



# A new food security approach? Continuity and novelty in the European Union's turn to preparedness

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## Abstract

Preparedness is an anticipatory approach developed in the military and health sectors in response to unforeseen and unforeseeable crises and emergencies. It has recently entered the debate over the resilience and sustainability of European food systems. The paper seeks to shed light on the implications of the European Union's adoption of preparedness in its food security policy, particularly focusing on the preparatory phase and the early activity the European Food Security Crisis Preparedness and Response Mechanism (EFSCM), a consultative body launched by the European Commission in 2021. Through an analysis of documents and meeting minutes, we illustrate how debates on implementing preparedness are influenced by conflicting sociotechnical imaginaries of sustainable food security. Results show that the EU's shift towards preparedness combines elements of continuity and novelty in its food policy. Continuity concerns the acknowledged need to deal with growing turbulence and unpredictability affecting food systems. Novelty involves attempts at building bridges between diverging imaginaries of sustainable food security to address both short-term and long-term challenges to food security. Also new is the shift to a 'management,' as opposed to a 'problem-solving,' outlook on crisis and emergency.

**Keywords** Preparedness · Food security · Food sustainability · EFSCM (European Food Security Crisis Preparedness and Response Mechanism) · Sociotechnical imaginaries · Dashboard governance

## Abbreviations

DG AGRI	Directorate-General for Agriculture and Rural Development
EC	European Commission
EGD	European Green Deal
EU	European Union

EFSCM	European Food Security Crisis Preparedness and Response Mechanism
F2F	Farm to Fork Strategy
MS	Member state

## Introduction and research question

On November 12, 2021, the European Commission (EC) announced the launch of the European Food Security Crisis Preparedness and Response Mechanism (EFSCM) as part of its 'Contingency Plan for Ensuring Food Supply and Food Security in Times of Crisis' (EC 2021a, b, c). The latter was introduced in the 'Farm to Fork' (F2F) strategy—in turn part of the European Green Deal (EGD) launched in December 2019—together with the goal of assessing the resilience of European food systems (EC 2020a, pp. 12–13) (see Table 1).

The EFSCM was defined as a strategic priority in the F2F strategy, following the perturbations to national food systems caused worldwide by the COVID-19 pandemic (EC 2020a). According to this document, the EU food system

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**Table 1** Timeline of EU documents and policies on food security in the 2000s

2010	Communication from the Commission, <i>An EU policy framework to assist developing countries in addressing food security challenges</i>
2012	Communication from the Commission, <i>The EU approach to resilience: learning from food security crises</i>
2013	Reform of Common Agricultural Policy (CAP): Significant reforms are made to the CAP, with a greater emphasis on environmental sustainability, rural development, and support for small-scale farmers
2015	Sustainable Development Goals (SDGs): The United Nations adopts the 2030 Agenda for Sustainable Development, including Goal 2: 'Zero Hunger', which aims to end hunger, achieve food security, improve nutrition, and promote sustainable agriculture
2019	<i>European Green Deal</i>
2020	Commission Strategic Foresight Report <i>Charting the course toward a more resilient Europe</i> . It discusses the first structural lessons learnt from the COVID-19 crisis. The report introduced resilience dashboards
2020	<i>Farm to Fork Strategy</i>
2021	UN Food Systems Summit: The European Union participates in the UN Food Systems Summit, contributing to discussions on transforming global food systems to achieve the SDGs Consultation meetings for EFSCM (see Table 3)
2022	Communication from the Commission, <i>Safe-guarding food security and reinforcing the resilience of food systems</i>
2022	Commission Strategic Foresight Report <i>Twinning the green and digital transitions in the new geopolitical context</i>
2022-ongoing	Activities of EFSCM (see Table 4)
2023	Commission Staff Working Document, <i>Drivers of Food Security</i>
2023	EC, <i>State of food security in the EU</i> , EFSCM qualitative assessment nr. 1

proved to be quite resilient to pandemic. Nevertheless this event, along with the subsequent shock of Russia's attack on Ukraine, has been widely viewed as an incentive to take steps to prepare for and respond to short-term and long-term threats to food supply and security, particularly those coming from climate change and global political and trade instability (EC 2021a, b, c). Among the responses elicited by contingent and structural factors of crisis, the EFSCM is worthy of consideration not only because the European Union (EU) is a key economic and political player at the global level but also for how in this way the EU has adopted a preparedness approach to the anticipation and handling of crises and emergencies. As preparedness was developed and thus far applied worldwide mainly in the military and health

sectors, its extension to food and agriculture seems to indicate the opening of a new phase in the EU's food security policy.

The F2F strategy is portrayed as a 'new comprehensive approach to how Europeans value food sustainability' and 'an opportunity to improve lifestyles, health, and the environment' (EC 2020a, p. 4). In this framework, a basic question is: does the EFSCM represent an actual innovation in the EU's food policy? Its introduction is too recent to allow definitive conclusions. However, we believe that useful insights can be drawn on how visions and approaches to food security and food sustainability are developing.

The backdrop of this study is the recent evolution of the European food system governance (Table 1), particularly with respect to the renewed emphasis on sustainability expressed by the F2F strategy. We draw on existing literature to outline these developments.

To account for the divergences emergent in the context of European governance about how to ensure both food security and food sustainability, we use the notion of socio-technical imaginaries (for a similar approach, see Gugganig et al. 2023). These are defined as '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' (Jasanoff and Kim 2015, p. 4). The concept serves primarily as a heuristic tool, akin to Weber's ideal types. The idea is that, through the analysis of academic papers, policy documents, and media discourses, it is possible to identify fundamentally different approaches and lines of contention about socio-technical change (but also about preservation or restoration) within a given policy field. Accordingly, the research question above can be reframed as how the implementation of preparedness implementation of preparedness measures in the food sector is affected by, and affects, existing imaginaries of sustainable food security. Within the limits set by the timeframe considered, our aim is thus both empirical, namely accounting for what appears to be a novelty in the EU's food security policy) and theoretical, namely shedding light on how preparedness as an approach to crisis and emergency is tailored to a specific policy context.

From a sociological perspective, preparedness is essentially about envisioning the future. As stressed by Jasanoff and Kim (2015, p. 338), 'imagining the future is political' and the notion of sociotechnical imaginaries helps to shed light on 'the centrality of science and technology in those acts of imagining, not only through the material productions of technoscience, but through the very ideas and practices of "science" and "technology" as formative, and normative, forces in the world'. The use of the notion of sociotechnical imaginaries to explore the operationalization

of preparedness is not new (see the contribution of Lakoff 2015a on the pathogenic imaginary). To our knowledge, however, this is the first time it is applied to food security.

