

Rebalance power and strengthen farmers' position in the EU food system? A CDA of the Farm to Fork Strategy

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Abstract

The Farm to Fork (F2F) Strategy at the heart of the European Union's Green Deal set out to create a "just transition" towards a sustainable food system, with benefits for all actors. We conducted a critical discourse analysis (CDA) to explore discourses around power in the food system and farmers' position in the communication and implementation of the Farm to Fork Strategy. Discourse analysis encapsulates various scientific methodologies for deciphering the meaning behind the creation and communication of different forms of language and identify power dynamics, amongst other aspects. We identified two prior discourses in one of the objectives of the European Union's new Common Agricultural Policy (2023-27). Our analysis found that the discourses, namely "rebalance power in food system" and "strengthening farmers' position in value chains," are marginalized in favour of an innovation-investment discourse, indicative of greater financialization and technologization based on techno-finances fixes in transforming the European Union agri-food system. We argue that entities representing agri-business interests have been influential in the policymaking process and voices representing smallholder and medium-sized farmers' transformational discourses have been excluded.

Keywords Critical discourse analysis · Farm to Fork Strategy · Food policy · Food sovereignty · Agri-food transitions · Agroecological transformation · Power relations · Technology · Investment

Introduction

A transformation of agri-food system is needed urgently to address the sustainability and health crises. In the European Union (EU), an estimated 60% to 70% of the soils have been degraded mostly due to industrial agriculture processes, significantly reducing their ability to support biodiverse ecosystems as well as sufficient crop yields (EC 2021d). According to the World Health Organization (WHO), on average three out of five adults in the EU and one-third of all children are overweight or living with obesity, the leading causes of noncommunicable diseases, with over 1.2 million deaths each year caused by unhealthy diets (WHO 2022). However, food system transformation is a complex process as it requires

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¹ Department of Agroecology, Aarhus University, Tjele, Denmark a material, institutional, and discursive reconfiguration of all elements in our food system and underlying drivers. A shift in approaches to governance and ethical standards has also been identified to counter the dominant agro-industrial paradigm with relocalized food systems, leading to a radical systemic change that is more inclusive of smallholder farmers (Bui et al. 2019).

In Europe, agricultural development has been riddled with conflicting standards across the Western and Eastern European states, sidestepping local socio-economic and cultural factors for commercial ones in attaining short-term goals (Biczkowski et al. 2022). The longstanding tradition of the EU's Common Agricultural Policy (CAP) coupled with weak domestic governance had created numerous cracks in the EU food system, whose addressal was long overdue. Since its introduction in 1962, the CAP has heavily subsidized industrial farming, with over 80% of direct subsidy payments going to only 20% of the farmers (Harvey 2021). The latter have large farms with an average mean size of over 17.4 hectares, whereas almost two-thirds of EU farmers have small farms (of five hectares or less), whose number has declined by 44% between 2005 and 2020 (Eurostat 2022). With worldwide annual agricultural subsidies, totalling over 640 billion euros, contributing to environmental damage and worsening social conditions, the average CAP annual subsidy spending of 54 billion euros has played a significant role in exacerbating these problems (Scown et al. 2020). CAP subsidies have promoted domestic agricultural surpluses that resulted in food dumping in poor countries, reducing their food security by creating dependence on "cheap" imported food (UNHR 2011). This destroyed small farmers' access to local markets and destabilized world markets for decades, causing high prices, and creating hunger and malnutrition (Bureau and Swinnen 2018). Where previously farmers were primarily receiving production support, since 1992, support to farmers has gradually become decoupled from production in favour of income support (Daugbjerg and Swinbank 2016). Additionally, with the greening of the CAP in the last two decades, policy makers have slowly phased out direct farm support in favour of green payments for the provision of ecosystem services (Daugbierg et al. 2020). Furthermore, as CAP's liberalization has implied a gradual reduction of the direct payments, European farmers are increasingly relying on commodity prices at the world market that are often highly volatile (Thorsøe et al. 2020).

The European Union's Farm to Fork (F2F) Strategy was the result of very strong mobilization across civil society organizations from 2016 to 2019 to address pressing food system problems in the EU. Farmers' unions, consumer organizations and think tanks teamed up with NGOs and academics, and expressed their concerns for creating a more inclusive, integrated, and comprehensive EU food policy to the European Commission (EC) and the European Parliament. This three-year participatory process recognized the need for developing a comprehensive food policy in addition to reforming the Common Agricultural Policy to deliver "environmentally, economically and socioculturally sustainable food systems" to link agriculture to ecosystem services, human health, and nutrition for tackling diet-related diseases (EESC 2017). The EU Food and Farming Forum organized by the International Panel of Experts on Sustainable Food Systems in May 2018 was instrumental in collecting 117 proposals for policy change from local and policy labs as well as over thirty research and civil society organizations (IPES-Food 2018). This culminated in the report titled Towards a Common Food Policy for the European Union in February 2019 that presented a blueprint for revamping food system sectors, strongly advocating for food production that utilizes more social innovations and community involvement (IPES-Food 2019). This collaborative process brought forth the F2F Strategy in May 2020 (EESC 2020), calling for a just transition to a more sustainable European Union food system to benefit all food chain actors (EC 2020c). The F2F Strategy is part of the broader European Green Deal, which aims to achieve climate-neutrality in Europe by 2050 (EC 2019b). Using around 1 trillion euros from investments, it embraces an inclusive growth model that promotes economic development, preserves nature, enhances well-being, and ensures that no one is excluded from its benefits (EC 2020e). The new Common Agricultural Policy, implemented in January 2023, aims for operationalizing the F2F Strategy during the period 2023–2027 by focusing on ten key objectives ranging from environmental and ecological aspects to improving farmers' competitiveness, income, and position in the EU food system transition (EC 2022a).

Sippel and Dolinga (2022) have pointed out that the global agri-food transition discourse is creating sociotechnical imaginaries¹ specifically for legitimizing financial investment for transforming food production into a hightech industry. The EU's food system transition policies are also endorsing this trend. In the Green Deal, there is particular emphasis on strengthening the farmers' and food producers' position by incorporating technologies such as "precision farming" and digital solutions (EC 2020b). These innovations will require "massive public investment" and private capital for achieving the EU's "environmental ambitions" for "sustainable and inclusive growth" (EC 2019b). Additional support will come from eco-schemes for converting to organic and carbon farming and adopting agroecological practices and precision farming techniques (EC 2021c). The F2F Strategy also talks about "accelerating the transition to sustainable, healthy and inclusive food systems" by exploiting technological innovation and investments for improving the livelihood of farmers and primary producers (EC 2020c).

