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Sustainability, justice and equity in food systems: Ideas and proposals in dispute in Brazil

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ABSTRACT

The impacts of food systems on climate change are of growing concern as meat consumption and the soy-meat complex expand. This article explores contrasting ideas, proposals and narratives in the Brazilian context with its significant power asymmetries and identifies two broad discursive repertoires voiced by the private sector, civil society and government to differently address issues of food and environmental justice, social equity and climate change. The influence of these repertoires on public policies can induce or hinder just transitions in food systems. Documents from 2008 to 2021 are analyzed, mainly focusing on multi-scale food systems, dimensions of justice and corporate political action. Contrasting perspectives on the drivers of inequalities and sustainability are also presented, along with respective proposals ranging from paradigm shifts in food systems to topical solutions based on private mechanisms.

1. Introduction

The impacts of food systems on climate change have been associated with different types of inequalities and injustices; the soy-meat complex is one of the main emitters of greenhouse gases, leading to greater considerations of justice and equity-related questions in food system sustainability transition studies (El Bilali, 2019; Hebinck et al., 2021; Kaljonen et al., 2021; Tribaldos and Kortetmäki, 2022). The expansion of this complex reinforces previous injustices and creates obstacles to just transitions toward sustainable and healthy food systems while mitigating climate change (Maluf et al., 2022). Private initiatives to mitigate climate change, such as the moratorium on growing soybeans in the Amazon and sustainability certifications, have been criticized by civil society organizations (Schilling-Vacaflor et al., 2021) and considered partial or even "false responses" that are ineffective at curbing deforestation of native forests and incapable of dealing with the main determinants of food and environmental injustice.

National and international debates over appropriate public policies are shaped both by narratives in the commercial private sector (CPS) and civil society movements and organizations (CSO). In sustainability transition studies, the role of narratives has mainly been

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investigated in energy transitions to support biorefineries (Bauer 2018), influencing actions by different actors in decentralized solar energy production (Rajagopalan and Breetz, 2022), or revealing the motivations of individuals to engage in electric vehicle transitions (Upham and Gathen, 2021). Virla et al. (2021) investigated how narratives shape risk perception by different socioeconomic and socio-political actor groups about oil sand production in Canada. While these authors explicitly included indigenous and marginalized groups, they did not specifically consider justice, and none of these studies focused on food system-related questions.

In this study, we analyze narratives in sustainability transition studies through a lens of justice. By examining contrasting narratives, ideas and propositions of key actors, we identify disputing narratives on sustainability and justice in food systems and climate change in Brazil. The possibilities of sustainability and just transitions are strongly influenced by the soy and livestock value chains that comprise the soy-meat complex. Our research questions are: Do social actors' narratives about transformations in food systems consider injustices and inequities at various scales of these systems and in the transition processes they envision? If so, to what extent and how? We untangle how certain narratives support or oppose sustainability transitions while focusing on how they affect injustices and inequities in food systems related to the soy-meat complex. Because of the power asymmetries inherent in the conflicts and contradictions between discursive repertoires in Brazil, an additional research question is addressed: How do these repertoires reflect the different capacities of social actors to influence public policies and government sectors? While agribusiness is trying to establish socio-political legitimacy for its technical initiatives, CSO emphasize their rights and the violations of these rights by agribusiness initiatives (Motta, 2016). Meanwhile, government narratives justify action (or inaction) and promote "solutions" for given public issues which are conditioned by their interactions with the commercial private sector and civil society.

This analysis considers three core dimensions of justice commonly theorized in environmental justice: distributive, procedural and recognition (Fraser and Honneth, 2003; Schlosberg, 2013). It is empirically based on bibliographic research and documentary analyses gathering documents and technical literature that support positions with strong impacts on national and international public debate, and government programs from three groups of actors (CPS, CSO and government) considering their heterogeneous compositions and visions. These groups are often linked to each other through policy networks that can boost or hinder just transition processes through the dissemination of narratives, ideas and propositions and their respective impact on public policies.

The specific goals of this study are to (a) identify key actors and respective propositions related to promoting transformations in food systems ¹ at different scales, with a focus on distributive, procedural and recognition injustices, (b) characterize distinct discursive repertoires addressing sustainability, climate change and food systems in order to verify whether and how they account for equity and justice issues, and (c) point out the private strategies and public policy proposals mentioned in these repertoires and to what extent they drive or impede actions aimed at just transitions in food systems at various scales. A multi-scale approach to food systems is needed to consider interconnected processes on different scales that relate to manifestations of inequities and injustice which are especially visible at the territorial level (Maluf, 2021). Special attention is given to the powerful actors within the soy-meat complex in Brazil. By considering the viewpoint of justice and power asymmetries in the politics of food system transitions, this analysis contributes to debates in EIST as well as assessment of the technological, economic, institutional and political aspects contained in contrasting narratives by social actors that are relevant for just transition because of their influence on food system debates at national and international levels.

The following section presents an approach to food system transition processes in Brazil and the role of narratives by key actors in public debates and policy making. The third section describes the methodology adopted to identify the discursive repertoires and narratives analyzed in the fourth section on sustainability, climate change and food systems in Brazil and their connections with the international debate. The conclusions highlight ideas and proposals that shape the disputed narratives and their repercussions on the design of strategies driving or constraining public actions and policies for transformations in value chains and food systems.

2. Transitions to sustainable food systems and disputes in narratives

The soy-meat complex, a close intertwining of soybean and livestock value chains, stands out among the pillars of the world food system based on the internationalization of agrifood chains. Its importance stems from significant growth in global meat consumption, which is driven by industrial livestock production (Weis, 2013). Changes in eating habits and repercussions on human health (Swinburn et al., 2019) are associated with increased greenhouse gas emissions resulting from expanding areas for intensive livestock activities and soybean cultivation to produce feed (Weis, 2013). The climate emergency and growing international pressure to transition current food systems to more sustainable and healthy models have brought the soy-meat complex under intense questioning.

Brazil is one of the world's largest producers and exporters of soybeans and meat, mainly to China and Europe; this production involves a predominantly unsustainable and unjust model that must be considered together with carbon emissions when considering justice. Previous work on soy and livestock value chains has attempted to broaden the original climate change focus of the just transition concept to include manifestations of inequities and distributive, recognitive and procedural injustices (Maluf et al., 2022). Similar attempts were made for other sectors (Bastos Lima, 2022) and are taken up in this article as components of narrative disputes in Brazil.

Power relations and conflicts of interest affect the possibilities of just transitions to sustainable and healthy food systems and are much more complex in contexts with high inequality (Karlsson et al., 2018). Brazil's history of land concentration and the economic and political power of agrarian elites and agrifood corporations has led to inequality and injustices at the interface between value

² In this paper, the term transformations refers to more fundamental changes proposed for food systems, while transitions is used for pathways toward achieve such transformations, following Anderson et al. (2019).

chains and food systems on different scales (international, national and subnational). Proposals and narratives from different actors in Brazil on inequalities and sustainability produce conflicting action strategies and disputes (Motta, 2016). Power and conflicts in these matters must be understood as components of food politics. Antagonisms constitute the political dimension of food ("the political"), while food politics concerns the practices and institutions that organize coexistence within a context of conflict ("politics") (Mouffe, 2005). Discursive repertoires constitute the political practice of actors and can be simultaneously considered a space for power disputes as well as means of demarcating these disputes (Fairclough, 1992). In this way, "discourse" and "practice" are inseparable dimensions of political action (Griggs and Howarth, 2011) that can strengthen or reverse existing inequalities in food systems to some degree through just transition processes.

Narratives and the disputes they raise have important repercussions for institutions that can be understood as products of the discursive activity that influences actions and provides the socially constituted, self-regulating mechanisms that enact institutions and shape individual behavior. Institutions are constituted by the structured collections of texts that exist in a particular field and produce the social categories and norms that shape the understandings and behavior of actors (Philipps et al., 2004). Several indications of these connections can be found in this paper, especially the impact of CPS and CSO narratives on government positions and the design of public policies.