Data consist of documents, minute meetings and reports related to the consultation process leading to the launch of the EFSCM, and documents issued during its first year of life, from March 2022 to April 2023 (Table 2). The first year of operation involved establishing the infrastructure for the Mechanism's 'routine' function. We did not directly observe the 'routine' function but we briefly discuss the publication in November 2023 of the first qualitative assessment of food security in the EU (EFSCM 2023b). As described later, we performed a qualitative analysis of the material gathered to shed light on the motivations for, and the implications of, the adoption of preparedness.

The article is structured as follows. The first section addresses the background of the study. Our research is grounded in the dialogue of two distinct fields that have hardly been considered together: the literature on preparedness and the literature on the resilience of food systems and food security. Firstly, we briefly discuss the debates on preparedness as an approach to crisis anticipation and management, along with its governmental implications. Next, we analyze the literature regarding the evolution of approaches to food security to illustrate the growing significance of the resilience framework. We then examine these changes in the food security policy of the EU, stressing the relevance of the issue of sustainability. We use the concept of sociotechnical imaginaries as a heuristic tool to identify competing visions of sustainable food security in this context. This review also provides insights into the interplay between long-term trends and recent shocks (COVID 19 and the Russian-Ukrainian conflict) influencing the European debate on food security and the adoption of the EFSCM.

The section devoted to the study of the EFSCM opens with a methodological subsection, followed by the exposition of results. The ensuing discussion highlights the

**Table 2** EFSCM. An overview of the process, from the consultation phase to the first year of activity

November 2020–March 2021: releasing the initial documents (Roadmap and Consultation Strategy Contingency Plan for Ensuring Food Supply and Food Security) based on assessments of the pandemic

January 2021–July 2021: Consultations on the experience of the pandemic (with stakeholders: March–July). (see Table 3)

November 12, 2021: Publication of the results of the consultations and establishment of the EFSCM (European Food Security Crisis Preparedness and Response Mechanism)

March 2022–May 2022: Assessment of the impact of the Ukraine crisis on markets (storage and resources) and exceptional measures to support farmers affected by price increases

March 2022–April 2023: First phase of the EFSCM expert group's work. (see Table 4)

April 28, 2023: Concluding plenary of the first phase

presence of elements of continuity and novelty in the preparedness turn of European food security policy. Continuity concerns the acknowledged need to deal with growing turbulence and unpredictability affecting food systems. Novelty involves attempts at building bridges between diverging imaginaries of sustainable food security in order to address conjointly short-term and long-term challenges. The 'preparedness turn' also shows a shift to a 'management,' as opposed to 'problem-solving,' outlook on crises and emergencies affecting food systems. The paper concludes with a few additional comments and open issues.

## Background of the study

### Preparedness

Modernity is marked by a view of the future as open. A key question, thus, has become how to anticipate the future for governing it (Luhmann 1976; Anderson 2010). The emergence of probability and actuarial sciences in the late eighteenth century represented a foundational response, centered on the idea of risk prediction and management (Hacking 1990). In the second half of the twentieth century, the growing salience of ecological and technological threats led to an ever-more harried search for appropriate responses. One is precaution, that is, action in anticipation of threats known enough to acknowledge the need to address them, but not enough to predict their likelihood (Pellizzoni 2009). Another is preparedness.

As a concept, preparedness dates back to the Cold War and the nuclear threat, having subsequently expanded to bioterrorism and health (Cooper 2006; Lakoff 2017). Faced with new and resurgent infectious diseases, the World Health Organization has embraced it since the early 2000s (e.g. WHO 2009). In the food policy literature, however, the notion has appeared only quite recently (Conforti et al. 2018; OECD 2020).

Contrary to both prevention and precaution, preparedness deals with unforeseen and to a varying extent unforeseeable threats, both because their sources are significantly novel and because these remain concealed until a sudden eruption. In this framework, being 'prepared' means being ready to react to surprise and the unknown (Cooper 2006; Anderson 2010; Lakoff 2017). Thus, the goal cannot be to prevent the actualization of the threat, but to detect it as early as possible to modulate its expression and make it governable, up to adapting to coexist with it (Pellizzoni 2020). For this purpose, 'vigilance' carried out by 'sentinels', either biological or technological, plays a crucial role. These should be sensitive enough to catch signs of danger but not too targeted to known threats, as this can lead to failure to detect new

threats (Lakoff and Collier 2008; Lakoff 2015b, 2017; Keck 2020).

Sentinels include monitored living beings (e.g. migratory birds, non-vaccinated poultry and human travelers) and detection systems, such as laboratories for early infectious disease detection. Sentinels ‘report’ (e.g. via a sudden increase in the morbidity or mortality rate) to response systems, which typically include preventive and precautionary measures (Elbe et al. 2014; Lakoff 2017; Keck 2020). In the health sector, this means, for example, stockpiling or securing the supply of drugs and healthcare equipment. Such measures may impinge on the system’s resilience as much as an early detection of the threat. In other words, vigilance is only one aspect, though qualifying, of preparedness. The system’s capacity to respond adequately to the onset of the threat is of no lesser importance. As we shall see, both aspects have been considered in the design of, and the debate held within, the EFSCM.

Resilience—the ability to recover from a shock or trauma—has become central to discourses and policies over food security that emphasize the need to think in terms of food sustainability (Lang and Barling 2012; Capone et al. 2014). It is thus useful to note that resilience can be considered an element or an outcome of preparedness. A resilient system is better prepared to respond; conversely, a rapid response enhances the system’s resilience (Pellizzoni 2020).

Furthermore, preparedness can be argued to entail a shift from a ‘problem-solving’ to a ‘management’ outlook on crises, as these are increasingly understood not only as unpredictable but also as unsolvable—the issue is more about learning to live with turbulence and surprise than overcoming such conditions (Massumi 2007; Walker and Cooper 2011; Pellizzoni and Sena 2021). Indeed, the idea of constant vigilance implies that no policy response can be properly decisive. The metaphor of trench warfare replaces that of a decisive attack (Keck 2020). No final victory is possible, as the threat will reappear in new, unpredictable forms. This involves a significant change in the ways security is conceived. We shall see whether this applies also to the case under study.

### Food security in times of shock

The growing emphasis on resilience in food security debates reflects a widespread consensus in the scientific literature that global food systems complex systems that are becoming significantly ‘insecure’ (Puma et al. 2015; de Raymond et al. 2021; Kornhuber et al. 2023; Gaupp 2022). The food crisis of 2007–2008 was particularly significant in this debate, especially given its coincidence with the energy and subprime mortgage financial crises. This triple shock brought food security to the forefront as a complex issue

connected with factors such as climate change, environmental degradation, natural disasters, energy price oscillations, financialization of the economy, population growth, and the diminishing capacities of indigenous and rural communities to produce food sustainably (Margulis 2013; de Raymond et al. 2021).

