

SÃO FRANCISCO RIVER TRANSPOSITION: INTENSIFYING WATER AND LAND OWNERSHIP CONCENTRATION IN SOUTHERN CEARÁ, BRAZIL

Transposição do Rio São Francisco: potencializando a concentração hídrico-fundiária no Sul do Ceará

Transposición del río São Francisco: potenciación de la concentración de agua y tierra en el sur de Ceará



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ABSTRACT

The study examines the water supply system of Brazil's Northeast focusing on the São Francisco River transposition project and its impact on the southern region of Ceará. It examines the capitalist expansion characterized by the concentration of water and land ownership driven by the territorialization of capital through the actions of the neoliberal state and large agribusiness corporations. The methodology includes a theoretical review of water, land, and territorial issues, complemented by fieldwork with interviews conducted among agribusiness entrepreneurs and small-scale family farmers. The research exposes the contradictions inherent in this megaproject for the Northeast's water supply system and critically assesses concerns over the commodification of natural resources, particularly water, by agribusiness and the neoliberal state's public water policies. These policies have effectively transformed water into a marketable commodity. It reveals that the project has not brought substantial structural changes for the working-class population in the Northeast region. Instead, it has led to water injustice, wealth accumulation, capital expansion, territorial control by agribusinesses, and socio-territorial conflicts. Moreover, the research highlights the struggles and resistance of family farmers fighting for equitable access to land, water, territory, and water supply for all. These communities have seen their natural resources depleted by coordinated actions between the state and corporate interests.

Keywords: Water network; Water and agrarian concentration; Agribusiness.

Article History

Received: 24 april, 2024

Accepted: 06 september, 2024

Published: 21 october, 2024

RESUMO

Discute-se a rede hídrica do Nordeste, a partir do projeto de transposição do rio São Francisco, com foco na mesorregião sul cearense, mediante a expansão capitalista, demonstrada pela concentração hídrico-fundiária através da territorialização do capital com a atuação do Estado neoliberal e grandes empresas do agronegócio. A metodologia assenta-se em revisão teórica, relacionada a água, terra e território, além da realização de trabalhos de campo mediante realização de entrevistas com empresários do agronegócio e agricultores familiares. Verificou-se as contradições do megaprojeto da rede hídrica do Nordeste e analisou-se as indagações e inquietações existentes em relação à mercantilização dos bens comuns da natureza pelo agronegócio e às políticas públicas hídricas do Estado neoliberal, que estão transformando a água em mercadoria. Observou-se, com a pesquisa, que essa rede hídrica não efetivou mudanças estruturais para a classe trabalhadora do Nordeste, ocasionando injustiça hídrica, acumulação, expansão do capital, territorialização das empresas agrícolas e conflitos socioterritoriais, evidenciando-se as lutas e resistências dos agricultores familiares por terra, água, território e rede hídrica para todos, pois perderam seus bens naturais a partir de ações coordenadas tanto pelo Estado quanto pelo capital.

Keywords: Rede hídrica; Concentração hídrico-fundiária; Agronegócio.

RESUMEN

Se discute la red hídrica en el Nordeste, a partir del proyecto de transposición del río São Francisco, con foco en la mesorregión sur de Ceará, a través de la expansión capitalista, demostrada por la concentración del agua y de la tierra a través de la territorialización del capital con la actuación del Estado neoliberal y de las grandes empresas del agronegocio. La metodología se basa en una revisión teórica sobre el agua, la tierra y el territorio, así como en un trabajo de campo a través de entrevistas con empresarios del agronegocio y agricultores familiares. Se verificaron las contradicciones del megaproyecto de la red hídrica del Nordeste y se analizaron las cuestiones y preocupaciones existentes en relación con la mercantilización de los bienes comunes de la naturaleza por parte del agronegocio y las políticas públicas hídricas del Estado neoliberal, que están convirtiendo el agua en una mercancía. La investigación demostró que esta red de agua no ha traído cambios estructurales para la clase trabajadora del Nordeste, provocando injusticia hídrica, acumulación, expansión del capital, territorialización de las empresas agrícolas y conflictos socioterritoriales, destacando las luchas y resistencias de los agricultores familiares por la tierra, el agua, el territorio y una red de agua para todos, ya que han perdido sus bienes naturales como resultado de acciones coordinadas tanto por el Estado como por el capital.

Palabras clave: Red hídrica; Concentración de agua y tierra; Agronegocio.

