

# Policy Briefing

## Martyrdom of the Cerrado: An Agri-Food Territory in Need of Justice

The Cerrado is a natural biome occupying 25 per cent of Brazil's surface. Compared to the Amazon, it is relatively unknown to international audiences, yet it is currently the world's largest agricultural frontier. Intensive soybean and beef production are driving deforestation, water depletion, habitat loss, and land grabbing. Emphasising the scale of land-based inequality and conflicts, this briefing exposes the Cerrado as a territory of martyrdom, contrasting the 'miracle' portrayed by the dominant agri-food regime. Resistance struggles within the region are outlined and recommendations looking to challenge the success narrative of agribusiness and to move towards territorial justice are presented.

### Key messages

- The Cerrado, a vast ecological region corresponding to 25 per cent of Brazil's land surface, has consolidated its place as a 'sacrifice' zone to feed the world. Soybean production across the 'Matopiba' region doubled between 2011 and 2017/18.
- Increased investments, including by foreign capital and many multinationals, have caused intensified socioenvironmental conflicts.
- Peasant farmers and traditional peoples have been the targets of attacks by land grabbers and large agribusinesses but are also agents of resistance and change.
- It is crucial to challenge the dominant narrative of agribusiness success in the Cerrado that has persisted over the last 50 years and to support peasant farmers and traditional peoples in their fight for territorial justice, whilst developing socially and environmentally responsible alternatives.

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## Deforestation and agricultural modernisation in Brazil

Combating deforestation has become a major policy issue on the global agenda for addressing climate change. At COP26, in 2021, **world leaders promised to end deforestation by 2030**. The Amazon in Brazil, where 60 per cent of the rainforest is located, was at the centre of discussions about where efforts should be concentrated.

This *Policy Briefing* draws attention to the less prominent Cerrado, a natural biome as well as a space of rich social and agrobiodiversity in Brazil. The Cerrado has been hailed as the cradle of an agricultural modernisation project that started in the 1970s and turned Brazil into a global agri-food giant. The so-called 'miracle of the Cerrado' is contested, though it continues to be seen as a model that other Southern countries aspire to replicate. More recently, the Cerrado emerged as a 'sacrifice zone' to feed the world, while presumably 'protecting' the Amazon. This *Policy Briefing* discusses why this is problematic, and where the battlefronts currently lie. Besides the territorial dimension of the struggles, there is a battle for an alternative vision of the agri-food system, fought both within Brazil as well as internationally.

### Introducing the Cerrado

The Cerrado is situated in Brazil's tropical latitudes and covers an area of about 2 million km<sup>2</sup>, corresponding to more than 25 per cent of the country's surface. The World



**Intensive soybean and beef production for export are driving deforestation, water depletion, habitat loss and land grabbing, particularly in the region known as 'Matopiba'.**

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The Cerrado ecoregion as delineated by the World Wide Fund for Nature. Produced by Pfly using NASA Blue Marble imagery and ecoregion GIS data.

Wide Fund for Nature refers to it as '**the world's most biologically rich savannah**' that is home to 5 per cent of the world's species and 30 per cent of Brazil's biodiversity. Yet, **less than 2 per cent of its territory is protected** in national parks and conservation areas. Several of these areas are illegally occupied for large monocrops and cattle ranching. With more than 80 ethnic groups living in the Cerrado, this is more than a biome but also a territory of people, culture, and heritage.

### The 'miracle of the Cerrado' and new frontiers

The origins of the most recent chapter of the Cerrado transformation can be traced back to the early 1970s. The Cerrado was perceived at the time as barren land and its conversion to farmland was seen as a goal of the modernisation agenda embraced by Brazil's military regime.

The conversion of the Cerrado was a political, social, economic, and technocratic endeavour:

- **Political:** It was part of a vision of territorial occupation and state control, supported by territorial development plans of the military government.

