



ASSOCIAÇÃO BRASILEIRA DE ERGONOMIA

Revista Ação Ergonômicawww.abergo.org.br

Interventions Of The Public Labor Prosecutor's Office In The Sugar-Alcohol Sector Of The State Of São Paulo: A Qualitative Perspective Of The Involved Actors

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ABSTRACT

In 2002, the Brazilian's Public Ministry of Labor of the 15th Region received complaints reporting informality, slave labor and deaths by exhaustion in the sugar and alcohol industry. The attorneys organized a program of joint actions with the Ministry of Labor (MPT), the Reference Center on Workers' Health (CEREST), the Union of Rural Workers and the Rural Pastoral to intercede in that sector. This study sought to explore how the actors participating in that MPT program evaluated the actions undertaken in the period from 2004 to 2013. The research was based on documentary analysis of these actions and on semi-structured interview with the different actors: MPT prosecutors, MT auditors, coordinator of CEREST, and representatives of the Union of Workers and Rural Pastoral. These interventions resulted in approximately 100 inspections, assessments of 200 plants and 850 companies, and 600 Terms for adjustment of conduct (TACs). The program benefited, directly or indirectly, 220 thousand workers in the sector. The greatest difficulties encountered: scattered territory; insufficient inspection teams; technical difficulty to apply the standards. Advances achieved: adequacy of the work environment; end of deaths due to exhaustion, less work precariousness. The interviewees asserted the effectiveness of the interventions in the sector.

KEYWORDS: Public Labor Ministry; Deaths from Exhaustion; Workplace Safety; Precariousness of Work; Worker's Health.

1. Introduction

Brazil stands out as one of the leading food producers, boasting a highly productive agricultural sector. The Brazilian agribusiness has played a crucial role, contributing to 33% of the country's gross domestic product (GDP), 42% of exports, and employing around 17.7 million people, mobilizing over 150 billion dollars. However, the agricultural field remains one of the most labor-intensive sectors, posing challenges for workers who daily deal with machinery, often encountering unsafe and uncomfortable equipment, and facing risks associated with pesticide handling. Regulatory bodies respond by penalizing companies that neglect health and safety legislation, thereby exposing their workforce to such risks (ABRAHÃO et al., 2015).

Despite being the second-largest global producer and exporter of food, behind only the United States, Brazil has been the world's largest consumer of pesticides since 2008. Representing 86% of all pesticide consumption in Latin America and 20% globally (IBGE, 2018), this raises concerns about environmental and public health. In 2013, export values reached 89.5 million dollars, constituting 9% of the global market, and OECD-FAO forecasts suggest that Brazil will become the leading exporter in terms of production volume between 2022 and 2025 (OECD-FAO, 2019).

Highlighting a concerning aspect of working conditions, only a quarter of the workforce engaged in agricultural production has a signed work permit (IBGE, 2018). The agricultural sector generated 9,821 jobs in 2015, being the only sector with a positive balance, thanks to increased production and exports of agricultural products, according to data from the General Register of Employed and Unemployed (CAGED). In 2015, the country increased agricultural production by 7.7% compared to 2014, reaching a record of 209.5 million tons of grains. Furthermore, the agribusiness's share of Brazil's foreign trade balance reached a record, accounting for 46.2% of everything sold abroad. According to the interim Minister of Agriculture, Livestock, and Supply, André Nassar, the strong performance of agriculture in 2015 shows that Brazilian producers maintain strong confidence in the sector and continue to invest in food production to supply the domestic market and expand exports. In the first three quarters of 2015, the Gross Domestic Product, with all this translating into employment (BRAZIL, 2015).

In the last decades of the 20th century, due to petroleum shortages and environmental concerns arising from fossil fuel use, there was a worldwide search for alternative fuels. Thus, the sugarcane-alcohol sector has shown significant expansion in recent years (BRAZIL, 2010).