Narratives configured in CPS documents are part of what is known as corporate political activity (Mialon et al., 2015). The discursive strategies used by CPS are intended to shape the debate on food and health while promoting their preferred actions or solutions to food system problems in order to avoid government regulatory strategies that could affect profit margins (Mialon et al., 2015). These narratives are meant to minimize risks from their products and focus on individual responsibility while emphasizing the positive characteristics of this sector and constructing a positive public image (Burlandy et al., 2021; Mialon et al., 2015; Mialon and Gomes, 2019). Meanwhile, CSO documents tend to mobilize political action by society and demand government responses to public problems. CSO are considered to be the driving forces of transformation in food system structures while confronting control and power by large corporations (CSM, 2020; Canfield et al., 2021; Motta, 2021).

Government documents express the results of agreements and negotiations between actors with different influences on decision-making processes at specific points in time during disputes over public resources and state regulatory mechanisms. Although they are created in institutional environments regulated by specific rules and formalize "official speech" expressing government commitments, these documents can configure ambiguous, ambivalent and contradictory discourse due to complex political processes that gather elements from different narratives. Some government documents indicate a total ban on pesticide use, while others advocate simply reducing its use (Burlandy et al., 2021). Ultimately, fragile regulations combine with corporate political activity, in this case leading the current government to allow pesticide use and maintaining Brazil's position as one of the leading global markets for these chemicals.

An approach to food system transition processes that incorporates justice dimensions requires two interrelated components. First, parameters for just transitions in food systems must be established; the analytical framework developed by Tribaldos and Kortetmäki (2022) proposes criteria to assess just food system transitions while comprehensively considering different dimensions of justice. In applying the lens of justice to analyses of disputes between discursive repertoires, our study highlights issues of equity, sustainability (distributive justice), power asymmetries and differentiated incidence in public policies (procedural justice), and affirmation or denial of social differentiation represented by family and peasant-based farming, indigenous peoples, traditional peoples and communities (recognitive justice). Second, the approach to transition processes must also break down the overall notion of transition into its main components while indicating what should be transformed, suggesting pathways and pointing out potential conflicts. Anderson et al. (2019) propose six "transformation domains" that are essential to promote agroecological transformations and relate to the manifestations and disputes around inequalities and injustices highlighted in our study: access to natural ecosystems, knowledge and culture, systems of exchange, networks, discourse and gender and equity. The narrative disputes and their central issues analyzed in this paper contribute to our understanding of conflicts in several of these domains or pathways.

3. Identification of key actors, documents and analytical categories

Documents from key actors in CPS, CSO and government were mapped from 2008, when the Brazilian National Plan on Climate Change (PNMC) (Brasil, 2008) was launched, to September 2021, without constituting an exhaustive survey. National and international documents referring to the Conferences of the Parties on Climate Change (COP) and the United Nations Summit on Food Systems 2021 (UNFSS) were also mapped. The analysis considered dimensions that simultaneously condition and are shaped by the discourses themselves, socio-historical and political contexts, types of documents (national policies, plans, political statements, etc.), institutional contexts of origin and purposes addressing national or international events.

For CSP, we favored organizations and networks around "agribusiness," a wide range of politically important segments which are the focus of strong narrative disputes (Pompeia, 2021). Special attention was paid to national organizations linked to the soy-meat complex that exert great influence on public policy and have public positions on climate and food issues (Annex, Table 1). For CSO, we prioritized national-scope organizations centered on agrifood and environmental issues that publicly position themselves in relation to the COP and UNFSS events, and documents from international actors that serve as a reference for national actors (Annex,

³ The JustFood Project (which this research is a part of) proposes identifying transition pathways in four areas: land use, diets, agricultural technology and food technology (Lehtonen et al., 2022).

⁴ Narratives in newspapers were not considered, since this would involve additional considerations extending beyond the scope of this article.

Table 1
Categories for analyzing narratives in the documentation on sustainability, food systems and climate change.

First-order terms	Second-order terms	Final categories
Sustainable economic processes and growth. Sustainable economic standards. Sustainable development. Green economy. Low-carbon economy in agriculture. Carbon market. Bioeconomy. Technological innovation. Agribusiness sustainable growth. Soybean cultivation as a model of	Sustainability for climate change by reducing GHG emissions. Sustainability as efficient economic use of natural resources. Science-based solutions and cutting-edge technologies for increasing productivity.	Efficient economic use of natural resources
sustainability. Sustainable ecosystems. Agroecological transition. Agrobiodiversity. Socio-biodiversity. Diversity of national food cultures. Peasant agriculture. Democratic and equitable food systems. Healthy food systems. Food sovereignty. Food and nutrition security. Human right to food. Corporate control. Dependence on pesticides, GMOs, fossil energy. Climate emergency. Climate and environmental justice. Gender, racial and ethnic inequalities.	Sustainable agroecological systems. Sustainability should encompass environment, health, social and ecological diversity and equal rights. Emphasis on social processes and power inequalities. Differentiation between peasant and corporate models. Paradigmatic changes in food systems, democracy and equity. Sustainable access to adequate and healthy food. Just and equitable food systems.	Paradigm shifts, agroecology, democracy and rights

Table 2). Among federal government documents we prioritized national plans and policies aimed at climate change and food security, together with specific policies for soy value chains (Annex, Table 3). Additional international documents related to UNFSS 2021 were also included to identify dominant narrative disputes around food systems (Annex, Table 4).

To systematize the reading and subsequent analysis of these documents, a spreadsheet was created to facilitate comparative analysis of narratives around sustainability and justice in food systems and climate change in Brazil (Annex, Table 5). This was based on inductive and deductive coding processes (concept-driven), considering the research questions and the theoretical framework of distributive, procedural and recognitive justice. The more general research question implies adopting three steps to verify whether and to what extent narratives from social actors about transformations in food systems take account of injustices and inequalities. The first step was to identify recurrent categories related to sustainability, food systems and climate change (the first-order terms); these were then aggregated into second-order terms by grouping related codes and associated ideas into patterns of meanings. This intermediate step brings us to the two final categories that summarize the main contrast between the two discursive repertoires that will be described in the following sections, and also addresses the second research question about the distinct capacity of these repertoires to influence public policies due to power asymmetries. All these terms and final categories are presented in Table 1.

The specific theoretical framework underlying this procedure is provided by the conception of justice articulated by Fraser and Honneth (2003) and a multi-scale approach to food systems (Maluf, 2021) that formed the basis for the research questions. These lead us to assess how and to what extent narratives consider the three dimensions of justice, namely distributive, recognitive and processual justice on various scales, as well as food system transition processes envisioned with regard to the soy-meat complex. Considering power asymmetries is also essential to assess narratives of CPS and subsequent impacts on government positions and shaping of public policies. Within a context of conflicts of interests and political antagonism, narratives are considered part of the political practice of social actors (Fairclough, 1992), the corporate political activity of the CPS (Mialon et al., 2015) and their repercussions in institutional terms (Philipps et al., 2004).

4. Discursive repertoires and narratives in dispute around sustainability, climate change and food system transitions

The analysis indicates two broad discursive repertoires that articulate conceptions, proposals for actions and pathways to transform food systems, one mostly disseminated by the CPS and the other by CSO. Despite internal distinctions, these two discursive repertoires express the main narrative disputes around processes, concepts and proposals for just and sustainable transition of food systems. The analysis highlights elements from both repertoires, indicating their influence on public policies related to sustainability, climate change and food systems.

4.1. Economic responses to sustainability and climate change

The discursive repertoire predominantly disseminated in CPS documents emphasizes economic responses to challenges of sustainability and climate change, highlighting the efficient economic use of natural resources (such as water, forests, soil, minerals and biodiversity) and mitigation of GHG emissions. Economic emphasis also underlies the commoditization of emissions through carbon credits (REDD and REDD+ mechanisms) or payment for environmental services. Technological innovations in food systems are the main path toward mitigating climate change, as well as to serve growing populations and meet food demand in a global market that requires continuous increases in agricultural productivity. The proposed solutions are aimed at large-scale agricultural technologies, assuming that these are also capable of meeting demands for higher productivity while reducing GHG emissions and deforestation of native vegetation. This is seen as the main driver of transformations in food systems, through "solutions" appearing under labels such as "green economy," "carbon market," "low-carbon economy," "low-carbon economy in agriculture," and "bioeconomy."