1 INTRODUCTION

The neoliberal state has transformed Brazil's Northeast region by constructing a new water supply system, with one of its most significant projects is the São Francisco River transposition, the largest water infrastructure project in Latin America. This new capital accumulation initiative, implemented by the state's water and agrarian policies, has become a central element for the region's agribusiness expansion.

Analyzing the new geography of the water supply network in the Northeast, it becomes evident that this development process involves the construction of interconnected water systems aimed at benefiting large landowners and promoting the economic growth of agribusiness in the semiarid region. This new water supply network must be critically examined, especially considering the extensive infrastructure projects built in the 21st century, including the São Francisco River Integration Project (PISF) and its associated branches: Entremontes, Agreste, Salgado, Apodi, Piancó, and the Ceará Water Belt (CAC). These projects, implemented by the federal and state governments, have been reinforcing the capitalist dynamics of water and land markets.

In the state of Ceará, the construction projects are specifically aimed at expanding the water supply through reservoirs like Castanhão, the largest dam in the Northeast region, with a storage capacity of 6.7 billion m³, Orós with 2.1 billion m³, and Banabuiú, all of which are already integrated with the Pacajus, Pacoti, Riachão, and Gavião dams. These water resources serve most of the population in the Jaguaribe and Metropolitan basins covering five million inhabitants across 56 municipalities (Brazil, 2020). Additionally, the Cariri region is also set to benefit. It is worth noting that Ceará has a total water storage capacity of 18 billion m³ (Brazil, 2020).

The water supply in southern Ceará, particularly in the Cariri region, through the Northeastern water supply network established around the PISF, has been accompanied by various forms of injustice — water, environmental, and territorial — affecting family farmers. This analysis revealed the expansion of the capital and the displacement of communities near these water infrastructure projects.

What is observed is the transformation of the water supply network into a means of capital accumulation in this new phase of the neoliberal state using the narrative of water scarcity in the Northeast region. What is striking in this process is how climate issues are leveraged in favor of capital alongside the strategy of creating various public policies that, in the narratives of government officials, claim to provide “water for those who are thirsty”. This leads to contradictions, given the minimal change in water access for small-scale farmers and the concentration of water in large reservoirs used by agribusiness sectors.

The state keeps favoring the dominant elite of the Northeast region by using public funds for large-scale water infrastructure projects, justified as solutions to water scarcity. Yet, even after over two centuries, millions of *sertanejos* (people who live in the *sertão* - hinterland) remain excluded from water access. In the face of these contradictions, protests

and resistance movements have emerged denouncing social, economic, and environmental injustices, while fighting for the necessary rights to build a more just society.

The narrative of drought and water scarcity has been perpetuated by the state and local elites as the primary cause of social inequality and the *sertanejo's* misery: "The availability of water is, no doubt, the determining factor of poverty or wealth in the region" (Brasil, 2004, p. 116). The construction of the largest water infrastructure project in Latin America, the São Francisco River transposition, has been marked by intense debates, conflicts, and social mobilizations, as well as territorial transformations and challenges in managing water resources in the semiarid region. According to Petrella (2002), this project is aligned with the interests of the 'lords of the land' who will also become the 'lords of the water', further strengthening the power of the regional elite.

Moreover, the new water system has intensified the concentration of land, wealth, and power among large landowners while also attracting agribusiness corporations that use water unsustainably, drastically altering the lives of local communities in their territories. Thus, it is possible to say that this extensive water infrastructure was not meant for the democratization of water. Instead, it has led to the commodification of water, sparking numerous instances of resistance and conflict along the entire course of the project.

This water supply network geography is designed to serve the capital through the commodification of land, water, and natural resources, central to the neoliberal capitalist system which is transforming water into a commodity as part of the process of primitive accumulation (Marx, 2011) or by spoliation (Harvey, 2004). As a result, these changes have had significant impacts on rural communities, who, in addition to being marginalized by state actions are now being charged to have access to water.

So, the territorialization of agribusiness is unfolding through the construction of the new water supply network in the Northeast region in a model that prioritizes the new water owners, focusing on its control, privatization, and commercialization. Therefore, the neoliberal state actively promotes the expansion of agrarian capital in the region leading to an intensified concentration of water and land resources (Cavalcante, 2019).

This occurs because the current changes taking place in the Northeast region are a reflection of a set of neoliberal political and economic strategies prioritized by the state, aimed at enabling the strengthening and expansion of capital. At this stage of global capitalism, dominant power, driven by financial capital, consolidates itself creating new relationships of production between land, water, and territory.