However, policy experts and scientific advisors have highlighted power imbalances in the EU food system as a major problem to be addressed in the transition towards sustainability and equitability. The International Panel of Experts on Sustainable Food Systems emphasized the need for a new "Common Food Policy" to protect the interests of all actors, particularly small and medium-sized farmers, as current agricultural policies favor the food industry due to powerful lobbying (IPES-Food 2019). The EU's Group of Chief Scientific Advisors, in collaboration with the Scientific Advice for Policy by European Academies, urged the European Commission to increase policy focus on democratizing power and information for small-scale actors in the food system and recognize the contribution of food sovereignty approaches from social movements in this regard

¹ According to Jasanoff (2015, p. 4), sociotechnical imaginaries are "collectively held, institutionally stabilized, and publicly performed visions of desirable futures, animated by shared understandings of forms of social life and social order attainable through, and supportive of, advances in science and technology".

(SAM 2020; SAPEA 2020). Therefore, the F2F Strategy was expected to be a holistic and systems-based policy that addresses power imbalances and promotes inclusivity to empower vulnerable actors in the EU food system.

Although scholars from European universities and research institutes have assessed the F2F Strategy's potential for sustainability and social inclusivity (Alberdi et al. 2020), and for advancing food sovereignty and agroecology (Duncan et al. 2020), the existing literature was brief and a thorough analysis of the F2F Strategy for addressing power imbalances and strengthening the position of farmers was lacking (EC 2022e). Therefore, the objective of this article is to analyse the dominant discourse in the F2F Strategy and related EU food policy documents, specifically focusing on how power imbalances affecting small and medium-sized farmers in the food chain are recognized and addressed through policy interventions for a just transition towards a sustainable EU food system. Such an analysis becomes increasingly important when considering the growing trend of financialization and technological advancements in the agri-food sector.

To address these questions and the knowledge gaps for understanding how the F2F Strategy and its implementation will address power imbalances in the EU food system transition, we opted for a critical discourse analysis (CDA) approach. Since it was developed for analysing knowledge, it is possible to analyse how societal discourses can influence current and future policies. Furthermore, CDA also emphasizes social justice issues and how they relate to power relations. Following this introduction, we contextualize why there is a need for rebalancing power in the EU food system with a brief conceptualization of "power" and then highlighting how it has become concentrated in global agri-business as well as the socioeconomic impact of power imbalances in the EU agri-food system. We then explain the methodology and then present the results of a textual analysis of the Farm to Fork (F2F) Strategy's communication, an interdiscursive analysis of the literature concerning its implementation actions, and a wider social analysis for investigating European civil society's take on the power dynamics relevant to EU's agri-food policies that are affecting farmers. Finally, we delve into our conceptualization of how the dominant discourse employed in the F2F Strategy's communication and implementation actions emerges from an agri-food sociotechnical imaginary, emphasizing market investments and industrial innovation. Furthermore, we also argue how this discourse jeopardizes the prospects of truly rebalancing power in favour of EU farmers to make a real difference.

Power and agri-food systems

Power was most famously conceptualized as "A has power over B to the extent that he can get B to do something that B would not otherwise do" (Dahl 1957, p. 202–203). However, a holistic framing of power goes beyond possessive aspects, traversing intersecting distinctions, such as 'power with,' 'power to' and 'power over' (Wrong 1995). These facets not only entail negative connotations of dominance and violence but also "power as a right" as contextualized in an "economy of power" by Foucault (Dean 2013, p. 6). Power becomes an important sociological issue when it is "naturalized" within a society's institutions and the public tacitly accepts it without question (Gramsci 1971; Gibson-Graham 2006).

Corporate concentration and asymmetrical power have become an ever-increasing problem in the global food system (IPES-Food 2017). In the aftermath of the Green Revolution of the 1960s-70s, vertical integration made agribusinesses immensely powerful. Monsanto, Bayer, BASF (Baden Aniline and Soda Factory), Syngenta, Dow Chemical and DuPont were all chemical/pharmaceutical companies when they started their operations. However, a series of mergers and acquisitions during the 1970s and 1990s enabled these corporations to start monopolizing the agriseed and pesticide market. Fast forward to the 2010s, Bayer acquired Monsanto in 2016, followed by the Chinese stateowned ChemChina buying Syngenta in 2017 (Elsheikh and Ayazi 2018), with Dow Chemical and DuPont merging to give birth to Corteva Agriscience in 2019 (Tullo 2019). By 2022, just four corporations (namely ChemChina/Syngenta Group, Bayer, Corteva Agriscience, and BASF) controlled 62% of the global agricultural seed sector and 51% of the agrochemical (pesticide, herbicide, etc.) market (ETC Group 2022).

The more concentrated an agribusiness sector becomes - whether that's seed, fertilizer, pesticide, food processing, distribution, and retail - the greater the control exercised by its firms over wages, prices, availability of products, and policymaking (Clapp 2021; Dörr 2018). The result is workers' job losses, lower farmers' incomes, and increasing poverty, malnutrition, and health inequity, with only a few companies and their private investors accumulating massive wealth and power (Borras and Mohamed 2020). Such scenarios also "contribute to economic inefficiencies and deadweight losses that can harm farmers and the society at large" (Torshizi and Clapp 2021, pg. 44). Furthermore, industrial players use their "revolving door" relationship with government regulatory agencies for framing food system issues for greater promotion of agri-business products and services (Clapp 2021). This also influences research agendas in academic and public research institutions and the uptake of research output in wider debates around policymaking (Fabbri et al. 2018). The power imbalances in food systems become more pronounced when people at the individual, household, national, regional, and global levels "remain fundamentally disempowered over the process and politics of food's production, consumption, and distribution" (Patel 2012, pg. 1).

In recent years, conflicting values around food security interpretations have created governance-related deficiencies in the EU food system, leading to polarization within academic debates and policymaking. Low institutional capacities and power imbalances across EU food chains, such as transnational retail corporations dominating small producers, as well as in wider political arenas, were found to "impose a dominant discourse on consumerism, free trade and neoliberalism" in a Delphi survey of 45 European food experts (Moragues-Faus et al. 2017). The same survey also found that power imbalances due to "the lack of a democratic political and regulatory framework to govern the EU food system" expose policymaking to be co-opted by powerful actors with vested interests (Moragues-Faus et al. 2017, p. 191). These entities constitute not just large businesses but also the European Commission and civil society groups that influence it, creating a need to examine dominant food security narratives. Corporate concentration in the EU harms small and medium-scale farmers through unfair trading practices, including surplus dumping and export monopolies in developing countries, with EU agri-food policies prioritizing agri-business investors and trading companies, promoting restrictive intellectual property rules (IPR) in Free Trade Agreements and reliance on costly industrial technologies for farmers and producers (IPES-Food 2019).