This discursive repertoire coincides with the content of the UNFSS-PSGG (2021) document to transform food systems toward zero carbon (net-zero) and adopt climate-smart agriculture. ⁴ The notion of sustainability is mentioned twice, in both cases linked to the business perspective: scientific solutions for sustainable business models in food and agriculture, and encouraging consumption of sustainably produced food.

Similar narratives can be found in national documents that associate continuous increases in productivity with the sustainable use of natural resources, under the justification that intensive implementation of technological innovations has permitted greater food production using less area and rational quantities of external inputs. The presumption is to avoid agricultural expansion into areas of native forests while helping to mitigate climate change through a "low-carbon economy in agriculture," reducing emissions and sequestering carbon in forests. The CPS seeks to legitimize this narrative with Brazil's alleged role in meeting growing global demand for food (Rodrigues, 2018), which is reflected in government plans (Brasil, 2012; 2021).

Actions to improve the positive image of agribusiness and its importance for the country's development are in full swing, alongside minimization of negative impacts on health and the environment. This includes narratives by APROSOJA (the Brazilian Association of Soybean Growers) that portray soy value chains as the "most sustainable production in the world" but also victims of an international smear campaign, adding that Brazil has stringent forest legislation and the highest percentage of protected land in the world. (APROSOJA, 2019). It states that "sustainability equals productivity in the use of environmental assets and resources, transforming sunlight into chemical energy (food) [and] ensuring life for all generations." ABIOVE (the Brazilian Association of Vegetable Oil Industries) and APROSOJA created a private training program ("Soja Plus") to reconcile agricultural production with natural resource conservation and improving the image of Brazilian agribusiness.

Similarly, CNA (2018) presents a wide range of technological proposals to increase productivity and expand the agricultural frontier on a sustainable basis, even if it involves deforestation, including production of "agroenergy" (biofuels). Climate-smart agriculture is among the references mobilized by the sector, in keeping with the global trend (Clapp et al., 2018; CNA, 2018). Brazilian agribusiness strategies build a positive image with an advertising campaign in the mainstream media associating the keyword "agro" with sustainability (Pompeia, 2021).

The influence of these narratives in government documents can be seen in Brazil's National Multi-Year Plans, which highlight the country's leading role and competitiveness in the global commodity market. Technological innovations for productivity increases and sustainability and the contribution of soy and meat to the trade balance surplus are mentioned (Brasil, 2004, 2007, 2011a, 2015), along with the expansion of agricultural and livestock "frontiers" into the north-central part of the country in response to rising prices and global demand from China (Brasil, 2011b). All this justifies continuous government investment in areas including science and technology, infrastructure and logistics, tax exemptions and agricultural credit and insurance (Brazil, 2004, 2007, 2011b, 2015).

Nuances and heterogeneous propositions within the discursive repertoires of CPS reflect the actors' positions in the value chains and food systems. Some issues and proposals for action stand out as objects of either shared support or criticism from CSO. Critiques are directed at the Forest Code and legal norms related to deforestation, the Ministry of the Environment's role in monitoring and combating illegal deforestation, rules for native forest management, the creation of conservation units, and land tenure regularization for territories occupied by indigenous peoples and rural populations (in areas where pastures and monocultures are expanding). Support from the CPS related to these subjects extends to mechanisms such as the soy moratorium, financial mechanisms promoting the reduction of GHG emissions and payments for environmental services.

Soybean growers and cattle breeders (represented by APROSOJA and CNA) oppose measures involving changes that could directly affect their profitability (for example, restrictions on expanding planted areas, pesticide use, or deforestation of native forests). Questioning the Paris Agreement is accompanied by narratives that defend deforestation and expansion of agricultural frontiers to

⁵ The omission of the term "climate change" is noteworthy, since the document addresses precisely a just transition promoting changes (one would assume) in response to climate change.

⁶ Narrative present in the statement signed by all regional APROSOJA associations: Aprosoja Brazil. Responsible Soy. "Letter of Palmas", July 2019.

⁷ For example, in APROSOJA article "The champion of forest protection." May 31, 2021. https://aprosojabrasil.com.br/comunicacao/blog/2021/05/31/artigo-o-campeao-da-protecao-florestal/ (Query on August 2021).

⁸ For example, in this editorial by an APROSOJA member: Rebelo, Almir. Brazilian agro-environmental sustainability and world communo-environmentalism. May 31, 2021. Opinião do produtor: A sustentabilidade agroambiental brasileira e o comunoambientalismo mundial - Comunicação Aprosoja (aprosojabrasil.com.br), May 31, 2021.

meet growing world food demand. Even so, traders and sectors more directly linked to consumers are more susceptible to pressures related to the climate agenda, such as ABIOVE and corporations based in the European Union. They tend to utilize strategies that attempt to incorporate criticism of the dominant food systems while simultaneously preserving the emphasis on economic aspects. One example is the Brazilian Coalition on Climate, Forests, and Agriculture, which in the narrative analyzed associates sustainability with sustainable management of land, forest and biodiversity but translates these notions into economic terms significantly different from the discursive repertoire presented below. It argues for a "bioeconomy" in which the concept of sustainability is linked to a business and economic logic in addition to socio-environmental benefits, and advocates for results-based payment systems and carbon markets. This narrative also gives the term "forest" a double or even ambiguous meaning, referring to native vegetation (such as the Amazon and Cerrado biomes) as well as eucalyptus monocultures, considering both important sites for carbon sequestration.

4.2. Facing social and power inequalities and promoting paradigm shifts for sustainability

The second broad discursive repertoire that predominates in the narratives in CSO documents as well as national policies and plans created with public participation emphasizes social, environmental and power issues. It strongly associates sustainability with diversity (environmental, social and cultural), which is expressed in terms like "agrobiodiversity," "socio-biodiversity" or "diversity of food cultures." This repertoire emphasizes power inequalities that strengthen large corporations and the dominant, monocultural, agro-industrial food model while attempting to provide visibility to certain rural social segments (family farmers, peasants, indigenous peoples, traditional peoples and communities, landless rural workers, etc.) and highlight their own diversity. They value knowledge and practices involved in their ways of life, production, extraction, processing, distribution and consumption of food, with agroecology as a key notion. This perspective is closely related to references to food sovereignty launched by segments of the rural world as an alternative for society as a whole. Vast literature in critical agrarian studies defends peasant autonomy in choosing what and how to produce and consume food, as well as in managing their own seeds as a crucial action against long-distance trade and genetic modification by large corporations (van der Ploeg, 2014; Patel, 2009).

Another recurring narrative is the need for paradigm shifts in food systems toward consolidating agroecological modes and peasant-based food production, where social relations, values and practices reorient relationships with territories and promote climate and environmental justice. In this way, new paradigms would be based on rights and justice, food sovereignty, socio-biodiversity, ethnic-racial and gender equality, and reduction of power asymmetries as true and just solutions to the climate crisis. The component of technological innovation is converted into the use of "socio-technologies" (LVC, 2016, LVC, 2020). The dimension of violence surrounding the struggle for rights in defense of territories (land and natural resources) as monocultures expand is also worth noting.

In terms of sustainability issues, CSO question and decry a central and near-exclusive focus on technological solutions that reduce GHG emissions without altering the production model based on large-scale monocultures and corporate control. They argue that this perspective reproduces the logic of "(agri)business-as-usual" (IPES-Food; ETC Group, 2021). Along similar lines, the conduct of the UNFSS has been criticized, denouncing the predominant narrative that ignores the devastating impacts of industrial food chains (IPES-Food; ETC Group, 2021). The documentation also criticizes the "green economy" and respective instruments as tools for international corporations that do not structurally alter power inequalities but rather strengthen the dominant agricultural model (Grupo Carta de Belém, 2014). Approaches such as the carbon market, REDD, REDD+ or climate-smart agriculture are considered false solutions to the climate crisis (LVC, 2014; Grain, 2019), or even "false narratives" that ignore key questions about where responsibility for damaging the environment and climate, human rights and well-being really lies (IPES-Food; ETC Group, 2021).