Against the assumption, which dominated the academic and policy debate since the 1970s, that the market alone would be capable of ensuring food security, a call has emerged for a ‘surplus of governance’ and for multi-actor coordination, at local, national and transnational levels, to address not only poverty and market failures but also climate instability and ecological risks in general (Jarosz 2011; Candel 2014; Benegiamo 2022). This extended conception of governance has manifested itself at the academic, policy and civil society levels (Lang and Barling 2012; Candel et al. 2014; McKeon 2021). In this context, one can see an increase in the use of systems thinking complexity theories to account for the relationship between the organization of food systems and their exposure to crisis and failure (Savary et al. 2020; de Raymond et al. 2021). In the literature, the resilience of global food systems is considered severely undermined by imbalances driven by financialization and corporate monopolies (Hendrickson 2015; Nyström et al. 2019). Likewise, growing specialization and standardization are regarded to increase systemic rigidity, as they reduce redundancies and capacities for self-adjustment and problem-signaling, that is, those features that can prevent the propagation of shocks (Khoury et al. 2014; Wood et al. 2023; Davis et al. 2021).

This shift in perspective has not changed the definition of food security given by the United Nations in 1996: the need for all people, at all times, to have physical and economic access to sufficient, safe and nutritious food (FAO 1996, 2009). According to this definition, food security is composed of four main dimensions, namely availability, access, utilization, and their stability over time. However, these features are increasingly regarded to be affected by what happens outside food systems. Therefore, food governance should consider a broader policy environment (Candel 2014, p. 586). In short, systemic vulnerabilities prompt new considerations on how to ensure food security (O’Connor et al. 2017; Daher et al. 2021), bringing to the fore issues of sustainability. The COVID-19 pandemic and the Russian-Ukrainian conflict have made this concern particularly tangible for the EU’s institutions, paving the way for the European Commission’s engagement to increase preparedness and reinforce the resilience of the European food system.

## Diverging sociotechnical imaginaries in the European way to sustainable food security

The growth of concerns about the need to enhance the resilience of the EU's food system actually preceded the shocks of the COVID-19 pandemic and the Russian-Ukrainian conflict. Such concerns are related to the awareness that food sustainability is crucial to food security (see EC 2010, 2012, 2022). This turn to sustainability in the understanding of food security has strengthened the perceived need for reforms to the Common Agricultural Policy (CAP)—the traditional ground of European food security. To this end, the EU's new CAP (2023–2027) has made stronger environmental commitments.

According to the perspective that led to the creation of CAP in the late 1950s, Europe's food security had to be based on increasing agricultural production (Sotte 2023). Since 2019, the EC, under the leadership of Ursula von der Leyen, has highlighted the sustainability of agriculture as an absolute priority for food security. In the frame of the European Green Deal, the aforementioned F2F strategy aims specifically to promote fair, healthy, and environmentally friendly food systems. The idea is that production should be harmonized with ecological restoration and conservation according to a 'green-growth' approach, the pillars of which are digital innovation, economic incentives to private actors, and the market as a main regulatory tool.

In complementing this concern for sustainability, the challenges posed by the pandemic and ongoing war crises have underscored the necessity of balancing long-term and short-term food security objectives. This has brought greater attention to the operationalization of preparedness and exposed divergent viewpoints regarding the understanding and interconnectedness of food sustainability and food security.

To account for the approaches and lines of contention in this debate, we have resorted to the notion of sociotechnical imaginaries. A literature review<sup>1</sup> of the debates on food security and sustainability in Europe allowed to identify two main sociotechnical imaginaries, which can be respectively called: paradigm conservation and paradigm shift.

The first is led by technological fix perspectives, such as 4.0 agriculture transformations (see Lajoie-O'Malley et al. 2020; FAO 2020). The basic argument is that technological innovation (especially digitalization) entails and simultaneously promotes a reorganization of the food chain, with a

concentration and upsizing of business that, in turn, favors or requires further technological intensification.

The second imaginary relies on organic and agroecological perspectives with a holistic understanding of agriculture and the environment (see Altieri 1987; Gliessman 1998). Far less relevant than the former in terms of policy, academic and economic weight, this imaginary is also less coherent than the other, as it allows for different views of the role of agroecology—from complementing mainstream agronomic approaches to replacing them with a different take on agriculture as a whole—as well as of the relationship between agroecology and organic and 'peasant' (tradition-based) agriculture.

For the technological fix imaginary, sustainable food security is best served by a 'sustainable intensification' of agricultural production, driven by capital-intensive innovations such as digitalization and biotechnologies, in a context where market competition remains paramount (Barrett and Rose 2020). To be resilient, the system needs to internalize externalities and increase the capacity to cope with turbulences through (automatized) early detection and promoting activities of contingency planning. In this sense, this imaginary is 'paradigm conservative': it focuses on short-term challenges and heavily relies on technically equipped preparedness apparatuses.

In contrast, for the agroecology imaginary, a radical discontinuity with agro-industrial logics driving the evolution of food systems is needed for sustainable food security. The basic argument is that food, before a commodity, is a fundamental right, which to be guaranteed entails a number of changes: reshaping supply chains; promoting new dietary habits; protecting or developing non-market relations; adopting low-energy input agronomic techniques; and engaging in transdisciplinary research to valorize traditional forms of knowledge (Wezel et al. 2009). Resilience can only increase by changing the system according to a sounder ecological design. This implies increasing self-reliance at each scale and accepting the lack of total control over biophysical interdependencies, which calls for promoting an ethos of prevention, precaution, and care. Preparedness is thus framed within a long-term view of redesigning food systems (and more broadly food cultures) to combine resilience and food security.

The F2F strategy seems primarily influenced by the first imaginary, since strengthening resilience is seen as related to 'fostering the competitiveness of the EU supply sector', and 'creating new business opportunities, while ensuring integrity of the single market' (EC 2020a, p. 5). The strategy nonetheless considers certain demands for discontinuity, as illustrated by its objectives for 2030, which include a 50% reduction in the use of chemical pesticides, at least a 20% reduction in the use of fertilizers, a 50% reduction in total

<sup>1</sup> The review is not reported due to space limits, but we include in the text some key references. We considered scientific articles, policy documents, official documents of regional and international organizations, documents and official websites of NGOs. From January 2021 to April 2023, we also monitored the debate in specialized media through media monitoring.



sales of antimicrobials for farmed animals and antibiotics for aquaculture, and the conversion of 25% of farmland to organic farming areas (see EC 2020a, pp. 6–9). F2F, therefore, appears marked by inconsistencies, or ambiguities, regarding the imaginary of sustainable food security. The objectives above are consistent with issues that the agro-ecological movement has long raised. However, F2F does not regard them as elements of a ‘paradigm shift’. Rather, agroecological or ‘organic’ practices are treated as techniques available for industrial agriculture as well (Omar and Thorsøe 2023).

