

Agrarian Frontier Expansion and Conflicts over Labor: Labor Struggles in the Sugarcane Sector in São Paulo State in Brazil

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Keywords: labor, trade unions, industrial agriculture, sugarcane, conflict, agrarian frontier, Brazil

Land grabbing and the expansion of the agrarian frontier

Commodity frontiers are processes and places of expansion and deepening of the capitalist mode of production, while extracting (new) raw materials. Commodity frontiers often involve an industrialization of production, which translates into a profound reuse of land and labor (Moore 2000). Currently, we are witnessing the expansion of the agrarian frontier: a global 'land rush', which is transforming vast tracts of land for the purpose of agro-industrial crop production. Multiple global crises—financial, energy, food prices—have led to an increase in global investments in land; in short, *land grabbing* (Borras et al. 2012). These agro-industrial transformations have various socio-economic implications; one key affected area is agricultural labor, which plays an integral role in people's livelihoods in rural areas. According to the International Labor Organization, 1.1 billion people globally work in agriculture—around 300 to 500 million of them as wage workers (ILO n.d.). Corporate investment in land and agro-industrial forms of production such as modern technologies, cultivation methods and (genetically modified) plants affect employment opportunities, labor processes and working conditions in agriculture, and profoundly shape conflicts over labor (Brunner & Pye 2019).

This article explores large-scale industrial agriculture and related conflicts over labor in Brazil. It does so through an analysis of the industrial transformation of the sugarcane sector in São Paulo state, a representative case

of recent agricultural changes and their effects on wage workers, trade unions and their struggles.

The agro-industrial transformation of the sugarcane sector in Brazil

Since colonial times, sugarcane production has always played an important role in the development of Brazil and has been interlinked with the development policy of the state. In this article, I focus on the industrial transformation of the sugarcane sector in São Paulo state, located in the southeast of the country, between 2002 and 2016.

After years of crisis, the sugarcane sector entered a new golden era starting in 2002, especially in the Cerrado region in the center-south. São Paulo state is the center of sugarcane production in Brazil, which rose from 176,574,000 tons in 2001/02 to 365,990,000 tons in 2016/17 (UNICA n.d.-b). This rise in production was fostered by the large expansion of the land area planted with sugarcane in São Paulo state, which rose from 2,661,620 hectares in 2002 to 5,590,586 hectares in 2016 (UNICA n.d.-a).

Several factors have enabled the expansion of sugarcane production. After the elections in 2002, the government of Lula da Silva (*Partido dos Trabalhadores*, Workers' Party) supported the sector with cheap credits. The state development bank *Banco Nacional de Desenvolvimento Econômico Social* lent the sugarcane industry credits worth around 28.2 billion Reais (around 4.2 billion Euros¹)

¹ In this paper, I use the exchange rate of March 1, 2020 for the conversion from Real to Euro, which was 1 Real : 0.15 Euro on that day (OANDA).



Mechanised sugarcane harvesting. Photo: Jan Brunner, 2017.

between 2003 and 2010. Furthermore, the invention of the so-called ‘flex-fuel car’, which runs on a combination of ethanol and petrol, led to an increase in the national demand for ethanol produced from Brazilian sugarcane. Beyond these national factors, global changes have increased the demand for sugar and ethanol from Brazil, including lower tariffs for Brazilian sugar exports to the EU and the growing demand for ethanol due to changing climate policies (Alves 2009, p. 159; Garvey & Barreto 2014, p. 57; WWF 2008, pp. 4-5).

The expansion of sugarcane production has been accompanied by the internationalization of the sector. Exports of sugar and ethanol and international investment in the sector have risen sharply. Due to new profit opportunities, international investors and corporations such as Shell, Mitsubishi and Louis Dreyfus Commodities have invested in the sector. In many cases, these investors have merged with Brazilian companies (e.g. Dutch Shell and Brazilian Cosan founded Raízen) or they have bought smaller, financially unstable Brazilian sugarcane companies, which also meant a concentration of capital. The global economic crisis of 2007/08 led to many bankruptcies of smaller Brazilian sugarcane firms and reinforced these twin processes of

internationalization and the concentration of capital (Garvey & Barreto 2014).

Another part of this transformation has been the mechanization of sugarcane harvesting. In São Paulo state, this process of mechanization was regulated indirectly by a law enacted in 2002, which set out the path for the full eradication of the burning of sugarcane by 2031. Since manual harvesting requires the burning of sugarcane, this law de facto brought about mechanization. The end of sugarcane burning was even accelerated, as the government of São Paulo and UNICA, the association of sugarcane companies, established a voluntary agreement (*Protocolo Agroambiental*) to end sugarcane burning by 2017. The rate of mechanization thereby rose from 33.3% in 2006 to 89.6% in 2014 (Baccarin, 2016 p. 122; Fredo et al. 2014).