Concentrated groups of powerful retail and buying companies, such as those in Germany, the Netherlands, and Sweden, have been exerting very harmful price pressures on farmers and producers as reported by the Open Society European Policy Institute in 2020. Oligopolistic power tactics of international buying groups (IBGs) that create a biased distribution of profits, risks and costs, and even unregulated agricultural technologies, contribute to injustices in EU food chains (OSEPI 2020). The European Group of Chief Scientific Advisors also recognized these power asymmetries, emphasizing all stakeholders, especially citizens and "less powerful and vulnerable groups," to be informed whether their food is healthy and produced in a socially just way. The Group also asserted that the European Commission should include more policies targeting large food processors and retailers as part of a more holistic transformation of the EU food system (SAM 2020). Hence, this set the stage for the Commission to introduce new policies and strategies, such as the Green Deal, the Farm to Fork Strategy, and reform the existing Common Agricultural Policy, with the intention of addressing power imbalances and governance problems in the food system, as well as health and environmental challenges.

In the early stages of CAP's reform, the European Commission recognized an imbalance of power in the agricultural inputs, food processing, and distribution sectors that disadvantaged individual farmers. The Commission even designated one of the initial objectives as "Rebalance Power in Food Chain," with the specific aim of "ensuring a fair economic return and improving the position of farmers in the food supply chain" and creating financial synergies (EC, 2020a, p. 4–5). A significant aspect of this power imbalance is the issue of "bargaining power," particularly affecting small and medium enterprises (SMEs), that the EC attempted to address by introducing the unfair trading practices (UTPs) Directive in 2019 (EC 2019a). Furthermore, the Commission also structured the new Common Agricultural Policy (2023-2027) to promote greater "fairness" within the European Union's farming sector, especially in income support to small-scale farmers, fostering collaboration among farmers, and implementing "social conditionality" to uphold the rights of farm workers (EC 2022a). Despite these initiatives, there is still the question of how the EU will effectively tackle ongoing concerns related to corporate and market concentration, as well as the power imbalances within the food system policy agenda.

Methodological approach

Critical discourse analysis (CDA) started out as a normative critique of the neoliberalist system of accumulating capital and power, evolving into an explanatory critique of the social factors and policy mechanisms behind it and inspiring action for change (Fairclough 2018). CDA was built on the well-established tradition of critical social analysis that draws its formalization from the Marxian view of social reality as being 'conceptually mediated' by the practices and discourses around capitalism (Fairclough and Graham 2002). The architects of CDA, namely Fairclough and van Dijk, determined that language plays a vital role in not only the creation and perpetuation of ideologies and practices by powerful institutions, but also in "normalizing social hierarchies through discourse" (Borras and Mohamed 2020). Prior to Fairclough, Michel Foucault had reasoned that discourses come together to produce "truth regimes" that represent power relations that reinforce the societal systems and policy mechanisms driving them (Lorenzini 2015). CDA is thus useful for deciphering the connotations of food system language and the societal forces and power dynamics behind them. Furthermore, CDA can discern dialectical relations between social 'objects' that are "simultaneously

both material and semiotic in character," such as institutions, power, beliefs, and cultural values.

EU food policy documents are an important source for analysing semiosis as they can reveal the discourses that can potentially control the dynamics of the food system by disguising the inner biases and preoccupations of the institutions (public and private) and their related ideologies (Cummings et al. 2020a). We chose the European Commission's communication document "A Farm to Fork Strategy for a fair, healthy and environmentally-friendly food system" (EC 2020c) as the basis for our CDA. This strategy document, like similar political documents discussed by Fairclough, has been "formed, disseminated and legitimised within complex chains and networks of events (committee meetings, reports, parliamentary debates, press statements, and press conferences, etc.)" (Fairclough 2010, pp. 244-245). Furthermore, as critical discourse analysis can help identify gaps in the preliminary stages of adopting political and governance mechanisms (Frick-Trzebitzky and Bruns 2019), it is also useful in assessing the implementation of the F2F Strategy since its release in 2020.

Our CDA approach is based on Fairclough's threepronged approach (depicted in Fig. 1), which combines linguistic and semiotic analyses of the F2F Strategy Communication text, an 'interdiscursive' analysis of texts (accessing intermixed discourses and genres), and a non-discursive social analysis within a wider cultural political economy context (Fairclough 2007). Even though Fairclough (2007; 2010) emphasized the importance of discourses that have already been identified in the area under investigation, his original CDA methodology did not explicitly include them, as also pointed out by Cummings et al. (2018; 2020b).

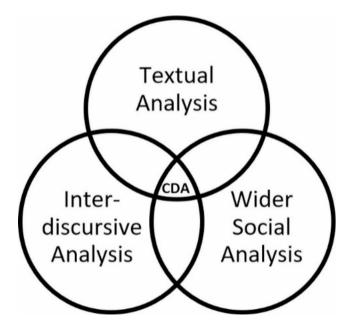


Fig. 1 A tripartite Critical Discourse Analysis (CDA) approach

Consequently, our methodological approach is an adaptation of the original methodology by including a step for first identifying prominent discourses in the CAP Specific Objectives Brief No. 3 regarding rebalancing power and strengthening farmers' position in food value chains. Thus, the descriptive textual analysis started by focusing on themes such as "power," "cooperation/cooperatives," "social," "innovation," "technology," "investment" and "knowledge." The interdiscursive analysis examined documents related to the measures and initiatives outlined in the F2F Strategy Action Plan steps (EC 2020d). The wider social analysis focused on the discourse framing and implementation of the F2F Strategy, with other EU documents, reports, and position papers of civil society and non-governmental organizations, as well as journal articles published by academia, serving as background references. Here, the concern was similar to the methodological approach employed by Prášková and Novotný (2021), which includes the non-discursive aspects of social processes concerning power structures.

Results

In this section, we demonstrate how thematic elements in the Common Agricultural Policy (CAP) objectives and the Farm to Fork (F2F) Strategy, related to rebalancing power and strengthening farmers' position in the food system, construct the dominant discourse. After determining that this discourse excludes rebalancing power for strengthening farmers' position, we demonstrate how the Strategy's implementation actions lead to new forms of agri-food commodification driven by market-based technological innovations and financial investments. Finally, we emphasize the socioeconomic ramifications of this dominant discourse within a wider social context as a continuation of power concentration in existing and emerging markets and corporate institutions.

