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Media Discourse in the European Union on Sustainable Food Systems

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Abstract

The necessity of a transition to a more sustainable food system is widely recognised, but the path that should be taken to achieve this is strongly contested. In 2020 the European Commission published the Farm to Fork Strategy, a policy framework which has the aim of facilitating the transition to a more sustainable food system in the European Union. Since its publication, it has however faced mounting opposition and consequently there are growing concerns that the original promise of the Strategy will be watered down. In light of the need to build and maintain support for the Farm to Fork Strategy throughout the EU, a deeper understanding of the media discourse on this issue can provide important insights for policymakers and campaigners. There is, however, little research on the media discourse on sustainability, and even less on sustainable food systems. Using Austria and Czechia as case studies, this thesis investigates the media discourse on sustainable food systems in the European Union. My findings demonstrate that while there are many similarities in the reporting, there are also important differences in the content of the media coverage between the two countries. Furthermore, I find that frames which emphasise the role of the market in addressing sustainability issues are dominant in the coverage across both countries. Other key frames identified include the role of regulation in transitioning to sustainable food systems, as well as the potential of technological solutions. Furthermore, a new frame is identified that emphasises how the negative impacts of imported food such as food insecurity and carbon emissions can be avoided through prioritisation of nationally produced food.

Key words: sustainable food systems; media discourse; qualitative analysis; framing; Austria; Czechia

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Chapter 1: Introduction

Over time, and particularly in recent decades, food production has become increasingly globalised and industrialised (Ehgartner, 2018). Global food supply chains have become ever more complex and their environmental and social impacts have become harder to ignore. Food systems account for a third of global greenhouse gas emissions (Crippa *et al.*, 2021) and land conversion for food production is one of the main drivers of biodiversity loss (Leclère *et al.*, 2020). Furthermore, a third of the food produced for human consumption worldwide is wasted (FAO, 2011). Over 850 million people globally suffer from hunger and malnutrition each year (Schanbacher, 2019) while over a billion people worldwide are overweight or obese (Reisch, Eberle and Lorek, 2013). Given that the global population is continuing to grow, it will become increasingly challenging to produce enough food to feed the global population and the environmental impact of food production will grow ever more severe (Ehgartner, 2018). It is therefore clear that change is urgently needed in our food system.

In light of these issues, the sustainability of the global food system has been receiving more attention from policymakers and scholars (Béné et al., 2019). In 2020, after several months of delay due to the outbreak of the Covid-19 pandemic, the European Commission announced the Farm to Fork Strategy, as part of the European Green Deal. The strategy outlines various measures aimed at enabling "a shift to a sustainable food system" (European Commission, 2020, p. 2). These include certification and labelling on the sustainability performance of food products, reducing the use of pesticides, support for environmentally friendly farming methods, and strengthening animal welfare standards. Key targets include expanding organic farming to cover a quarter of EU farmland and reducing the use of chemical pesticides by 50% by 2030. As well as the production side of food systems, the strategy also addresses the environmental impact of food consumption, and sets out plans to facilitate a "shift to healthy, sustainable diets" (European Commission, 2020, p. 13). Many of the proposed initiatives build on existing EU policies such as the Common Agricultural Policy (CAP), but the Farm to Fork strategy is the first comprehensive legislative framework that covers the entire food supply chain (European Parliament, 2020). The strategy received a mixed reception. Many environmental NGOs praised its ambition and long-term vision (WWF, 2020), and welcomed a new approach to food policy that prioritises health and biodiversity over agribusiness profits (Pesticide Action Network Europe, 2020). On the other hand, sector stakeholders have criticised targets to reduce

the use of fertilisers as too ambitious (Fertilizers Europe, 2020) and have raised concerns about how the legislation will affect the competitiveness of European food producers (Hancock, Varvitsioti and Bounds, 2023). Furthermore, researchers have emphasised that in order for the Strategy to be a success, it will be necessary to build broad political support from all stakeholders in the food system: "policymakers and administrations, farmers, businesses, civil society, and citizens" (IEEP, 2020).

Since the Farm to Fork Strategy was published in 2020, several of the proposals have been put into action, such as recommendations to Member States on their CAP strategic plans, and the EU code of conduct on responsible food business and marketing practices (EPRS, 2022). However, as the Von der Leyen Commission nears the end of its mandate, there are still many aspects of the Farm to Fork Strategy that are yet to be written into legislation. Yet, in light of the food and energy crises triggered by Russia's invasion of Ukraine, criticism of the proposed legislation has started mounting, with French farm lobbies, as well as the EU Agricultural Commissioner, contending that the proposals are too ambitious and would inflict an unfair compliance burden across member states (Wax, 2023). There are therefore growing concerns that the original promise of the Strategy will be watered down, and in February 2023 almost 300 organisations signed a joint letter urging the Commission to ensure that the EU framework on sustainable food systems is published by September 2023 (EEB, 2023).

It is therefore clear that there is a serious and urgent threat that the Farm to Fork strategy could be derailed. This, in turn, has serious implications for the EU's target to achieve net zero emissions by 2050. In order for the EU to meet its environmental goals and, more importantly, avoid devastating damage to the environment, it will therefore be essential to build and maintain support for the Farm to Fork Strategy across all parts of society and throughout all the member states. In this context, an understanding of the media discourse can provide a helpful insight to policymakers and campaigners in order to assess national trends and inform communication strategies (Broadbent *et al.*, 2016; Diaconeasa *et al.*, 2022). There is, therefore, a growing body of literature that seeks to establish which issues related to sustainability and sustainable food systems receive the most attention in the media, and how they are framed (Diprose *et al.*, 2018; Atanasova, 2019; Kristiansen, Painter and Shea, 2021; Diaconeasa *et al.*, 2022).

This Master's thesis will seek to contribute to this body of literature by answering the following question: "What issues and actors are the most prominent in the mainstream press in the European Union on the topic of sustainable food systems, and how are they framed?" In order to answer this question, my analysis will consist of two case studies of the national mainstream press in Austria and Czechia. My research makes an original and important contribution to the literature by examining the media discourse on sustainable food systems in two countries where this has previously not been investigated, thereby allowing a deeper understanding of how the media discourse on this subject may vary across the EU, and if so, how. Furthermore, this thesis will establish whether the neoliberal framing of environmental issues which has been found to dominate sustainability reporting in previous research on the media in other countries, can also be identified in the Austrian and Czech media discourse, or whether alternative frames can be identified.

This Master's thesis is composed of eight chapters. Following this introductory chapter, the second chapter will review the literature on the concepts of sustainability and sustainable food systems, and outline the most prominent approaches in the scholarship to addressing these issues. Subsequently, the second chapter will outline the role of the media in agenda setting and sustainability policy, before engaging with the existing scholarship on media coverage of sustainability and sustainable food systems, and their framing. The third chapter elaborates the case selection of country and publications. It also details the methodological approach used for this study, namely qualitative content analysis and qualitative framing analysis. The following three chapters detail the results of the analysis; Chapter 4 presents the content of the Austrian media, Chapter 5 presents the content of the Czech media, and Chapter 6 presents the frames that were identified through the analysis. In Chapter 7, the results of the research are discussed and contextualised in the literature. Chapter 8 summarises the findings of the thesis and presents avenues for future research.

Chapter 2: Literature Review

In order to provide a foundation for my research, the first part of this chapter sets out the definitions of the concepts of sustainability and sustainable food systems, and describes the various approaches identified in the literature to transitioning towards a more sustainable food system. Subsequently, this chapter will outline the role of the media in influencing the discourse on sustainability and sustainable food systems, before giving an overview of the findings from previous research on sustainability discourses in the media. Lastly, this chapter will highlight the gaps in the literature on media and sustainable food systems that this thesis seeks to address.

2.1 Understanding the concept of sustainability and sustainable food systems

Sustainability as a concept is highly contested (Van Gorp and van der Goot, 2012; Diprose et al., 2018; Ehgartner, 2020). Indeed, it has been argued that the concept has been so widely used that it has come to lack meaning altogether (Dryzek, 1997). As Diprose et. al (2018) have highlighted, while climate change can be more clearly defined through scientific evidence, sustainability is a social construct with various interpretations. The most cited definition is that of the Brundtland Report of the World Commission on Environment and Development (WCED) (Burchell and Lightfoot, 2004; Diprose et al., 2018; Ehgartner, 2018; Atanasova, 2019; Diaconeasa et al., 2022), according to which, "humanity has the ability to make development sustainable to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED, 1987, p. 24). A more recent and more specific definition has characterized sustainability as an approach which balances the three pillars of economic growth, environmental protection, and social justice (Elkington, It is this definition that underpins the 2015 United Nations (UN) Sustainable Development Goals (Diprose et al., 2018) as well as much of the recent academic scholarship (Van Gorp and van der Goot, 2012; Pal and Jenkins, 2014; Atanasova, 2019). For the purposes of this study, Elkington's definition will be operationalised, due to its more specific nature, although it too is open to interpretation. It is for this reason, as will be discussed later in this chapter, that the media plays an important role in conveying various interpretations of sustainability to the public and provides an arena for various actors to provide their input on what constitutes sustainability or sustainable practices.

The concept of sustainability has been applied to various different sectors of society and the economy including industry, transport, and finance, in order to address their respective impacts on the environment. This study focusses on how sustainability has been applied to global food systems. Food systems can be understood as "all elements and activities that relate to production, processing, distribution, preparation, and consumption of food" (Willett et al., 2019, p. 450). Often, this is divided into the consumption and production aspects for the purposes of research and analysis (Welch, 2015). Many issues with the current global food system have been highlighted, such as land, water and ecosystem degradation, biodiversity loss, excessive greenhouse gas emissions, and widespread malnutrition and hunger (El Bilali et al., 2019). Indeed, despite the fact that global food production has increased as the world's population has increased, over 850 million people globally suffer from hunger and malnutrition each year (Schanbacher, 2019). What is more, there is considerable evidence that indicates that food production is one of the main drivers of climate change (Willett et al., 2019). Given the growing world population and the increasingly urgent threat of climate change, more and more voices are calling for a transition to a more sustainable global food system (El Bilal et al., 2019; Willett et al., 2019; Ruben et al., 2021).

Despite growing interest in sustainable food systems, there are few existing definitions for the concept (El Bilali et al., 2019). The High Level Panel of Experts on Food Security and Nutrition, a United Nations body, has provided the following definition, building on the Brundtland Report definition cited previously for sustainability more generally: "A sustainable food system (SFS) is a food system that delivers food security and nutrition for all in such a way that the economic, social and environmental bases to generate food security and nutrition for future generations are not compromised." (HLPE, 2014, p. 12). It has, however, been argued that in addition to the three 'traditional' elements of sustainability (economic growth, environmental protection, and social justice), in the case of food systems it is also necessary to consider the cultural dimension of sustainability (Jehlička and Smith, 2011; Béné et al., 2019). It is argued that our relation to food is formed through a cultural lens and that as well as being sustainable and healthy, it is also necessary for diets to be "culturally appropriate" (Eakin et al., 2017, p. 760). Diets are often inherently tied to tradition, religion, family, and communities, and consequently "cultural factors are perhaps the most powerful determinants of which food we consume" (Prescott and Bell, 1995, p. 201). Furthermore, it has been highlighted that the cultural dimension of sustainability and food remains under researched (Jehlička and Smith, 2011).

Several pathways are set out in the literature for how a transition to a sustainable food system could be achieved. The following section gives a brief overview of these, in order to provide context for the later analysis, in order to see which, if any, of these solutions, are advocated for in the media discourse. Garnett (2014) describes the three main approaches to achieving a sustainable food system present in the literature: efficiency, demand restraint, and food system transformation. The efficiency approach is grounded in the assumption that technological innovations and managerial progress will allow more food to be produced in order to meet growing global demand, while also decreasing the impact on the environment and supporting people's nutritional needs. However, critics of this approach highlight that by focussing on issues of productivity, technological innovations are prioritised over social innovations and consequently issues such as hunger and environmental problems may be neglected (IPES-Food, 2015).