Even the narratives that promote nature-based solutions are seen by CSO as recycling old false solutions based on market mechanisms that lead to privatization and exploitation of natural resources. They do not change systemic determinants of the current crisis, and reinforce the elements that disrupt the peasant-based food production network (Carta de Belém, 2019). In analyzing potential transformations of food systems, the report by IPES-Food, 2021 identifies nine planetary boundaries: climate change (sometimes referred to as climate crisis) is just one of them. Few documents specifically refer to the soy value chains usually associated with deforestation (ETC Group, 2021; Grain, 2019; Grupo Carta de Belém, 2009).

4.3. Contrasting narratives influencing public policies

Although narratives from the two broad discursive repertoires can be found in the government plans analyzed, CPS narratives and demands are more clearly visible in the plans and actions under the responsibility of the Ministry of Agriculture (Brasil, 2012, 2021). Acceptance of CSO demands and pressures is mainly visible in the intersectoral plans coordinated by MMA and MDS⁹ (Brasil, 2011a, 2016, 2017, 2018). Some national plans (Brasil, 2018) associate soy expansion with deforestation and include actions for land title regularization (including territories with native forests in common use by indigenous and rural populations), strengthening environmental inspection and government participation in the soy moratorium. Other national plans and policies (Brasil, 2011a, 2016,

⁹ The other planetary boundaries are: (1) climate change, (2) biosphere integrity (genetic and functional diversity), (3) ocean acidification, (4) freshwater use, (5) land-system change (including deforestation), (6) biogeochemical flows (phosphorus, nitrogen), (7) stratospheric ozone depletion, (8) atmospheric aerosol loading, and (9) novel entities (e.g., pesticides, GMOs, nanomaterials, plastics, etc.)

¹⁰ MDS was created by the Lula administration to coordinate inter-ministerial actions related to food and nutrition security that conflicted with guidelines from other governmental sectors such as MAPA. The Bolsonaro government interrupted the implementation of National Food and Nutrition Security Plans and eliminated the National Food and Nutrition Security Council (CONSEA).

2017) include measures to promote "agroecological systems" and diversity production, add value to agrobiodiversity products, establish heritage seed banks, recover and preserve soils and water sources, and reduce use and application of agrochemicals. All these actions are seen as advantageous in adapting to climate change, in line with the HLPE, 2020 that a more resilient food system "requires adjustments of complex ecosystems, social and economic production, processing and consumption of food" and that such changes will be more difficult in most regions and for poorer and more vulnerable populations.

The diagnoses and proposals for action in the government documents reflect the different capacities of actors that influence priorities and action guidelines (Paarlberg, 2010). The Brazilian federal government harbors distinct and even opposing conceptions against a backdrop of significant socioeconomic inequalities and power asymmetries. One example is the disputed concept of family farming, a socio-political category that gained strength in the 1990s and became a reference in the formulation of differentiated government policies. Historic influence by large landowners and patronal agriculture over the Ministry of Agriculture, Livestock and Provision (MAPA) led to the creation of the Ministry of Agrarian Development (MDA) by center-left governments to address differentiated policies such as agrarian reform and agroecology. This response highlights the unique duality of narratives related to agriculture and the rural world in Brazil's governmental structure. Narratives from agribusiness representatives often deny differentiation between family/peasant-based agriculture and large-scale, specialized agriculture, omitting any negative social, environmental, or health-related effects of the dominant food system (Burlandy et al., 2021).

The previous example illustrates the institutional repercussions of narrative disputes (Phillips et al., 2004). Documents from social actors usually propose, validate or promote institutional frameworks and corresponding actions, which can result in contrasting and even conflicting directions. This was seen in several of the narratives analyzed here, such as government support for the bioeconomy and so-called climate-efficient productive practices led by powerful corporate networks, or construction of a set of actions guided by the perspective of food and nutrition sovereignty and security proposed by CSO. In this way, contrasting institutional orientations coexisted in the same government (Philips et al., 2004).

The narratives in different government plans also make it possible to identify discursive strategies and disputes over meanings such as corporate action strategies, as indicated by Mialon et al. (2015). Concepts or key elements of the international debate on climate change are reappropriated, retranslated and adapted to the terms of the dominant agricultural production model in global food systems. The reductionist strategy in the first discursive repertoire reappropriates and re-signifies concepts (generally without specifying, deliberately confusing the audience), thus selecting certain elements that are more favorable or feasible in the dominant food system. For example: climate issues are reduced to accounting for GHG emissions (and carbon credits); "sustainability" becomes "economic sustainability"; biodiversity means combining two or three genetically identical monocultures; "forest" (from the perspective of carbon sequestration) does not distinguish between tree monocultures (such as eucalyptus) and native vegetation in the Amazon or Cerrado biomes. ¹¹

In national government plans as well as CPS narratives, the abovementioned discursive strategies construct a positive image of the soy-meat complex as sustainable (or potentially sustainable). They attempt to erase its relationship with climate change (and social inequalities, discussed below) or drive transformative actions in food systems that threaten the existing global economic and power concentration, which it reproduces at the national level.

The ABC Plan (Brasil, 2012), for example, associates the main sustainability actions with the adoption of technologies to reduce GHG emissions. Although it makes no mention of soy, it utilizes a discursive strategy that associates the images of soy and livestock with a sustainable and conservationist production model. The main activities proposed highlight technologies associated with soybean cultivation, emphasizing direct planting involving transgenic seeds resistant to herbicides. This narrative is present in the Soybean Chamber (also linked to MAPA), which lauds direct planting as a "sustainable production system" while opposing the ban on glyphosate 2,4-D and Paraquat, arguing that there is no evidence that these herbicides are carcinogenic and that this ban could lead to reductions of "up to 50% in national production, impacting the Brazilian trade balance." The ABC Plan also offers credit for recovering "degraded pastures" through integrated crop-livestock-forest systems (known in Brazil as ILPF), presented as diversification or even as "increased biodiversity" even though in practice it is nothing more than a combination of two to four monocultures, namely soybeans (as a crop), pasture, cattle and eucalyptus.

Government plans make extensive use of the terms "sustainable" and "sustainability," at first glance indicating apparent consensus with international agreements and commitments related to environmental issues. ¹² But the adjectives, questions and actions associated with sustainability reveal multiple meanings for this term; potential differences in meaning have already been discussed by Nascimento (2012). Prominent components of this dispute are the different uses, emphases and multiple nuances of these terms, including strictly economic meanings dissociated from the environmental issue "sustainability of the economic expansion cycle," "sustainability of investments," "ensure the generation of foreign exchange and the sustainability of agribusiness").

The CPS seeks to minimize the regulatory role of the government in matters of interest to corporations, while the narratives about

¹¹ The MDA was created in 1999 and eliminated in 2016, shortly after the parliamentary coup that ousted Dilma Rousseff from the presidency, signalling the political strength of agribusiness.

¹² A milestone of this strategy is the mainstream media campaign entitled "Agro: A indústria-riqueza do Brasil" ["Ag: the industry-wealth of Brazil"], which disseminates corporate content without making this clear to viewers. It is intended to neutralize conflicts and does not distinguish between different agricultural systems (global, organic, agroecological), dissociating agribusiness from deforestation, slave labor, pesticide use and health problems. (Burlandy et al., 2021; Pompeia, 2021)

¹³ These expressions are frequently found in the federal government's Multi-Year Plans, which mention sustainability hundreds of times, mirroring the various meanings of this term in the national public debate.

Table 2

Correspondence between discursive repertoires, sustainability, proposed actions for food system transitions and implications for justice in the documents analyzed.