Textual analysis of the F2F Strategy communication document

By positioning itself at the "heart of the Green Deal," the F2F Strategy presents an ambitious vision of making Europe "the first climate-neutral continent by 2050" and aims to "boost the economy, improve people's health and quality of life, care for nature, and leave no one behind" (EC 2020c, p. 2). Linking to the United Nations' Sustainable Development Goals (SDGs), the Strategy emphasizes that all "citizens and operators across value chains in the EU and elsewhere, should benefit from a just transition" (p. 2, para 2).

The vision also clarifies that the "strategy aims to reward those farmers, fishers and other operators in the food chain" who are taking on this responsibility, as "the transition to sustainable food systems is also a huge economic opportunity" (p. 3, paras 1, 3). It is based on "improving the incomes of primary producers and reinforcing EU's competitiveness...by putting an emphasis on new opportunities for citizens and food operators alike" (p. 4, para 2).

The F2F Strategy's goals range from reducing the "environmental and climate footprint of the EU food system" by strengthening its "resilience," making it more food secure by ensuring "everyone has access to sufficient, nutritious, sustainable" and "most affordable" food, to spearheading a "global transition towards competitive sustainability" driven by "new business opportunities" (p. 4). On page 5, the mention of technical and financial assistance from the European Agricultural Fund for Rural Development suggests a possibility for rebalancing power. However, a few lines later, it is explained that assistance and related impact assessments will typically focus on "how small and medium enterprises (SMEs) are affected, and innovation fostered or hindered" and for "making efficient policy choices at minimum costs" (p. 5).

What is stated to be key in accomplishing the green transition is "human and financial investment" combined with "nature-based, technological, digital, and space-based solutions" (p. 5, para 2). In light of this, the F2F Strategy identified a "new business model" around carbon sequestration that will reward farmers through a carbon market promoted by a "new EU carbon farming initiative under the Climate Pact" (p. 5, para 3). Paragraph 1 on page 6 elaborates that farmers and their respective cooperatives can create "new jobs in primary production" and additional income flows by generating renewable energy through bio-refineries and installing solar panels. These business opportunities are linked to the circular bio-based economy and rely on investment in "advanced bio-refineries that produce biofertilisers, protein feed, bioenergy, and bio-chemicals" (p. 6). Moreover, farmers are expected to "grasp opportunities to reduce methane emissions... (by) investing in anaerobic digesters for biogas production" (p. 6).

Under the new CAP, a "decent" income for farmers, "allowing them to provide for their families and withstand crises of all kinds" is only guaranteed if "investments into green and digital technologies and practices" are made and income support is reserved for farmers who actually meet "green" standards, not "companies who merely own farmland" (p. 9). Another element of the Strategy envisioned by the EU Commission to help farmers "strengthen their position in the supply chain and capture a fair share of the added value of sustainable production" are "collective initiatives" that lead to more "cooperation within the common market organizations for agricultural products" (p. 10). The Communication document clearly stipulates that the European Commission plans to "empower consumers to make informed, healthy and sustainable food choices" (p. 13). It not only aims to develop an "EU Code of conduct for responsible business and marketing practice" but also "improve the corporate governance framework" and "seek commitments from food companies and organizations to take concrete actions" (p. 12).

Investments have been deemed necessary to "speed up innovation and accelerate knowledge transfer" in order to increase the "use of digital technologies and nature-based solutions for agri-food" (p. 15). European corporations and financial institutions will benefit as "through EU budget guarantees, the InvestEU Fund will foster investment in the agro-food sector by de-risking investments," with implementation in capital markets being achieved with the EU taxonomy tool (pp. 15–16).

To cater to primary producers' "need for objective, tailored, advisory services on sustainable management choices," not only will the Agricultural Knowledge and Innovation Systems (AKIS) be promoted, but the Farm Accountancy Data Network (FADN) will also be converted into the Farm Sustainability Data Network (FSDN) to "collect data on Farm to Fork and Biodiversity Strategies' targets and other sustainability indicators" (p. 16). Thus, under the common European agricultural data space, these measures are being taken to "provide feedback and guidance to farmers and link their experience to the European Innovation Partnership and Research projects" and improve their incomes (p. 16).

From a CDA perspective, the Farm to Fork Strategy document refers to the theme of 'power' twice, using the terms "empowered" (p. 3) and "empower" (p. 14). However, these references are not related to farmers but rather to consumers. Additionally, there is one mention of strengthening "the powers of control and enforcement authorities" (p. 15) in relation to power. The terms "agro-ecology" and "agro-ecological approaches" are used interchangeably four times, and "organic" is mentioned 12 times. However, these mentions do not address the issue of rebalancing power for farmers. Instead, they focus on general food system sustainability, relying on scientific research, innovation, and knowledge transfer through capital-intensive technology processes. The term "value chain" is mentioned 7 times in the context of reducing Greenhouse Gas (GHG) emissions, addressing food shortage crises, and requiring investment and innovation. While value chains and cooperatives were primarily associated with strengthening farmers' position in the specific Brief on the CAP objective "Rebalance Power in Food Chain" (EC, 2019a), the Farm to Fork Strategy document does not discuss them in the context of farmers. Although the term "cooperatives" is mentioned only twice,



Fig. 2 A word cloud of the textual analysis of prominent themes in F2F Strategy document

 Table 1 Farm to Fork Strategy Implementation Actions related to

 Farmers' Position in food value chain (EC, 2020d)

Time-table	Actions	No.
2021–2022	Legislative initiatives to enhance cooperation of primary producers to	11
	support their position in the food chain and non-	
	legislative initiatives to	
	improve transparency	
Q3 2021	EU carbon farming initiative	12
Q2 2022	Proposal for a revision of the Farm Accountancy	9
	Data Network Regulation to transform it into a	
	Farm Sustainability Data Network with a view to	
	contribute to a wide uptake of sustainable farm-	
	ing practices	
Q3 2022	Clarification of the scope of competition rules in	10
	the TFEU with regard to	
	sustainability in collective actions.	
Q4 2022	Proposal to require origin indication for certain	21
	products	
2023	Proposal for a legislative framework for sustain-	1
	able food systems	

the term "farmers" appears 25 times. The document also fails to explain how value chains can be made more inclusive and fairer to enable a "just" transition. A breakdown of other prominent themes reveals that the terms "technology" (including technologies/technological) are mentioned 8 times, "digital" and "data" are mentioned 6 and 15 times respectively, and "innovation" (including innovative) appears 20 times. The theme of "fairness" (including fair/ unfair/fairer) and "cooperation" is referenced 10 times, but only in a generalized sense relating to trade and commerce. The theme of "competition" (including competitive/competitiveness/competitors) is mentioned 11 times, as are the terms "income" and "social" in each instance. The themes of "finance" (including financial/financed/financing) and "fund" (including funding) collectively appear 19 times, "invest" (including investment/investors) is mentioned 26 times, and "economy" (including economic) is mentioned 33 times. A word cloud representation of these terms and themes is provided in Fig. 2 below.