The demand restraint approach addresses the consumption side of food systems, and entails consumers altering their diet and buying habits in order to reduce their environmental impact (El Bilali et al., 2019). There are numerous conceptions of what this involves more specifically. For example, it can include decreasing meat consumption and buying regionally and organically produced food that is minimally processed (Leitzmann, 2003). Additionally buying seasonal produce (Macdiarmid, 2014), reducing food waste (Reisch, Eberle and Lorek, 2013), buying ecologically packaged food (Beitzen-Heineke, Balta-Ozkan and Reefke, 2017), and purchasing food that has been produced and traded ethically (Leitzmann, 2003), may be considered to contribute towards a sustainable diet. In this approach, it is therefore individual consumers and their buying habits that are presented as the solution to resolving issues with global food systems. However, some consider this emphasis on individuals' responsibility to be problematic. Lynch and Giles (2013) highlight how discourse on sustainable food initiatives is often characterised by a neoliberal paradigm that foregrounds individual behaviour and personal responsibility. From a neoliberal perspective, once individuals are educated on a topic, they should be capable of choosing to act more responsibly. Such an approach, however, fails to recognise other factors that might prevent people from making more "responsible" choices, depending on their lifestyle and background (Lynch and Giles, 2013). Furthermore, by blaming individuals' behaviour, the role of other actors, such as the government or businesses, who could also have a considerable impact on transitioning to a more sustainable food system, is marginalised (Shove, 2010).

Proponents of the third approach, food system transformation, advocate for a structural reform of food systems and their power dynamics, where both the production and the consumption sides are addressed (Garnett, 2014). In this perspective, the problems with the food system are considered to be structural and socio-economic, rather than being attributed to technical issues or individuals' decisions (Garnett, 2014). While this perspective is praised for recognising the complexities of the food system and the various actors involved (El Bilali *et al.*, 2019), this also makes it difficult to present specific recommendations and solutions (Garnett, 2014).

There are therefore varying opinions on what the most appropriate solution is for addressing issues with food systems, and about which actors are responsible for addressing these issues. As will be elaborated upon in the next part of this chapter, the media plays a crucial role in shaping the discourse on this subject, through its ability to highlight certain solutions and actors over others.

2.2 The media and sustainable food

Mass media provides a venue for discourse and public debate on various issues and ideally should represent all relevant voices within society (Newig *et al.*, 2013). However, the media is not a neutral actor; it can be considered to perform the role of a gatekeeper as it selects and disseminates information to raise awareness of particular issues, and can frame these issues in a certain way while highlighting some voices and views over others (Carvalho, 2007; Uusi-Rauva and Tienari, 2010; Diaconeasa *et al.*, 2022). Furthermore, while it is difficult to pinpoint a causal effect, the literature widely accepts that the ability of the media to draw attention to particular issues makes them central to the agenda setting process (Strong and Wells, 2020). Equally, it has also been argued that the age of social media has given rise to "reverse agenda setting" whereby the media responds to the interests that the public express online, for example through tweets or online petitions (Ragas, Tran and Martin, 2014). In any case, it is clear that the dynamic between the media and the public is neither linear nor one-directional, which shall be born in mind in my analysis and conclusions.

According to Entman's framing theory, the media is able to build a narrative in order to encourage a particular interpretation of an issue (Entman, 2007). Or as Carvalho (2007, p. 223) puts it, "particular values and worldviews are produced, reproduced and transformed in media

discourses; others are excluded from them". What is more, the media is the main source of information about public affairs for most people (Strong and Wells, 2020) and therefore has the ability to shape awareness and opinions among the public on various issues, including sustainable food systems. Media frames can therefore be indicative of prevalent cultural attitudes and national tendencies on certain issues, although the media does have a tendency to reflect an elite perspective (Broadbent *et al.*, 2016). It is important to note, however, that the framing of sustainability in the media is influenced by the societal context and this must therefore be taken into account when comparing the media in different countries (Uusi-Rauva and Tienari, 2010). Differing media cultures, tradition, and policy contexts may have an influence on how various issues are presented in the media.

While there is a considerable amount of scholarship on media coverage of climate change, there has been a lack of research on media coverage of sustainability and even less so on sustainable food systems (Diprose et al., 2018; Yacoumis, 2018; Atanasova, 2019). A likely explanation seems to be the methodological difficulty presented by the wide usage of the term and the lack of a common definition (Bartolj, Murovec and Slabe-Erker, 2018; Diprose et al., 2018), as well as issues of semantics and translation (Van Gorp and van der Goot, 2012). Nevertheless, in light of the importance of mass media in shaping the discourse on sustainability and sustainable food consumption, understanding the media discourse on this topic is of great interest to both the food industry and policymakers (Diaconeasa et al., 2022). Indeed, previous research has established a strong link between the amount of media coverage of environmental issues and shifts in public opinion. For example Bailey (2022) has investigated the increased media coverage of plastics pollution since 2022 and identifies a corresponding major increase in public engagement with this issue and consequently pressure for policy responses. Therefore, while the link between media coverage, public opinion and political action may not always be linear (Bailey, 2022), and there are many other factors that may have an impact on the policymaking process, for example lobbying (Hofmann, 2018), it is clear that the media has an important role to play which merits further research.

Findings from previous research have identified variations in the way that the issue of sustainable food systems is discussed in the media. The political orientation and ideology of a publication has been shown to impact the discourse on sustainability (Doulton and Brown, 2009). For example several studies have found that scepticism of sustainability is more prevalent in right-wing publications within the British media landscape, where sustainability

efforts are presented as silly or untrustworthy (Carvalho and Burgess, 2005; Carvalho, 2007; Diprose *et al.*, 2018). A study by Koteyko (2012) found the topic of a more sustainable lifestyle and a "low carbon diet" to be more prominent in broadsheet newspapers compared to tabloids, which likely indicates a link between sustainability and social class; environmentalism is often considered as an aspirational, middle-class ideology (Cooper *et al.*, 2012; Diprose *et al.*, 2018). This linkage is also reflected in discourses surrounding sustainability that appeal to readers to invest in more expensive, better-quality products. However, the socio-economic groups who do not have the means to follow this advice are consequently excluded from sustainability efforts (Atanasova, 2019). On the issue of which actors are most prominent in media reporting on sustainability, in their analysis of the framing of sustainability in the British press, Diprose *et al.*, find that business voices particularly dominate, while the voices of ordinary people hardly feature (Diprose *et al.*, 2018, p. 680).

As will be further discussed in Chapter 3, in order to answer the second part of my research question, I conduct a qualitative framing analysis. The following section therefore describes the frames that have been previously identified in the scholarship on media discourse on sustainability more generally; there is no existing research that has studied the media framing of sustainable food systems more specifically, therefore my research will establish whether similar frames can be identified, and potentially identify new ones. As there is only a limited amount of literature on this subject, findings from various geographical contexts are discussed. It is, however, open to question whether these findings are generalisable to the Austrian and Czech contexts, and this will therefore be born in mind for the later analysis.

There are two frames that have been identified as being particularly dominant in the newspaper coverage of sustainability: firstly, a focus on various technological solutions that are proposed in order to solve environmental problems and secondly, the role of businesses in providing solutions to issues of sustainability in the food system. These frames were identified by Yacoumis (2018), in his study of Australian newspapers and their discourse on sustainable development. He names these frames "human ingenuity and the promise of technology", and "win-win: the language of business". In a study of framing in *Positive News*, a constructive news outlet, Atanasova (2019) identified similar frames, which she describes as "belief in the power of the market" and "belief in the power of science".

In their analysis on the media discourse on sustainability, Diprose *et al.* (2018) similarly conclude that the dominant framing in the British press portrays sustainability as "being achievable through market forces, technology and economic growth" (Diprose *et al.*, 2018, p. 683). In addition, while they had expected that prominent intergovernmental events such as the agreement of the Sustainable Development Goals by United Nations member states, and the UN Paris Climate Conference of 2015 would attract considerable coverage, they found that the events hardly featured in the articles. This, along with their finding that the voices of intergovernmental organisations such as the UN received limited coverage in the British press indicates that "internationalist policy frames are a low priority for British newspaper editors" (Diprose *et al.*, 2018, p. 681).

These frames have, however, been criticised for promoting a "green growth" paradigm (Atanasova, 2019, p. 701) and disproportionately focussing on the aspect of economic growth, while neglecting to reflect more critically about the aims of environmental protection and social justice that sustainability should also encompass. There are also doubts about to what extent technological progress will be able to offset the ecological impacts of continued resource consumption (Kemp and van Lente, 2011; Atanasova, 2019). One explanation for these framings that prioritise growth and consumerism in sustainability reporting, is the business model of mainstream news outlets (Atanasova, 2019). Given that most media outlets depend on corporate advertising to fund their operations, their ability to challenge economic growth and consumerist tendencies is constrained.

There is very little research on the media discourse on sustainable food systems more specifically. Diaconeasa *et al.* (2021) conducted research on the media discourse on sustainable food consumption in four European countries: Germany, Italy, Norway and Romania. They find that over a five year period from 2014 to 2018, the number of articles on sustainable food consumption increased, as well as the variety of topics covered (Diaconeasa *et al.*, 2022, p. 14), which potentially suggests that public interest in this topic grew over this time period (Harcup and O'Neill, 2001). They find that there is a different framing of sustainable products in Germany, Italy and Norway, the wealthier European countries, compared to Romania, a poorer European country. Whereas in the richer countries, there is a focus on reasons why you should choose sustainable products, in the poorer country the newspapers more often focus on higher prices for quality food (Diaconeasa *et al.*, 2022, p. 13). Furthermore, they find that the media prioritises different topics in the countries analysed.

Whereas in Germany and Norway the negative effects of meat consumption on health are a popular topic, in Italy the newspapers tend to focus more on local food, while in Romania unhealthy food habits receive the most attention (Diaconeasa *et al.*, 2022, p. 13). There are, however, several shortcomings of the approach adopted in this study. The approach focusses specifically on the consumption aspect of food systems, while failing to recognise the limitations of focusing on individual responsibility and agency, as discussed previously in this chapter. Furthermore, this study primarily presents quantitative findings, with only a few insights into how these issues are framed. This thesis will therefore build upon their approach by presenting descriptive statistics as well as an analysis of how issues related to sustainable food systems are framed by the media.

My research will seek to address two gaps in the literature. Firstly, there is a lack of research on the media discourse on sustainable food systems, despite recognition of the importance of this topic and the increasing salience of this theme in the media in recent years. This thesis will therefore build on the existing literature by investigating the media discourse on sustainable food systems in two countries where this has not previously been researched and provide wider as well as deeper analysis through the use of descriptive statistics as well as a framing analysis, as is discussed in the subsequent chapter. Furthermore, as previously highlighted, the cultural dimension of sustainable food systems has received limited attention in the scholarship. By employing a cross-country analysis of media coverage in Austria and Czechia, I intend to identify any differences in the discourse between the two countries.

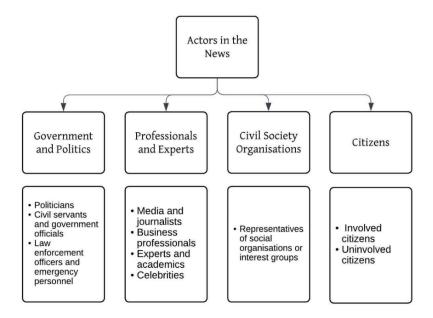
Chapter 3: Methodology

The following chapter will outline the methodological approach of the thesis. Firstly, the research question is explained in further detail. Secondly, a brief overview of the EU media landscape is presented along with an explanation of the choice to analyse the media at the national level. Thirdly, I will detail the reasoning behind the case selection of countries. The fourth part of this chapter outlines the relevance of studying the mainstream press and gives a brief overview of the Austrian and Czech media landscape, before detailing the newspapers that have been selected for this study and the sampling process. The fifth and final part of this chapter includes an outline of the selected methodological approach, namely qualitative content analysis, making use of van Gorp's systematic approach for inductive frame analysis.

3.1 Research Question

In light of the research gaps identified in the previous chapter, my research seeks to address the following research question: "What issues and actors are the most prominent in the mainstream press in the European Union on the topic of sustainable food systems, and how are they framed?" My research will thus contribute to an existing body of literature where descriptive analysis has enabled researchers to shed light on the content of media reporting on sustainability (Kristiansen, Painter and Shea, 2021; Diaconeasa *et al.*, 2022; Hansen, 2022), as well as how it is framed (Koteyko, 2012; Diprose *et al.*, 2018; Atanasova, 2019). These contributions have allowed a deeper understanding of the wider discourse on sustainability and sustainable food systems, which in turn has important implications for the dynamics of sustainability governance (Bailey, 2022). For the purpose of this research, I will follow Beckers & Van Aelst's conceptualisation of actors in the news as set out on the following page in Figure 1 (2019, p. 874).