Given these facts, the social problem in the Northeast is not simply solved by the supply of water, as it is already present in certain reservoirs. The issue lies in how the water network is managed and distributed as these new supply system policies have led to numerous territorial conflicts, primarily affecting family farmers, traditional communities, and indigenous peoples. Essentially, the neoliberal state is focused on promoting the expansion and consolidation of capitalism in rural areas through agribusiness corporations (Cavalcante, 2019).

Accordingly, the objective of this article is to understand how this water supply network is being implemented. Who will benefit from the land and water market? Will agribusiness tend to expand along it? Are there concentrations of water and land ownership through the territorialization of agribusiness corporations? What are the relationships between family farmers and the water supply system? Is it causing conflicts through struggles and resistance in rural areas?

This study underscores the need to critically examine the contradictions within the new water supply system in the Northeast, particularly concerning the São Francisco River transposition. It investigates the commodification of land and water and the subsequent economic concentration in the region while exploring the links between basin integration and the rise of new owners of land and water under the capitalist system. The analysis focuses on the south of Ceará, a focal point of state intervention through the São Francisco River Integration Project (PISF).

2 METHODOLOGIES

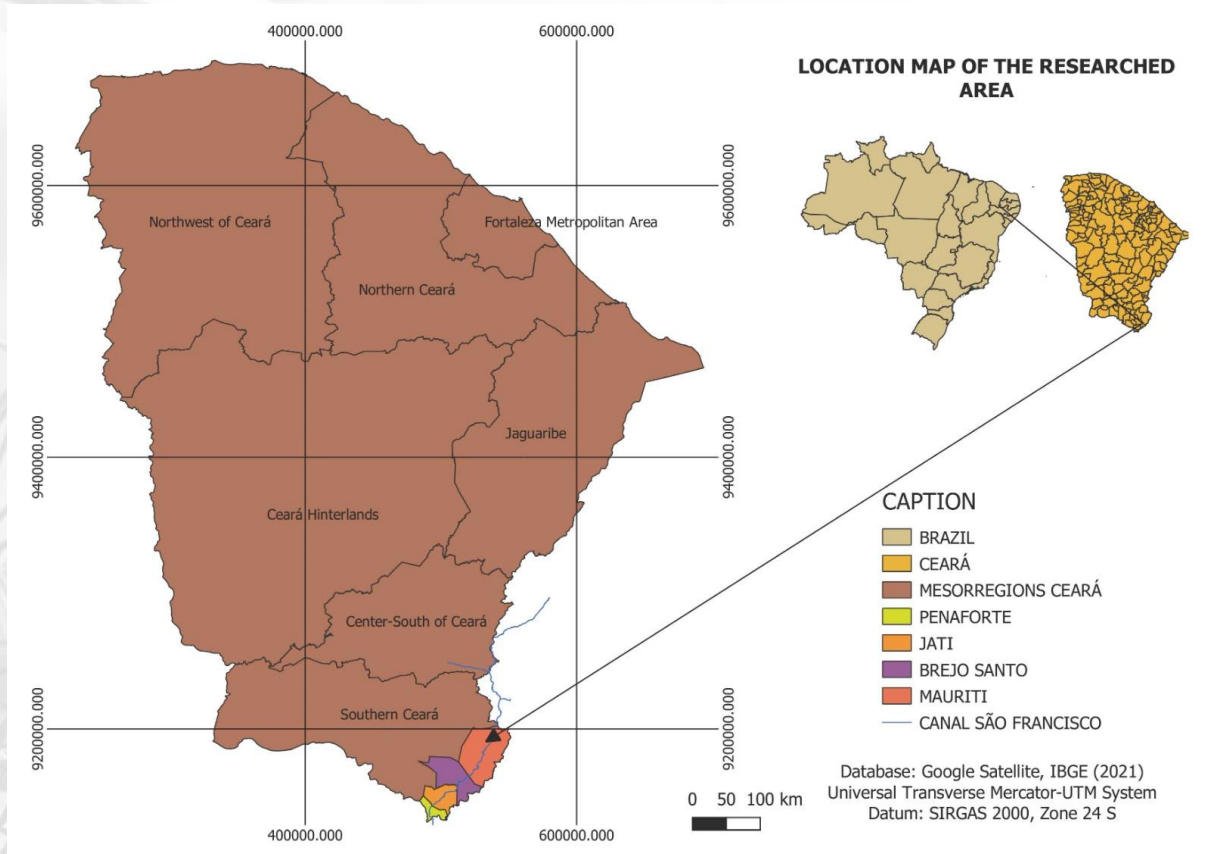
2.1 Field of study

The study's spatial delimitation is the municipalities that make up the southern mesoregion of Ceará - understood in this work as the South of Ceará - which are located along the route of the Northern Axis of the São Francisco River Transposition project. Although the mesoregion is made up of 25 municipalities, this study is limited to the municipalities of Penaforte, Jati, Brejo Santo, and Mauriti, where the São Francisco River transposition works are taking place (Figure 01), which have changed the water supply network in this region.

The motivation for this study is to understand the geography of agrarian capital in the context of agribusiness activities, the rising land market prices, and the contradictions in rural areas along with their new spatial dynamics. This includes examining the profound

territorial disputes, expropriation, displacement, and the relationships of family farmers in the southern Ceará mesoregion influenced by the São Francisco River transposition project, specifically in the municipalities of Penaforte, Jati, Brejo Santo, and Mauriti.

Figure 01 – Map of the Study Area.



Source: elaborated by the authors, 2024.

It is crucial to understand the new geography of the water supply network in the Northeast and the capitalist expansion and transformations occurring in rural areas driven by the São Francisco River transposition project and agribusiness ventures. This water, directed toward agrarian capital for private profit, highlights the ongoing exclusion of Northeast Brazilian family farmers from the benefits of sustainable regional development

2.2 Methodological procedures

To achieve the objectives of this study, methodological procedures were employed in different stages in the laboratory and in the field, to collect and process quantitative and qualitative primary and secondary data. Bibliographic research was carried out to establish the state of the art in documentary records from institutions that had data associated with the subject of this study.