Sugarcane, initially transformed into sugar and now also into fuel alcohol, plays a prominent role in the global economy, with Brazil leading in both sugar and alcohol production (CESNIK, 2016). According to Kohlhepp (2010), sugarcane has regained status as one of Brazil's major exports, offering employment and income opportunities, especially for those involved in harvesting. It holds a crucial position in our country, where Brazil is the world's largest producer (34%) and exporter, boasting the lowest production costs. From 1993 to 2001, sugar production more than tripled.

As per data from ÚNICA (2019), in the 2017/2018 harvest, 641 million tons of sugarcane were harvested on 10.23 million hectares, representing over 16% of the area used for agricultural production in Brazil. The sector's development has been marked by market fluctuations, consistently supported by government intervention. As Scopinho (2003) states, the history of the sugarcane industry in Brazil intertwines with the nation's history.

During the severe economic crisis in the sugarcane industry in the 1930s, when the State assumed the role of direct administrator of the national economy, the Sugar and Alcohol Institute (IAA) was established in 1933. This government body was tasked with directing, controlling, and promoting sugarcane-alcohol production nationally. The history of government intervention in the sugarcane industry dates back to colonial times, institutionalized gradually in response to demands and pressures from producers, particularly mill owners (SCOPINHO, 2003).

A set of measures was enacted in the form of laws aimed at stabilizing production, establishing quotas for producers, and defining criteria for prices, weighing, inspection, technical, legal, financial, and social assistance—all aimed at reducing conflicts and harmonizing relations among mill owners. The IAA regulated contentious relations between mill owners and sugarcane suppliers (SCOPINHO, 2003).

In the political aspect, agribusiness has symbolized the country's economic development

through a positive foreign trade balance. The increase in exports, especially agricultural products in recent years, underscores this achievement. It is essential to reflect on the relationships and forms of work implemented by this agricultural model, considering not only the process of precarious labor relations and unemployment caused by machinery use but also to delve into the visible and invisible elements characterizing the complexity of work, based on the reality of this sector (SCOPINHO, 2003).

According to Laat (2010), in the production process, activities related to the harvest and processing of sugarcane are considered crucial, involving a large number of workers and impacting their health. Unlike other countries like Australia, where mechanized methods are used, in Brazil, the harvest was carried out by manual and semi-mechanized methods, with significant use of low-skilled labor. In recent decades, cane cutters were paid based on the amount of cane cut, requiring workers to handle about 12 tons per day. Thus, sugarcane cutting is considered degrading work, precisely due to the aggravating factors associated with this production system. Workers can be driven to exhaustion to meet the daily production imposed by sugarcane organizations.

The evolution of production and labor relations in Brazilian agriculture has undergone significant changes in recent decades. The mechanization of the agricultural sector played a decisive role in the structure of the labor market, especially in monoculture activities such as sugarcane, significantly influencing labor activities in handling this crop. This new cycle of sugarcane cultivation reflects variations that have reshaped this aspect of the national agribusiness, which generates a turnover of R\$ 40 billion per year (SILVA FILHO and QUEIROZ, 2013).

The sugarcane industry holds strategic significance for both Brazil and the state of São Paulo, encompassing approximately 8.811 million hectares and processing the equivalent of 658.822 million tons of sugarcane in the 2013/2014 harvest. This productive sector exhibits annual growth, with São Paulo playing a major role, currently hosting around 42.9% of the country's sugar and alcohol mills, as reported by the Ministry of Agriculture, Livestock, and Supply. However, this production chain is a source of concern for public authorities and civil society due to the exposure of migrant workers to risks inherent in the work process (VILELA et al., 2014).

Laat (2010) notes that from 2000 onwards, there has been an increase in reports of deaths due to exhaustion, workplace accidents, early loss of work capacity, pollution, and its effects on public health. These issues challenge the official narrative of "green" ethanol. Excessive workload and fatigue incentivized by payment and production-related bonuses are identified as contributing factors to this tragedy.