The pandemic and war crises had contradictory impacts on the perceived synergies between increasing European food sustainability and strengthening food security, revealing potential conflicts between long-term and short-term views on the issue. On the one hand, a widespread framing of the pandemic connected zoonoses to the unsustainability of current food systems, stressing issues such as biodiversity loss and deforestation, but also social inequalities, and rural poverty, among other factors (IPES Food 2020; ILO 2022). On the other hand, the war triggered criticisms in Europe regarding F2F as too focused on the ecological transition at the expense of food security, the two being regarded as not necessarily synergic as implied by the policies enacted since 2019 (new CAP, F2F, EGD) (see COPA-COGECA 2023). These criticisms translated into the decision to relax European green agricultural policies to allow the cultivation of fallow land to meet shortfalls in exports from Ukraine and Russia. According to Morales et al. (2022), this decision impacts long-term biodiversity and, consequently, food security (see also Pörtner et al. 2022).

Unsurprisingly, in the EU’s parliamentary debates on food security, politically conservative forces endorse paradigm continuation approaches together with those actors whose interests are best served by continuity. This was brought to light during the European Parliament’s discussion of a report written by Marlene Mortler, a German MEP from the Center-right European People’s Party, titled *On Ensuring Food Security and Long-Term Resilience of EU Agriculture* and adopted in June 2023 (European Parliament 2023). The report called on the Commission to carry out a comprehensive assessment of the cumulative impact of Green Deal legislative proposals on the EU farming sector. It also called for ‘a comprehensive strategy combining both precision farming and resource protection’, while providing ‘additional financial support for the industries hardest hit by price rises and take targeted measures to help farmers absorb the effects of skyrocketing fertiliser prices’ (European Parliament 2023, p. 8). The report has been praised by COPA-COGECA (the most important representative body of European farmers) as a call for ‘realism’ from the

**Table 3** Consultation meetings (2021)

January, 20	What are the lessons learnt from COVID-19 and other crises with regard to food security in the EU?
February, 25	What are the threats to EU food security?
March, 26	How are the EU, Member States, third countries and international organizations prepared to handle crises?
April, 21	How are companies in the EU food system prepared to handle crises?
May, 20	Academic Workshop organized in collaboration with the Joint Research Centre
June, 16	How to best organize a coordinated approach?
July, 15	Outline of the main elements of a Contingency plan to ensure food supply and food security in times of crises

**Table 4** EFSCM meetings

Regular meeting	23 March 2022— ‘a kick-off meeting (also serving the crisis purpose)’ (EC 2023c, p. 18) 14 November 2022— <i>drivers for food security</i> 28 April 2023— <i>Concluding plenary meeting</i>
Meeting ad hoc in crisis mode	9 March 2022 4 May 2022 23 September 2022
Subgroup Dashboard for the monitoring of food supply and food security	31 May 2022 18 July 2022 24 October 2022
Subgroup Crisis Communication on food supply and food security	15 December 2022 28 February 2023 30 March 2023
Subgroup Improving the diversity of sources of supply	27 June 2022 14 October 2022 30 January 2023 17 March 2023

European Commission with respect to its ‘green ambitions’ (COPA-COGECA 2023).

## The study

### Methodology

The data used for this study consist of documents, minutes from meetings, reports related to the consultation process that led to the launch of the EFSCM (Table 3), and documents published during its first year of operation, from March 2022 to April 2023 (Table 4).

Meetings were accompanied by the publication of documents on the official website: for each meeting, agendas (provided in advance), minutes, and a varying number of working documents were usually available within a few weeks after the meeting. We reviewed all documents pertaining to each meeting as they were released. In total, 1976 pages were analyzed.

Initially, we conducted a thematic categorization of these documents and a collective discussion to identify the most significant ones. Subsequently, a more detailed analysis was conducted on selected documents to identify the underlying sociotechnical imaginaries of sustainable food security. Since the aim was to understand to what extent, in the launch and early operation of the EFSCM, pre-existing imaginaries were confirmed or modified, we conducted a textual analysis starting from keywords related to the technological fix and the agroecological imaginaries (i.e., digitalization, sustainable intensification, agroecology, food sovereignty, peasants' knowledge). These allowed us to identify relevant textual strings, which were subsequently analyzed and collectively discussed. While analyzing meeting minutes, we focused on individuals involved as regular members or experts consulted by the body as a whole or one of its subgroups. We examined CVs of the invited experts to identify their links with specific expert cultures, or 'epistemic communities' (Haas 1992), paying attention to their degree of openness to paradigm-shift positions.

To gather further insight into the Mechanism's operation and obtain feedback on our understanding, we conducted two semi-structured interviews: the first with an agricultural policy researcher employed at a prominent European economic research and consulting company who served as an expert advisor for the EFSCM (Interviewee A), and the second with a member of the subgroup 'Improving Diversity' who took part in meetings as a representative of a professional association (Interviewee B). Furthermore, we organized a meeting to discuss initial research findings with the latter expert. In the presentation of the results below we include salient excerpts from the documents and the interviews.

## Results

### The Contingency Plan and the preparatory phase of the EFSCM

The creation of the EFSCM was foreseen in the F2F strategy as part of a Contingency Plan to be developed and put in place in times of crisis. On November 27, 2020, the EC released a Roadmap (DG AGRI 2020) to inform stakeholders and citizens about an open consultation for developing the Contingency Plan. On page two, it is stated that:

The Farm to Fork Strategy, part of the European Green Deal, envisages the development of a Contingency Plan by the Commission, to be activated when there is a crisis that affects the entire or part of the food system in the EU and puts food security within

the EU in danger. The Contingency Plan will include the creation of a coordinated crises preparedness and response mechanism. The Commission will draw on lessons learned from past crises, including the ongoing COVID-19 pandemic in developing the Contingency Plan. The Commission will coordinate this response, with the involvement of Member States.

According to the Roadmap, the EFSCM should not be viewed as a mandatory instrument directly impacting policy, but rather as a 'permanent forum' (DG AGRI 2020 p. 2) with the primary goal of formulating guidelines, recommendations and non-binding agreements, to enhance coordination among member states (MSs) and between the public and private sectors in addressing risks and responding to food security crises. Additionally, the document alludes to a broader legislative framework that may encompass preparedness measures, which suggests an intention to ask MSs to develop preparedness tools, such as an own Contingency Plan.