The field research was conducted systematically and comprehensively over three years, from 2021 to 2024. Each stage was meticulously planned to ensure a thorough understanding of the local context. From the perspective of historical and dialectical materialism, it is crucial to comprehend the entirety of the capitalist production system in the following manner:

a) Recognition of the study area and contact with families: The fact that the researcher was personally affected by the project facilitated existing relationships with various families and friends, which helped establish initial dialogue due to a pre-existing trust base. Upon starting the doctoral program in 2021, the researcher became aware of the activities of the Movement of People Affected by Dams (MAB) in the Cariri region and he was invited to join the movement and began holding frequent collective meetings with those impacted. This process was crucial for developing class consciousness among those affected by the transposition project as evidenced in this research.

b) Application of participatory methodologies, subjective conceptions, and practices by social actors surveyed, making it possible to understand the local reality: starting in October 2023, following the research approval by the Research Ethics Committee. Twenty semi-structured interviews with research subjects were conducted. These interviews included eight family farmers, four representatives from the municipal executive branches of the studied municipalities, four entrepreneurs or representatives of agribusiness, and four institutional representatives.

c) Conducting semi-structured interviews with representatives of entities and groups involved in the Northeastern water supply system, enabling an understanding of the regional context: this approach raises several research questions: How is the river transposition being implemented? Who will benefit from the transposition in terms of land and water markets? What are family farmers' relations with the transposition project? Will new agroecological production systems emerge? Will agribusiness tend to expand along with the transposition? Will the transposition cause conflict through struggles and resistance in the countryside? Is there agrarian and water concentration based on agribusiness corporations in the southern mesoregion of Ceará?

Through the interviews, valuable information was gathered that helped achieve the objectives of this study. Based on the various data collection, analysis, and interpretation procedures, it was possible to understand the transformations brought about by the new water system in the southern region of Ceará.

3 THE WATER SUPPLY NETWORK IN DISPUTE: WHO THE TRANSPOSITION IS FOR?

Although the state's motivation for the construction of the São Francisco River transposition project was to direct the water to supply the 12 million Northeasterners in the semiarid region who suffer from water scarcity, evidence suggests that the real aim has been to favor large agribusiness projects. These projects remain inaccessible to the communities of family farmers in the southern mesoregion of Ceará, and in opposition to the primacy of social development, to serve primarily economic interests (Coelho, 2005).

The newly implemented water supply network facilitates increased water availability and strengthens irrigated agricultural projects in the Northeast region, which boasts significant potential due to its fertile soils. This development promotes the expansion of productive farmland and boosts agricultural yields per hectare, particularly along the canal and water accumulation reservoirs that are already under construction.