By conducting the textual analysis, we have deduced that the F2F Strategy initially claims to bring about a socioeconomic and environmentally friendly transformation of the EU food system at the level of the visions and the goals. However, in implementing the initiatives, the Strategy is resorting to an innovation-oriented approach relying heavily on intensive inputs from industrial technology and financial sector investments.

Interdiscursive analysis of farm to fork strategy implementation actions

Regarding the implementation of the Farm to Fork (F2F) Strategy, the European Commission outlined 27 steps in a Draft Action Plan (EC, 2020d). However, our focus is on six specific action measures (1, 9–12, and 21 as shown in Table 1), which have the potential to rebalance power and strengthen farmers' position in value chains.

Even though the EU Commission previously stated that the new CAP would "continue providing measures that aim to strengthen farmers' position (and cooperation) in a continuously evolving value chain" (EC 2019a, p. 11), increasing market transparency, and regulating unfair trading practices (UTPs), our examination revealed that the action plan lacks concrete steps to achieve these goals. Additionally, while the F2F Strategy Communication document mentioned the EU will "support small-scale farmers in meeting these (sustainability) standards and in accessing markets" (EC 2020c, p. 17). However, the action list does not address this aspect. Action 11 specifically states that legislative initiatives will only "support" rather than "strengthen" the position of "primary producers", with the latter term being used synonymously with "farmers" in the F2F Strategy discourse.

The EU's 2019 Directive on unfair trading practices was not mentioned in the communication document "Safeguarding food security and reinforcing the resilience of food systems" released in March 2022 (EC 2022b). This is despite the EU Parliament urging the Commission to "thoroughly enforce" the UTPs into national law and to "reinforce efforts to strengthen the position of farmers in the food supply chain and bring forward concrete proposals in line with the strategy" (EP 2021a, p. 40-41; EP 2021b, p. 39). Additionally, there was no progress on action 10, which relates to competition rules in the Treaty on the Functioning of the European Union (TFEU), as indicated in the October 2022 brief 'Taking the EU's 'farm to fork' strategy forward' (EP 2022c). Furthermore, the "Safeguarding food security..." 2022 communication document did not mention the "importance of halting and addressing consolidation and concentration in the grocery retail sector in order to ensure fair prices for farmers and decent labour conditions for workers" (EP 2021a, p. 41; EP 2021b, p. 31). Instead, the document focused on topics such as "fairer distribution of income support," risk management tools, access to credit for farmers to

manage revenue and income losses and allocating a portion of aid to fertilizer manufacturers and the processing industry under the Temporary Crisis Framework (TCF) adopted due to the Ukraine war (EC 2022b).

Rather than making progress on action step 11, the EU Commission has instead pledged EUR 2.5 billion for "international cooperation" towards food and nutrition research and innovation with entities such as the Consultative Group on International Agricultural Research (CGIAR) (EC 2022b). The pending creation of a "framework for a sustainable food system" before the end of 2023, among other things, is linked to addressing the "responsibilities of all actors in the food system" in incorporating "sustainable practices and progressively raising sustainability standards" (EC 2020c, p. 5). This presents an opportunity to combine steps 11 and 1 to create a more holistic and socially-inclusive legislative framework for a "just" food system transition.

According to EC (2021a), carbon farming is pitched as a "green business model" that repackages ecosystem services as "natural capital" and rewards "land managers" for carbon dioxide (CO2) sequestration, contributing to the EU's goal of reducing net greenhouse gas (GHG) emissions by 55% by 2030 and achieving climate neutrality by 2050. Since the "focus of carbon farming is not necessarily limited to agricultural farms but includes 'actors of the land sectors' - thus potentially extending to landowners and forestry actors," (EP 2022b, p. 3), agricultural landowners will also qualify as carbon farmers and receive benefits. These land managers can accumulate "carbon credits" and sell them on carbon markets such as the EU Emissions Trading System (ETS), which doubled in size from 2020 and was worth 693 billion euros in 2021, driven by the demand for the EU's reduction targets (Chestney 2022).

Safeguarding farmers' data is crucial for strengthening their position, and the stakeholder consultations held in June-July 2022 played a significant role in transitioning from the Farm Accountancy Data Network (FADN) to the Farm Sustainability Data Network (FSDN). During these consultations, the farmers aka data providers and other stakeholders² emphasized the importance of including social aspects in the FADN's conversion. However, despite existing data protection regulation³, farmers expressed reluctance in participating in the FSDN's data collection due to data privacy concerns, which were also shared by the data collectors (EC, 2022d). The EU Commission intends to reinforce individual data protection rules for both natural and legal persons regarding farm ID, data storage, access, transmission, processing, and use of primary data, as well as the right to refuse data provision to "end-users of scientific data and other interested parties" (EC 2022d, p. 12).

The Commission has set a target to have "at least 25% of EU's agricultural land under organic farming by 2030" (EC 2020c, p. 8-9) through the implementation of an Action Plan on organic farming (EC 2021b) and by increasing consumer preference for organic products. Organic farmers will also be eligible for eco-schemes and have access to traditional and locally-adapted seed varieties (EC 2021b). However, since smallholder farmers in the EU face "high costs and red tape linked to organic certification" and lack access to local food markets and short supply chains, the Action Plan states that having more "producer organizations" will play a crucial role in increasing market power, particularly in countering unfair trading practices (EC 2021b, p. 14). It is worth noting that EU food and drinks with labels specifying geographical indications (GI)⁴ account for approximately 5.7% of overall EU food and drink production and 15% of all food-related exports (EC 2019a). The GI labels were designed to enhance the value of artisanal products, considering factors such as country of origin or the place of provenance, short supply chains, single markets and "green hubs" (EP, 2021a). In 2022, the European Commission amended previous GI regulations⁵ and simplified the 30-year-old Traditional Speciality Guaranteed (TSG) scheme, aiming for stricter enforcement of the GI system to improve intellectual property rights (IPR) protection (EC 2022f).