Figure 1 Actors in the news, adapted from Beckers & Van Aelst (2019)



3.2 European media landscape

In order to answer the research question, it is necessary to first understand more about the structure and nature of the European media landscape, focusing specifically on the press. The decision to focus on the press will be elaborated upon in section 3.4 of this chapter. There is a consensus that the European media landscape is segmented along national lines (Bijsmans and Altides, 2007; Königslöw, 2012). Indeed, the lack of a European public sphere and pan-European media has been highlighted as a threat to the democratic legitimacy of the European Union (Ward, 2002; Habermas and Cronin, 2009). The dearth of transnational publications has been attributed to the linguistic and cultural diversity in the EU, as well as the lack of a pan-European advertising market, which make it more challenging to appeal to such a broad market (Varga, 2011). In recent decades, several transnational newspapers have emerged, such as Euractiv and Politico. These have had considerable success, but have a limited, elite readership (Varga, 2011). Thus, in order to gauge the European discourse on sustainability (Diaconeasa et al., 2022), as well as other topics from feminist foreign policy to the refugee crisis (Gottlob and Boomgaarden, 2020; Rosén Sundström, 2023), previous research has often focussed on national newspapers. Following this approach, this study will also examine two case studies of the national press in two EU member states, namely Austria and Czechia, as is discussed in further detail in the subsequent section.

3.3 Case selection: Countries

In order to develop a more comprehensive understanding of the media discourse on sustainable food in the European Union, two member states were selected which, while they share similarities, represent different aspects of European culture and society. The case selection therefore adopts a most-similar systems research design, as set out by Esser and Vliegenthart (2017) in their overview of comparative research methods in communication science. Austria and Czechia are both central European countries of a similar size and population. They have a similar cultural and culinary heritage due to their shared history of the Austro-Hungarian empire. Furthermore, as is explained in the following section of this chapter, the media systems in both countries fall under the Democratic Corporatist Model (Hallin and Mancini, 2004). Nevertheless, there are differences between the countries which make for fruitful comparison and understanding of how the discourse on sustainable food consumption may vary across the European Union.

Firstly, Austria is a wealthier nation than Czechia; in 2021 Austria had a GDP per capita of €36,950 whereas in Czechia, it was €18,020 (Eurostat, 2021). The difference in the level of their economic development could potentially contribute to a different framing of sustainable food consumption in the media, in light of Ronald Inglehart's post-materialist theory of attitudinal change (Inglehart, 1977). Inglehart posited that as the material security of an individual increases, their priorities shift from a preoccupation with the basic goal of survival, to so-called post-material concerns such as environmental issues. Therefore, following Inglehart's theory, we would expect Austrians to be more concerned about issues such as sustainable food consumption, than the Czech populace, and for this to therefore be reflected in the media discourse. For example, we could perhaps expect there to be more coverage of the issue in the Austrian media, in order to cater to the interests of Austrian readers (Galtung and Ruge, 1965; Harcup and O'Neill, 2001; Boykoff, 2008).

Equally, one might also argue that although economic disparities do exist within the EU, in Czechia the quality of life is still high, especially compared to other parts of the world (Deloitte, 2019), and most Czech citizens do not have concerns about their basic survival needs. Indeed Czechia has the lowest poverty rate in the OECD (OECD, 2023). One might therefore question whether the difference in affluence between Austria and Czechia would make a significant

difference to their attitudes towards sustainable food. Therefore another potential factor to consider is the legacy of the Communist regime for certain EU countries. Chaisty and Whitefield (2015) find, for example, from their analysis of the International Social Survey Program (ISSP) surveys from 1993 to 2010 that in post-Communist EU countries, citizens' support for environmental policies was distinctly lower compared to citizens in other EU countries, even when controlling for other factors such as economic development. They attribute this to the so-called 'stickiness of citizen values', arguing that citizens in post-Communist countries still view environmental issues through a distinctive ideological lens (Chaisty and Whitefield, 2015, p. 612). While a considerable amount of time has passed since this study, we still see evidence that environmental issues have a lower salience in post-Communist EU countries. For example, in Czechia, the Green Party (Strana zelených) has had limited electoral success. In the last 10 electoral terms, they have only had representation in the Chamber of Deputies twice, and not since 2010. On the other hand, in Austria, the Austrian Greens (Die Grüne Alternative) have consistently had representation in the National Council and in 2019 entered government for the first time, in coalition with the Austrian People's Party (Österreichische Volkspartei).

In sum, Austria and Czechia have been selected for comparison because, while they share some similar traits, they can be considered representative of wider regional differences in the EU due to their different levels of economic development, the Communist legacy of Czechia, and thus, the differing salience of environmental issues between the two countries. This thesis will also address a gap in the literature, as the media discourse on sustainable food systems in Austria and Czechia has not previously been investigated.

3.4 Case selection: Newspapers

In order to analyse the discourse on sustainable food systems in the mainstream press, this study includes 3 national newspapers from each country. Although newspaper consumption throughout Europe is in decline, they are still key influencers of public opinion and awareness of current affairs, and particularly environmental issues (Boykoff, 2008; Nerlich, Forsyth and Clarke, 2012; Diprose *et al.*, 2018), and they provide an accessible means of assessing national trends (Broadbent *et al.*, 2016). Furthermore, a focus group study on the issue of meat consumption and the environment which involved participants from the UK, US, China and Brazil found that despite the increasing use of social media, traditional media outlets such as

national television, radio, and the press "remain important vehicles for informing the public on developments in knowledge in relation to health and environment" (Happer and Wellesley, 2019). While it is not clear if this conclusion can also be applied to Austria and Czechia, as will be elaborated on further below, it is clear that the press still have an important influence in both countries.

It is important to note that there are considerable variations between the media landscapes in different countries, often shaped by differences in countries' political systems (Statham and Koopmans, 2010). Therefore in order to provide further context for my analysis, a brief overview of the media landscape of Austria and Czechia follows, focussing particularly on the mainstream press.

The Austrian media system falls within the Democratic Corporatist Model, as set out by Hallin & Mancini (2004), characterised by a highly developed commercial media market, limited state power, strong protection for press freedom and a high level of newspaper circulation. Indeed, Austria has the highest printed newspaper consumption rate in Europe (Newman *et al.*, 2020). Furthermore, it is interesting to note that there is a high degree of concentration in the Austrian press, with a select few publications dominating the market. While in the past, Austrian newspapers tended to have strong links to political parties or trade unions, a phenomenon referred to as party-press parallelism, these links have become considerably weaker over the last generation (Hallin and Mancini, 2004). There is now a low level of political parallelism in the Austrian media, with more of a tendency towards 'catch-all' media that tries to attract readers of various political persuasions (Hallin and Mancini, 2004). In recent years, however, there have been several scandals related to the freedom of the press, for example the former Chancellor Sebastian Kurz resigned in 2021 due to allegations of him paying for positive coverage in the press (Reporters Without Borders, 2023a).

The contemporary media system of Czechia, as it has developed since 1989, like Austria, corresponds to the Democratic Corporatist Model. It is a liberal, pluralistic system, with a framework of constitutionally guaranteed freedom of expression (Köpplová and Jirák, 2010). In recent years, however, there has been increasing rhetoric from politicians seeking to stoke distrust of the media, with former president Miloš Zeman being an outspoken critic (Reporters Without Borders, 2023b). There is a low level of political parallelism and the print media is almost exclusively in foreign ownership. However, in 2013 the media group Mafra, which

publishes two Czech daily newspapers, was bought by Andrej Babiš, who went on to become the Czech Prime Minister in 2017 as the leader of the ANO party, leading to concerns about the independence of journalists and the freedom of the press (Waschková Císařová and Kotišová, 2022). While newspaper readership had been in decline for several years following the 2008 financial crisis, in recent years newspaper readership in the Czech Republic has remained stable. Recent figures show that 65% of the Czech population read newspapers, therefore demonstrating that they still reach a considerable proportion of the population (Unie vydavatelů, 2023). The same report, however, also highlights that more educated and wealthier Czech citizens are considerably more likely to read a newspaper. This therefore has implications for the findings of my research, as these statistics imply that the media discourse on sustainable food consumption may only have an impact on particular socio-economic groups in the Czech population.

The publications included in this study were selected based on three criteria. Firstly, for reasons of practicality, newspapers were selected based on their availability on an online archive. Secondly, newspapers were selected based on their readership figures, as the publications with the highest readership are likely to have a greater impact on public opinion, elite actors such as politicians, and the wider public discourse on sustainable food systems (Nerlich, Forsyth and Clarke, 2012; Painter and Gavin, 2016; Happer and Wellesley, 2019). Thirdly, I aimed to select newspapers of varying ideological orientations, to try to capture the breadth of the respective national newspaper landscapes and reflect various political ideologies (Diprose *et al.*, 2018; Diaconeasa *et al.*, 2022). An overview of the selected newspapers is presented in Table 1 on the following page.

 Table 1 Selected Newspapers in Austria and Czechia

| Country | Newspaper | Orientation | Readership |
|---------------------|---------------|---|--------------------|
| Austria Neue Kronen | | a Neue Kronen Most read newspaper, tabloid. | |
| | Zeitung | Uncontested market leader for | 2022 (Verein ARGE |
| | | many years, limited | Media-Analysen, |
| | | competition from other tabloids | 2023). |
| | | (Steinmaurer, 2010). | |
| | | Fluctuates between social | |
| | | democratic, conservative and | |
| | | right-wing populist | |
| | | (Eurotopics, n.d.). | |
| Austria | Der Standard | Most read quality newspaper, | 520,000 readers in |
| | | liberal, centre-left (Eurotopics, | 2022 (Verein ARGE |
| | | n.d.). | Media-Analysen, |
| | | | 2023) |
| Austria | Die Presse | 2 nd most read quality | 250,000 readers in |
| | | newspaper, conservative-liberal | 2022 (Verein ARGE |
| | | (Eurotopics, n.d.). | Media-Analysen, |
| | | | 2023) |
| Czechia | Blesk | Most read newspaper, tabloid. | 626,000 readers in |
| | | | 2022/2023 (Unie |
| | | | vydavatelů, 2023). |
| Czechia | Mladá Fronta | 2 nd most read newspaper, | 400,000 readers in |
| | Dnes | quality, liberal publication. | 2022/2023 (Unie |
| | | (Eurotopics, n.d.) | vydavatelů, 2023). |
| Czechia | Lidové Noviny | 4 th most read newspaper, | 155,000 readers in |
| | | quality, conservative. | 2022/2023 (Unie |
| | | (Eurotopics, n.d.) | vydavatelů, 2023). |

The Austrian newspapers were accessed through Factiva and the Czech newspapers were accessed through Anopress. The time period chosen is a 7-month period from 01.05.2020 until 30.11.2020 which should capture any coverage of the Farm to Fork Strategy, which was published at the end of May 2020. Furthermore, given that this time frame is relatively recent, it can provide useful insights for the ongoing deliberations over the implementation of the Farm to Fork Strategy. Relevant articles for analysis were identified using the search engines of the respective databases by using the search strings below in Table 2, which have also been translated into English for clarity. The search terms are based on those employed by Diaconeasa *et al.* (2021). Following pre-sampling research, the decision was made to additionally include the terms "diet" and "environment" as these were commonly mentioned in articles relevant to the research question.

Table 2 Search strings used to retrieve relevant articles

Search string: Czech

(jídl* OR potravin* OR diet*) AND (udržiteln* OR životn* prostřed* OR planet*)

Search string: German

(essen OR Lebensmittel* OR Diät*) AND (nachhaltig* OR Nachhaltigkeit* OR Umwelt*)

Search string: English

(food OR grocer* OR diet*) AND (sustainable OR sustainability OR environment*)

Given that 'sustainability' has a broad meaning that can also be used in other contexts, the term can pose a challenge methodologically (Barkemeyer *et al.*, 2009; Diprose *et al.*, 2018). The initial search results were therefore read and refined to ensure that only articles relevant to the research were included, that is, articles that were related to both food and sustainability, giving a total number of 142 articles included in my sample. This process is set out in Table 3. All

articles were then imported to the qualitative analysis software MAXQDA. This allowed me to manage, analyse and compare the articles. A list of all the articles analysed can be found in the Appendix.

Table 3 Sampling process

| Newspaper | Search Results | Relevant Results |
|---------------------|----------------|------------------|
| Neue Kronen Zeitung | 85 | 34 |
| Der Standard | 85 | 21 |
| Die Presse | 139 | 28 |
| Blesk | 69 | 16 |
| Mladá Fronta Dnes | 139 | 18 |
| Lidové Noviny | 136 | 25 |

3.5 Methodological Approach: Qualitative Content Analysis and Framing Theory

Having established the selected countries and newspapers, the following section will elaborate on the analytical framework used to conduct the research. The methodological approach consists of qualitative content analysis. Furthermore, in order to answer the second part of the research question related to the framing in the media discourse, this thesis will draw on Entman's framing theory (1993). Entman provided the first comprehensive and precise framework for frame analysis and this has consequently since become one of the most popular theories in media and communication studies (Bryant and Miron, 2004; Atanasova, 2019). Furthermore, Entman's framing theory has been influential in previous research into the discourse on sustainability and environmental issues (Uusi-Rauva and Tienari, 2010; Diprose et al., 2018; Diaconeasa et al., 2022). According to Entman (1993, p. 52), framing is to 'select some aspects of a perceived reality and make them more salient in a communicating text, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation for the item described.' In the context of sustainable food, framing can have an important role in the public discourse in identifying what the key problems are, who or what causes these problems, what the solutions are, and who should take responsibility for their implementation. These four key functions of a frame as set out by Entman therefore form the basis for the frame analysis carried out on the articles, as elaborated later in this chapter.