The water infrastructure introduced by the PISF was driven by profound changes leading to land, economic, and social concentration, income inequality, and water and territorial conflicts (Brito, 2013). These shifts are also altering the spatial dynamics and lives of small-scale farmers, who are fighting against the oppressive system to defend their territories and their livelihoods. As Suassuna (2010, p. 349) notes, "It is unequivocal the proof of the political pressure focused on the interests of agribusiness and the hydro-businesses".

Water security in the Northeast has become one of the state's greatest challenges over the past centuries. According to Almeida (2022), the hinterland people have long been marginalized and denied access to common natural resources, a situation that has led to widespread migration from the Northeast region to major economic centers across different Brazilian states.

It is important to highlight that the water transposition project has exacerbated regional socioeconomic disparities, primarily benefiting large landowners who monopolize water and land resources, along with major agribusiness corporations (Silva, 2017). Through irrigation projects, it also serves large construction companies and politicians seeking electoral funding, all under the pretext of addressing the water needs of the semiarid population (Petrella, 2002). Assis (2009) rightly argues that the São Francisco River transposition is intended to fail as it favors a privileged minority of agribusiness corporations, catering to the interests of a few at the expense of the collective well-being of small farming communities.

An analysis of the project's context reveals that, during its conception, the existing communities along its route were not taken into account. It is evident that the transposition was not designed to address the water shortages in the Northeast for all, but rather to support the irrigation industry focused on exports.

Family farmers in the states of Pernambuco, Ceará, Paraíba, and Rio Grande do Norte, whose lands have been or are being transformed by the execution of this massive public project driven by the capitalist logic of globalization, are being forced to abandon their rural homes and relocate to rural production villages. This transition is not only altering their way of life but also reshaping their understanding of land, water, and territory.

This is the ongoing process with the São Francisco River transposition, an infrastructure project that is reshaping the everyday territory of family farmers. At its core, this transformation affects their sense of belonging, identity, and the value placed on their lived experiences, customs, and habits (Fernandes, 2009).

The transformation of the territory as a vital space is remarkable, affecting families from various communities near the project with those relocated families now sharing a common space, forcing them to adapt to new ways of life, traditions, experiences, and interactions. This shift highlights the process of 'de-territorialization', as proposed by Haesbaert (2004), which refers to the loss of connection to a lived territory due to social, economic, or political changes. While this may lead to new forms of identity and belonging, it also results in conflicts and inequalities as has been the case along the new water system network in the region, particularly around the São Francisco River transposition areas.

This approach to territory, driven by capital's appropriation of natural resources such as land and water, results in territorial conflicts. It leads to the concentration of land ownership, an inequitable land distribution, the displacement of family farmers, and the capture of land rents causing an increase in land prices and creating disparities in water access.

The transposition has deepened the competition, interest, appropriation, control, and management of water resources (Ismael, 2022), highlighting a growing trend of commodification and privatization of water (Petrella, 2002). This perspective has emerged from the speculation of water and land monopolies along the river's transposition route, propelled by large landowners and the resistance of relocated communities and family farmers throughout the project area.

The Northeast region is experiencing an intensification of disputes, conflicts, and contradictions between family farmers and the agribusiness sector over the new water

supply network. This reflects the interests of capital which are strongly aligned with the private sector demands, particularly those of the agribusiness corporations and their significant needs for land and water. These dynamics have led to increased tensions with family farmers (Assis, 2015).

This process is marked by the concentration of wealth, agrarian and water conflicts, land expansion, concentration, and speculation. It accelerates agrarian concentration, increases mechanization in agriculture, and leads to rural exodus, with the expropriation of family farmers and the concentration of power in the hands of a few only. These questions in the region represent strategies of capital reproduction and interests aimed at capitalist accumulation within the globalized economy (Cavalcante, 2019).

The disclosure that the water transfer project has altered water and agricultural policies, establishing water and land markets in the region, becomes clear when interacting with the social actors involved. Once commonly used by the *sertanejos*, natural resources are now regulated through water permits and charges, a measure deemed necessary for the state to gain greater control over water resource management. The state is called upon to solve problems in times of crisis, however, at its core, this project was designed with regional development in mind primarily benefiting the capital owners.

Therefore, this strategy also deepens regional inequalities, concentrating development in select areas while neglecting others as is evident around the water transposition project leading to a scenario of exclusion and widening socioeconomic disparities. The construction of this water supply network is reshaping the geographical landscape of the Northeast, integrating the region into levels of global competitiveness. It leads public policies to align with the interests of hegemonic actors and creates socioeconomic opportunities through territorial control, land concentration, and the commodification of water for capital accumulation.