In summary, our interdiscursive analysis of the texts of the six implementation actions (1, 9, 10, 11, 12 & 21) of the F2F Strategy revealed a hybrid mix of different genres, discourses, and styles concerning each action's primary objectives. By contextualizing the various texts related to these actions, we observed a connection between concrete investment-oriented policies and the innovation-focused discourse that permeates the linguistic aspects of the F2F Strategy text. We found that there was limited progress in clarifying competition rules, enforcing the unfair trading practices (UTPs) Directive, and implementing legislative/non-legislative measures. Instead, there was a stronger emphasis on digitization of farm data (e.g., FSDN), increased reliance on biotechnology, precision agriculture, and the commodification of agroecological services (carbon farming) for creating greater investment opportunities through financial markets.

² The other stakeholders consist of, but not limited to, *data collectors* for data collection, submission and administrative data access, and *data users* such as policy-makers, farm advisors, academia, researchers, evaluators, and consultancies.

³ This is namely regulation (EU) 2018/1725.

⁴ Such labels specify a product's link to where it was made and constitute Protected Designation of Origin (PDO), Protected Geographical Indication (PGI), Geographical indication of spirit drinks and aromatised wines (GI) and Traditional speciality guaranteed (TSG).

⁵ These GI regulations were issued in the years 2013, 2017 and 2019.

Wider social analysis

In the three-tiered goals of the F2F Strategy, which aim to make food-related trade and economic returns fairer in the EU food system transition, the actual definition of "fair" is not provided. Although the F2F Strategy envisions a "just transition" with social benefits for all actors in EU food chains and beyond, the Communication fails to explain what these social benefits entail and does not consider social inequalities across different regions. It was crucial to emphasize food as more of a common good (Vivero-Pol et al. 2018) and move away from commodity-based framings of food, as recommended by the EU's Scientific Advice Mechanism (SAM 2020). However, the EC did not act on this recommendation when developing the F2F strategy.

An extensive plan, connecting the Horizon 2020 and Horizon Europe programs with the European Innovation Partnership 'Agricultural Productivity and Sustainability' (EIP-AGRI), the European Regional Development Fund, and the InvestEU Fund, will allocate billions of Euros to research and innovation (R&I) platforms for food system transition technologies. These technologies encompass various aspects, ranging from high-speed broadband internet and artificial intelligence to the integration of precision farming, insect-based proteins, meat substitutes, and microbiome research. The primary beneficiaries will be SMEs and "mid-cap" companies⁶ (EC 2020c), rather than EU's smallholder farmers who, despite subsidies, lack the resources to keep continually investing in newer technologies (Giller et al. 2021. Consequently, only large-scale actors will be able to utilize such technologies, reinforcing industrial farming production models and further consolidating the power of agribusiness companies (IPES-Food 2019).

International experts on sustainable food systems have expressed concerns about the reductionist approach of the EU's carbon farming discourse toward ecosystem functions and agroecological practices (IPES-Food 2019). This discourse creates commodities such as "soil carbon stocks" and "carbon removal solutions" for certification under the QUantification, Additionality and baselines, Long-term storage, and sustainabilITY (QU.A.L.ITY) mechanism before they can be traded on an internal EU carbon market (EC 2022c). The commodification of agricultural products as tradable goods and speculative financial instruments is already an inherent problem of the industrial food system. It has resulted in the asymmetrical transmission of power from farmers and local communities towards agricultural commodity traders, asset fund managers, and food processing companies (Oxfam 2011). Speculation, particularly related to land grabbing and acquisition, has been recognized as a major flaw in the EU food system, which is further exacerbated by area-based CAP payments (IPES-Food 2019).

European farmers, rather than having autonomy over their knowledge at the farm level, will only be able to use tailored data provided by Agricultural Knowledge and Innovation Systems (AKIS) and the Farm Sustainability Data Network (FSDN) for specialized technological applications, such as the carbon farming initiative. We acknowledge the importance of measures such as the Farm Sustainability Tool for nutrient management and precision agriculture technologies for integrating agriculture into the circular biobased economy, reducing GHG emissions, and minimizing the hazardous effects of chemical pesticides and nutrient losses. However, they will also serve to maintain the status quo of power concentration upstream in the industrial food system in terms of provisioning for investment and technology-intensive biological solutions and alternatives. Although the development of the FSDN claims to ensure privacy and protection of farmers' data, there is no stipulation regarding farmers retaining ownership of their data or their say in determining which "interested parties" (namely agri-businesses, tech companies, and private investment firms) would be allowed to use their data.

While the organic farming action plan is undoubtedly a positive development, it still leaves individually operating small farmers to fend for themselves in the face of asymmetric corporate and market power. The ultimate goal should be to promote organic farming and subsequently adopt agroecological approaches to minimize the need for any type of pesticides, fertilizers, and feed additives, whether chemical or otherwise. Farmer's input costs will be significantly reduced by circulating the inputs and outputs primarily at the farm or local level. Thus, their increased autonomy over the drivers of their farming system will contribute to rebalancing power in favor of farmers, improving their position and income.

In 2022, the implementation of the F2F action steps aimed at strengthening farmers' position was overshadowed by the decision to allocate hundreds of millions of Euros in humanitarian aid to address food insecurity due to the war in Ukraine by financing industrial farming inputs such as fuel and fertilizer under the TCF. This decision is perplexing as it will further consolidate and concentrate power in the hands of industrial players in the EU food system, that too using funds intended for humanitarian purposes.

The CDA approach also introduces a socially evaluative dimension into the linguistic and textual analysis. Thus, in the third phase of our analysis, we employed a wider social analysis to examine the relationships between the dominant discourse identified in the texts of the F2F Strategy and its associated implementation actions, and the social elements of the food system, including power, institutions, ideologies,

 $^{^{\}overline{6}}$ Mid-cap companies are those with employees ranging from 250 to 3000.

social inequality, and financial access. Our findings revealed that the architects of the F2F Strategy and related policies failed to incorporate social dimensions such as the decommodification of food and maintaining its status as a common good. Instead, initiatives such as AKIS and FSDN, which further commodify and digitize aspects of the agri-food system, such as carbon farming and farm-level knowledge and data, are set to be funded by investments from carbon markets and regional and global financial institutions. Our findings align with the concerns and recommendations expressed in publications by civil society and expert groups (IPES-Food 2019; SAM 2020; SAPEA 2020; Hiller et al. 2021) both prior to the communication of the F2F Strategy document and during its implementation.