In order to conduct a content analysis, both an inductive and deductive approach is possible. Deductive studies involve compiling a list of codes or frames from past research on the same or a similar topic and establishing their presence in the data (Atanasova, 2019). This approach, however, risks that certain categories or frames may be omitted by depending on previous research (Matthes and Kohring, 2008). On the other hand, an inductive analysis involves coding with an open perspective, reducing the likelihood that codes could be overlooked, whilst also having the benefit of being able to identify new themes and frames (Atanasova, 2019). This study will combine the inductive and deductive methods and will thus seek to establish whether topics and frames previously identified by researchers are also present in my sample, as well as potentially identifying new topics and frames that could be used in the future as a starting point for deductive studies. This approach will thereby contribute to the previous literature on this subject whilst avoiding the risk of overlooking any frames.

A limitation of the approach of qualitative content analysis is that the researchers' own mental constructs and biases may have an impact on the categories and frames identified (Van Gorp and van der Goot, 2012). I therefore followed a systematic approach involving several phases, and the research material was regularly scanned and compared (Van Gorp and van der Goot, 2012). All 144 articles were read at least twice during the coding process. Two processes were followed in order to respond to both parts of the research question, which are both set out below.

In relation to the first part of the research question seeking to identify the most prominent issues and actors in the sample, the following process was followed. Following a mixed methods approach, I firstly drew on the relevant literature in order to establish a preliminary codebook of issues and actors. Through inductive analysis of the articles, the codebook was adapted as necessary in order to include additional topics addressed and actors mentioned. If multiple topics and actors were addressed within one article, these were all duly noted. Analytic memos were written during the coding process in order to note down any initial ideas, for example about emerging patterns (Yin, 2016, p. 333). Once all the articles had been analysed, any categories with significant overlap in their content were merged, and categories with less than two coded segments were discarded.

For the framing analysis carried out in response to the second part of the research question, a systematic approach for frame analysis was followed, as set out by van Gorp (2009) who builds

on Entman's framing theory (1993) and as exemplified in their exploratory investigation of framing in communication materials from key stakeholders in the Belgian food and agricultural sector (Van Gorp and van der Goot, 2012). The first step involved coding for elements of articles fulfilling any of the four functions of a frame as set out by Entman (1993), and entering them into a table created for each article using the Memo function in MAXQDA. This process is set out in more detail below in Table 4.

Table 4 Coding system for frame analysis

| Frame element | Question for qualitative text analysis |
|--------------------------|---|
| Problem Definition | What is the problem with the food system? |
| Causal Interpretation | Who or what causes this problem? |
| Treatment Recommendation | How could this issue with the food system be resolved? |
| Moral Evaluation | Who should take responsibility for implementing the solution? |

Furthermore, I coded for manifest framing devices that might contribute to the reader's interpretation of the message of the articles, such as lexical choices, argumentative structures, slogans, examples, references to sources and language style (Van Gorp and van der Goot, 2012). The second step consisted of axial coding (Strauss and Corbin, 1990), where the codes and tables were compared in order to identify similarities in the framing elements identified in the articles. Where similarities were identified between the articles, they were grouped together as 'Document Sets' in MAXQDA, and subsequently re-read in order to confirm a common frame in the articles and identify a common theme or cultural phenomenon in order to label the frames. Finally, a frame matrix (Van Gorp and van der Goot, 2012, p. 132) was created for each of the five frames that were identified, where the elements that constitute the frame were brought together. These, along with the other results of the analysis, will be presented in the subsequent chapters.

Chapter 4: Qualitative Content Analysis of Austrian Press

This chapter presents the results qualitative analysis carried out in order to investigate which topics and actors are present in the Austrian media discourse. These descriptive statistics allow for a better understanding of how the concept of sustainable food systems is presented to the Austrian public by the media and which voices dominate in the press coverage. Below, Table 5 sets out the percentage of articles analysed which address each topic, organised in descending order by which topics are most prominent. For the purpose of the analysis, the articles will be referred to by their numbers as listed in the Appendix.

Table 5 Percentage of articles in Austrian newspapers that reference each topic

| Sustainable Food | Kronen | Die Presse | Der | All |
|------------------------|---------|------------|----------|------------|
| Topics | Zeitung | | Standard | newspapers |
| Regional Food | 41.18 | 38.10 | 28.57 | 34.94 |
| Innovations | 20.59 | 42.86 | 28.57 | 28.92 |
| Food Packaging and | 38.24 | 42.86 | 7.14 | 28.92 |
| Waste | | | | |
| Organic Food and | 20.59 | 28.57 | 32.14 | 25.30 |
| Farming | | | | |
| Diet and Food Patterns | 17.65 | 42.86 | 17.86 | 24.10 |
| Animal Welfare | 11.76 | 33.33 | 28.57 | 22.89 |
| Food Waste | 17.65 | 47.62 | 3.57 | 20.48 |
| Biodiversity | 5.88 | 4.76 | 10.71 | 7.23 |
| Hunger and Starvation | 2.94 | 14.29 | 7.14 | 7.23 |
| Health | 8.82 | 4.76 | 3.57 | 6.02 |
| Working Conditions | 0.00 | 14.29 | 7.14 | 6.02 |
| Educating about | 2.94 | 14.29 | 0.00 | 4.82 |
| Sustainability | | | | |
| Seasonal Food | 5.88 | 0.00 | 7.14 | 4.82 |
| Environmentally | 0.00 | 9.52 | 3.57 | 3.61 |
| Friendly Farming | | | | |
| Methods | | | | |
| Farm to Fork Strategy | 0.00 | 4.76 | 3.57 | 2.41 |

The most prominent topic overall in the Austrian press is regional food, that is, food produced in Austria. The time period selected was only a few months after the outbreak of the Covid-19 pandemic and consequently several articles make reference to the idea of self-sufficiency due to supply chains being disrupted and dependency on exports being highlighted as an issue at the time (Kronen Zeitung 26, Der Standard 6). Additionally, the articles include references to the increasing popularity of regional products (Die Presse 3, Der Standard 4), and initiatives and innovations to make regional food more accessible (Der Standard 11, Kronen Zeitung 10, Die Presse 12). Furthermore, readers are encouraged to buy food produced in Austria as a way of reducing their impact on the environment (Kronen Zeitung 7, Kronen Zeitung 15, Die Presse 4). The topic of regional food is particularly prominent in the Kronen Zeitung and Die Presse, where approximately 40% of articles featured this topic. The positive framing of regional, Austrian production is discussed in further detail in Chapter 6.

All three newspapers also focus considerably on innovations in relation to food and sustainability, however this theme is particularly prominent in Die Presse. The newspapers cover the development of plant-based meat alternatives (Kronen Zeitung 4), innovation in food packaging (Die Presse 10, Der Standard 19), the first online farmer's market in Austria (Die Presse 12), and the use of robots in agriculture (Der Standard 18).

The third most prominent topic in the Austrian press is food packaging and waste. This topic receives more attention in Die Presse and the Kronen Zeitung; Der Standard features only a few articles on this subject. The newspapers report on businesses trying to make their packaging more environmentally friendly (Kronen Zeitung 6, Kronen Zeitung 12, Die Presse 10), discussions about the proposal for a new deposit scheme in Austria for plastic bottles (Kronen Zeitung 19, Kronen Zeitung 27, Die Presse 26), EU legislation to reduce plastic waste (Die Presse 7, Die Presse 18) and tips for how readers can avoid products with excessive packaging (Kronen Zeitung 32).

Organic food and farming also receives considerable attention from all the publications. There is coverage of businesses that offer organic food (Kronen Zeitung 9, Kronen Zeitung 26, Die Presse 14), the increasing popularity of organic food (Kronen Zeitung 20, Die Presse 1, Der Standard 4), initiatives to promote organic food (Kronen Zeitung 28), the EU target under the Farm to Fork Strategy for 25 percent of agricultural land to be farmed organically by 2030 (Die

Presse 8) as well as articles encouraging readers to buy organic food (Kronen Zeitung 7, Kronen Zeitung 15, Die Presse 4).

Diet and food patterns are also a popular subject for the Austrian newspapers although more so in Die Presse compared to the other two publications. This topic includes articles on the increasing number of vegetarians, vegans, and flexitarians, (Kronen Zeitung 1, Die Presse 20), the development of meat alternatives (Kronen Zeitung 4, Die Presse 20, Der Standard 14), restaurants offering vegan food (Kronen Zeitung 9, Kronen Zeitung 18, Die Presse 24), recommendations to the reader to change their diet, for example by reducing their meat consumption, in order to reduce their impact on the environment (Kronen Zeitung 15, Die Presse 9, Der Standard 21) as well as promotion of a vegetarian diet for animal welfare reasons (Die Presse 27).

Animal welfare is a popular topic in Die Presse and Der Standard, less so in the Kronen Zeitung. The articles cover people choosing to follow a vegetarian or vegan diet for animal welfare reasons (Kronen Zeitung 1, Die Presse 27), restaurants offering vegan products for animal welfare reasons (Kronen Zeitung 18, Die Presse 24) and how new technology could help improve farm animals' wellbeing (Der Standard 17). This topic also intersects with discussions about regional food, with regional production presented as a way of avoiding having to transport animals (Kronen Zeitung 31) and higher welfare standards in Austria compared to other countries are highlighted (Der Standard 6).

Food waste features considerably in Die Presse, somewhat in the Kronen Zeitung, and almost not at all in Der Standard, where only one article covers this topic. Articles highlight statistics about the amount of food wasted and discuss how this should be addressed (Kronen Zeitung 11, Die Presse 2, Die Presse 23), and describe initiatives to tackle food waste by NGOs, businesses, and restaurants (Kronen Zeitung 14, Kronen Zeitung 30, Die Presse 1).

Only a few articles across the newspapers addressed biodiversity. These primarily include discussions about how biodiversity loss could be prevented through changes in the food system (Kronen Zeitung 7, Die Presse 19, Der Standard 13). One article highlights the failure of the

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¹ A flexitarian diet is a diet that is primarily vegetarian with the occasional inclusion of meat or fish (Derbyshire, 2017).

EU's Common Agricultural Policy to prevent biodiversity loss (Der Standard 9). Only six articles address the issue of hunger and starvation. These predominantly address the threat of famine due to the Covid-19 pandemic (Kronen Zeitung 15, Die Presse 28, Der Standard 12). Additionally, few articles touch upon health in relation to food and sustainability. They cover diverse topics including people choosing to follow a vegetarian diet for health reasons (Kronen Zeitung 1), businesses aiming to provide healthy and sustainable products to consumers (Kronen Zeitung 9), and the health risks associated with the working conditions in meat production, in light of an incident in a slaughterhouse in Germany where approximately 1,500 workers became infected with Covid-19 (Die Presse 27). There are also only a few articles that cover working conditions in the food industry. These primarily refer this same incident of the Covid-19 infections in the German slaughterhouse (Die Presse 14, Die Presse 27, Der Standard 16).

A few articles in the Kronen Zeitung and Die Presse address educating about sustainability. For example, articles cover an initiative to educate young children about healthy eating and regional food (Kronen Zeitung 28) and a new course being offered at an Austrian university on agricultural technology and management, with an emphasis on sustainability and technological innovations (Die Presse 3). There are also several articles that reference seasonal food, for example restaurants that prioritise seasonal produce (Kronen Zeitung 1) and advice to readers to buy seasonal food in order to reduce their impact on the environment (Kronen Zeitung 7).

There is little discussion of environmentally friendly farming methods, with only three articles mentioning this topic, and no articles at all in the Kronen Zeitung covering this theme. The articles that do cover this topic include an article on university programmes on sustainable land use (Die Presse 3), research on how to prevent biodiversity loss through environmentally friendly farming methods, (Die Presse 19), as well as the EU's Farm to Fork Strategy (Der Standard 9).

Interestingly, only two articles mention the Farm to Fork Strategy, despite the time period selected for the sample covered the time of its publication. One article addresses fears about an additional economic burden for farmers as a result of the strategy (Der Standard 9), whilst the other article is predominantly descriptive, setting out the different aspects of the strategy (Die Presse 8).