The consultation process aimed at elaborating the European Contingency Plan and organized by the Commission occurred between January and July 2021. It consisted of seven meetings (Table 3) and was supported by the Expert Group for Agricultural Markets.<sup>2</sup> This phase included officials from MSs and stakeholders. As outlined in the document of the DG AGRI (2021a, b, c) concerning the 'Consultation Strategy', the response of MSs to potential future crises should prioritize coordinated actions and dialogue; the exchange of best practices, the maintenance of up-to-date databases, the capacity to assess threats to food security as well as appropriate responses on a case-by-case basis, the involvement of international organizations, and transparent communication with the public and stakeholders.

The consultation meetings primarily focused on assessing the lessons learned from the COVID-19 crisis and were framed by the general statement that the EU food system had proven resilient. In particular, the DG AGRI's representatives stressed that resilience is best served by a fully functioning single market and an open rules-based international trade (see DG AGRI 2021b). Consequently, protectionist measures, along with any actions that may disrupt the functioning of the European market, are defined as possible threats to food security.

Concerns about potential market disruptions are among the main topics discussed during the second consultation

<sup>2</sup> The expert group for Agricultural Markets was created to provide advice and expertise to the Commission in relation to questions concerning EU agricultural markets' organization. The group was established in 2011 and has been in function since then. Members of the group are MS authorities (one representative for each State).

meeting, held in February 2021, which revolved around the questions of what the threats to EU food security are and whether states should be required to establish strategic reserves. Some participants considered food reserves a distortion of the free market; others regarded them as a key requisite of resilience. The latter is, for instance, the position expressed by a NATO representative, based on the recently updated NATO resilience framework, which stresses that securing food and water supplies is a relevant dimension of preparedness.<sup>3</sup>

Meeting minutes confirm that the balance between stocks and flows of grains and other foodstuffs is a long-standing political issue:

The discussion on strategic food reserves showed most policies dated from the cold war have been dismantled in Europe in the last 30 years, as trade rendered them meaningless to ensure food security. Rising risks could change the perception. (...) The debate showed mixed opinions, with some calling the EU to gather strategic reserves like China, while others questioned the relevance of keeping strategic reserves (DG AGRI 2021c, p. 4).

The COVID-19 pandemic has shown that hindrances to food circulation pose a threat as serious as insufficient stockpiling (EC 2021b). However, subsequent meetings showed concern for being prepared not only for shocks dependent on circulation but also for production shocks. Stakeholders from the reinsurance sector (i.e., insurance for insurance companies), for example, expressed concerns about ‘the increasing risk of global crop failure that trade would not be able to mitigate’ (DG AGRI 2021c, p. 3).

Worries about production crises, particularly those linked to climate change, were also pointed out through a ‘megatrends’ analysis, which was presented to the participants as part of the EU Strategic Foresight approach (EC 2020b) that served as a guide in organizing the seven meetings. Interestingly, this analysis revealed new vulnerabilities connected with digital technology. Megatrends with highly disruptive potential for food security were shown to include IT failure, cyberattacks, and disruptions to communication channels. It is worth noting that this megatrend analysis is part of the EC’s increasing use of strategic foresight techniques. According to Interviewee A, ‘the European Commission is prioritizing foresight, calling for all Horizon projects to include foresight methodologies. The Commission and EU research need to develop this capacity’. Moreover, a direct connection has been established by the EC between strategic

foresight and the development of a ‘culture of preparedness’ in all the MSs.<sup>4</sup>

Concerning the embeddedness of preparedness in the administrative cultures and political visions of MSs, during the consultation meeting held on 26 March 2021 (see Table 3), significant differences emerged in the discussion about preparedness during the COVID-19 pandemic. In short, some states seemed rather advanced in their preparedness plans and guidelines, while others seemed to lag behind in adopting a ‘proper’ (i.e., one that targets unforeseen threats) preparedness approach. For example, an Italian representative (an expert of the CREA, the leading Italian research organization dedicated to agri-food supply chains) stated that, in Italy, food security preparedness relies ‘on a wide range of risk assessments’, lacking a ‘holistic’ perspective. The Q&A discussion clarified that ‘the interplay between the different work streams during COVID-19 showed that while the general framework responded well, it is not intended to respond to unforeseen challenges’ (DG AGRI 2021d, p. 3). Conversely, the Danish representative (Head of crisis management at the Danish Veterinary and Food Administration) extensively illustrated a ‘Danish preparedness model’ based on ‘peer-to-peer exchanges and an open-minded approach (a specific response to a specific type of crisis, no one-size-fits-all approach)’ that proved to be efficient during COVID-19. The Q&A discussion highlighted the existence of regular ‘simulation exercises’ carried out every second year with agencies committed to the exercise. The simulated scenarios are chosen from a catalogue of scientifically probable ones, and the learning points are sent as a report to the Prime Minister and then integrated (DG AGRI 2021d, p. 3).

Shortly after the consultation phase was completed, on 12 November 2021, the EC announced the Contingency Plan, with the institution of the EFSCM (EC 2021a, b, c). The document reiterates the position the EC made explicit during the entire consultation process, according to which preparedness strategies are a tool for strengthening an already established market-based resilience, which demands further ‘flexibility’ in response to shock and threats and, consequently, nonbinding rules for Member States.

In the opinion of Interviewee A:

Currently, we approach preparedness by supporting stakeholders in need during emergencies. However, preparedness should be something else. It involves making interventions today for something we do not know whether and how it will happen. This approach is lacking, but we are in the early days. Implementing a preparedness strategy in this sector involves

<sup>3</sup> NATO’s approach to resilience is detailed on NATO’s website: [https://www.nato.int/cps/en/natohq/topics\\_132722.htm#resilience](https://www.nato.int/cps/en/natohq/topics_132722.htm#resilience) [Accessed 25 Sep 2023].

<sup>4</sup> See the EC website: [https://commission.europa.eu/strategy-and-policy/strategic-planning/strategic-foresight\\_en](https://commission.europa.eu/strategy-and-policy/strategic-planning/strategic-foresight_en) [Accessed 16 Oct 2023].



disrupting the status quo. This creates a challenge because stakeholders understandably resist change, and one has to find ways to lead them to adapt to new requirements.