Discussion

For EU governing bodies and member states, the Farm to Fork (F2F) Strategy represents an important milestone in aligning the Green Deal and the new CAP for transforming the food system until 2030. The F2F Strategy communication document (EC 2020c) encompasses several discourses that are at the forefront of a food system imaginary that is in a state of flux across the EU.

The dominant innovation-investment discourse

The vision and goals of the F2F Strategy convey the EU's ambitious aim of a global ecological transition benefiting people, including farmers, and nature. However, the implementation and action plan steps (1,9, 10, 11, 12, and 21) reveal a dominant discourse centred on technology and finance. We refer to this discourse as the innovation-investment

discourse (see Fig. 3 for its evolution). Like other policy discourses, this discourse should serve a dual purpose of (1) accurately representing actual EU farming systems and (2) operationalizing policy objectives for improving their performance. The innovation-investment discourse reveals a mismatch between the F2F Strategy's objectives and goals and the means of implementation as the action plan steps do not represent the interests of small and medium-scale farmers whose position and power requires strengthening.

The innovation-investment discourse employs rhetoric in framing food-system issues for the promotion of agri-food technological innovations as the ultimate solution for fixing food system, whereby attracting financial investments. The underlying logic of this discourse stems from the hubris of the marriage between Big Ag and Big Tech, whereby creating what Duncan et al. (2021) term as 'ag tech'. Investments for ag tech will come increasingly from Big Finance, including asset management and private equity firms, further consolidating corporate power and private influence within the global agri-food system (Bull et al. 2021; Clapp 2019; Ashwood et al. 2022).

This constructs an agri-food imaginary with venture capitalists and private investors portrayed as saviours, morally obliged to invest for protecting the food system from 'neo-Malthusian' and ecological threats while simultaneously feeding a growing population (Sippel and Dolinga 2022). In this era of bio-economy transitions, the EU agri-food industry is going beyond food production innovations towards commodifying farmers' knowledge, agricultural data (Grain 2021), ecosystem services, and natural resources (ECVC 2022). In the EU context, the innovation-investment discourse justifies creating an agri-food sociotechnical imaginary; any challenges to a transition to a 'sustainable' food system for meeting the food needs of a growing and

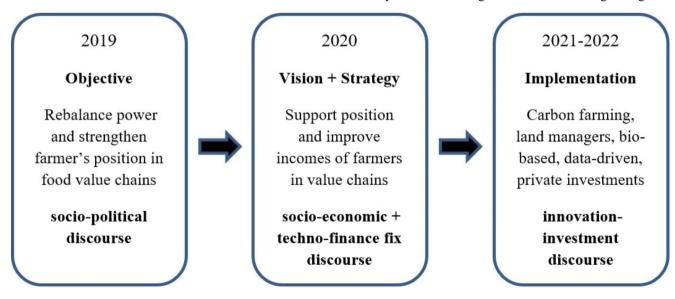


Fig. 3 Evolution of the dominant discourse in the framing and implementation of the F2F Strategy

increasingly affluent population, such as GHG emissions and sequestration, animal and human ill-health, ecological degradation, and low farmers' incomes, can purportedly be addressed through continuous technological innovation fuelled by public and private investments.

The F2F Strategy communication clearly emphasizes farmers, fishers, and other primary producers having a prominent role in the food system transition and receiving "higher returns" through value-addition. However, the success of the Green Deal relies on their transforming production methods at an accelerated pace. The third section, titled "Enabling the Transition" highlights the importance of technology, research and innovation (R&I), investments, data and knowledge transfer, and advisory services in restructuring the EU food system.

The innovation-investment discourse is built upon the concept of the techno-finance fix. As conceptualized by Morgan (2018), techno-finance fix is the narrative of technologies funded by financial markets providing societies with the most effective strategies for addressing ecological crises. However, this phenomenon belies a dangerous trend of unhindered cross-border financial transactions between banks and corporations, often involving public funds, promoting the commodification and depletion of natural resources as robust economic activity.

The techno-finance fix emerges from neoliberal ideology and technological determinism, disregarding alternative approaches such as social innovations and broader nonmarket solutions, that are less reliant on capital-intensive technologies, for addressing socio-ecological crises (Morgan 2018). This deeply ingrained belief in aligning financialization and technologization processes, coupled with strong lobbying, has made techno-finance fixes a defining feature of global food politics and policymaking, and we have found the F2F Strategy to be no exception.

The innovation-investment discourse of the F2F Stratdisregards sociological dimensions and favours egy techno-finance fixes. This leads to the interchangeability of agricultural innovation, such as precision farming, with regenerative agriculture practices, resulting in the industrial and corporate appropriation of local agroecological approaches. The EU carbon farming initiative under the Climate Pact is another example of a techno-finance fix. Carbon farming allows non-agricultural "land managers" to take power away from agricultural farmers by simply owning the land and accumulating carbon credits from carbon dioxide (CO2) sequestration through natural ecosystem processes, without even engaging in agroecological activities. Ironically, the Land Use, Land-Use Change and Forestry (LULUCF) regulation within the 'Fit for 55' package does not regulate all GHG emissions, only aiming to reach the EU's target limit of 42 million tons of CO2 equivalent by

2030 (EC 2021a). Non-CO2 agricultural emissions, such as methane or nitrous oxide, will not be regulated until 2031 (EP 2022a).

Carbon farming can potentially lead to increased landgrabbing by corporations and asset management companies. After the 2008 financial crisis, these entities leveraged pension and insurance funds to buy tens of thousands of hectares of European farmland to hold them as commercial assets (EP 2015). The revision of the LULUCF legislation (EP 2022a) also lacks measures to protect the land rights of small-scale farmers and local communities and prevent land grabbing.

Neither the F2F Strategy communication, nor the implementation actions acknowledge carbon-sequestering agroecological practices of local smallholder farmers. These farmers used traditional farming knowledge to develop innovations without market investments and industrial technology. Their biodiverse farming ecosystems and cooperation with fellow farmers through food sovereignty movements have become quite prominent in the EU in the past two decades (Nyeleni Europe and Central Asia 2019). However, despite being identified as a key challenge in the EC (2019a) Brief as well as the SAPEA (2020) report, the F2F Strategy's implementation shows no sign of strengthening farmers' cooperation through food sovereignty.

The power behind the dominant discourse

Why is there no explicit reference to power in the entire Farm to Fork Strategy Communication, even though it was aimed at the Common Agricultural Policy's objective of rebalancing power in agro-food value chains (EC 2020a)? Where the European Parliament's Own-Initiative Report mentions rebalancing power, we accept that "moving towards integrated food policies can remedy the democratic deficit in food systems and rebalance power," but disagree that it requires "shifting the focus from agriculture to food" (EP 2021b, p. 46). The focus should be on holistically engaging both farmers and consumers, and all actors in between.