Overall, it can be concluded that the concept of sustainable food systems is mostly presented to the Austrian public by the Austrian newspapers in relation to the topics of regional food, innovations, food packaging and waste, organic food and farming, and diet and food patterns. On the other hand, themes such as educating about sustainability, seasonal food, environmentally friendly farming methods, and the Farm to Fork Strategy are not highlighted to the Austrian readership.

During the coding process, actors involved in the media discourse on sustainability and food were also identified. Table 6 below sets out the percentage of articles in each newspaper that cited or quoted various actors. While this data does not show in what context these actors appear in the articles and how much credibility they are granted, it does give an insight into which actors are the most dominant in the media discourse, in this case, particularly individuals and businesses.

Table 6 Percentage of articles in Austrian newspapers that reference each actor

| Actors | Kronen Zeitung | Die Presse | Der Standard | All newspapers |
|-----------------|----------------|------------|--------------|----------------|
| Individuals | 58.82 | 76.19 | 28.57 | 51.81 |
| Businesses | 32.35 | 80.95 | 28.57 | 42.17 |
| Government | | | | |
| Authorities and | 35.29 | 23.81 | 39.29 | 34.94 |
| Politicians | | | | |
| Farmers | 26.47 | 19.05 | 28.57 | 25.30 |
| Supermarkets | 23.53 | 28.57 | 14.29 | 21.69 |
| Researchers | 8.82 | 33.33 | 25.00 | 20.48 |
| European Union | 14.71 | 33.33 | 17.86 | 20.48 |
| NGOs | 20.59 | 38.10 | 3.57 | 19.28 |
| Hospitality | 17.65 | 28.57 | 7.14 | 16.87 |
| United Nations | 0.00 | 9.52 | 0.00 | 2.41 |

The actor referred to the most often in the Austrian newspapers is the individual, which includes allusions to consumers, households, and Austrians. They are especially prominent in coverage from Die Presse, where over three quarters of the articles reference individuals in the debate

on sustainability and food. Contrary to what these figures may suggest, however, ordinary people are rarely given a voice and are mostly referred to, rather than quoted.

Businesses also feature considerably in the debate, including large businesses such as Nestlé (Die Presse 15), small local businesses (Die Presse 22), start-ups (Der Standard 11, Die Presse 6), and Austrian businesses being highlighted for their environmental credentials (Kronen Zeitung 21). The coverage includes businesses active in various fields such as aquaponics (Die Presse 11), food packaging production (Die Presse 10), an online Austrian farmer's market (Die Presse 12), food made from insects (Die Presse 13), and agricultural technology (Der Standard 18). Businesses feature particularly prominently in Die Presse compared to the other two newspapers.

The third most significant actor in the press coverage is government authorities and politicians, who receive the most coverage in Der Standard and the Kronen Zeitung. Articles cover a commitment from the government to have compulsory labelling on meat to indicate where it has come from (Die Presse 27), new criteria announced by the government for awarding public contracts that prioritise climate protection and regionality (Der Standard 2), and research into improving animal welfare that is being funded by the government (Der Standard 17). It is exclusively national politicians that feature in the debate; there are no references to Members of the European Parliament or politicians in other countries, which perhaps suggests that the issue of sustainable food systems is mainly considered on a national, rather than international, level.

Farmers, supermarkets, and researchers also feature considerably across all the newspapers. The European Union is mentioned in all the newspapers, for example there are references to the European Commission (Kronen Zeitung 23, Der Standard 9), existing EU legislation (Kronen Zeitung 27, Die Presse 7), and proposals for EU legislation (Die Presse 26). NGOs feature substantially in the Kronen Zeitung and Die Presse, but hardly at all in Der Standard. Among the NGOs referenced are WWF (Kronen Zeitung 3, Kronen Zeitung 7, Die Presse 2), Greenpeace (Kronen Zeitung 20, Kronen Zeitung 23, Die Presse 21), and the Global Footprint Network (Die Presse 4). The hospitality industry is also mentioned, more so in the Kronen Zeitung and Die Presse than in Der Standard. Articles cover topics such as a scheme to make it easier for restaurateurs to buy regional produce (Kronen Zeitung 10), an Austrian vegan restaurant chain (Kronen Zeitung 18), and calls for more transparency in the hospitality

industry about where food, particularly meat, has come from (Die Presse 16, Der Standard 6). The United Nations is largely insignificant in the Austrian media coverage, only being mentioned in two articles from Die Presse.

In summary, the actors most frequently cited or quoted in the newspaper coverage in Austria on sustainability and food are individuals, businesses, and government authorities and politicians, which perhaps gives an indication of who the media presents as the most relevant actors involved in these issues. On the other hand, NGOs, hospitality, and the United Nations receive limited coverage and therefore the press coverage maybe gives the impression to Austrian readers that these actors are less relevant to the issue of sustainable food systems. The responsibility and culpability ascribed to various actors will later be addressed in more detail in Chapter 7 through the framing analysis.

Chapter 5 : Qualitative Content Analysis of Czech Press

This chapter will present the findings of the qualitative content analysis performed on the Czech newspaper articles in order to identify, first, which topics and, second, which actors are the most prominent in the media discourse on sustainable food systems. Table 7 shows the percentage of articles in each newspaper that covered each topic, arranged in descending order from the most frequently mentioned topic, to the least frequently mentioned topic overall.

Table 7 Percentage of articles in Czech newspapers that reference each topic

| Sustainable Food | Blesk | Mladá | Lidové Noviny | All newspapers |
|--|-------|-------------|---------------|----------------|
| Topics | | Fronta Dnes | | |
| Innovations | 25.00 | 27.78 | 36.00 | 30.51 |
| Food Packaging and Waste | 25.00 | 22.22 | 36.00 | 29.30 |
| Diet and Food Patterns | 31.25 | 22.22 | 24.00 | 25.42 |
| Health | 31.25 | 22.22 | 8.00 | 18.64 |
| Regional Food | 25.00 | 27.78 | 4.00 | 16.95 |
| Environmentally Friendly Farming Methods | 6.25 | 16.67 | 20.00 | 15.25 |
| Food Waste | 18.75 | 11.11 | 4.00 | 10.17 |
| Biodiversity | 6.25 | 16.67 | 4.00 | 8.47 |
| Organic Food and Farming | 6.25 | 16.67 | 4.00 | 8.47 |
| Animal Welfare | 0.00 | 5.56 | 12.00 | 6.78 |
| Hunger and Starvation | 0.00 | 11.11 | 8.00 | 6.78 |
| Educating about Sustainability | 6.25 | 11.11 | 4.00 | 6.78 |
| Farm to Fork Strategy | 12.50 | 5.56 | 4.00 | 6.78 |
| Working Conditions | 0.00 | 0.00 | 0.00 | 0.00 |
| Seasonal Food | 0.00 | 0.00 | 0.00 | 0.00 |

The topic that receives the most attention in the Czech press coverage is innovations in the food sector that are related to sustainability, which is a popular topic across all the Czech newspapers. The publications include reporting on companies altering their packaging to reduce plastic waste (Blesk 6, Mladá Fronta Dnes 13, Lidové Noviny 2), food made from insects (Blesk 15), artificial intelligence that allows supermarkets to predict how much food they should order and thereby prevent food waste (Mladá Fronta Dnes 15), and 3D printed meat (Lidové Noviny 7, Lidové Noviny 21).

Another topic that receives considerable coverage is food packaging and waste, with the most coverage appearing in Lidové Noviny. The EU's Directive on single-use plastics is covered by several articles (Mladá Fronta Dnes 8, Lidové Noviny 10, Lidové Noviny 17). This legislation was introduced in 2019 and sought to eliminate the 10 single-use plastic items most commonly found on Europe's beaches. Furthermore, there are articles reporting on innovations in food packaging to reduce plastic waste (Blesk 7, Lidové Noviny 2, Lidové Noviny 13), and advice to readers to try to buy food without packaging (Blesk 8).

Another popular topic is that of diet and food patterns, which had relatively even coverage across all three publications. There are several articles with recommendations to readers to reduce their meat consumption if they want to reduce their carbon footprint (Blesk 1, Blesk 4, Mladá Fronta Dnes 4). Additionally, there is reporting on the creation of new meat replacement products (Blesk 2, Lidové Noviny 9, Lidové Noviny 14), the trend of more people becoming flexitarians (Mladá Fronta Dnes 4, Lidové Noviny 7), and the increasing demand for vegan and vegetarian products (Mladá Fronta Dnes 6, Lidové Noviny 7).

There are several articles that highlight health in relation to sustainability and food, particularly in Blesk. This includes subjects such as the health benefits of following a flexitarian diet (Blesk 1), the health benefits of meat alternatives (Blesk 2, Mladá Fronta Dnes 6, Lidové Noviny 9), and the health risks from microplastics getting into the food chain (Mladá Fronta Dnes 8). Additionally there are articles that discuss how the way food is produced can lead to the emergence of viruses such as Covid-19 (Mladá Fronta Dnes 12), and also that those who reduce their meat consumption should ensure that they are getting all the nutrients that they need (Lidové Noviny 7).

Regional food, i.e. food that is produced in the Czech Republic, is covered by several articles in Blesk and Mladá Fronta Dnes, but only one article in Lidové Noviny. Several of these articles are on a proposal made by a cross-party coalition of politicians for there to be a quota for the amount of Czech food sold in supermarkets (Blesk 12, Blesk 16, Mladá Fronta Dnes 16). The proposal, whereby it was proposed that the proportion of locally produced food should be increased to 55% within a year, and subsequently to 85%, was approved by the lower house of the Czech Parliament but later rejected by the Czech Senate. The reasoning behind the legislation was a desire to support Czech farmers and to reduce carbon emissions from importing food from distant countries. However, the Senate voted it down due to concerns that it would break the rules of the EU single market, reduce competition, and increase prices. Other topics include the possibility of making vegetarian burgers from rapeseed which is grown in Czechia, instead of soya which is often imported from South America (Blesk 2), and a project educating students at a culinary school in Cheb about regional produce (Mladá Fronta Dnes 7).

Environmentally friendly farming methods are covered the most in Lidové Noviny, with some coverage in Mladá Fronta Dnes and very little coverage in Blesk. The reporting covers a scheme by the municipal government in Prague to encourage environmentally friendly farming methods by giving away land for free (Blesk 9, Mladá Fronta Dnes 17), a project educating students at a culinary school about the benefits of organic farming (Mladá Fronta Dnes 7), the UN sustainable development goal to promote sustainable agriculture (Lidové Noviny 11), and the Farm to Fork strategy (Lidové Noviny 18).

In total there are six articles covering food waste, with most coverage appearing in Blesk and Mladá Fronta Dnes. These include tips for how to avoid food waste (Blesk 7, Blesk 8), advice on how to use all the parts of fruit and vegetables in order to avoid waste (Blesk 11), a report highlighting that food waste is especially a problem in richer countries (Mladá Fronta Dnes 12) and an article about artificial intelligence which helps to prevent food waste in supermarkets (Mladá Fronta Dnes 15).

There are a handful of articles in the Czech press that address biodiversity. Several of these are in reference to the Farm to Fork strategy and its aim of increasing biodiversity in Europe (Blesk 15, Mladá Fronta Dnes 18, Lidové Noviny 18). Furthermore, there are articles on the World Wildlife Fund highlighting the impact of the food industry on biodiversity (Mladá

Fronta Dnes 6) and the impact of palm oil production on biodiversity due to deforestation in rainforests (Mladá Fronta Dnes 9).

Organic food and farming is not a particularly prominent topic in the Czech press, with only five articles covering this topic. The coverage includes articles on the previously mentioned scheme from the Prague municipality where free land was given away to be used for organic and ecological farming (Blesk 9), supermarkets expanding their range of organic products (Mladá Fronta Dnes 6), and plans under the Farm to Fork Strategy to increase the amount of land in the EU that is farmed organically, and the concerns of Czech farmers that their yields will decrease as a result (Lidové Noviny 18).

Animal welfare was also not a topic present in many articles, indeed it did not feature in any articles in Blesk and only one article in Mladá Fronta Dnes. The articles describe how organic farming allows animals to live in a more natural habitat (Mladá Fronta Dnes 7), the increasing popularity of meat alternatives due to rising concern among consumers about animal welfare (Lidové Noviny 14), and a new initiative from KFC where they are 3D printing chicken nuggets, in light of criticism about the number of chickens killed for their business (Lidové Noviny 21).

Blesk did not feature any articles on the issue of hunger and starvation, and there are only two respectively from the other two publications. These address rising poverty and hunger as a result of the Covid-19 pandemic (Mladá Fronta Dnes 5, Lidové Noviny 6), and the UN sustainable development goal to end world hunger and whether this will be met by 2030 as intended (Lidové Noviny 11).