Discursive repertoire - Efficient economic use of natural resources Assumptions Proposed actions

Economic arguments and mechanisms as guides for actions to promote sustainability while mitigating climate change, mainly through technologies that increase productivity without increasing GHG emissions.

Continuous productivity increases plus technological innovations as major pillars to feed a growing world population. Low-carbon agriculture in face of the growing demand for food makes it possible to expand food production without increasing current GHG emission levels.

- (i) New technologies to increase food production while reducing GHG emissions, loss of native vegetation and deforestation, including: Increase yields and productivity of a few specific crops in already cultivated land to avoid expanding production into natural ecosystems.
- (ii) GMO seeds and no-till cultivation combined with herbicides such as glyphosate, paraquat and 2,4-D (conservation practice that adds organic matter and reduces erosion as well as the need to use heavy machinery).

Implications for justice

DISTRIBUTIVE JUSTICE

Equity is presented mainly as adopting new technologies and making them available for more marginalized sectors such as family farming. The argument is to boost incomes through technology to stimulate the development of territories, cities and regions by expanding productive urban structures and providing public services to reduce socioeconomic inequalities on multiple scales. Increases in food production ensure food security. Large-scale, high-tech production lowers food prices

References to environmental injustice alongside social inequality generate a development proposal aimed at social justice that includes the right to a healthy environment for all.

RECOGNITIVE/PROCEDURAL JUSTICE Recognitive and procedural justice are not emphasized in this discursive repertoire.

Discursive repertoire-- Paradigm changes, agroecology, democracy and rights

Just and equitable food systems should be based on food sovereignty, agroecological production/extraction, processing and distribution that respect biodiversity and strengthen peasants and family farmers, fisherfolk, landless rural workers, indigenous peoples and traditional communities. Systems that ensure access to adequate and healthy food must respect the diversity of the national food culture.

Concept of sustainability that includes social relations, values and practices linked to the territories.

Low GHG emissions should be achieved by adopting "social technologies."

Transitions to agroecological modes of production should focus on promoting food and nutrition sovereignty and security and the human right to food, representing new paradigms for food production, commercialization and consumption.

Power relations in food systems and power asymmetries in decision-making are determinants of environmental and health problems, revealing the political dimension of agroecological transitions.

Large-scale power asymmetries and human rights violations in food systems lead to the criminalization and killing of peasants and activists.

Expand agroecological and sustainable family farming by managing agroecosystems, incorporating ecologically based principles, methods and technologies, and the right of peasants, family farmers, indigenous peoples and traditional communities to free and sustainable use of agrobiodiversity.

Promote the model of producing, extracting and processing agroecological and organic food while protecting and valuing agrobiodiversity. Strengthen family farming, agrarian reform, agroecological transition, seed varieties, women, youth and social movements.

New sustainability indicators that cover public support for diversified agroecological systems through subsidies, moratoria, new seed legislation and participatory governance.

Highlight the role of healthy food systems in the analysis of power relations and political economy. Develop and consolidate regulatory strategies to target practices in the commercial private sector that lead to chronic disease, especially the commercialization of ultra-processed products. Participatory processes that can incorporate social and health problems in the political agenda and food system transitions. These include considering research as a public good capable of informing decision-making and public policies and more integrated indicators of health, nutrition, social well-being, environment and culture to expand the visibility of these topics.

 (i) Transitions in food systems require: consideration of the complexity of food systems and their connections to health problems, including the one health perspective (integrating human, animal and environmental health issues).
 (ii) construction of intersectoral food and nutrition policies based on democratic and participatory political processes.

DISTRIBUTIVE JUSTICE

More equitable and environmentally sustainable development.

The equity perspective focuses on income inequality, access to land and equal opportunities for all in the various aspects of social life, including access to basic public services such as education, health, sanitation and social assistance.

RECOGNITIVE JUSTICE

The equity perspective relates to ethnic, racial, generational and gender inequalities. The issue of traditional peoples and communities appears as transversal

The enormous inequalities in Brazilian society make it difficult to build an effectively democratic environment on equity without prejudices related to gender, race and ethnicity.

PROCEDURAL JUSTICE

Emphasis on elements of procedural justice with calls for participatory spaces, citizenship and justice within the larger challenge of consolidating democracy and social participation.

This aspect of citizenship and justice extends into community justice, including previously excluded segments of society into the justice system. High concentration of power in large corporations occurs at all stages of the agrifood chain, from production to final consumption, making the system vulnerable to abrupt fluctuations in agricultural commodity prices, rising food prices and outbreaks of food crises.

The population groups most affected by the problems of current food systems are those with less social visibility, economic power and influence in decision-making processes. Participatory processes should permit the politicization of social and health problems that currently affect vulnerable groups in society. Concentration of power and financial capital and the financialization of food systems are important drivers of inequalities.

The lack of equity in food systems is related to the accelerated, concentrated and large-scale commercialization of natural resources, inputs, technological equipment and ultra-processed foods. These processes exclude vulnerable groups

(continued on next page)

Table 2 (continued)

Assumptions	Proposed actions	Implications for justice
		and provoke adverse health consequences.
		Science as a public good should face inequalities in
		knowledge, power of influence and visibility,
		which involves how research is funded, how
		problems are structured and priorities are set an
		how data is collected and made available;
		interfaces between science and politics should b
		strengthened to this end.

moratoria present this measure as an essentially private initiative independent of the state, erasing or reducing government participation in punitive and inspection actions (which determine illegality) (Brasil, 2018). At the same time, agribusiness sectors drive political actions to change regulations and norms for forest protection (Pompeia, 2021). Even recent proposals by the Brazilian Coalition in defense of "zero deforestation" take place within a national context of dismantling government activities related to inspection and combating deforestation. Large corporations tend to question the existence of deforestation through certifications, and the current Brazilian political context enables discursive mechanisms from the CPS to legitimize active and visible strategies to dismantle public policies (Niederle et al., 2022).

5. Transforming food systems, sustainability and justice

The need to transform food systems occupies a prominent place in the international debate on sustainability and climate change, with many disagreements around the UNFSS 2021. The degree and amplitude of the transformations proposed in the two discursive repertoires raise the following questions: (a) whether and how they refer to inequalities, injustices and the promotion of equity in food systems; (b) what relationships are established between food systems, sustainability and healthy eating, and how they fit into the Brazilian debate on food and nutrition sovereignty and security and the human right to food. This section indicates how narratives strengthen distinct transition processes that move toward more or less just and sustainable food systems (Table 2).

Digging deeper into the food system transformation controversies, the document from the international private sector to the UNFSS underscores the urgent need to transform the food system in order to avoid severe environmental and human risks for all people, the planet and businesses (UNFSS/PSGG, 2021). But the authors omit the reasons behind the socio-environmental and human health-related repercussions of the production and consumption models in food systems under the hegemony of agrifood corporations. The proposed guidelines combine a technical and economic emphasis in the form of science-based solutions, investment in research and innovation and clarity for the capital market, with references to incorporating the three dimensions of justice with generic and non-specific formulations. In this way, the guidelines refer to improving livelihoods and well-being along value chains and positioning consumers as agents of change. In Brazilian CPS documents, inequality is portrayed as an element to be overcome by improving living conditions in the countryside and generating employment. Technology appears as a solution in several documents, such as the "The Future is Agro" campaign (CNA, 2018).

Meanwhile, the notion of justice/injustice is commonly associated with the idea of "legal insecurity" affecting agricultural producers due to the creation of conservation units, regularization of territories occupied by indigenous and traditional peoples and agrarian reform. "Labor" also appears as a sensitive issue for the CPS, and requires a clear and specific definition of "slavery-like labor" and differentiation from labor rights practiced in the city. Positions on traditional communities, quilombolas, and indigenous peoples vary in the sector according to each actor. Among actors directly linked to soy production (such as APROSOJA) there is latent tension related to demarcation of indigenous lands and compensation payments to rural producers. For private actors focused on the bioeconomy, traditional peoples are recognized as a factor in forest conservation and a stimulus for economic integration of such communities in sustainable use and management of forests.