In February 2022, the European Commission published a review of studies that assessed the potential impact of the Biodiversity and Farm to Fork Strategies on EU agriculture. The review covered studies conducted by the Commission's Joint Research Centre, Wageningen University and Research, United States Department of Agriculture (USDA), Kiel University, and the Institute for Sustainable Development and International Relations. Surprisingly, none of these studies analysed the F2F Strategy's impact on "strengthening of farmers' position in the food supply chain" (EC 2022e). So, why did the innovation-investment discourse become dominant in implementing the F2F Strategy without strengthening the position of farmers, particularly small and medium-sized ones?

Therefore, we attempted to address this knowledge gap and identify the F2F Strategy's primary beneficiaries. The same powerful food system players, including agri-food corporations and industrial farm owners, having benefited from CAP payments for decades, are now influencing the F2F Strategy to maintain the status quo. Copa and Cogeca are two of the most influential lobby groups, holding exclusive meetings prior to agrifood policymaking with EU agricultural ministers and members of the European Parliament's agricultural committee, granting them considerable influence over who receives tens of billions of Euros in CAP subsidies (Apuzzo & Gebrekidan 2019). In many cases these subsidies go to oligarchs, corrupt politicians (including prime ministers), and mafia landowners, such as in Slovakia, Czech Republic, Hungary, and Bulgaria, who suppress the power of small-scale farmers and seize their farmland through dubious government-backed deals (Gebrekidan et al. 2019).

Copa-Cogeca went from being a "united voice of the farmers and agri-cooperatives in the EU" to a hybrid lobby group now closely aligned with agri-businesses such as BASF, Syngenta, Bayer, Nestlé, Mondale, and Unilever (CEO 2020). Copa-Cogeca also happened to chair eight of the thirteen Civil Dialogue Groups contributing to the CAP reform and the F2F Strategy, while the European Coordination Via Campesina, that represents small and mediumscale farmers, did not chair any (EC 2019c). In approaching the F2F Strategy, Copa-Cogeca primarily focuses on technological advancements (adoption of digital solutions) and financial gains (bargaining power, economies of scale), emphasizing overall efficiency improvements (waste management, packaging, inputs, manufacturing, transport) and omitting any social goals through increased farmers' cooperation (Copa-Cogeca 2020).

The transformation of agri-cooperatives represented by Cogeca into agribusiness multinationals has further marginalized smallholder farmer-owned cooperatives (CEO 2020). The consolidation and liberalization of the EU dairy industry in recent years, in particular, resulted in high milk price volatility despite the presence of strong cooperatives (Thorsøe et al. 2020). The European Milk Board (EMB)⁷ emphasized that the F2F Strategy improve dairy farmers' position through temporary bonuses for producing less when milk prices are low, freedom to sell to different dairies, and prices covering production costs (EMB 2020). This way, farmers would be less dependent on government aid and public sector subsidies. The F2F Strategy's implementation is indicative of how much autonomy farmers and primary producers have over income generation. Economic gains or returns are not specifically meant for farmers, typically benefitting consumers, food operators (such as food processing companies), distributors, and retailers. The innovation-investment discourse describes that sustainability in food production will come from providing knowledge and advice to primary producers and farmers, but without first clarifying what is "sustainable," casting doubt over their position becoming strengthened.

In summary, there is a disconnect between the objectives, vision, and goals of the F2F Strategy, which aim for sociological transformation, and the implementation and action plans that deviate from social reform in the food system and instead promote further industrial lock-in that is typical agribusiness fashion.

Conclusion

It is an inherent characteristic of the capitalist neoliberal food system that those who invest also control the food and the people involved in its production. For farmers in Europe, the agri-environmental policies and support programmes under the Common Agricultural Policy (CAP) constitute a crucial enabling condition for the development and transition of farming systems. The decades-old CAP had been consistently failing to address socioeconomic and environmental issues in the European food system that contributed to acute problems not just regionally but also globally. The release of the Farm to Fork (F2F) Strategy in 2020 was a landmark event that promised to concretize the work of civil society actors in making the EU food system more socially and ecologically inclusive, becoming key in the eventual reform of the CAP. However, our critical discourse analysis of the Farm to Fork Strategy communication text and other related agri-food policy documents revealed that the dominant innovation-investment discourse in them serves to create a marriage between the EU agri-food system and the circular bio-based economy financed by private investments using techno-finance fixes, as opposed to farmer-led agroecological innovation. The inherent discursive legitimations thus enable particular actors to influence and even dictate policies, as is evident from the Civil Dialogue Groups (EC 2019c) preceding the F2F Strategy. Grassroots organizations representing smallholder farmers were excluded from giving policy advice to the final F2F Strategy Communication document and entities supporting agri-food corporations, while masquerading as civil society voices, took the lead in maintaining the status quo.

⁷ The European Milk Board represents around 100,000 dairy farmers across 15 EU countries.

Unless the Farm to Fork Strategy's implementation and action plans recognize the transformational power of small and medium-sized agroecological and regenerative agriculture enterprises that are driven by community-based knowledge transfer and socioeconomic models, any real redistribution of power and resources will not transpire. There are, however, still opportunities that can arise from implementing the legislative framework for sustainable food systems (2023 onwards) for civil society activists, food sovereignty advocates, academics, agroecology practitioners and small and medium-sized young and old farmers. They can raise their voices in terms of the discourses and imaginaries around sustainable farming and ecological food production and take a more active role in the implementation of the Farm to Fork Strategy for strengthening the farmers' position. We expect the critical discourse analysis of the F2F Strategy and its implementation presented in this paper to contribute to current and future scholarly debates around how the EU's agri-food policies are shaping the power dynamics for European farmers, especially small and medium-sized ones, for making the transition towards sustainability an equitable one. There is evidence coming out from the work of NGOs such as Nyeleni Europe and Central Asia (Nyeleni 2019), the European Coordination Via Campesina (ECVC 2021) and researchers such as the International Panel of Experts on Sustainable Food Systems (IPES-Food 2019) that this is already taking place in alternative farming systems in more localized contexts. However, it is yet to be seen whether the EU, which from our analysis is now all set for creating more industrial lock-ins around market investment-driven innovations in the food chain, will adopt more socially-inclusive and holistic approaches to rebalancing power for farmers in the European food system and beyond.

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Human and animal rights This article does not contain any studies performed with animals.

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