindicato dos Trabalhadores e Empregados Rurais de Quata	7/24/2015	Daniel Cerqueira de Souza	President	Union	São Paulo	Quatá
96	Serviços de Registro de Imóveis e Anexos	7/24/2015	Luiz Ricardo Guerra	Notary	Private sector	São Paulo	Quatá
97	Promotoria Geral de Justica de Quata	7/24/2015	Lucas Ribeiro Travain	Public Prosecutor	Government	São Paulo	Quatá

The names of interviewed workers are not provided in this appendix to maintain their privacy and the confidentiality of worker interviews.

## **APPENDIX C: REFERENCES**

Biosev, A Louis Dreyfus Commodities Company. "Setor Sucroalcooleiro". http://ri.biosev.com/biosev/web/conteudo\_pt.asp?idioma=0&conta=28&tipo=30884

Bunge. 2015. "Commitment to Sustainable Value Chains". http://www.bunge.com/citizenship/files/Sustainability-Commitments.pdf

Comissão Pastoral da Terra Nordeste II. http://www.cptne2.org.br

Comissão Pastoral da Terra. 2014. "Conflitos no campo – Brasil 2013." ISSN 1676-661X. http://cptnacional.org.br/index.php/component/jdownloads/viewdownload/43-conflitos-nocampo-brasil-publicacao/344-conflitos-no-campo-brasil-2013?Itemid=23

Companhia Nacional de Abastecimento. 2013. "Perfil do Setor do Acucar e do Etanol no Brasil Safra 2011/2012". http://www.conab.gov.br/OlalaCMS/uploads/arquivos/ 13\_10\_02\_11\_28\_41\_perfil\_sucro\_2012.pdf

Costa, Patricía Trindade Maranhão. 2009 "Fighting Forced Labor - The Example of Brazil." International Labor Organization. http://www.ilo.org/wcmsp5/groups/public/---ed\_norm/---declaration/documents/publication/wcms\_111297.pdf

Dávila, Renata. "A desapropriação por descumprimento da função socioambiental da propriedade: prática administrativa e avanços jurisprudenciais." http://www.ambito-juridico.com.br/site/?n link=revista artigos leitura&artigo id=10162

Deininger, K et al. 2011. "Rising Global Interest in Farmland: Can it Yield Sustainable and Equitable Benefits?" The World Bank. http://siteresources.worldbank.org/DEC/Resources/Rising-Global-Interest-in-Farmland.pdf

Folha de Sao Paulo. 2009. "530 sao flagrados em situacao analoga a escravido em Minas." http://www1.folha.uol.com.br/folha/brasil/ult96u657130.shtml

Hill, Dave and Ravi Kumar. "Global Neoliberalism and Education and its Consequences". University of Northampton. 2009. http://www.untag-smd.ac.id/files/Perpustakaan\_Digital\_2/ NEOLIBERAL-ISM%20Global%20neoliberalism%20and%20education%20and%20its% 20consequences.pdf

Hoffmann, R. and Ney M. 2010. "Estrutura fundiária e propriedade agrícola no Brasil." http://www.mda.gov.br/sitemda/sites/sitemda/files/user\_arquivos\_64/pageflip-4001789-487363-lt Estrutura Fundiria e -594202.pdf

IBAMA. 2006. "Processo 02019.000307/2006-31 Interessado: Frei Sinesio Araujo Assunto: 20724 Data: 27-03-2006 13:36:52 Documento Procedencia: OUT. De 18/03/06 de 17 Ilhas de Sirinhaem."

Instituto Brasileiro de Geografia e Estatística. 2011. "Pesquisa Nacional Por Amostra De Domicilios." http://biblioteca.ibge.gov.br/visualizacao/periodicos/59/pnad\_2011\_v31\_br.pdf

Instituto Brasileiro de Geografia e Estatística. 2014. "Pesquisa Nacional Por Amostra De Domicilios". http://biblioteca.ibge.gov.br/visualizacao/periodicos/59/pnad\_2013\_v33\_br.pdf

Instituto Ethos. "Pacto Nacional pela Erradicação do Trabalho Escravo." http://www3.ethos.org.br/conteudo/projetos/em-andamento/pacto-nacional-pela-erradicacao-do-trabalho-escravo/#.VckD6NwkPB8