The Civil Society and Indigenous Peoples' Mechanism linked to the United Nations Committee for World Food Security (CFS) was absent from the UNFSS official programming, a divergence from the very mission of UNFSS indicating the strong influence of large corporations and private foundations on its agenda. The actors in this international network instead opposed demands for a multilateral organization (CFS) to take a leading role in view of COVID-19 and the necessary radical transformation of food systems. There is a clear opposition to international positions by the CPS, which focus on private economic mechanisms in transition processes. A coalition of social movements crafted the People's Autonomous Response to the UNFSS, advocating food systems for people instead of corporations through a rights-based approach. A few years earlier, in 2018, the Via Campesina International Report commemorated the approval of the United Nations Declaration on the Rights of Peasants and Other People Working in Rural Areas (UNDROP), after two decades of mobilization. But despite these successes, corporate lobbying was able to advance more prominently within the context of the UNFSS (LVC, 2021).

The erosion of public policies demands a break with neoliberal sentiment, which extends to free trade agreements between countries in the Global South and the Latin America Southern Cone and Europe (LVC, 2020; LVC, 2019; LVC, 2018; LVC, 2017; Grain, 2019; Grain, Carta de Belém, 2019). This gives primacy to the public sphere, attributing a central role to public policies and food governance that is not intended to enable corporate interests. The dismantling of public policies to combat hunger (such as the Food Acquisition Program) and the lack of priority given to the family and peasant segment of agriculture has been denounced by Brazilian

CSO (Carta de Belém, 2021; Aguiar, 2021).

An integrated approach to food systems and their connections with environmental, social and health problems cannot ignore differences between systems and the contrast between partial responses and systemic responses. Documents from CSO repeatedly utilize the notion of food systems in reference to both the corporate model and the peasant/local model, with narratives that emphasize coexistence between both. The appropriation of sustainability gives rise to denominations such as "sustainable and decentralized systems, with an agroecological base," "democratic, healthy and sustainable food systems," and "sustainable ecosystems." As for the transition to agroecological models, some elements are highlighted: new sustainability indicators, public support to diversified agroecological systems, moratoria, reviewing seed legislation and participatory governance mechanisms (IPES-Food, 2016). Denunciation of this narrative of injustices associated with the industrial model is noteworthy, along with proposals for structural transformations that bring family farmers, peasants, workers and poor people to the forefront of political economic process.

In this way, approaches to food systems differ in how they recognize the systemic determinants of inequalities and promote equity, with an emphasis on racial and gender dimensions, a component that refers to distributive and recognitive justice. Additionally, the way they address power asymmetries, decision-making processes and social participation refers to procedural justice. Narratives focusing on increases in productivity tend to address equity in terms of higher incomes for more marginalized sectors like family farmers, based on technologies to boost productivity and reduce costs, which are aligned with policies to overcome poverty.

The perspective of equity that guides the transformation of food systems according to CSO is very different. Within the Brazilian context, this includes strengthening biodiversity, rights, ethnic, racial and gender equality and consolidation of new paradigms for food production, marketing and consumption in light of food and nutrition sovereignty and security and the human right to food. Income, access to land, gender and ethnic-racial inequalities and the rights of traditional peoples and communities are addressed transversally in these discourses, affirming the relevance and interaction of the dimensions of distributive and recognitive injustice in Brazil. Layers of inequalities and the perpetuation of injustices are also at the center of the proposal for radical transformation of the food system which results from narratives of international CSO (CSM, 2020): consolidation of more equitable, agroecological and resilient local food systems, premises of food sovereignty and rights, and the perspective of democratizing the food system in parallel with the demand for global climate justice.

The various manifestations of inequality pointed out in the narratives above are usually linked to the themes of ethnic/racial democracy, gender equality and the guarantee of human rights. This association between democracy, justice and social participation refers to the dimension of procedural justice through participatory spaces and an effective democratic environment. Similarly, associating sustainability and democracy is a narrative construction highlighting the role of power relations in decision-making processes that guide public policies, and the democratization of these processes. This democratization requires more visibility for demands from different population segments, and their influence in governmental and international decision-making processes is currently marked by strong power asymmetries.

From this perspective, the power relations established within food systems are determinants of environmental and health problems and must be made visible through participatory processes and a politicization of social and health problems. In this way, highlighting the asymmetries of economic and political power in food systems is part of political action strategies for civil society organizations, which takes the form of a claim for procedural justice. The dimension of violence is explicitly invoked by criminalizing activists and peasants and assassinating their leaders. A reconfiguration of power relations also affects the transformation of food production, marketing and consumption practices. Principles that guide proposals for the transition to sustainable and decentralized food systems are those that affect power relations and decision-making processes, a condition for consolidation of agroecology-based production systems.

Finally, with regard to the relationship between food systems and healthy eating, the discursive repertoire of the CPS focuses on the quantitative dimension of food supply vis-à-vis global demand to justify intensive use of technologies to boost land productivity while controlling GHG emissions. Prohibitions and restrictions on pesticide use are contested by claims that they are not harmful "if used properly" (Soy Sector Chamber). Emphasis is placed on nutritious and healthy diets that are accessible and affordable (UNFSS/PSGG, 2021). A fragmented appropriation of healthy eating that leads to individual accountability driven by "educational actions" neutralizes conflicts between CPS practices and products and depoliticizes the debate (Burlandy et al., 2021). Pseudo-solutions such as organic ultra-processed products derived from intensive practices and monoculture are completely disconnected with principles of food and nutrition sovereignty and security and the human right to adequate and healthy food.

The discursive repertoires of CSO contrast strongly with some national policies espousing promotion of equitable and universal access to adequate and healthy food through diverse food systems and agroecological models that give rise to culturally appropriate and diversified diets. One example is the slogan "Real food in the countryside and the cities" promoted by Brazilian social movements in support of agrobiodiversity and agroecology, fresh and regional foods, the leading role of women, respect for Black and indigenous ancestry and the rescue of identities, memories and food cultures (ANA, 2018a). Valuing diverse diets and food cultures helps improve food and nutrition profiles, while agro-industrial models based on monocultures and pesticides are directly associated with poor diets and health problems. Growing demand for animal protein and the corresponding animal feed reinforces deforestation and environmental problems, highlighting the synergistic effects of obesity, malnutrition and climate change. Corporate political activity has made it difficult to transform power relations in food systems and adopt regulatory strategies focused on CPS business practices that have led to higher incidence of chronic diseases (Burlandy et al., 2021).

¹⁴ See, for example, the recurrent use of the phrase "broken food system" in narratives critiquing the conduct of the FSS (LVC, 2015; ETC Group, 2021).

The approach to disputing narratives presented in this article and the discussion points highlighted above are in line with other studies and academic literature, including analytical similarity to the study by Anderson and Rivera-Ferre (2021). While critiquing the promotion of industrial agriculture as essential to eliminate hunger, these authors characterize this perspective as narratives of extractive food systems consistent with neoliberal economic concepts that bear significant similarity to the first discursive repertoire presented above. Notable in both descriptions is the support for increased productivity and yields achieved mainly through standardization, mechanization, monocultures and the use of sophisticated technology (e.g., genetic engineering). As for environmental sustainability, a quite controversial focus is on maintaining "resources" at maximum sustainable yield or on "soft sustainability" through incremental changes rather than restoration of degraded land, water and other elements of the natural world. In contrast, narratives focusing on activities and imaginaries that can restore or enhance communities and ecosystems (human, social, financial, physical, natural capital) through systems thinking and attention to social and ecological interactions have been labeled regenerative.

Like the second discursive repertoire identified in our study, agroecology is taken to be the most prominent example of regenerative approaches that can provide nutritious food by incorporating scientific and traditional knowledge, balancing elements including diversity, resilience, support for culture and traditional foods, responsible governance and movement toward a circular and solidarity economy. By emphasizing diversity of crops and livestock and reducing dependence on external inputs, agroecology enhances resilience, self-sufficiency and dietary diversity. Agroecology in regenerative narratives is closely aligned with food sovereignty, which has always had a strong political orientation and attempts to amplify the voices of small-scale producers.