Alves (2006) highlights that the sugarcane industry has been a stage for socio-environmental disputes, balancing its economic and political importance with documented environmental impacts, public health concerns, and effects on workers' well-being in various studies and research. Media reports, along with information from the Pastoral Service of Migrants in Guariba (SP), indicate that between the 2004/2005 and 2006/2007 harvests, 14 sugarcane cutters died in the sugarcane region of São Paulo. These were young workers, aged between 24 and 50, migrants from other regions of the country (Northern Minas, Bahia, Maranhão, Piauí). The causes of death on their death certificates are vague, listing only cardiac arrest, respiratory failure, or stroke. However, friends and family members report that before their deaths, they had complained of excessive work, body pains, cramps, shortness of breath, and fainting. To understand what caused these deaths, an analysis of the working conditions of these individuals and the production processes to which they were subjected is necessary.

According to Vilela et al. (2014), the Workers' Health Surveillance (VISAT) of the Unified

Health System (SUS) initiated actions to address issues related to the working and living conditions of sugarcane workers in São Paulo from 2006 to 2009. This led to the definition of sanitary standards and initiatives at the legislative and judicial levels. However, even the most successful actions failed to address organizational determinants, especially the production-based remuneration, which challenges traditional surveillance and is exacerbated by the weak representation of workers.

Filgueiras (2012) notes that the National Program for the Promotion of Decent Work in the Sugarcane Industry is evidence that concentrating institutional efforts in a specific economic sector is a strategy that yields better results. This approach leverages the human resources of the Ministry of Labor, promotes institutional integration between government entities, and enhances planning mechanisms for actions and operations, ultimately improving the social conditions of workers.

In 2002, the 15th Region of the Ministry of Labor identified a serious situation in the sugarcane industry in São Paulo, especially in cane harvesting based on production, through reports of problems related to the work environment. The complaints included precarious labor relations, outsourcing of migrant workers, absence of registration, working conditions resembling slavery, irregular transportation of workers, sexual and moral harassment, and deaths due to exhaustion. A coordinated action program (PROMO) was initiated during this period in collaboration with various other entities: SUS; Sanitary Surveillance (VISA); Workers' Health Reference Center (CEREST); Ministry of Labor (MT); Rural Workers Union; Rural Pastoral; Universities; and other state government bodies dealing with policies for the sugarcane sector (Brazil 2006-PROMO).

This study aimed to explore how stakeholders evaluated intervention actions in the sugarcane sector in the state of São Paulo from 2004 to 2013 and the effectiveness of the program orchestrated by the Ministry of Labor.

2. Materials And Methods

The research commenced in January 2015, initiated through contact with a Prosecutor from the 15th Region of the Ministry of Labor (MPT) in Campinas, with the aim of gathering information for studying the actions and interventions of the Ministry in the sugarcane sector, specifically in manual sugarcane cutting and the application of NR 31.

The initial phase involved researching materials on the established actions in the sugarcane sector, utilizing document analysis and information provided by the Prosecutor. Following contact with the Prosecutor, it became evident that interventions took place in collaboration with other public entities (MT and CEREST), as well as the Rural Union and the Rural Pastoral, spanning from 2004 to 2013. Identification of key individuals involved in these interventions allowed for subsequent contact to gather information on their roles.

The jurisdiction of the 15th Region of the MPT covers the entire territory of the state of São Paulo, excluding Greater São Paulo and Baixada Santista. Access to information was granted by the University, emphasizing confidentiality commitment to the MPT. Initially, the MPT's Program and Actions in the sugarcane sector - PROMO (involving sugar and alcohol mills in São Paulo) were analyzed, along with other actions. The analysis included documentation description and subsequent synthesis.

For field research with participants, documentation was submitted to the Ethics Committee and registered on the Brazil Platform. After the research project was approved by the Committee, field research was authorized. Other involved public entities, namely MT and CEREST Piracicaba, later provided information on their roles in joint inspections with MPT. The Rural

Union and Rural Pastoral, also involved in interventions, supplied information about their participation. The collective documentation from all participants facilitated the development of document-based research.