There are a few articles that touch upon educating about sustainability. These include articles on an information point set up by a charity to educate people about how they can make their lifestyle more sustainable (Blesk 10), the previously mentioned programme where students of a culinary school are educated about regional and organic food production (Mladá Fronta Dnes 7) and a partnership between a waste management company and municipalities in order to educate people about how to separate waste correctly (Lidové Noviny 24).

Very few articles discuss the Farm to Fork strategy, despite its publication during the time period covered. One article describes the negative reaction of Czech farmers to the proposal

for the reduction of meat and dairy production (Blesk 13). Other articles focus on the part of the strategy that outlines how the Commission wants to support the production of meat alternatives such as products made from insects (Blesk 15) and plans to reduce the use of artificial pesticides and fertilisers (Lidové Noviny 18). Topics such as working conditions in the food industry and seasonal food did not feature at all in the Czech press coverage.

In sum, the most prominent topics in the Czech newspapers in relation to food and sustainability are innovations, food packaging and waste, diet and food patterns, health, and regional food. It can therefore be concluded that it is primarily through these issues that the concept of sustainable food systems is presented to Czech readers by the press. Themes which receive the least attention include educating about sustainability, the Farm to Fork Strategy, working conditions, and seasonal food, which perhaps gives the impression to readers that these topics are of little relevance to the issue of sustainable food systems. This chapter will now turn to the actors cited and quoted in the articles in relation to the discourse on sustainability and food, as set out in Table 8.

Table 8 Percentage of articles in Czech newspapers that reference each actor

| Actors | Blesk | Mladá Fronta Dnes | Lidové Noviny | All newspapers |
|--|-------|-------------------|---------------|----------------|
| Business | 31.25 | 50.00 | 68.00 | 52.54 |
| Individuals | 62.50 | 50.00 | 36.00 | 47.46 |
| Government Authorities and Politicians | 31.25 | 50.00 | 28.00 | 35.59 |
| European Union | 18.75 | 22.22 | 32.00 | 25.42 |
| Farmers | 25.00 | 33.33 | 16.00 | 23.73 |
| Researchers | 18.75 | 27.78 | 24.00 | 23.73 |
| Hospitality | 0.00 | 22.22 | 24.00 | 16.95 |
| United Nations | 0.00 | 33.33 | 16.00 | 16.95 |
| NGOs | 18.75 | 27.78 | 4.00 | 15.25 |
| Supermarkets | 6.25 | 16.67 | 4.00 | 8.47 |

Overall, businesses are the most frequently mentioned actor in the debate, and they are particularly prominent in the coverage from Lidové Noviny. There are different types of businesses mentioned in the articles, including start-ups (Blesk 7, Mladá Fronta Dnes 9), large multinational businesses (Blesk 8, Lidové Noviny 5), retailers (Mladá Fronta Dnes 1, Mladá Fronta Dnes 15) and supermarkets (Mladá Fronta 4, Mladá Fronta 6). There are also businesses from different parts of the food industry, such as businesses in the hospitality industry (Blesk 10, Lidové Noviny 8), food producers (Blesk 6, Blesk 15, Lidové Noviny 2, Lidové Noviny 3, Lidové Noviny 23), agriculture businesses (Mladá Fronta Dnes 2), and businesses that produce packaging for food (Mladá Fronta Dnes 13).

It is individuals that are the second most prominent actor in the media discourse on food and sustainability. They are cited in the context of individuals' diets (Blesk 1, Blesk 2, Blesk 14, Mladá Fronta Dnes 12) individuals' carbon footprint (Blesk 4, Mladá Fronta 4), food waste caused by individuals and households (Blesk 7, Blesk 8, Mladá Fronta Dnes 15), advice in articles to the reader for how they could alter their behaviour to have a smaller impact on the environment (Blesk 8, Blesk 11, Lidové Noviny 16), and consumers (Mladá Fronta Dnes 7, Lidové Noviny 5, Lidové Noviny 22).

Government authorities and politicians are the third most frequently mentioned actor in the Czech press. The Prague municipal government, (Blesk 9), the agricultural ministry (Mladá Fronta Dnes 14, Mladá Fronta Dnes 16), and the environmental ministry (Lidové Noviny 10) are all referenced. Two articles also cover the British government and their plans for policies in relation to food and sustainability (Mladá Fronta Dnes 4, Mladá Fronta Dnes 10). In the newspapers there are references to national politicians (Blesk 9, Blesk 16, Mladá Fronta Dnes 3, Lidové Noviny 10) as well as members of the European Parliament (Mladá Fronta Dnes 18, Lidové Noviny 3, Lidové Noviny 4).

The European Union also features considerably across the three publications. It is mentioned in articles about the EU's Farm to Fork Strategy (Blesk 13, Mladá Fronta Dnes 18, Lidové Noviny 18), the EU ban on single-use plastics (Mladá Fronta Dnes 8, Lidové Noviny 10), a vote in the European Parliament on whether vegetarian burgers and vegetarian sausages are allowed to keep their names (Lidové Noviny 3), and the Common Agricultural Policy (Lidové Noviny 4). There is also an article that addresses how the proposal to have a quota for the

amount of Czech produce sold in Czech supermarkets would conflict with the rules of the EU single market (Blesk 12).

Farmers are mentioned in several articles across all three newspapers, including in references to the Czech Farmers' Union (Blesk 13, Blesk 16, Mladá Fronta Dnes 14). There is also substantial coverage of researchers across various disciplines including nutritional science (Blesk 2), social sciences (Mladá Fronta Dnes 1, Lidové Noviny 6), agriculture (Mladá Fronta Dnes 7), climate science (Lidové Noviny 1), and biology (Lidové Noviny 22).

The hospitality industry is prominent in the coverage from Mladá Fronta Dnes and Lidové Noviny, but does not feature at all in the articles from Blesk. This category includes references to restaurants (Mladá Fronta Dnes 17, Lidové Noviny 7, Lidové Noviny 17), fast-food chains (Mladá Fronta Dnes 11, Lidové Noviny 5), and hotels (Lidové Noviny 17). The United Nations also does not feature at all in the coverage from Blesk, but appears in several articles from the other two publications. These include articles concerning warnings from the UN about rising poverty and hunger because of the Covid-19 pandemic (Mladá Fronta Dnes 5, Lidové Noviny 6), the United Nations Climate Change Conference in 2021, or COP26, (Mladá Fronta Dnes 10), and the UN Sustainable Development Goals (Mladá Fronta Dnes 15, Lidové Noviny 11). NGOs feature relatively frequently in Blesk and Mladá Fronta Dnes, but only appear once in Lidové Noviny. Examples of the NGOS mentioned include Bezobalu, a Czech NGO that promotes zero waste lifestyles (Blesk 10), Oxfam (Mladá Fronta Dnes 5), the World Wildlife Fund (Mladá Fronta Dnes 6, Mladá Fronta Dnes 12, Lidové Noviny 5), and Greenpeace (Mladá Fronta Dnes 10). Supermarkets were not particularly prominent in the Czech press coverage, and were only mentioned in five articles.

To summarise, individuals, businesses and government authorities and politicians can be identified as the most prominent actors in the Czech press coverage of sustainable food systems, whereas the UN, NGOs and supermarkets do not feature considerably in the Czech newspapers. The tabloid Blesk focusses particularly on individuals, whereas Lidové Noviny is the newspaper that featured businesses the most in their articles. Mladá Fronta Dnes has more even coverage of various actors in their articles.

The qualitative content analysis presented in the previous chapters gives a useful insight into the topics and actors present in the media discourse on sustainability and food in the European Union. However, the qualitative framing analysis presented in the following chapter will provide a deeper understanding of the ways in which these issues are presented, and who is assumed to have responsibility for causing and also resolving these issues.

Chapter 6: Results of Framing Analysis

In order to answer the second part of my research question regarding how sustainable food systems are framed in the media, the analysis identified the following five frames: "Belief in the Power of the Market", "Belief in the Power of Lifestyle Change", "Belief in the Power of Regulation", "The Value of Regional Production", and "Belief in the Power of Science". For each frame, a central theme was chosen to describe the frame as a whole (van Gorp, 2009, p. 98). This chapter will proceed by describing each identified frame in order of their prominence in the newspaper articles, using indicative examples from the analysed articles. Furthermore, the characteristics of each frame are set out in a frame matrix (van Gorp, 2009, p. 93). The frame matrix includes the four elements of a frame according to Entman (1993), as set out in Chapter 3. It is possible that a frame does not include all four elements, which is indicated in the frame matrix by 'None identified'. This chapter will conclude by analysing in which country and in which publications the frames are most prominent.

6.1 Belief in the Power of the Market

In this frame, as set out in Table 9 on the following page, the impact of food production on the environment is identified as a problem, and businesses offering sustainable products in response to demand from consumers are identified as the solution. It is therefore implied that through the forces and supply and demand, the invisible hand guides the market towards solving issues in the food system related to sustainability. A similar frame was also identified in a study by Atanasova et al. (2019) on the framing of sustainability more generally, however there are some slight differences due to this study's more narrow focus on sustainability and food. The reaction of businesses in response to consumer demand for more sustainability is alluded to in various articles, for example it is described how companies such as Beyond Meat produce meat alternatives in response to people's desire to "live ecologically and ethically"² (Die Presse 20). In another article, a representative of packaging company DS Smith explains that, "the ever-increasing demand for sustainability and recyclability of packaging materials is leading many companies to significantly reduce the use of plastic" (Mladá Fronta 13).

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² This and all other quotations from the articles are the author's own translations from Czech or German into English.

The businesses who offer these sustainable solutions include large multinational corporations, start-ups, restaurants and supermarkets. It is interesting to note the language used to describe these businesses, as this often serves to reinforce the impression that it is companies who have the answer to sustainability issues. For example, in one article, a vegan restaurant chain is described as a "company with responsibility" (Die Presse 25). Another article refers throughout to "green CEOs" (Kronen Zeitung 12).

Table 9 Frame Matrix for the Frame "Belief in the Power of the Market"

| Frame element | Findings | | |
|--------------------------|---|--|--|
| Problem Definition | Impact of food production on the environment | | |
| Causal Interpretation | None identified | | |
| Treatment Recommendation | Consumer demand for more sustainable products Businesses innovating and offering sustainable products in response to consumer demand | | |
| Moral Evaluation | BusinessesSupermarketsRestaurantsIndividuals | | |

Interestingly, however, no specific actor is highlighted as being the cause of these environmental problems, even when it appears evident that in some cases it is the businesses themselves, who might be making their packaging more sustainable now, but previously had not. This supports the findings of Diprose et. al (2018, p. 682) in their analysis of the discourse on sustainability in the British press, where they found that there was a lack of discussion about culpability for environmental issues.

Business owners cited in the articles express a sense of personal responsibility, for example the owners of a bistro in Prague explain their decision to opt for more expensive, but more environmentally friendly packaging, stating that "as the owners of a bistro and as parents, we see no other way than to join the effort to reduce plastic consumption and waste" (Lidové

Noviny 8). Similarly, in another article, the manager of a dairy farm argues that "everyone can make a contribution to more environmental protection, I am convinced of that" (Kronen Zeitung 6).

Furthermore, through this frame it is emphasised that individuals play an important role through the way they choose to spend their money. For example, in one article Professor Bernadette Kamleitner, from the Institute for Consumer Research at the Vienna University of Economics and Business, argues that, "it's not true that consumers don't have power" and, "the more people would change their behaviour, the more retailers would respond" (Der Standard 16).

6.2 Belief in the Power of Lifestyle Change

In this frame, the problem identified is that the environment suffers from the adverse effects of individuals' careless behaviour. The solution, therefore, is for individuals to change their lifestyle and to make more conscious decisions in order to decrease their impact on the environment. While the previous frame also involves action on the part of individuals, in that case this is portrayed as a means of getting businesses to change their practices, whereas in this frame, the emphasis is on the environmental impact of individuals.