Sugarcane burning has been contested by socio-environmental groups since the late 1980s due to health and environmental concerns. Yet it was the change of interests of the sugarcane companies that was crucial in bringing an end to sugarcane burning. Harvesting with modern machines is more productive and profitable compared to manual harvesting, and due to the inflow of capital from international investors and

financial support from the state, the expensive investments in harvest machines were made feasible. Additionally, sugarcane companies and the state had an interest in creating an image of 'bioethanol' as clean and green in order to accelerate these exports (Alves 2009; Andrade Júnior 2016; Reis 2017).

Effects on labor

The transformation of the sector, especially the mechanization process, has had a strong effect on labor. Traditionally, work on sugarcane fields was mainly done manually. During the harvest season between April and December, in addition to the local workers, many migrants from poorer regions of Brazil, such as the Northeast, came to work as manual harvesters. These manual harvesting jobs have largely disappeared due to mechanization, as reflected in the decline in the number of registered manual workers from 178,510 in 2007 to 55,530 in 2017. The elimination of these lower-skilled jobs left many workers unemployed, and labor migration largely came to a halt. By comparison, fewer higher-skilled occupations, such as harvester and tractor operators, were created: the number of these 'mechanized' jobs in São Paulo state increased from 24,279 to 41,517 during the same period (Baccarin, et al. 2020, p. 612; Barreto, 2018, pp. 209, 223-230). The mechanized work on the fields is done by teams of harvest machine drivers, tractor drivers (which accompany the harvest machines), truck drivers, fire truck drivers, mechanics and team leaders. Manual workers, such as plantation helpers or herbicide sprayers, do all the work that machines cannot do or are employed in cases where it is cheaper to use manual labor instead of machines (Barreto, 2018, p. 269; Silva, Bueno, & de Melo, 2014, pp. 89-91).

Workers mainly have formal work contracts. These vary from daily to seasonal to permanent contracts. In 2016, a harvest machine driver typically earned 1,500 to 3,000 Reais (225-450 Euros), sugarcane cutters 1,500 to 2,100 Reais (225-315 Euros) and all other manual workers 1,000 to 1,500 Reais (150-225 Euros) (Reis 2017, p. 208; Interviews with sugarcane workers and representatives of rural and transport trade unions, São Paulo state 2016-2017).

Agro-industrial transformations and conflicts over labor

Traditionally, strikes, wildcat strikes and collective bargaining were the main means used by workers and rural trade unions in the sugarcane sector to enforce their claims. After mechanization, strikes and other collective actions were more difficult to organize and occurred less frequently. Due to the decline in manual labor, the president of one of the rural unions stated: "Nowadays, I lack the army to fight against the companies" (Interview, Jaboticabal, May 27, 2016). Additionally, the decrease in workers and union members has led to a decrease in the revenues and resources of rural trade unions. As a consequence, local rural trade unions (*sindicatos*) have had to cut back on spending and have reduced services such as workplace inspections, legal advice and medical consultations (Interviews with rural trade union representatives, São Paulo state, 2016-2017).

The mechanization of sugarcane harvesting has, furthermore, led to fragmentation between different trade unions. Legal disputes between rural and transport workers' unions were frequently required, for instance, to resolve the issue of representation of harvest machine, tractor and rural truck drivers. In Brazil, only one union can represent one group of workers in a municipality. Trade union umbrella organizations are fragmented, too, and rarely are such conflicts resolved (Interviews with representatives of rural and transport trade unions, São Paulo state, 2016-2017).

Sugarcane companies use a variety of forms of control over their workers to prevent protests and ensure productive labor input, such as through the wage system, the use of supervisors or the layoffs of strike leaders. Due to the declining employment opportunities in the sector and increasing regional unemployment, many workers fear losing their jobs and are therefore more reluctant to organize collectively and accept worse working conditions. Marx refers to this in terms of the "reserve army of labor" (Marx 2008 [1890], pp. 657-670). The fear of becoming unemployed is widespread, not only among manual workers; harvest machine drivers, in the interviews, also mentioned their disinclination to protest. These workers are

aware that they have a relatively ‘privileged’ employment for a rural area, with a comparatively high salary, health insurance and medical services provided by the company, and a formal contract (Interviews with sugarcane workers and representatives of rural and transport trade unions, São Paulo state, 2016-2017).