The second phase involved conducting semi-structured interviews with various actors who actively participated in the interventions during the period covered by this research. Seven actors were interviewed: 2 MPT Prosecutors, 2 MT Auditors, 1 Coordinator from CEREST-Piracicaba, 1 representative from the Workers' Union, and 1 representative from Rural Pastoral. The goal was to identify the perceptions/perspectives each had regarding the joint actions. Interviews were conducted at the current location of each participant, and each participant signed an Informed Consent Form.

Interviews took place in Bauru, Cosmópolis, Mogi Mirim, Piracicaba, and Campinas, based on the work location or current residence of the involved actor. The interview duration varied between one and two and a half hours. Semi-structured interviews with each participant were recorded, transcribed, and then systematized to identify similarities and differences in their responses. The interviews were based on standardized questionnaires covering personal data, roles in the process, participation details, contributions of their organization, challenges faced, achievements, positive and negative aspects, and perceptions of program effectiveness.

3. Results And Discussion

The primary outcomes gleaned from the documentary research underscored that the collaborative efforts of MPT, MT, and CEREST acted cohesively and synergistically, contributing positively to the transformation and awareness of the sugarcane sector. Joint actions by these public entities demonstrated the effectiveness of interventions, with regulations such as NR 31, 17, and 15 providing the foundation for addressing worker exposure limits.

The combined efforts of MPT, MT, and CEREST in the sugarcane-alcohol sector in the MPT's 15th Region, from 2004 to 2013, yielded impressive figures: over 100 inspections, 852 companies were penalized - encompassing all operational mills at the time, approximately 200, including third parties; the number of Terms of Conduct Adjustment surpassed six hundred, benefiting all of the sector's over 220,000 workers, directly or indirectly.

The optimization of human resources by MPT facilitated institutional integration among government sectors, enhancing the planning mechanisms for actions and operations, leading to improved social conditions for workers. This aligns with Jackson Filho's (2015) research, emphasizing the positive engagement of public service workers, challenging the negative societal perception of them as privileged and 'non-working.'

MT played a significant role through rural inspections in mills, supplier work fronts, and rural condominium work fronts, always in collaboration with MPT, enabling prompt issue resolution in the week of penalties. MT formulated penalties, while MPT established Conduct Adjustment Terms (TACs), committing companies to rectify identified irregularities. Instances where agreements were not reached led to other legal proceedings such as Civil Action and Accord. In these instances, agreements served as a basis for the entire sector to effectively comply with health and safety requirements.

NR 31, encompassing a broader range of items than NRRs, provided more technical elements for MT inspections and enhanced industry understanding. It was deemed highly relevant for promoting preventive actions, reinforcing the effectiveness of joint interventions.

CEREST, acting as a technical assistant to MPT in the 15th Campinas region, participated in joint inspections with MT in worker accommodations, effectively regularizing lodgings statewide. Additionally, this entity engaged in research collaborations with universities,

establishing scientific parameters through NRs to underpin MPT actions for sector regulation. Notably, the application of NR 17 was observed to be relevant, necessitating the demonstration of real worker activities through Ergonomic Work Analysis (AET), aligning with the works of Abrahão (2000), Guérin et al. (2001), and Silva (2016). This analysis, specifically conducted in the sugarcane cutting sector, emphasized the importance of understanding the intrinsic aspects of workers' actions and associated constraints. The significance of activity analysis, supported by Gemma et al. (2010), lies in comprehending the actual work performed, encountered challenges, and strategies employed to overcome them.

The interviews corroborated the improvements identified in the documentary research and revealed, through the voices of various stakeholders, the key challenges encountered, the progress made, and the effectiveness of the joint intervention program.