International Labor Organization. 2001. "Stopping Forced Labor." http://www.ilo.org/wcmsp5/groups/public/@dgreports/@dcomm/@publ/documents/publication/wcms\_publ\_9221119483\_en.pdf

Leff, Nathaniel. "Economic Development in Brazil, 1822 - 1913. How Latin America Fell Behind: Essays on the Economic Histories of Brazil and Mexico, 1800 – 1914". Stanford: Stanford UP, 1997. 34-64. http://disciplinas.stoa.usp.br/pluginfile.php/308023/mod\_resource/ content/1/Leff%20Economic%20Development%20in%20Brazil.pdf

Locatelli, Piero. July 2014. "Congresso pode 'abrandar' PEC do Trabalho Escravo". Carta Capital. http://www.cartacapital.com.br/sociedade/2018pec-do-trabalho-escravo2019-pode-ser-esvaziada-commovimentacao-no-congresso-1993.html

Mark Johnston. "The Sugar Trade in the West Indies and Brazil Between 1492 and 1700." https://www.lib.umn.edu/bell/tradeproducts/sugar

Ministério do Trabalho e Emprego. 2015. "MTE apresenta balanço do trabalho escravo." http://portal.mte.gov.br/imprensa/mte-apresenta-balanco-do-trabalho-escravo-nos-20-anos-de-atuacao-do-grupo-movel/palavrachave/traabalho-escrvo-combate.htm

Ministério Público Federal. 2006. "Providências Extrajudiciais e Judiciais – Trabalho Escravo, São Paulo." http://pfdc.pgr.mpf.mp.br/atuacao-e-conteudos-deapoio/arquivos/trabalho-escravo/atuacao-do-mpf/levantamento-sobre-a-atuacao-do-mpf-emtrabalho-escravo-por-estado/sao-paulo

Ministério Público Federal, 2015. "INQUÉRITO CIVIL Nº 1,26,000,000896/2012-15."

Movimento dos Trabalhadores Sem Terra. 2014. "Bunge foi beneficiada por fraudes em lotes da Reforma Agrária, diz PF." http://www.mst.org.br/ 2014/12/08/ bunge-foi-beneficiada-por-fraudes-em-lotes-da-reformaagraria-diz-pf.html

New York Times. 2015. "TIAA-CREF, U.S. Investment Giant, Accused of Land Grabs in Brazil." http://www.nytimes.com/2015/11/17/world/americas/tiaa-cref-us-investment-giant-accused-of-land-grabs-in-brazil.html

Observatorio do Codigo Florestal. "O Codigo Florestal." http://www.observatorioflorestal.org.br/ pagina-basica/o-codigo-florestal

Organization of American States. "Report on the Situation of Human Rights in Brazil, Chapter VII – Land Ownership and the Rights of Rural Workers." https://www.cidh.oas.org/countryrep/ Brazileng/chaper%207%20.htm

Oxfam. "Brazil". http://www.oxfamitalia.org/wp-content/uploads/2013/09/ finalonepageronbrazilsumus.pdf

Oxfam. 2013. "Oxfam Case Study: Sugar Production in Brazil." http://www.oxfamnovib.nl/ Redactie/Downloads/Rapporten/cs-sugar-production-land-brazil-021013-en[1].pdf

Planas, Roque. July 2014. "Brazil's 'Quilombo' Movement May Be The World's Largest Slavery Reparations Program". Huffington Post. http://www.huffingtonpost.com/2014/07/10/brazil-quilombos n 5572236.html

Portal Brasil. 2015. "Ministério do Trabalho resgata mais de 5,6 mil crianças do trabalho infantile." http://www.brasil.gov.br/cidadania-e-justica/2015/06/ministerio-do-trabalho-resgata-mais-de-5-6-mil-criancas-do-trabalho-infantil

Reis, Thiago. 2014. "Número de famílias assentadas sobe, mas é menor que de anos FHC e Lula." http://g1.globo.com/brasil/noticia/2014/01/numero-de-familias-assentadas-sobe-mas-e-menor-que-de-anos-fhc-e-lula.html

Repórter Brasil. "Informacoes sobre o pacto nacional pela erradicacao do trabalho escravo." http://www.reporterbrasil.org.br/pacto/listasuja/datails/663

Repórter Brasil. "Lista Suja do Trabalho Escravo." http://reporterbrasil.org.br/listasuja/ resultado.php