6. Concluding remarks

The main narrative disputes are found around the very meanings of sustainability and actions proposed for transition, especially when isolated or partial measures are contrasted with those involving broader transformations of the entire food system. Another important dispute concerns whether and how proposals for the transformation of food systems consider procedural and recognition justice. Narratives that emphasize democratization of decision-making processes (procedural justice) and the recognition of ethnic-racial and gender inequalities (linked to distributive inequality) are more likely to promote just transition processes toward sustainable and equitable food systems.

Underlying tensions and conflicts that arise around inherent inequalities and injustice in food systems at the territorial, national and international levels are not properly addressed by predominant narratives, proposals and respective technical/economic trends. Documents from the CPS argue that inequalities can be overcome by improving living conditions and generating jobs, mainly in the countryside, through private mechanisms as well as economic responses based on innovations and technical progress; sustainability is limited to reducing GHG emissions. Meanwhile, in highlighting systemic determinants of inequalities resulting from food systems and Brazilian social structure, CSO call for radical changes in food systems as well as ethnic-racial democracy, gender equality and guaranteed human rights. Technological innovation is converted into "socio-technologies," while instruments such as the carbon market and green economy are denounced as false solutions.

Narratives disseminated by the CPS and CSO can be found in governmental documents because of the networks and national public spaces that connect them to governmental sectors. The economic weight of the CPS and corresponding political imbalances in policy making affect the possibility that CSO narratives will be picked up by governments and effectively implemented. Even so, this fact should not overshadow the relevant results achieved by social participation in a democratic context. Narrative disputes about how problems are conceived and diagnosed and can be overcome should be understood more properly as the coexistence of different orientations within the same government, therefore indicating that the narrative dispute is institutionalized within the government.

Diagnoses are known to be able to highlight or divert attention from the main conditioning factors of inequalities and sustainability, as well as the responsibility of the actors involved (such as private sector narratives on the effects of their practices, for instance); they consequently lead to very different solutions. One-off solutions such as GHG emission control strengthen market niches (technologies, inputs, etc.) and weaken government regulatory strategies affecting private interests, in turn supporting the primacy of self-regulation of private sector practices and voluntary trade agreements. In sharp contrast, major transformations toward sustainable and healthy food systems result from the viewpoint of Brazilian CSO that promote food and nutrition sovereignty and security and the human right to adequate and healthy food through integrated public policies.

Sustainability and food intertwine in justice issues where the agribusiness/corporate model coexists with family and peasant-based farming. The international CSO documents analyzed here argue for peasant-based agroecology as a strategy to overcome the present multidimensional crisis. Corporate food system dynamics based on large-scale, specialized agriculture and anchored in neoliberal policies are seen as reproducing distributive and procedural injustices and contradicted as such in spaces of international negotiation and at the UNFSS. Here, the appropriation and resignification of notions of sustainability, food security and healthy eating can be seen as an important part of the dispute over narratives.

By adopting a processual and multi-scale approach to food system transformations, we were able to highlight the different ways inequality and promotion of equity and justice issues are addressed in the two repertoires. On one side distributive justice is mainly considered in terms of income, while other distributive injustices (land ownership, access to resources and distribution of environmental damages), procedural injustices (power asymmetries and incidence in public policies) and recognitive injustices (social differentiation of family farmers, indigenous peoples and other categories) are brought to the fore by the other party.

The relationships between food systems and healthy eating, which are quite relevant in the Brazilian debate on food and nutrition sovereignty and security and the human right to food, offer another notable contrast. Conflicting conceptions of food security mainly relate to the roles of large-scale monoculture agriculture and transnational corporations. The two discursive repertoires adopt quite distinct perspectives; the CPS emphasizes the quantitative dimension of food production requiring intensive technologies, higher

productivity and control of GHG emissions, with little if any reference to nutritional value. Meanwhile, CSO demand universal access to adequate and healthy food based on diversified, family-based and agroecological food production.

The complex dimensions of justice which affect the feasibility of promotion can be seen in the determinants of choices in terms of public action, such as the political orientation of governments particularly with regard to facing injustice. Legislative disputes are especially relevant in Brazil, as is the profile of the judiciary and the current trend of political judicialization, which can hinder transformations. The scenario is completed by the very ability of social actors to characterize situations of injustice, especially in the most vulnerable sectors. The recent Brazilian experience in this field can be summarized as follows: (i) measures of distributive justice with limited confrontation of structural determinants (e.g., income transfer with limited inequality reduction, support to family farmers maintaining high concentration of land ownership), (ii) advances in recognitive justice (recognition of indigenous peoples and traditional peoples and communities facing ongoing threats), (iii) significant but fragile advances in procedural justice subject to periodic setbacks (social participation in public policies).

Finally, additional academic research along similar lines is needed to shed light on the conflicts surrounding justice, since narratives and other political manifestations by the various actors involved are a central component of the politics of food system transition. Furthermore, the still-limited use of the lens of justice helps highlight the asymmetries of power that are often present in the relationships between actors. In this case, they lie at the heart of the differentiated capacity of narratives to catalyze actions that induce or hinder transitions to just and sustainable food systems.

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Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

ANNEX

(Table 1, Table 2, Table 3, Table 4, Table 5)

Table 1

Commercial private sector - institutions and selected documents.

	Selected Documents		Institution/Actor
blished on the APROSOJA Brazil website ta de Palmas (political manifesto) .com.br/		s; national organization, with strong of Mato Grosso.	
o é Agro" ["The Future is Ag"] campaign, te the 2018 presidential elections and the n program.		aditional representative of large ployers including soybean growers ted over 50 years ago, the entity has a over unions organized into 27 state	Confederation of Agriculture and
eace"] (Rodrigues, 2018)	"Agro é paz" ["Ag is Peace"] (organized by this Chair was included, or lectures by experts linked to provide support for a government plantes for the 2018 presidential election.	University of São Paulo
ww.abag.com.br/artigos-abag/	14 position papers; www.aba	ce the agribusiness production chains. he upstream input sector gricultural machinery).	Agribusiness Association
grama Soja Plus [Soybean Plus Program]; 	6 position papers; <i>Programa Se</i> Best Practices Manual	oducing meal, vegetable oils and corporations and traders in soy value MAGI, Bunge, Cargill, and COFCO. n the soy moratorium.	ABIOVE - Brazilian Association of Vegetable Oil Industries
blished on the Brazilian Coalition 2021, with positions on legislation and climate agenda. https://www. me/index.php/en/what-we-propose/	website from 2015 to 2021, v policies related to the climate	tence public policies and promote at encourage a sustainable economy low-carbon agriculture and ement." Includes a wide range of tions representing the private sector, I society. Also brings together t act on an international scale (as Conservancy), but has significant including important associations linked it complex (such as ABIOVE, ABAG,	Climate, Forests and Agriculture
		complex (such as ABIOVE, ABAG,	1

Table 1 (continued)

Institution/Actor	Description/Comments	Selected Documents
	ABIEC [Brazilian Association of Meat Exporting Industries] and ABIA [Brazilian Association of Food Industry]), international corporations (ADM, AMMAGI, Cargill), agrochemical manufacturers (Bayer, BASF), and supermarkets (Carrefour),	
	among others.	

 Table 2

 Civil Society – Institutions and Selected documents.