The Contingency Plan also refers to ‘specific dashboards for monitoring food supply and food security complementing those already existing’ as part of the EFSCM. Moreover, the Commission recognizes that future crises will probably differ from the COVID-19 pandemic and emphasizes the need to enhance coordination among MSs, to leverage existing EU mechanisms and to collaborate with other international institutions. A major emphasis is also placed on effective communication, especially with the public, to prevent panic and discourage detrimental practices such as hoarding. In

**Table 5** Members of the EFSCM  
Members of EFSCM

Member states authorities (27)	Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, German, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden
Other European (non-EU) countries authorities (14)	Albania, Andorra, Bosnia and Herzegovina, Faroe Islands, Iceland, Kosovo, Liechtenstein, Monaco, Montenegro, North Macedonia, Norway, San Marino, Serbia, Switzerland
EU agencies and bodies (4)	Comagri, European Association of Poultry processors and Poultry Trade (AVEC), European Economic and Social Committee (EESC), European Food Safety Authority (EFSA)
International/ intergovernmental organizations (2)	European free trade Association (EFTA), The International Institute of Refrigeration IIF-IIR
Companies (1)	The Nagel-Group (specialized in food logistics)
NGOs (4)	Bureau Européen des Unions de Consommateurs; Conseil Européen des Jeunes Agriculteurs; European Food Banks Federation; Four Paws
Professional associations (2)	European Coordination Via Campesina (ECVC), Federation of Veterinarians of Europe (FVE)
Trade and business associations (32)	Stakeholders from the food supply chain (agricultural producers, processors, wholesalers, distributors—as well as input providers, transport and logistics representatives, equipment suppliers, packaging and others) For the full list, see: <a href="https://ec.europa.eu/transparency/expert-groups-register/screen/expert-groups/consult?lang=en%26groupID=3829">https://ec.europa.eu/transparency/expert-groups-register/screen/expert-groups/consult?lang=en%26groupID=3829</a>
Other organisations (2)	Assemblée des Régions Européennes Fruitières, Légumières et Horticoles (AREFLH) and World Union of Wholesale Markets (WUWM)
Observers	

this way, the structure of the EFSCM (elaborated below) was already outlined.

### The activities of the EFSCM (March 2022–April 2023)

According to the Contingency Plan (EC 2021a, b, c), the EFSCM relies on a group of experts and a set of procedural rules governing its operation. The Commission’s Decision that set up the group states that the body ‘shall meet at least once a year. In case of urgency, it can be convened by the Commission at any time without prior notice’ (EC 2021c, p. 4).

The group includes experts from institutions and stakeholders. These latter are, in large majority, trade and business associations (Table 5). The body is expected to provide advice and expertise to the Commission on topics such as cooperation, coordination, best practices, and MS and non-EU countries’ Contingency Plans. It should also ‘assist the Commission in preparing policy initiatives concerning Union preparedness’ and ‘develop recommendations relevant to Union preparedness for, and response to, food supply and food security crises on a case-by-case basis’ (EC 2021c, p. 2).

Based on the Decision, the Commission established four subgroups, each with a specific focus, namely:

- enhancing the diversity of sources in supply chains, both shorter and longer (hereafter Improving Diversity group);
- developing guidelines for crisis communication on food supply and security (hereafter Crisis Communication group);
- creating a ‘Dashboard for the monitoring of food supply and food security’ (hereafter Dashboard group);
- facilitating information exchange between Member States and the Commission.

These groups worked simultaneously throughout 2022–2023 (Table 4), and their results were presented during a plenary session held in April 2023. This session concluded the first phase of the EFSCM’s activities.

Work started in March 2022 with an ad hoc plenary meeting prompted by the Ukraine War outbreak. The vulnerabilities highlighted by the Ukraine crisis, regarding increases in energy and input prices, played a pivotal role in subsequent discussions within the EFSCM concerning the diversification of sources. Some called for a slower implementation of the EGD and F2F objectives to boost food production, whereas others asked for maintaining or accelerating the implementation of these objectives to strengthen the resilience of the EU food system to crises (EFSCM 2022a). The conclusions of the minutes call for a balance between

individual nations' food self-sufficiency and safeguarding the European market according to an 'open strategic autonomy' approach. The opportunity to improve resilience in agriculture is stressed by DG-AGRI Director-General Wolfgang Burtscher, confirming the commitment to the F2F strategy and showing agreement on a vision of food sustainability as key to food security (EFSCM 2022a).

Implementing a 'culture of preparedness' dominated discussions in the Dashboard and Crisis Communication groups. The latter formulated guidelines for policymakers, which address well-known crisis management issues. These guidelines recommend developing a communication plan for potential crises, emphasizing the importance of customized messages to reflect 'the public's sentiment and stakeholders' concerns' while also fostering institutional trust (EFSCM 2023a, pp. 35–38).

The Dashboard was conceived as an interface that supports decision-making by providing quick access to various data, enabling the supervision of complex systems. Emerging in management as tools for monitoring work performance, dashboards have since been increasingly adopted in public policy, including urban governance (Bartlett and Tkacz 2017). The EC had already supported the creation of dashboards to monitor resilience. They were introduced in the 2020 Strategic Foresight Report, 'Charting the course toward a more resilient Europe' (EC 2020b), which discussed the first structural lessons learned from the COVID-19 crisis.

The EFSCM's Dashboard fits into such a groove, operationalizing the 'vigilance' element of preparedness. According to Interviewee A, 'one of the intentions of EC is to create a data integration system, using satellite or other data, to develop warning indicators to prevent crises: the Dashboard is the beginning of this process.'

Launched in October 2022 (EFSCM 2022c), the Dashboard comprises three elements:

- a monitoring system designed to track trends in food supply and security;
- an alert system responsible for systematically gathering data on meteorological factors (such as droughts), outbreaks of animal diseases, or potential cost increases in critical sectors, providing timely notifications of significant changes that indicate potential emergencies;
- a qualitative assessment of the EU agri-food sector, focusing on food supply and food security.

The assessment structure was in progress during the timeframe of our research. It took the form of an online survey conducted between July and September 2023, collecting inputs from EFSCM experts, member states/regions, non-EU authorities, and stakeholders' organizations, which

was concluded by the publication of the first edition of the 'State of Food Security in the EU' document in November (EFSCM 2023b). The document contains links to the Dashboard, thus showing the interplay between quantitative and qualitative data collection. Scheduled biannually, this qualitative assessment of the state of food security in the EU is one of the key forthcoming priorities of the EFSCM's agenda.

Another significant objective of the Dashboard is the conversion of some indicators into a publicly accessible app. As Interviewee B stated, certain links were planned to undergo transformation 'into applications throughout 2023'. However, no further information was provided on this matter at the time of our writing.

More generally, the implementation and use conditions of the Dashboard, beginning with its addressees and purposes (for example, who are the recipients and what they are supposed to do when the alert system rings or when some problem emerges from an assessment), have remained underdeveloped, as confirmed by Interviewee B: 'we have to wait to understand whether data that refer to local situations will also be considered. The problem concerns who are the data addressees, and for which uses'. We will return to this point in the discussion.

The Improving Diversity group engaged in extensive debates over the 'response' element of preparedness, focusing on the structure and organization of the European food system and its vulnerabilities. These debates offer a glimpse into how a preparedness perspective may affect the approach to food security, taking in turn—as we shall see in a moment—specific connotations when applied to this issue, as a result of the contrast between different sociotechnical imaginaries, which emerged in the work of this group.