In consequence, strikes and other forms of collective action by workers and trade unions have declined. Collective bargaining, backed by law, remains an important means for workers and unions to enhance working conditions. However, the loss of bargaining power of manual sugarcane workers and rural trade unions has led to an increase in labor intensity (manual workers harvested 7.7 tons per day in 2000 and 8.7 tons in 2010) and lower wages for sugarcane cutters (Baccarin 2016, p. 130; Reis 2017, pp. 177-178; Repórter Brasil 2009, pp. 9-11). Machine drivers and their transport unions were able to use their higher bargaining power, due to their higher qualification levels compared to manual workers, to achieve moderate wage increases. Nevertheless, they were often unable to resist the insistence on long working hours (of up to 12 hours per day for drivers) in these negotiations (Interviews with different transport trade unionists, São Paulo state, 2016-2017).

In the period 2002-2016, the Brazilian government, led by the Workers’ Party, improved conditions to allow for labor inspections of rural work. It increased the Ministry of Labor’s budget for labor inspectors and prioritized the elimination of slave-like labor. In addition, the Ministry of Labor created a labor inspection group for rural areas in São Paulo state. A new labor directive, which specifically regulates working conditions (especially health and safety issues) in the agricultural sector (*Norma Regulamentadora 31*) was also implemented. In addition, the Brazilian government defined the sugarcane sector as a priority for the elimination of slave labor, as it sought to establish the necessary clean image for this key export sector. These changes have helped labor inspectors and prosecutors to sanction deviant companies (Anner 2008, p. 55; Coslovsky & Locke 2013; McGrath 2013; Interview with labor inspector, Batatais, March 28, 2017).

Strengthening labor inspections has improved the worst violations of labor standards in the sugarcane sector in the state of São Paulo. Better work safety regulations, improved workplace equipment such as fresh water and sanitation facilities and work breaks have helped to reduce the risk of accidents and work-related health problems, such as the fatalities that occurred among manual sugar cane cutters due to exhaustion in the mid-2000s. Slave-like labor, which was a major problem in the industry until the mid-2000s, has also been largely eliminated (Capitani et al. 2015; Coslovsky & Locke 2013; Interview with labor inspectors, Ribeirão Preto, November 4, 2016).



Strike of migrant sugarcane workers: "Where are our labor rights?", Source: Centro de Estudos do Trabalho, Ambiente e Saúde (Unesp Presidente Prudente), 2016

Conclusion
Agro-industrial transformations have an enormous impact on labor and workers, on trade unions and their struggles. In the case of the sugarcane sector in São Paulo state, this transformation has produced a few winners—namely ‘mechanized’ workers with better working conditions—but also many losers—in particular, manual workers who lost their jobs entirely or who must work long hours for low wages.

Increasing difficulties in organizing strikes and other collective protests due to the employment effects brought about by the mechanization of sugarcane harvesting have, in many cases, led trade unions and workers to modify their protest strategies. There is increased reporting of violations of labor standards to state labor inspectors, which has helped to improve the worst working conditions such as slave-like labor (Garvey & Barreto 2016, pp. 188-191; Interview with representatives of rural trade union, Cosmópolis, October 17, 2016 and transport trade unionist, São Paulo, March 8, 2017). Furthermore, rural trade unions (CONTAG, FERAESP) have tried to improve working conditions by participating in tripartite roundtables with the sugarcane industry (UNICA, Fórum Nacional Sucroalcooleiro) and government representatives. However, this strategy has had rather negative effects for rural trade unions in São Paulo state: working conditions have hardly improved as a

result, while such efforts also created fractions between rural trade unions (Interviews with rural trade unionists, Ribeirão Preto, March 29, 2017 and Cosmópolis, October 17, 2016).

The biggest challenge for workers and trade unions, however, is unemployment. Attempts to get sugarcane companies and the state to provide free training for unemployed sugarcane workers have hardly been successful, as only a few thousand have been able to participate in such programs. Another strategy employed by workers and trade unions is to engage in struggles over land (Interviews with representatives of rural and transport trade unions, São Paulo state, 2016-2017). These are much more difficult than labor struggles, though at the same time they do attack the foundations of capitalism—exploitation *and* private property—more profoundly.

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*All photos provided by the author.

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Cite this article:

Brunner, J. 2021. “Agrarian Frontier Expansion and Conflicts over Labor: Labor Struggles in the Sugarcane Sector in São Paulo State in Brazil.” *Commodity Frontiers* 2: 64-69. doi: 10.18174/cf.2021a18093.

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