Institution	Description/ Comments	Selected Documents
ANA – National Articulation of Agroecology	Nationwide organization that links civil society organizations, social movements and regional networks engaged in agroecology and in strengthening family-based production. It was established in 2002 to construct alternatives for rural development. Most actors work with rural populations.	2 political letters: ANA (2014, 2018b) Document: "Soybeans in Brazil: poverty, violence and food insecurity" (ANA, 2018b);
Carta de Belém Group	National network combining social movements, unions, non- governmental organizations and academics who work to defend territorial and socio-environmental rights of rural populations. Formed in 2009 to oppose market solutions and processes to financialize nature in the face of environmental and climate crises. Includes organizations that are part of ANA.	8 political letters related to COP UNCCC (Grupo Carta de Belém, 2009, 2014, 2019, 2021, 2013, 2015, 2016, 2018) https://www.cartadebelem.org.br
FASE	National NGO that is part of ANA; included because of a document specifically focusing on soy expansion in Brazil.	"Critical Dossier on Soybean Logistics: In defense of alternatives to the monocultural chain" (Aguiar, 2021).
La Via Campesina	International peasant movement encompassing the main rural social movements in Brazil such as MST (the Landless Rural Workers Movement), MPA (Small Farmers Movement) and MMC (Peasant Women's Movement). Founded in 1993, with small-scale farmers representing four continents and making their voices heard as they face globalized agricultural policies and agribusinesses.	8 annual reports, from 2013 to 2020 (LVC, 2015 to LVC, 2021)
ETC Group	International foundation that assesses corporate actions at the international level. Founded in the 1970s to monitor the impact of emerging technologies (such as the use of plant genetic resources, intellectual property and biotechnology) on agricultural biodiversity, rural population and food security. ETC participates as an observer in various instances of the United Nations and as a consultant in the Consultative Group on International Agricultural Research (CGIAR).	Documents related to COPs and global food systems were selected: "Who will feed us?" (ETC Group), "Too big to feed" (ETC Group, IPES-Food), "Hijacking food systems" (ETC Group, 2021) and "A long food movement" (IPES-Food; ETC Group, 2021).
GRAIN	International NGO that conducts research and analysis to support peasants and small farmers in the fight for food systems, with focus on biodiversity and community-controlled agriculture. Mainly focuses on Africa, Asia and Latin America.	86 internet articles related to Brazil and soy: https://grain.org/
IPES-Food - International Panel of Experts on Sustainable Food Systems	Independent panel established in 2015 with experts from different continents and countries to contribute to the transition to sustainable global food systems through scientific reports & detailed policy recommendations. Comprised of environmental scientists, development economists, nutritionists, agronomists and sociologists, as well as practitioners from civil society & social movements. Does not accept funding from governments or corporations.	"From uniformity to diversity: a paradigm shift from industrial agriculture to diversified agroecological systems (IPES-Food, 2016); "Unravelling the Food–Health Nexus ()" IPES-Food, 2017) and "A long food movement" (IPES-Food; ETC Group, 2021).
HLPE - High Level Panel of Experts on Food Security	Advisor to the UN Committee on World Food Security (CFS), whose reports are important references in international debates on food systems. Created in 2009 as an interface between science and politics. Prepares scientific studies, analyzes and opinions at the request of the CFS.	Report: "Food security and nutrition: building a global narrative towards 2030". (HLPE, 2020).

Table 3 Brazilian government documents.

Coordinated by	Documents analyzed	Description/Comments
Federal Administration	PNMC - National Climate Change General Plan (Brasil, 2008) and Policy (Brasil, 2009)	Related to the Brazilian government's commitment to the Kyoto Protocol. Preparation involved various forums and government sectors. Provides for the preparation of sectoral plans (industry, energy, agriculture, etc.).
MAPA - Ministry of Agriculture, Livestock and Provisioning	ABC Plans- Low-Carbon Agriculture - Sectoral plan for mitigation and adaptation to climate change for the consolidation of a low-carbon economy in agriculture (Brasil, 2012 and 2021)	The only sectoral climate change plan that addresses issues related to food systems. Focused on technological processes to reduce GHG emissions in agricultural and livestock production systems.
MMA - Ministry of the Environment	PPCDAm - Climate Change Action Plans for the Prevention and Control of Deforestation and Fires in the Cerrado and Legal Amazon (Brazil, 2018)	A continuation of previous plans that coordinates different actions and policies such as land management, conservation units, environmental inspection, soy moratorium, productive activities and sustainable use of forests.
MMA - Ministry of the Environment	PNA - National Plan for Adaptation to Climate Change (Brasil, 2016)	Broad spectrum, includes actions aimed at agriculture and food and nutrition security.
Federal Administration	PPAs - Multi-Year Administration Plans (Brasil, 2004; 2011b; 2015; 2019)	Planning instruments that define guidelines, objectives, priority actions and general spending targets for four years. Five PPAs were analyzed; the 2004-2007 and 2008-2011 PPAs from the Lula government (Brasil, 2004; 2007) and the 2012-2015 and 2016-2019 PPAs from Dilma Rousseff's presidency (Brasil, 2011; 2015c), both under Workers Party administrations, and the 2020-2023 PPA from the extreme-right Bolsonaro administration.
MAPA - Ministry of Agriculture, Livestock and Food Supply	"Soy Sectoral Chamber" agendas and minutes - 25 meetings held between 2014 and 2019. www.gov.br/agricultura/pt- br/assuntos/camaras-setoriais-tematicas/camaras-setoriais- 1/soja	Included to identify specific narratives and demands of the soy sector. The Chamber is a public-private relationship forum composed of government institutions, farmer's associations (most notably APROSOJA), companies and corporations, especially upstream input sectors related to the soy value chain. Intended to support and monitor actions by the agricultural sector.
MDS - Ministry of Social Development and Fight Against Hunger	PNSAN - National Policy on Food and Nutritional Security, Decree 7272/2010 (Brasil, 2010) PLANSAN I 2012–2015 (Brasil, 2011a) and PLANSAN II 2016–2019 (Brasil, 2017) - Two National Plans for Food and Nutritional Security	Important milestones for policies aimed at food justice, with significant contributions from the National Council for Food and Nutrition Security (CONSEA), directly linked to Brazilian president, which includes important representation by civil society and influences government policy narratives and actions, including those relating to climate change.

Table 4
International documents related to UNFSS.

Actor	Selected Documents	Comments
Scientific Group for the UNFSS	"Science for Transformation of Food Systems: Opportunities for the UN Food Systems Summit" (Braun et al., 2021)	Draft paper by the Chair and Vice-Chairs of the Scientific Group for the UNFSS, based on contributions from scientific communities around the world.
Private Sector Guiding	"Business Declaration for Food Systems Transformation"	Document signed by numerous company presidents and CEOs.
Group	(UNFSS-PSGG, 2021)	
International Civil Society Mechanism (CSM)	"Voices from the ground: from COVID-19 to radical transformation of our food system" (CSM, 2020)	CSM was created for relations with the CFS and has produced documents on food system transformations related to the UNFSS.

 Table 5

 Analysis and document registration worksheet.

A.2 Document date A.3 Document level (national/international) A.4 Actors' segment (government, private commercial sector, civil society) A.5 Author(s) A.6 Type of document (plan, program, report, political letter, etc.) A.7 Document production context A.8 Target audiences A.9 Documents and events mentioned A.10 Central theme(s) A.11 Main objective(s) A.12 Main approach(s)	
A.4 Actors' segment (government, private commercial sector, civil society) A.5 Author(s) A.6 Type of document (plan, program, report, political letter, etc.) A.7 Document production context A.8 Target audiences A.9 Documents and events mentioned A.10 Central theme(s) A.11 Main objective(s)	
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A.11 Main objective(s)	
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A 12 Main approach(s)	
11.12 Main approach(s)	
A.13 Main action(s) and their justification(s)	

(continued on next page)

Table 5 (continued)

B.1 Whether and how the document addresses actions related to the soy chain (also check agribusiness)
B.2 Whether and how the document addresses actions related to food systems
B.3 Whether and how the document addresses actions related to climate change
B.4 Whether and how the document addresses actions related to food security/food and nutritional security
B.5 Whether and how the document addresses sustainability issues
B.6 Whether and how the document addresses transition and transformation issues
B.7 Whether and how the document addresses justice issues
B.8 Whether and how the document addresses equity issues
B.9 Whether and how the document addresses health and nutrition issues

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