The initiating prosecutor from Campinas acknowledged the precariousness of working conditions in the sugarcane-alcohol chain and felt compelled to instigate change. Thus, a specific program (PROMO) for the sector was established. Initially volunteering with another prosecutor, he continued the initiative independently, eventually presiding over PROMO. Through complaints and on-site visits, he recognized the dehumanizing nature of the work and lodgings, emphasizing the need for an organized and orchestrated action. His role involved structuring and organizing actions comprehensively. The intervention process was initiated when specific issues in a company warranted action, either under his responsibility or shared with other prosecutors. Seven prosecutors from MPT, approximately 14 to 18 auditors from MT, and the technical team from CEREST Piracicaba (engineers and occupational health and safety technicians) participated in these interventions.

The sugarcane-alcohol sector was geographically dispersed, posing a challenge due to limited personnel for inspection teams. Despite these difficulties, significant advances in improving labor conditions were achieved through interventions.

According to the union representative, worker deaths had been noted since 1993, but the union lacked the means to intervene. Workers, predominantly from Paraíba and Minas Gerais, states without specific employment policies for this category, faced harsh conditions. The representative visited Paraíba to understand their living conditions, emphasizing the extreme hardships there. Limited access to basic needs, such as water, was a constant struggle, with workers allowed to drink water only after harvesting 300 to 500m of sugarcane. This restriction, seen as a means to enforce production quotas, deprived workers of satisfying a fundamental physiological need—quenching thirst.

The rural pastoral representative highlighted that before interventions, workers would strive intensely for a few months during the harvest to earn income and acquire possessions. Interventions helped unite institutional and civil forces, addressing crucial issues and aiding in combating exhaustion-related deaths through logistical support from the Forum, promoting meetings.

MT auditors described their continuous efforts since the 2000s, involving collaboration, refinement of norms, and extraction of quality from regulations. They emphasized the complexity of their role, requiring legal knowledge, technical competence, and interpersonal skills. The objective of inspections, they stressed, is guidance rather than punishment. Non-compliance tools like fines, embargoes, and closures are reserved for severe cases and resistant employers.

Prosecutors faced significant resistance from sugar mills in adapting to regulations. The coordinated resistance orchestrated by a powerful group posed a challenge. When a leading company in the sector took action or signed an agreement, other mills followed suit.

The rural union representative cited the main advances as the union's collaboration with the Migrant Pastoral in Piracicaba, partnership with CEREST, and alliances with other public entities. These collaborations facilitated direct responses to immediate complaints, leading to improvements and knowledge enhancement.

The rural pastoral representative considered the interventions a significant advancement, leading to the approval of a State law improving rural worker housing conditions. He emphasized the collaborative approach: "Great works are not done alone!"

Prosecutors and auditors highlighted the positive impact of scientific partnerships, enabling valuable exchanges. Research outcomes, quantifying the challenges of cane cutting, were used in subsequent civil actions. The movement analysis and the real quantity of cutting required to meet the 12-ton daily target became essential for environmental litigation, prompting the implementation of ergonomic analyses, mandatory breaks, and even company-initiated occupational gymnastics.

This study highlights the transformative impact of collective action and synergies achieved through joint interventions in the sugarcane industry. The collaborative efforts of various stakeholders, including the Ministry of Public Labor (MPT), Ministry of Labor (MT), Regional Specialized Reference Centers in Occupational Health (CEREST), pastoral groups, and labor unions, contributed significantly to improving working conditions in the sector.

The CEREST coordinator emphasized the instrumental role of their technical support, acting as a technical assistant to the MPT. The synergy among committed individuals and organizations, including unions, played a pivotal role in achieving positive outcomes. The coordinated efforts were particularly fortunate for Piracicaba, leading to improvements and demonstrating the effectiveness of joint intervention programs.

The prosecutors and stakeholders acknowledged a prevalent challenge in Brazil – existing laws often go unenforced. However, significant progress was noted in the sugarcane-alcohol sector, with more than 75% of entities complying with regulations beyond traditional Brazilian standards. The effectiveness of the joint intervention program was evident through the rapid resolution of issues within the same week, showcasing tangible improvements.

The prosecutors emphasized that individual efforts yield limited results, whereas collective action was essential for efficacy. The joint efforts of MPT, MT, CEREST, pastoral groups, and unions brought about a notable transformation in the sugarcane industry, transcending its previous state of precarity. Although perfection was not achieved, the interventions prevented a potentially worse scenario, saving lives and ensuring workers' rights were respected.