- **Social:** It helped to ease pressure over land in the more densely populated southern regions of Brazil by attracting experienced and capitalised southern farmers to the central regions.
- **Economic:** It aimed to create the conditions for cheap food production that could support industrialisation and the economic expansion of agro-industrial conglomerates.
- **Technocratic:** The project embraced science and technology as the solution to the challenges posed by nature (such as acidic soils and high temperatures).

The tropicalisation of soybean (until then, a temperate crop) became a symbol of the scientific conquest of the Cerrado. The Brazilian Agricultural Research Corporation (Embrapa), established at the time to lead the agricultural modernisation project, is today widely regarded as **the hero of this Brazilian Green Revolution**.

The '**miracle of the Cerrado**', using the words of *The Economist*, is a narrative that praises this conversion process, particularly the science and technology that enabled entrepreneurial farmers to achieve high yields and become competitive in world markets, turning Brazil into a global leader for a range of agri-food commodities. Besides technology, the conversion of the Cerrado was supported by bulky subsidies that were directed to large-scale, intensive farming, although state support is deliberately underplayed by narratives centred on science and entrepreneurship. The rise in crop yields, volumes of production and exports, particularly since the mid-1990s has been unprecedented, driven by the increase in



**The expansion of the agricultural frontier has exacerbated land inequality.**



**The growth of foreign and domestic capital investments has caused intensified socio-environmental conflicts.**

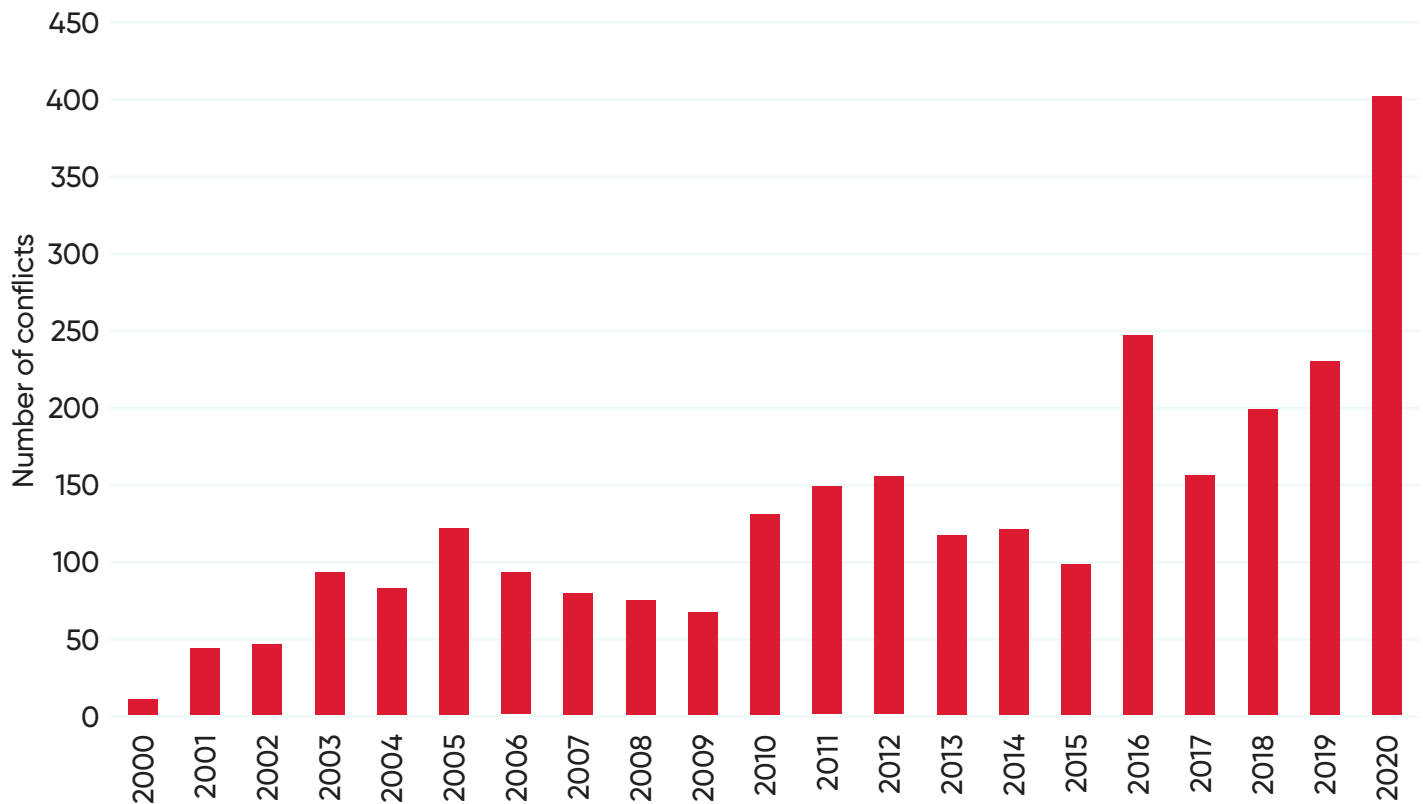
demand of soybeans from China. But this has come at a great cost.