Table 10 Frame Matrix for the Frame "Belief in the Power of Lifestyle Change"

| Frame element | Findings | | |
|--------------------------|--|--|--|
| Problem Definition | Careless behaviour by individuals has a negative impact on the environment | | |
| Causal Interpretation | Individuals | | |
| Treatment Recommendation | Individuals should change their behaviour in order to decrease their impact on the environment | | |
| Moral Evaluation | Individuals | | |

Many of the articles where this frame was identified consisted of tips and advice for how the reader should change their lifestyle in order to minimise their impact on the environment. For example, in one article, the WWF provides suggestions for how each individual can contribute

to push back Earth Overshoot Day,³ by reducing their meat consumption and to buy locally and organically produced food (Die Presse 4). Another article emphasises that, "every Austrian can do their bit" in order to reduce greenhouse gas emissions and prevent species extinction, and emphatically encourages readers: "Buy regional produce!" (Kronen Zeitung 7). The impact that such lifestyle changes can have is emphasised, for example it is highlighted that, "small and simple steps, when added up, have a huge positive impact" (Blesk 8). The title of another article declares, "What we decide to eat influences the environment of the entire planet: How to eat for a healthy planet" (Kronen Zeitung 7). Additionally, a sense of personal responsibility for our own actions and choices is invoked, as well as a sense of obligation to future generations: "We need to realize that we can make a difference as individuals. Just as we all came together in the pandemic, we should all come together on the issue of the environment. This will ensure a better life for us and our children," (Lidové Noviny 16). Furthermore, particular language is used in several articles in order to describe consumers, for example "the environmentally conscious consumer" (Die Presse 11), and "the conscious consumer" (Kronen Zeitung 10), thereby implying that there are different types of consumer – those who are conscious of the consequences of their purchases, and those who are not.

6.3 Belief in the Power of Regulation

This frame encompasses articles where regulation, proposed and implemented by the government, politicians, or the European Union, is presented as the way to address the environmental impact of the food system. Various environmental issues are invoked, such as food waste, world hunger, greenhouse gas emissions from food production, and deforestation for food production. Depending on the issue, different causes are identified, for example in one article businesses are ascribed the blame for plastic pollution (Die Presse 7), whereas in another article, individual Austrians are held responsible for plastic waste, as it is highlighted that they buy 50% more plastic bottles than the EU average (Die Presse 18). In another example, the article holds farmers responsible for "defending an outdated system in Europe that is partly responsible for climate change and biodiversity loss" (Der Standard 20).

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³ Earth Overshoot Day is the day when humanity's demand for ecological resources and services surpasses the natural capacity of the planet to replenish them within the same year.

Table 11 Frame Matrix for the Frame "Belief in the Power of Regulation"

| Frame element | Findings | | | |
|--------------------------|---|--|--|--|
| Problem Definition | The environmental impact of the food system | | | |
| Causal Interpretation | BusinessesIndividualsFarmers | | | |
| Treatment Recommendation | Regulation and policy-making that reduces the adverse effects of food production on the environment | | | |
| Moral Evaluation | Government authorities Politicians The European Union | | | |

Various regulations and policies are covered by the articles. There are articles on existing policies on both the EU and national level, such as EU legislation requiring member states to recycle 55 percent of all plastic packaging by 2030 (Die Presse 7), an EU ban on harmful pesticides (Der Standard 20), and a scheme by the local government in Prague to give away land to farmers for free to be used for ecological farming (Blesk 9, Mladá Fronta 17). Additionally, there is coverage of proposed policies, including a legally binding action plan on food waste (Kronen Zeitung 3), a quota for the amount of Czech food sold in supermarkets (Blesk 12, Mladá Fronta Dnes 16, Lidové Noviny 15), and a proposal for food packaging to have to declare the environmental impact of the product (Mladá Fronta Dnes 4). While in these articles, the policies may be presented as a solution, they also often include discussions about the efficacy of such policies and include the opinions of those who may be opposed to such legislation. For example, the proposal for there to be a quota introduced for the amount of Czech produce sold in Czech supermarkets was highly controversial. The primary reasoning behind the policy was to support Czech farmers and improve Czech selfsufficiency, but its supporters also highlighted that the policy would reduce emissions by reducing the need for food to be imported from distant countries (Blesk 12). Nevertheless, the articles highlight that the idea faced strong opposition and politicians opposed to the measure argued that the only ones that would truly benefit would be the Czech agri-barons, and that the policy would result in higher prices and less choice for consumers, not to mention that it would violate the principles of the European single market (Blesk 12). Therefore, what may be presented as a solution to environmental issues by certain actors, may be disputed by others; the newspapers can be seen to contribute to the public debate on government policy, by setting out the arguments for and against various policies.

In several articles it is highlighted that legislative measures are necessary and it is argued that leaving such issues to be resolved by the market or by individuals would not be effective. For example, an opinion piece in Der Standard argues strongly for the necessity of legislative measures in order to combat climate change, maintaining that, "the problem is too big, the consequences too grave, for us to leave the responsibility to individuals" (Der Standard 1). The article goes on to argue that legislation is necessary in order to "hold those to account whose actions have profound implications: the big companies."

6.4 The Value of Regional Production

In this frame, regionally produced food is presented as the solution to the issue of greenhouse gas emissions that arise from importing food from distant countries, as well as combatting dependency on imported food. The Covid-19 pandemic and the consequent disruption of supply chains meant that dependency on imports in various sectors became a particularly salient topic at this time, including in this case, dependency on imported food. Locally produced food, i.e. food produced in Austria or Czechia, is therefore presented as a way to guarantee the food supply, even in times of crisis (Kronen Zeitung 26). Furthermore, the environmental impact of imported food is highlighted, due to the carbon emissions from its transportation, while the much lower carbon emissions of food produced in Austria are highlighted (Kronen Zeitung 29). Another article highlights how rainforests are being destroyed in South America for the production of soya which is used in meat alternatives, and a representative of the Czech Union of Oilseed Growers (SPZO) proposes that instead, vegetarian burgers could be produced form rapeseed which is commonly grown in the Czech Republic (Blesk 2). Additionally, one Austrian article highlights the higher consumer standards in Austria and therefore argues that regional food is better for our health (Der Standard 6).

Table 12 Frame matrix for the frame "The Value of Regional Production"

| Frame element | Findings | | |
|--------------------------|---|--|--|
| Problem Definition | Imported food | | |
| Causal Interpretation | Globalisation of food system | | |
| Treatment Recommendation | Buying regional produce Investment and government support for regional producers | | |
| Moral Evaluation | Individuals Government | | |

On one hand, therefore, the solution proposed is on the production side, and various articles argue that there is a need for more support from the government for regional producers. For example in one article, a representative of Greenpeace calls for the government to ensure that agricultural subsidies are directed towards supporting environmentally friendly, regional food production (Kronen Zeitung 20) and several articles discuss the legislation that was proposed in Czechia for there to be a quota for Czech food in the supermarkets (Blesk 12, Blesk 16, Mladá Fronta 16). Additionally, in one article a commentator argues that the Austrian government should introduced mandatory labelling on food that indicates where it was produced, in order to create more transparency and allow consumers to make better-informed choices (Der Standard 6). On the other hand, within this frame individuals are also considered to hold some of the responsibility; it is suggested that through individuals changing their buying habits and opting for regional produce, they can contribute to addressing environmental issues. For example, newspaper readers are encouraged to opt for regional produce in order to reduce their impact on the environment (Die Presse 4, Kronen Zeitung 7) and in order to support local farmers and jobs (Kronen Zeitung 29). Some of the articles where this frame was identified therefore also overlap with the frame "Belief in the Power of Lifestyle Change".

6.5 Belief in the Power of Science

This frame was also identified in Atanasova's frame analysis (2019), in relation to sustainability more generally. In this frame, science and technology are presented as the

solution to various environmental issues related to the food system. For example, one article covers an invention by a student that prevents food waste by using old bread to make alcohol (Kronen Zeitung 25), another covers the development of insect-based food products, which require less natural resources for their production than meat (Blesk 15). The latter article describes how the EU is playing a role in promoting new innovations by supporting companies developing meat alternatives, as announced in the Fark to Fork strategy. Another article alludes to the role of the EU in supporting innovation, with researchers calling for the EU to increase funding for the development of bioreactors, which could be used, for example, for the production of more environmentally friendly alternatives to palm oil (Mladá Fronta 9).

Table 13 Frame matrix for the frame "Belief in the Power of Science"

| Frame element | Findings | | |
|--------------------------|---|--|--|
| Problem Definition | Various environmental problems related to the food system | | |
| Causal Interpretation | None identified | | |
| Treatment Recommendation | Science and technology can provide solutions to make the food industry more sustainable | | |
| Moral Evaluation | EntrepreneursResearchersThe European Union | | |

Articles where this frame is identified emphasise the potential positive impact that new technology could have: "robots could completely revolutionise agriculture in the future – and thus relieve the burden on humans and the environment" (Der Standard 18). Given that various different environmental problems are identified in this frame, no single causal interpretation can be identified. Entrepreneurs and researchers are identified as those who develop the new technology, supported in some cases by the European Union through their funding and policies.

6.6 Presence of frames across publications

Table 14 shows show how the frequency of the frames varies across the six newspapers, allowing conclusions to be drawn about how different types of newspapers may differ in their reporting about sustainable food systems.

Table 14 Percentage of articles in each newspaper per frame

| | Kronen Zeitung | Die Presse | Der Standard | Blesk | Mladá Fronta Dnes | Lidové Noviny | All newspapers |
|--|-------------------|------------|-----------------|-------|-------------------------|------------------|----------------|
| Belief in the Power of the Market | 32.35 | 57.14 | 21.43 | 25 | 38.89 | 60 | 38.73 |
| Belief in the Power of Lifestyle Change | 32.35 | 42.86 | 17.86 | 50 | 22.22 | 28 | 30.99 |
| Belief in the Power of Regulation | 14.71 | 23.81 | 25.00 | 31.25 | 50.00 | 16 | 24.65 |
| The Value of Regional Production | 35.29 | 9.52 | 7.14 | 6.25 | 0.00 | 0 | 11.97 |
| Belief in the Power of Science | 8.82 | 19.05 | 10.71 | 6.25 | 16.67 | 0 | 9.86 |

"Belief in the Power of the Market" is the most prominent frame overall, and is present in approximately 39% of the articles analysed. This frame is identified in the most articles in Die Presse and Lidové Noviny, which are both quality, conservative publications. The publications where this frame is identified the least are Der Standard and Blesk. This frame is equally prominent in both countries. The frame "Belief in the Power of Lifestyle Change" is found the most in Blesk and Die Presse, and the least in Der Standard and Mladá Fronta Dnes, the liberal,

quality newspapers selected from Austria and Czechia. The level of prominence of this frame is also the same in both countries.

Mladá Fronta Dnes and Blesk are the publications where the frame "Belief in the Power of Regulation" is most frequently identified, while Lidové Noviny and the Kronen Zeitung feature few articles with this frame. Overall, the Czech newspapers featured this frame considerably more than the Austrian newspapers. On the other hand, the frame "The Value of Regional Production" appears almost exclusively in the Austrian press, save for a few articles in Blesk. Among the Austrian newspapers, it is the Kronen Zeitung where this frame can be identified the most, by a considerable margin. Lastly, the frame "Belief in the Power of Science" features the most in Die Presse and Der Standard, the two Austrian quality publications. This frame is considerably more prominent in the Austrian newspaper articles, while it only features in a small proportion of the Czech newspaper coverage. The significance of these findings, and those of the previous three chapters, will be discussed and contextualised in further detail in the subsequent Discussion chapter.

Chapter 7: Discussion

The previous three chapters set out the results of my research, which sought to answer the question: "What issues and actors are the most prominent in the mainstream press in the European Union on the topic of sustainable food systems, and how are they framed?" This chapter will analyse these findings in closer detail, contextualise them in the literature, and consider their practical implications for the aim of transitioning to sustainable food systems. The first part of this chapter will address the topics and actors identified in the media coverage, while the second part of this chapter will discuss the results of the framing analysis.

Regional food, innovations, food packaging and waste, and diet and food patterns are all topics that were among the most prominent in the news coverage in both Czechia and Austria. This could have implications for which issues the public have higher awareness of and for which issues there would be greater public support for policy responses (Kristiansen, Painter and Shea, 2021; Bailey, 2022). These findings are therefore promising in light of the EU's policy objectives. For example, the European Parliament and the Council are currently discussing the Commission's proposal for a revision of the Packaging Waste Directive, which includes new requirements for the recyclability of packaging (European Parliament, 2023). Furthermore, one of the objectives of the Farm to Fork strategy is to facilitate a "shift to healthy, sustainable diets" (European Commission, 2020, p. 13).

The promotion of regional food is a more challenging issue for the EU, as will be addressed later in this chapter in reference to the frame, "The Value of Regional Production". It should, however, be noted that the heightened interest in regional food identified in the articles in the sample was in many instances linked to the Covid-19 pandemic and concerns about the resilience of supply chains. It is therefore unclear whether the prominence of this topic persisted after the height of the Covid-19 pandemic; this is perhaps a question for future research. Although it does receive more attention in the Czech media, it is interesting to note that overall the topic of health was not particularly prominent, despite the time frame covered during the Covid-19 pandemic. Indeed, only one article refers to the link between food production and global health, highlighting that, "the food we eat and the way it is produced are also key factors in the emergence of deadly viruses such as Covid-19" (Mladá Fronta Dnes 12, p.2).