Repórter Brasil. 2008. "Brazil of Biofuls: Sugarcane 2008." http://reporterbrasil.org.br/ documentos/brazil\_of\_biofuels\_v3.pdf

Revista Veja. 2013. "Valeu tentar, mas fracassou." http://uc.socioambiental.org/en/noticia/valeu-tentar-mas-fracassou

Rondonio Agora. 2009. "Operação evita degradação da Reserva Extrativista Rio Preto Jacundá." http://www.rondoniagora.com/noticias/operacao-evita-degradacao-da-reserva-extrativista-rio-preto-jacunda.htm

Sakamoto, Leonardo. 2014. "Congress Approves Expropriation of Property Found with Slaves." Reporter Brasil. 27 June 2014. http://reporterbrasil.org.br/2014/06/congressapproves-expropriation-of-property-found-with-slaves/

Sampaio, P. A. et al. "Proposta do Plano Nacional da Reforma Agrária". Brasília, MDA/INCRA, October 2003. http://www.scielo.br/scielo.php?script=sci arttext&pid=S0103-20032012000300007

Sauer, Sergio and Sergio Leite. "Agrarian structure, foreign land ownership, and land value in Brazil". Paper presented at the International Conference on Global Land Grabbing 6-8 April 2011. http://www.iss.nl/fileadmin/ASSETS/iss/Documents/Conference\_papers/LDPI/14 Sergio Sauer and Sergio Pereira Leite - ENGLISH.pdf

Skidmore, Thomas E. 1999. "Brazil: Five Centuries of Change". New York: Oxford UP, 1999. http://library.brown.edu/fivecenturiesofchange/

Staffing Industry Analysts. 2014. "Brazil – World Cup construction company added to slave labour list". http://www.staffingindustry.com/row/Research-Publications/Daily-News/Brazil-World-Cup-construction-company-added-to-slave-labour-list-30654

Teixeira, G. 2013. "Trabalhos, Tripartismo e Processos Sociais: Contribuições sobre o Compromiso Nacional da Cana de Açúcar." http://r1.ufrrj.br/cpda/wpcontent/uploads/2013/05/Dissertação-Gabriel-Pereira-da-Silva-Teixeira1.pdf

Terra de Direitos. 2009. "Usina Trapiche é multada em um milhão por cometer crime ambiental." http://terradedireitos.org.br/en/2009/11/03/usina-trapiche-emultada-em-um-milhao-por-cometer-crime-ambiental/

The Guardian. 2013. "Brazil's 'Dirty List' Names and Shames Companies Involved in Slave Labor." http://www.theguardian.com/sustainable-business/brazil-dirty-list-names-shames-slave-labour

Union of the Sugarcane Industry (UNICA). "FAQ." http://www.unica.com.br/fag/

United States Agency for International Development. "Property Rights and Resource Governance Brazil." May 2011. http://usaidlandtenure.net/sites/default/files/country-profiles/full-reports/USAID Land Tenure Brazil Profile.pdf

United States Department of Agriculture. 2015. "Sugar: World Markets and Trade." http://apps.fas.usda.gov/psdonline/circulars/Sugar.pdf

United States Department of Labor. 2013. "Findings on the Worst Forms of Child Labor." http://www.dol.gov/ilab/reports/child-labor/brazil.htm#laws

United States Department of State. 2014. "Country Report on Human Rights Practices for 2014, Brazil". http://www.state.gov/j/drl/rls/hrrpt/humanrightsreport/index.htm#wrapper

Veja Online. "Em Profundidade Reforma Agraria." http://veja.abril.com.br/idade/exclusivo/reforma\_agraria/contexto\_2.html

Vieira, Maria. "Setor Sucroalcooleiro Brasileiro: Evolução e Perspectivas". Banco Nacional de Desenvolvimento Econômico e Social. http://www.bndes.gov.br/SiteBNDES/export/sites/default/bndes pt/Galerias/Arquivos/conhecimento/liv perspectivas/07.pdf

Yamada, Erica and Luiz Villares. "Julgamento da Terra Indígena Raposa Serra do Sol". Revista de Direito Fundação Getúlio Vargas, São Paulo Jan./June 2010. http://www.scielo.br/ scielo.php?pid=S1808-24322010000100008&script=sci arttext

# **APPENDIX D: REVISION HISTORY**

REVISION DATE	SUMMARY OF CHANGE
15-December-2015	Completion of final report following round of internal and external review.