Initially focusing on the diversity between shorter and longer supply chains, the discussion expanded to the diversification of supply sources, including potential differentiations within production, trade, and supply chains. Its evolution was affected by the choice of experts invited by the DG AGRI to contribute to the sub-group activities. Analysis of their CVs shows that they belong to epistemic communities that are supportive of a 'paradigm shift' for the future of the EU agri-food system. This is the case of Interviewee A, whose intervention in the first meeting of the sub-group focused on evidence from two Horizon 2020 projects on resilience and farm diversifications, stressing the importance of shortening the supply chain. Another example is a French expert who was invited to present his work on an agroecological scenario for Europe in 2050 during the last meeting of the subgroup. This scenario (TYFA—Ten Years for Agroecology) is based on a widespread adoption of agroecology, the phasing-out of vegetable protein imports and the adoption of healthier diets by 2050.

Unsurprisingly, this led the participants in the subgroup to thematize issues such as the constraints of current common agricultural policies, the potential risks associated with the concentration and specialization of farms and farming regions, and the challenges stemming from rural depopulation and the reduction in the number of farms. In short, the choice of invited experts gave room to the ‘paradigm shift’ imaginary of food security that is included (though not prominently advocated) in the F2F strategy.

The lively debate that took place in the meetings is summarized in the minutes. Significant distinctions emerged between short-term and long-term diversification: the former was mainly associated with quick responses to crises, while the latter was regarded as entailing a transition toward more resilient agricultural models. Moreover, opinions about the ideal conditions for diversification varied significantly. Some argued that a closer relationship between farmers and consumers, as is typical of small farms, may facilitate diversification, enabling direct information about demand. Others claimed instead that diversification might be more achievable for larger enterprises with greater capital resources. A synthesis between the two positions (akin to the F2F strategy suggestions) was attempted by claims such as that ‘the existing diversity [of farming models] should be preserved’ (EFSCM 2022b, p. 2).

The work of the Improving Diversity group culminated in ‘Draft Recommendations’ (EFSCM 2023c), which were internally discussed during the meeting of March 17, 2023, and subsequently presented in the concluding plenary session on April 28, 2023. Their primary addressees are ‘policy-makers at the national level’ (Interviewee B). Concerning production, the Draft Recommendations consider crop diversification (called ‘on-farm diversification’, see EFSCM 2023c, p. 2) as a strategy for adapting to climate change. They emphasize the importance of policy tools that promote crop rotation, an agroecological technique widely recognized as a risk mitigation practice. Additionally, they stress the use of eco-schemes supporting farmers’ adoption of climate, and environment-friendly practices. They also stress the relevance of research and innovation, including new plant varieties obtained through genomic techniques and alternative protein sources, and the adoption of a plurality of agricultural techniques, including agroecological practices. Concerning trade and circulation, the Recommendations stress that the common European market is a crucial tool for enhancing resilience and food security (EFSCM 2023c). They underscore the importance of ‘time diversification’ in sourcing imports and the establishment of stable alliances with trade partners. This implies the need to preserve and strengthen European influence on the agricultural policies of non-EU countries. Interestingly, the Recommendations also point to the need to integrate the priority of

safeguarding agricultural soils into land-use planning, stating that ‘soil sealing [i.e., the covering of the ground by an impermeable material] and spatial planning rules can have a negative impact on the capacity of farming and aquaculture to supply raw material for food’ (EFSCM 2023c, p. 4). Thus, the message is that there should be coherence between all the policies impinging on the use of soil.

Furthermore, the Recommendations highlight the greater resilience of short supply chains, as demonstrated by the COVID-19 pandemic, hence their significance in diversifying food provision. However, they also stress the risks associated with protectionist policies that may not prioritize overall sustainability, potentially leading to price growth. Thus, supply diversification and accessibility should be balanced, enabling consumers to choose among various sustainable options (in accordance with the F2F strategy). In this regard, the importance of the final stage of the food chain, which processes and makes food available to consumers, is stressed, as is the potential role of transitioning toward a more plant-based diet, which should be made available and accessible.

Notably, in the plenary discussion of the Recommendations the issue of stockpiling as a preparedness tool was taken up again by some participants. In response, the Commission expressed concern about the high associated costs and the existence of ‘diverging needs among different Member States’.

## Discussion

Approaches to food security have significantly evolved over recent years, in response to structural and contingent factors, either specific to the sector or contextual, which make threats and shocks increasingly unpredictable. At the EU level, a series of nonbinding regulative interventions have indicated that food security and the resilience of food systems are growing concerns. These interventions started before the crises brought about by the COVID-19 pandemic and the Russian-Ukrainian War. However, such crises have spurred conceptual and organizational changes.

The culmination of this process was the launch of the EFSCM and, with it, the operationalization of preparedness in European food security policy. The question addressed in this article is whether such an event signals a policy shift, the full-fledged consequences of which cannot be predicted but—considering the features of preparedness—might be relevant.

The main points we can draw from our study are the following:

- (a) The notion of preparedness refers to the presence of unforeseen and, to various extents, unforeseeable threats and comprises ‘vigilance’ and ‘response’ aspects. The latter typically includes preventive and precautionary measures, while the former is specific to preparedness, with implications that, as our study shows (see point d below), concern both the design and the goals of security arrangements. However, considering that the EU’s approach to food security has increasingly focused on how internal vulnerabilities intertwine with changing contextual conditions and on the need to foster resilience to unpredictable threats and shocks, the launch of the EFSCM appears aligned, rather than breaking, with such an approach.
- (b) As for contrasting visions of security and resilience, we have drawn this diversification to two main socio-technical imaginaries of sustainable food security. One (technological fix imaginary) advocates ‘paradigm conservation’. It sees technological innovation as a driver for reorganizing the food chain without questioning the ruling socioeconomic model. The other (agroecological imaginary) calls for a ‘paradigm shift’ and for addressing food security in terms of citizen (rather than consumer) rights, for a growing role of agroecological approaches, and for a thorough rethinking of the sector, including consumption habits. This division has been found in the preparatory phase and early operation of the EFSCM. Thus, also from this viewpoint there does not seem to be a break with the situation prior to its introduction. One example is the diverging evaluation of the role of small and large farms. Additional examples, more directly related to the ‘response’ aspect of preparedness, concern the relevance of food stocks compared with flows and the role of market protectionism compared with market openness in eliciting resilience.
- (c) The preparatory phase and the early operation of the EFSCM, however, involved attempts to build bridges between these imaginaries, as a way of combining short-term and long-term approaches to prepare for food security crises. For example, insistence on the pivotal role of the market in ensuring food security was intertwined with an emphasis on the importance of land-use planning designed to preserve agricultural soils, and with a case for digitalization, biotechnologies, and agroecology as complementary rather than competing approaches. Similarly, the relationships between resilience, preparedness and diversity that emerge from the analysis are significant. The growing concern for diversity, not only at the supply chain level but also at the farm level, is evident from the creation of a dedicated group within the EFSCM. However, the case for diversity, particularly concerning farming types, which is a tenet of the agroecological approach (IPES-Food 2016), was not so much contrasted with the ruling agro-industrial model, with its focus on specialization, uniformity and concentration, as it was presented in terms of coexistence and complementarity. Likewise, the technological fix imaginary appeared mitigated by remarks about digitalization as both a way to enhance resilience and a potential risk factor in the long run—digital vulnerability is believed to be one of the threats that may contribute to future food crises. Similar remarks are also present in the European Strategic Foresight documents, so the EFSCM can be seen at once innovating, with respect to a consolidated contrast between socio-technical imaginaries, and in accordance with a recent policy orientation towards possible compatibilities and synergies between different sociotechnical approaches. However, these attempts to articulate the two imaginaries have emerged in a ‘confined’ space, where the influence of economic actors and interest groups, though more important than that of civil society organizations (see Table 5), is balanced by the presence of experts who are part of networks contributing to the existence of both imaginaries. The EC also plays a mediating role in this context. Outside the space of the EFSCM, influential corporate interests support the conservation of the ruling paradigm. In this regard, it is useful to recall what Jasanoff and Kim observe: ‘Coalitions between corporate interests and the media, through advertising and outright control, are likely to play a pivotal role in making and unmaking global sociotechnical imaginaries’ (Jasanoff and Kim 2015, p. 27).
- (d) The results discussed thus far show that there is continuity between older and emerging policy orientations, the EFSCM launch, and its initial work. This, more precisely, concerns the ‘response’ element of preparedness. The ‘vigilance’ element, as previously mentioned, conveys a condition of permanent potential emergency stemming from an endemic unpredictability of threats. This idea was operationalized in the Dashboard. Its inclusion in the design of the EFSCM can be regarded as an actual novelty in terms of policy tools, even if it is inscribed in the groove of the EC’s growing emphasis on foresight techniques. However, as noted, the addressees, the purposes and, to some extent, the concrete working of the Dashboard have remained unspecified. Several questions arise. For example: who is supposed to issue alerts? Who is supposed to receive them (national bodies, citizens, farmers...)? What is expected to happen next, assuming that a rapid response is the basic goal of the system? Regarding monitoring and assessment, what guarantees are there that the data collected and the way they are analyzed are fit for the



purpose? Of course, one can argue that the unfinished character of the Dashboard is contingent. A new, complex tool needs time to be implemented, especially with a multilevel governance system such as the European one. However, the Dashboard should be considered in the context of a growing leaning of food security policy, and of policy approaches in general, toward soft regulation, the exchange of best practices, the maintenance of up-to-date databases and a case-by-case approach to threats. Seen in this perspective, the issue seems more of strategy, or logic, than of time, the Dashboard appearing, more than unfinished, purposefully unspecified about key elements pertaining to its governmental performance. Additionally, the work carried out and planned concerning the qualitative assessment (periodic expert survey and data display) remains vague in its purposes and addressees.

- (e) As noted above, preparedness can be argued to entails a shift from a 'problem-solving' to a 'management' approach to crises. This appears confirmed in our case. Thus, the EFSCM might turn out to be more a way of promoting a culture of strategic foresight in the member states' administrations than an effective instrument for resolving crises. As we have seen, there are significant differences concerning the embeddedness of preparedness in the political visions and administrative cultures of EU member states. However, the emphasis on data, particularly big data, as a component of a culture of preparedness creates the preconditions for an intensified use of digital technologies in agriculture, with its implications for business concentration (Prause et al. 2021), hence for the goal of farming diversification, and regarding the vulnerabilities connected with digitalization.
- (f) There is an emergent critique of the limits of 'governing through dashboards' (Kitchin et al. 2015; Kitchin and McArdle 2016; Bartlett and Tkacz 2017). In our case, the fact that the Dashboard is conceived as a tool for preparedness raises a specific problem concerning the choice of indicators. As noted above, a balance between specificity and generality, closure and openness should be achieved. The soundness of their selection, however, can be assessed only retrospectively, according to how effective the system has proven to be in eliciting a successful response to a crisis. This strengthens the feeling that the Dashboard, and more generally the EFSCM, is to be read in the framework of a move, in Europe as elsewhere, toward a 'living with uncertainty' governmental framework. This framework is not new—Ulrich Beck (1992) detected it already in the 1980s—but its current intensification and spread across policy sectors provides a sense of its transformation from a transitory

condition (before new institutional arrangements are established, as Beck advocated) to a permanent one.

## Conclusion

Given the short time span of observation, future developments in the EFSCM may confirm or disconfirm our findings. At the time of writing, the group responsible for facilitating information exchange between member states and the EC is still active, and a new group on 'Mitigating Risks and Vulnerabilities in the Food Supply Chains' came into operation in October 2023. This confirms the importance that the EC places on food security but also highlights the unsettled state of its commitment. In other words, it is difficult to make predictions.

Having acknowledged this, we can say that the question this paper addressed, namely whether the launch of the EFSCM has imparted a twist to the European approach to food security, has found a nuanced answer. To a significant extent, one can talk of continuity rather than a break. However, the landscape of sociotechnical imaginaries has not remained unchanged, with embryonal but significant attempts at building bridges and finding complementarities to manage short-term and long-term challenges to food security. Moreover, the establishment of a dashboard approach to crisis anticipation and handling signals a novelty for this sector, at least in Europe. The framework of preparedness therefore seems to offer opportunities for innovation while raising new questions, such as the implications of a 'management' outlook on crises. Nevertheless, a strong continuity is represented by the commitment to the 'Single Market' as the main tool to achieve a balance and complementarity between different pathways to sustainability.

However, the strong power imbalances that characterize the European agricultural policy cast a shadow on this commitment. We could not address this issue, but it is fair to say that the EU policy on agriculture is inherently difficult to reform. As the field is populated by cohesive social groups with strong economic and political influence (Sotte 2023), the possibility of moving toward a more resilient and prepared system may be significantly affected. Similar remarks can be made concerning the multilevel character of European policy. Regardless of the future performance of the EFSCM, its interface with the member states' governments and administrative structures is likely to encounter problems. The preparatory work for the EFSCM showed the presence of different political and administrative cultures and levels of national investment in the project, including the progress of preparedness plans and guidelines. This may affect the development of the full potential of the EFSCM,

which in turn may be ineffective in driving national preparedness cultures toward common ground. Moreover, agriculture policy and food security are complex matters. If it is reasonable to hypothesize that preparedness has come to stay, and with it the EFSCM, its future role depends on a variety of political, economic, and ecological factors. Further inquiry may shed light on these and other issues.

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## Declarations

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