Participants unanimously attributed the success to the collective nature of actions and the personal commitment of individuals within the involved institutions. The prosecutors highlighted the importance of the collective mindset in defending a larger cause, emphasizing the positive impact of elite collaboration and teamwork.

The Ministry of Public Labor's interventions, especially Civil Public Actions, played a strategic role in achieving significant advancements in the sector and public policies for the health preservation of sugarcane industry workers. This integration aligns with studies on Ergonomics of Activity in Brazil, emphasizing the link between the provision of public services and worker health.

The synergistic approach demonstrated during interventions showcased its effectiveness and could serve as inspiration for application in other contexts. The study underscores the need for inter-agency collaboration in implementing public policies in Brazil, reinforcing the potential positive outcomes derived from integrated efforts (HERRERA, 2019).

4. Final Considerations

This study delves into the early 2000s when Rural Unions, Pastoral da Terra, and the media consistently reported worker deaths in the sugarcane harvest, unveiling a myriad of issues within the labor environment of the sugarcane-alcohol sector in São Paulo. These encompassed precarious labor relations, migrant worker outsourcing without proper documentation, irregular transportation, sexual and moral harassment, conditions akin to slavery, and deaths from exhaustion. Complaints from workers, experiencing excessive workload, body pain, cramps, shortness of breath, and fainting, were prevalent before their demise. These reports prompted the Ministry of Public Labor (MPT) of the 15th Region in Campinas to initiate a series of interventions through a coordinated action program (PROMO).

The study identifies significant challenges faced during interventions, notably the sector's expansive nature across diverse territories and insufficient personnel for inspection teams. Despite these challenges, the interventions resulted in substantial improvements in working conditions.

Rural Unions and Pastoral Rural encountered open support from public agencies in addressing issues faced by workers, such as payment discrepancies, prolonged and intensified working hours, moral and sexual harassment, deplorable living conditions, and, most importantly, deaths from exhaustion. Joint actions swiftly addressed these concerns, contributing to their resolution and the cessation of deaths due to exhaustion.

The CEREST, acting as a technical assistant to the MPT in Campinas, played a crucial role in joint inspections with the Ministry of Labor (MT), leading to the regularization of accommodations throughout São Paulo. Collaborative research with universities provided scientific parameters through regulatory standards (NRs), supporting MPT actions and sector regulation.

Regulatory standards, particularly NR15, NR17, and notably NR31, played a pivotal role in promoting preventive actions and substantiating joint interventions. NR31, with its comprehensive technical foundation, contributed to improved working environments, reduced labor precariousness, the cessation of outsourcing, the end of deaths from exhaustion, and increased awareness among sugarcane-alcohol sector managers regarding legislative compliance.

The research findings underscore the positive impact of collective efforts by MPT, MT, and CEREST in transforming and raising awareness within the sector. Despite differing perspectives among involved stakeholders, a unanimous perception emerged of the effectiveness of joint interventions. The actors' commitment and engagement, coupled with a shared sense of civic duty, were pivotal factors contributing to the success of the collective endeavor for a just cause.

5. Acknowledgments

I express my gratitude to the professors and great friends at FEAGRI-UNICAMP: Dr. Mauro Jose Andrade Tereso, advisor; Dr. Roberto Funes Abrahão, co-advisor, for their patience and encouragement in my education; to the professors who were part of the defense committee; to Dr. Mário Antônio Gomes, for the support, encouragement, and for opening the doors of the Ministry of Labor Prosecution, 15th region; to everyone who participated and contributed to this research: MPT, MT, CEREST-Piracicaba, Rural Union of Cosmópolis, Rural Pastoral, and all the referenced authors.

6. Declaration Of Sources Of Funding

"This work was carried out with the support of the Coordination for the Improvement of Higher

Education Personnel (CAPES) - Brazil (Funding Code 001)."

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