Such actions by the neoliberal state are leading to a rapid rise in water conflicts and resistance, through social movements that engage in political actions and organizations to gain visibility. These groups are fighting to address this issue while envisioning a different model of society — one that is more just, emancipatory, and fosters the people's inclusion (Lima, 2005).

These projects also drive major social changes frequently leading to direct or indirect displacement of small farmers all under the state's official narrative of progress and economic growth in the region. However, significant challenges remain for the local population to participate in this regional development. These include access to land for food

production and income generation, water for drinking and irrigation, and the preservation of territory to safeguard their rights to memory, freedom, autonomy, identity, and traditional ways of life.

The role of the state and capital also stands out in shaping the new geography of the water network, bringing about regional changes driven by the geopolitics of water. This process primarily results in the exclusion of local populations who only have access to water through payment. Meanwhile, water access remains concentrated in the hands of agrarian oligarchies and agribusiness sectors which have historically benefited and now have wielded even more power. This imbalance has intensified conflicts and, in this context, water disputes arise from the lack of democratization of water resources.

As seen, the construction of the water supply network and the arrival of water have not led to the democratization of its access (Sousa, 2019). Alongside this, various forms of resistance from small farming communities are growing along the project's path. Fieldwork observations reveal that living conditions have worsened compared to the period before the water transposition project as these communities now have to pay to access water.

In the current context of the São Francisco River transposition, the Northeast region has become a prime space for the new water owners in the agribusiness sector, driving the expansion of irrigation, income and land concentration, and territorial inequality while also turning water into a commodity. The capitalist state and regional planning policies have strengthened national market competitiveness as, at its core, the transposition of the São Francisco River has favored the new water owners (Morais, 2021) — the landowning elites, who have long benefited from an exclusionary agrarian and water structure, further fueling capital accumulation.

Additionally, agribusiness corporations dominate regional water resources, accelerating the concentration and control of this common good, and transforming it into a commodity, undermining the rights of rural communities and prioritizing excessive profit. Understanding the role of the state and the contradictions in the strategic plan for the Northeast region, these actions have empowered new water owners along the basin integration routes. As a result, they have attracted significant national and international investments from agribusiness corporations.

4 THE CONCENTRATION OF WATER-LAND OWNERSHIP IN SOUTHERN CEARÁ

In the south of Ceará, a process of water and land concentration has been underway over the past few decades as a result of the São Francisco River transposition works completion. Saboia (2015) highlighted contradictions regarding the social agents who would have access to water in the region and noted changes in the territory's productive dynamics as a result of the water infrastructure that was still being implemented. Currently, this territory is being privileged for the establishment of corporations and the capitalist expansion of agribusiness, resulting in further concentration of water and land resources.

This dynamic in the new socio-territorial configuration of southern Ceará, initially driven by low land prices and water security from the transposition, has led to public/private financial incentives for technological innovations and professional training for technical assistance, aimed at increasing productivity in the countryside has also influenced the spatial expansion of agribusiness corporations in the region.

In this territory, we observe intrinsic evidence between state and capital. The intense advance of capitalism in agriculture is underway with the extensive endorsement and sponsorship of the state. This process not only perpetuates large landholdings but also amplifies regional inequality through public policies that offer fiscal incentives, scientific knowledge for workforce training, agricultural credit, and technical assistance, which benefit regional oligarchies and further concentrate and expand capital accumulation (Nobre, 2021).

These processes of land and water concentration are significantly boosting the financial profitability of agricultural activities in southern Ceará. Land along the transposition route is experiencing greater appreciation compared to areas located farther from the project:

Speculation was intense, and land values have soared well above those before the river transposition. Many small farmers sold their land at the beginning of the project and now find themselves landless and unable to afford new properties (Statement from a small farmer in Penaforte, CE, October 2023).

The arrival of the water supply network in the region has led to a noticeable increase in land market values, primarily benefiting large landowners. This, in turn, created favorable conditions for the expansion of agribusiness in southern Ceará. In this context:

Certainly, there will be an increased interest and attention to the areas set to receive water from the São Francisco River transposition project. However,

it remains to be seen at what cost this water will be extracted for irrigation activities because wherever it is used for irrigation, this issue will arise. (Statement from a representative of the Executive Branch of Penaforte, Oct. 2023).