The degradation of land and the depletion of water basins are evident legacies of the 'miracle', which have in turn impacted yields and profitability. Soil exhaustion coupled with global demand for agri-food commodities have pushed the intensive agricultural frontier further north to a region known as 'Matopiba', containing the states of Maranhão, Tocantins, Piauí, and Bahia.

Officially **recognised by Embrapa as a territory in 2014**, Matopiba covers more than 300 municipalities in an area of over 73m hectares. Matopiba has 28 demarcated indigenous lands and 34 *quilombola* territories (created by Afro-Brazilian people who escaped from slave plantations that existed in Brazil until abolition in 1888). It also hosts 865 agrarian reform settlements and 42 environment conservation areas. There is also land claimed by traditional communities, but they are not officially recognised by the Brazilian government.

While Matopiba represents a small portion of the Cerrado, it has become an auspicious cornerstone in the rhetoric of agribusiness expansion. According to Embrapa, soybean production across the four states has increased from 769,000 tonnes in 1993 to more than 7m tonnes in 2011, and 14.5m tonnes in 2017/18. Estimates for the 2021/22 harvest indicate the total planted area of soybean, corn, and cotton will reach 8.4m hectares, 2.6 per cent more than in 2020/21. The Minister of Agriculture estimates that this will grow by another 1.1m hectares by 2030.

**Figure 1 Number of land-related conflicts in Matopiba (2000–20)**



Source: Produced by Debora Lima, based on data from CPT and NERA.

## The miracle's legacy – Matopiba as the new frontier for inequality and conflict

Besides significant environmental impacts, including deforestation and water depletion, the expansion of the agricultural frontier has exacerbated land inequality. The **2017 Agricultural Census** shows a reduction in the number of farm units with areas between 50 and 2,500 hectares and an increase in units above 2,500 hectares. This increase is proportionately greater (at 41.4 per cent) than the increase observed for the country as a whole (21.5 per cent).

The Census also indicates that, in 2017, the average size of farm units in Matopiba (116 hectares) was higher than the national average (64 hectares). Small farms (of up to 10 hectares) constitute about 40 per cent of all units yet hold less than 1 per cent of the land. By contrast, large units cover more than half of all farmed land. Farm units with areas between 1,000 and 2,500 hectares (representing 1.3 per cent of all farm units) hold

16.9 per cent of the land in Matopiba and those with areas above 2,500 hectares (0.8 per cent of all farm units) control 36.2 per cent.

Favareto *et al.* (2019) argue that, in spite of the hype about the economic potential of Matopiba, there is more poverty and injustice than wealth and wellbeing in the region. Only 45 municipalities have a gross domestic product above the national average. The fact that production is concentrated in few municipalities blocks the distribution of economic benefits across the territory.

Conflicts and disputes over land and other natural resources (such as water, wood, and minerals) are particularly intense in frontier zones. The expansion of the frontier, with the growth of foreign and domestic capital investments, has caused intensified socioenvironmental conflicts. Land-related conflicts in Matopiba have increased considerably since 2016 (Figure 1), suggesting a connection between investments, expansion of monocrops, and conflicts over land and other natural resources.