The current situation in southern Ceará is strengthening the expansion of capitalism through regional planning and the construction of water infrastructure made possible by the São Francisco River transposition, the Salgado Branch, and the Ceará Water Belt. These projects ensure water security for economic activities based on the acquisition of cheap land, productive soils, and abundant water in aquifers, facilitating the construction of deep wells. As a result, agribusiness corporations have been attracted to the local and changed the regional agrarian dynamics.

Land concentration has also resulted in the appropriation of water resources. It is through the water supply network that the presence of agribusiness corporations is evident in southern Ceará, such as Paraíso Verde, Gaúcho, Sávio Bringel, and Fazenda Ribeirão (Figure 02). Based on information gathered during fieldwork, what becomes clear is the strengthening of capitalist interests, to the detriment of family farming and rural quality of life.

Figure 02 – Banana and bean cultivation by agribusiness corporations in Mauriti.



Source: elaborated by the authors, 2023.

With the recent territorial expansion of agribusiness corporations in the region, this model is leading to an increasing concentration of land and water. For instance, the Paraíso Verde corporation began its activities in 2009 with 425.2 hectares in Barbalha and, in 2023 it acquired 607 hectares in Abaiara; in 2020, bought 321 hectares in Mauriti; and, in 2023, other 200 hectares in Jati. Currently, this corporation alone controls 1,553 hectares.

This has led to significant territorial transformations, driven by alliances between the neoliberal state and the agrarian capital resulting in structural changes based on the agribusiness model - extensive monoculture areas heavily relying on large quantities of water resources. The concentration of land and water evidences regional inequalities, social injustices, and water inequities, clearly revealing capitalist appropriation by agribusiness companies. This system profits from access to water, fertile soils, the use of technical-scientific and agronomic innovations, and modernized irrigation systems, which are crucial mechanisms for the development of agribusiness activities.

The alliance between the state and the expansion of agrarian capital, supported by a suite of public and economic policies, favors the use of territory by agribusiness companies in the region. In this context, it is understood that the “[...] differentiated use of each territory by companies, institutions, and individuals allows us to understand the hierarchy of places from the regional scale to the global scale” (Santos & Silveira, 2008, p. 144).

In this scenario, the land market is becoming increasingly active along several segments of the water transposition project, boosting the expansion of agrarian capital linked to water security. This supports the expansion of irrigated areas leveraging the region’s skilled and abundant labor force, and the development of logistical infrastructure for production. Together, these factors create a robust framework that supports the further expansion of agrarian.

This dynamic has triggered a true land rush and rising land values in the region with increasing interest in the lands of family farmers. Consequently, these farmers are left without land for their production activities after selling their properties. Traditionally characterized by family farming, southern Ceará is now seeing a shift towards monoculture, such as the expanded cultivation of bananas, reflecting the influence of agribusiness practices following the water transposition project.

Given the changes in agrarian dynamics in the region, it’s essential to consider the perspectives of family farmers. They report that the water diversion project led to a sharp increase in land prices and greater land concentration. As one farmer from Jati, Ceará explained: “I remember when a hectare was affordable. But once construction of the transposition canal began, land prices soared” (Statement from a family farmer in Jati, CE, October 2023).

It is understood that the arrival of water from the São Francisco River transposition project has caused a boom in the local land market. As one family farmer noted: 'We are in a 100 km radius with over 1 million people which creates a large consumer market. That’s

why some fruit companies are moving into the region (Statement from a family farmer in Brejo Santo, CE, Oct. 2023). Another family farmer adds that:

The emerging model in the region is closely aligned with the Vale do São Francisco approach in Juazeiro and Petrolina. This model capitalizes on the available water resources, favorable sunlight, and fertile soils to produce agricultural commodities (Statement from a family farmer in Mauriti, CE, Oct. 2023).

Therefore, the Cariri region is undergoing constant changes and multiple transformations in its territory to benefit the dominant agribusiness capital, such as changes to the economy, cultural practices, technology, labor division, land and water infrastructure, the relationship between peasants and the land, and the overall social life of the communities affected by this water supply network project and the agrarian issues.

There has been a noticeable increase in the use of equipment for drilling artesian wells to obtain water for irrigation, often without the necessary environmental licenses, which harms the environment and jeopardizes the region's aquifer recharge. According to a representative from the Ceará Water Resources Management Company (COGERH):

We have a groundwater monitoring plan in the Araripe Basin that began in 2009 with 24 wells and 30 natural springs in the Cariri region. The data on the evolution of the historical series is extremely worrying, as there is an average drop of 0.5 meters per year. The main cause is the new frontier of capital with the expansion of agribusiness (Statement by a COGERH civil servant, 2024).

The expansion of capitalist exploitation and the wealth generated by public policies are clear. As noted by a regional representative from Banco do Nordeste do Brasil (BNB) during the EXPOCRATO opening: 'Currently, 46% of BNB's resources are allocated to the agribusiness sector throughout the Northeast and northern Minas Gerais. However, family farmers often face bureaucratic obstacles that make it difficult to access these funds.

In recent decades, a new agricultural frontier in the south of Ceará has been expanded, driven by the progressive discourse in the rural areas. The exhibitions promote the neoliberal agribusiness model, attracting corporations across Brazil as one of the EXPOCRATO coordinators puts it:

The Cariri region is growing rapidly. In the last five years, with the arrival of several agribusiness entrepreneurs from Mato Grosso, Goiás, Rio Grande do Sul, Paraná, Piauí, and Alagoas, who are investing in a unique region that

gets between 800 and 1000 mm of rain a year, has an excellent water table and wants to gain access to the waters of the Cariri water network. As well as having cheap land to buy, it is close to the Araripe Gypsum Complex in Pernambuco - the largest in the country, 250 km from the southern mesoregion of Ceará. This is where 97% of the country's gypsum comes from, representing the fourth-largest reserve on the planet. Soon, these logistics will be improved by the Transnordestina railroad, bringing advantages for soil correction and improving the fertility of properties (Statement by one of EXPOCRATO's coordinators, 2024).

Therefore, the statements of family farmers and representatives of public and private institutions in the southern Ceará territory highlight a perceptible shift in the region's agricultural structure, transitioning from a family farming model to a competitive agribusiness corporation system. Resources such as water, sunlight, and fertile soils are being redirected toward agribusiness, reflecting a significant transformation in the sector.

5 FINAL CONSIDERATIONS

The article compellingly highlights that the Northeast region is in the process of establishing a comprehensive new water supply network with the state as the pivotal agent of transformation through targeted public policies designed to foster the necessary conditions for the expansion and consolidation of the water market, significantly enhancing agribusiness activities in the region.

This makes evident that significant state investments in agrarian and water public policies aim to create and strengthen agricultural projects in southern Ceará, focusing on agribusiness activities. These efforts include access to water from the new water supply network through transposition, leveraging regional characteristics and potential. However, this also raises concerns about the historical issues of exclusion and regional inequality in the use of public funds.

As a result, a new territorial configuration is emerging through the intensification of capitalist relations that prioritize the agribusiness sector, transforming the agrarian structure of the region, which previously had low land concentration and easy access to water and land. This shift is leading to socioeconomic and environmental unsustainability as evidenced by deforestation, the expansion of irrigated monoculture, and the increased use of pesticides.

The capital offensive, manifested in the rush for land along the river banks of the transposition project, creates the ideal conditions for the consolidation of capitalist territory, leading to the monopolization of land and access to that water. This process reinforces

agrarian counter-reform and accelerates the expansion of agribusiness, resulting in unequal and exclusionary development in the region.

Given this situation, the increasing concentration of land, water, and capital has transformed the territory of family farming into an agribusiness territory. This production model is based on latifundium, monoculture, and the use of pesticides. The water supply network has boosted the land market which despite initially offering very low prices of the land, provided favorable conditions for agricultural production, including suitable terrain for agricultural mechanization and the use of central pivots irrigations with the expansion of irrigated monoculture areas

These characteristics have led to an intensified demand for land purchases in southern Ceará since the construction of the São Francisco River transposition project. Consequently, there has been a shift in the dynamics of land structure, marked by the expansion of the latifundium and increased land concentration, transforming the region into a favored territory for the expansion of capital.

All these land acquisitions are key to the process of territorial control and the advancement of capitalism in the hinterland of the county. They are linked to the concentration of land integrated with production and an increase in the volume of water, which contribute to the impacts and injustices that serve the interests of the agrarian bourgeoisie at the expense of other alternative livelihoods.

Consequently, water conflicts have intensified, highlighting the unsustainability of the current economic development model for family farmers. These farmers have traditionally engaged in diversified food production, ensuring food security for their households while constructing territories of resistance, existence, and social justice.

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