Research by the Comissão Pastoral da Terra (CPT) and the Núcleo de Estudos, Pesquisas e Projetos de Reforma Agrária (NERA) indicates that traditional peoples (*povos tradicionais*) – using land under communal regimes – and peasant farmers are the social groups most affected by land conflicts in Matopiba. There has also been an increase in associated social and environmental conflicts, particularly disputes over the water in Matopiba. The most well-known case happened in Correntina, in 2017. Agribusiness companies had been pumping the waters of the Corrente River for irrigation, one of the rivers of the São Francisco basin. Two farms alone extracted, on average, 106m cubic metres of water per hour, corresponding to the monthly consumption of the whole of Correntina city. Denunciations of excessive and illegal use of water for irrigation of large monocrops resulted in a **mass mobilisation denouncing the river's death and water shortages** for the local population.

### **Multiple spaces of resistance and change**

While the target of attacks by land grabbers and large agribusinesses, peasant farmers and traditional peoples have been agents of resistance and change on several fronts, through:

- **Claiming territorial rights and occupying the land.** Most agrarian movements are struggling in the Cerrado, demanding land for the landless, agrarian reform, and rights to stay in their traditionally occupied territories, including demands for conservation areas with sustainable use.



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- **Pursuing alternative agri-food pathways.** Social movement activists, working alongside scientists and technicians, are seeking to develop agri-food system alternatives that work for people and nature. These include participatory **social innovations** and efforts to improve both **nutritious and ecological qualities of food** supplied by state-funded programmes.
- **Reclaiming public policy.** Progressive agri-food policies have been persistently under attack since around 2015, with severe cuts in federal resources to support programmes designed to strengthen agrarian justice and social inclusion. This is a space being reclaimed by turning to **municipalities to act for the protection of territories and promotion of alternatives.**
- **Activist scholarship.** Connections between social movements and academia have helped to document social and environmental impacts in the frontier. The establishment of the **Observatório dos Conflitos Socioambientais do Matopiba** in 2019 is a case in point. These connections have encouraged alternatives to dominant narratives about agricultural success and sustainable food systems.
- **International knowledge networks and cooperation.** Links with social movements and scholars from other world regions have further stimulated such reflections and increased visibility for local struggles and perspectives on equitable and sustainable development rooted in diverse experiences.

## Policy recommendations

### Policymakers:

- Frontier agricultural territories like the Cerrado must be brought to the forefront of policy debate. The dominant narrative about agri-food success – centred on yields, competitive commodities, and cheap food to feed the world – needs to be challenged, for both its detrimental social and environmental impact and the shadow it casts over alternative pathways.
- In frontier agri-food territories, restrictions are needed to limit the power of big agribusinesses and hold them accountable for environmental destruction, social exclusion, and illegal practices. There is scope to strengthen legislation and control mechanisms on deforestation and forest replacement. There is also a need to reformulate legislation on the use of water, especially on concessions of water for irrigation.
- The transition towards more sustainable agri-food territories needs public sector support. Distributive programmes that target disadvantaged social groups

should target the entire local food system, from production to consumption, in ways that advance sustainability and justice.

### Donors, funders, and research institutions:

- Increased funding is needed for social movements developing alternatives to unsustainable agribusiness. Social movements and scholars have devised inclusive and sustainable technological solutions for farming and are promoting food justice through localised chains. Resources are needed to cultivate this further.
- International exchanges between activists and researchers play a central role in developing alternatives, by giving visibility to domestic struggles and enabling mutual learning across contexts. Researchers should work with on-the-ground resistance movements in the Cerrado, giving their fight visibility and increased resources.
- Sustained South–South exchanges between social movements and researchers are crucial. Funding programmes should be long term, extending beyond short-lived governmental affairs that are conditioned by diplomacy. ■

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### Further reading

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