Contrary to previous findings that identified "the need for education on sustainable food consumption" to be a common theme in the media in four European countries (Diaconeasa *et al.*, 2022, p. 14), this study found educating about sustainability to be among the least prominent themes in Czechia and Austria. This could perhaps be attributed to the time frame, as Diaconeasa *et al.* consider the time period between 2014 and 2018, whereas my analysis covered a slightly later time period in 2020; it is possible that as the sustainability of food systems has become a more salient topic in European countries in recent years (Diaconeasa *et al.*, 2022, p. 14), public awareness and understand of this issue has grown and thus education efforts are perceived to be a less important topic. Another possible explanation for this is that media attention to various issues and policy solutions has been demonstrated to fluctuate over time, as Downs (1972) set out in his theory of issue-attention cycles, which has been shown to still hold relevance in more recent studies of media coverage of sustainability issues (Holt and Barkemeyer, 2012).

Although the coverage of sustainable food systems in Czechia and Austria is similar in many ways, key differences were also identified. For example, organic food, food waste, and animal welfare feature much more in the Austrian media, while health is a much more prominent topic in the Czech media. My results are therefore consistent with the findings of Diaconeasa *et al.* (2021) who show that the salience of various issues in relation to sustainable food varies across the media in different European countries and they consequently suggest that:

businesses and policy makers should adjust the way how they frame their media and communication strategies related to food sustainability to reflect the socioeconomic and cultural context of the country, so that they suit the audience's level of development and understanding. (Diaconeasa *et al.*, 2022, p. 14).

As part of the Farm to Fork Strategy, the EU is currently looking to introduce legislation aiming to increase organic farming, tackle food waste, and improve animal welfare standards (European Commission, 2020). Given the prominence of these issues in the Austrian media, the Austrian public potentially already have a higher awareness of these issues (Kristiansen, Painter and Shea, 2021), whereas legislators and NGOs may need to consider communication campaigns in order to raise awareness of these topics in Czechia, in order to ensure there is adequate public support for such measures.

Additionally, the issues of working conditions in the food industry, and hunger and starvation hardly feature in the articles. Both of these issues fall under the 'social justice' pillar of sustainability, according to Elkington's (1997) definition as cited in Chapter 2. It therefore appears that the social justice element is neglected in the Czech and Austrian media coverage. This finding is consistent with that of Diprose *et al.* (2018, p.680) who also found the social justice element of sustainability to be lacking in the British media coverage of sustainability. They suggest that this might be because, while the readers might not be affected by the issue of hunger and starvation, they may be the ones who have the ability to provide a solution, for example through development aid programmes, and therefore this might be an uncomfortable topic for readers (Diprose *et al.*, 2018, p. 680). More generally, the literature has previously found that newspapers have a tendency to cover issues that affect readers directly (Boykoff, 2008), which would explain why the issue of famine in distant countries receives little coverage. It is also possible that articles on this issue may have been less likely to mention terms such as "sustainability" or "environment" and thus may not have been picked up by the sampling used for this study.

Another interesting finding is the lack of coverage of the Farm to Fork Strategy across newspapers in both countries, given that the time period for the study was selected on the basis of its publication. Indeed, previous research has found that European legislation tends to receive low levels of coverage in the national media (Gleissner and De Vreese, 2005) and there are mixed findings about the salience of major sustainability policy events in press coverage, with some studies identifying heightened media interest (Barkemeyer *et al.*, 2009), and some reflecting similar conclusions to this study (Diprose *et al.*, 2018). It is possible that there would be more coverage of this in speciality food and agricultural publications (Ehgartner, 2018), or in pan-European newspapers such as Politico or Euronews. Overall, it is perhaps concerning that the Strategy received so little coverage; this could suggest that the Commission needs to re-evaluate the efficacy of its communications strategy.

The analysis identified that there are many similarities in the actors present in the media discourse in Austria and Czechia. The actors who are mentioned the most often by a considerable margin in both countries are individuals and businesses. Government authorities and politicians are also mentioned frequently. As these actors are the most prominent in the discourse, this potentially indicates to readers that they are the most important actors in relation to the issue of sustainable food systems (Kristiansen, Painter and Shea, 2021). On the other

hand, actors such as NGOs, the hospitality industry, and the United Nations did not feature considerably in the sample, therefore suggesting to readers that these are less relevant stakeholders on this issue.

Given that individuals and businesses were the most prominent actors in the media discourse, it is perhaps not surprising that the two most prominent frames are related to these two actors. The frame "Belief in the Power of the Market" dominates the press coverage in both countries. Articles where this frame is identified foreground the role of businesses in providing solutions to issues in relation to food and sustainability, in reaction to consumer demand for more sustainable offerings. Previous studies have also found that similar frames dominate reporting on the topic of sustainability more generally (Diprose *et al.*, 2018; Atanasova, 2019), this study is however the first to identify whether such frames are also present in discussions of sustainable food systems more specifically. However, as highlighted in the literature review, there has been considerable criticism of market-based, consumer-driven solutions and neoliberal framing of sustainability (Diprose *et al.*, 2018). As was outlined in the literature review, some would argue that in order to achieve sustainability, a fundamental restructuring of the food system is necessary in order to achieve a truly sustainable food system (Garnett, 2014). They would therefore argue that relying on market forces and the power of consumer demand is not the appropriate solution (Prádanos, 2018).

The publications where this frame is identified in the most articles are Die Presse and Lidové Noviny, which are both quality, conservative publications, which reflects the findings of Doulton and Brown (2009) who concluded that the conservative-leaning press in the UK are more likely to portray sustainability issues through a neoliberal lens. On the other hand, it was in Der Standard, a quality, liberal publication, that this frame was identified the least. Nevertheless, the fact that this frame was frequently identified across all publications in the sample indicates that this perspective of sustainability is the one most often conveyed to Austrian and Czech readers, thereby potentially influencing public opinion on the most appropriate pathway to achieving more sustainable food systems.

The second most prominent frame identified in the sample is "Belief in the Power of Lifestyle Change", where articles emphasise the environmental impacts of people's lifestyle choices, and present suggestions for how individuals should change their behaviour in order to combat various issues related to the sustainability of the food system. This confirms previous findings

on the media discourse on sustainability, where frames involving individual behaviour and lifestyle have been identified as being particularly prominent (Diprose *et al.*, 2018; Kristiansen, Painter and Shea, 2021) and to be increasing over time (Koteyko, 2012; Hellsten, Porter and Nerlich, 2014).

However, the literature has been critical of discourses that foreground the role of the individual, arguing this diverts attention from other actors such as governments who have power and responsibility to make changes to the food system (Shove, 2010). Additionally, articles with such framing often emphasise how easy and simple such lifestyle changes are, failing to recognise the constraints in people's lives such as economic and health issues, that may preclude them from making more "environmentally responsible choices" (Lynch and Giles, 2013). Der Standard was the newspaper that featured this frame the least, and indeed one of its articles consisted of a critical reflection of the impact of individual lifestyle change, arguing that "individual consumption choices are not going to save the planet. Only stricter environmental protection laws can do that" (Der Standard 1, p. 1).

It is therefore perhaps not surprising that the frame that was observed the most often in Der Standard was "Belief in the Power of Regulation". In this frame, the role of legislators at the regional, national, and EU level is emphasised in response to the environmental impact of the food system. This frame was also the most prominent frame in Mladá Fronta Dnes, meaning that this frame was the most dominant in the quality, liberal publications. We can therefore infer that the ideological position of the newspaper has an influence on sustainability reporting, with neoliberal frames more prominent in the conservative publications, and opposing frames emphasising regulatory intervention being more prominent in the liberal newspapers in this study. Interestingly, overall this frame was identified considerably more in the Czech newspapers than in the Austrian newspapers. It therefore appears that Czech readers are more likely to be offered an alternative to the neoliberal framing of sustainability issues. Similar frames have not been identified in previous studies, where technological and market-driven frames have been found to dominate coverage (Diprose et al., 2018; Yacoumis, 2018; Atanasova, 2019). The fact, however, that this frame appears in 25% of the articles analysed shows that regulatory solutions are often presented to Austrian and especially Czech readers as an important part of the approach to addressing the sustainability of food systems.

This study has also identified a second frame that has not been identified in previous research on the media framing of sustainability: "The Value of Regional Production". Within this frame, regionally produced food is presented as the solution to issues associated with importing food, such as greenhouse gas emissions and unreliable supply chains. Scholars have referred to such phenomena as food nationalism (Najdený *et al.*, 2022) or gastronationalism (De Soucey, 2010).

While on one hand, the literature has highlighted the benefits of shorter supply chains and local food production (Leitzmann, 2003; Jehlička and Smith, 2011), it has equally been emphasised that these are challenged by the realities of global neoliberal trading systems and, more specifically, the rules of the European Single Market. For example, Sweden had to withdraw its National Food Administration's (NFA) proposed guidelines for more climate-friendly food choices at the request of the EU because they were deemed to be in conflict with the EU principle of free movement of goods (Reisch, Eberle and Lorek, 2013). Additionally, given that the European market is so significant for food exports from the Global South (Usman, Ituen and Abimbola, 2021), any policies to reduce imports are likely to be highly controversial. The Farm to Fork strategy does mention the Commission's aim to "enhance resilience of regional and local food systems", by "reducing dependence on long-haul transportation" (European Commission, 2020, pp. 12–13). However, unless the fundamental principles of the EU Single market are changed, which is highly unlikely, then policies that prioritise national producers in member states and affect intra-EU trade will remain out of the question.

Strikingly, this frame was present almost exclusively in the Austrian press, and mostly in the tabloid, the Kronen Zeitung. While a growing body of literature on the phenomenon of gastronationalism has emerged in recent years (Ichijo, 2020), there is still limited research to suggest why it might be more prominent in some European countries than others (Najdený *et al.*, 2022). One potential explanation is that several articles emphasise the belief that Austrian products are of a higher quality (Kronen Zeitung 6, Der Standard 6). On the other hand, the absence of this frame in the Czech newspapers can potentially be explained by its history. It is possible that Czechia's experience of a command economy has made the country more averse to the idea of interference with global food supply chains. Indeed, in one article that discusses the proposal concerning quotas for Czech food in supermarkets, it is described how many citizens feared "a return to empty shelves, poor quality, and limited choice that we

remember from the days of communism" (Blesk 12, p. 1), thus illustrating how cultural and historical factors can have an impact on policy-making in relation to sustainable food systems.

The final frame identified through the analysis is "Belief in the Power of Science". This frame, as also identified by Atanasova (2019), identifies scientific research and technological innovation as the solution to issues with the food system. Researchers and entrepreneurs are identified as the key actors in this frame, through their role in driving innovations, and the European Union is also identified as a key actor, through its role in funding and supporting scientific research. This frame was identified the most in Die Presse and Der Standard, the two Austrian quality publications, and overall was more prominent in the Austrian press than in the Czech press. Previous research has found this frame to be particularly dominant in the media discourse on sustainability (Yacoumis, 2018; Atanasova, 2019), however in this study this frame was not particularly prominent. Many would argue that research and innovation are central to the transition to a sustainable food system (León-Bravo et al., 2019; Rabadán, 2021). On the other hand, a pre-occupation with technological solutions has also been criticised. For example Prádanos (2018, p.18) argues that "technology can only be socially and environmentally benign if it is embedded in a system that prioritizes social and ecological wellbeing" over economic growth. However, given that this frame is overall not particularly prominent in the media discourse in both countries, this could have the implication that this approach is less prominent in the minds of Austrian and Czech citizens and policymakers.

Chapter 8: Conclusion

In this concluding chapter, the findings of my research will be summarised, the limitations of the study will be discussed, and potential avenues for future research will be outlined. The thesis will conclude with a reflection on the contribution this thesis has made to the literature and the practical implications of my findings. This thesis set out to answer the research question: "What issues and actors are the most prominent in the mainstream press in the European Union on the topic of sustainable food systems, and how are they framed?" The Austrian and Czech press were selected as case studies in order to answer this question. The generalisability of these findings to other EU member states is subject to further empirical research, nevertheless, my research provides the following insights.

In response to the first part of the question, the analysis revealed that regional food, innovations, food packaging and waste, and diet and food patterns are all topics that are among the most prominent in the news coverage in both Czechia and Austria, which could potentially indicate that citizens in these countries have a higher awareness of these issues. On the other hand, the topics of health and education about sustainability do not feature greatly in the coverage in either country. There is considerably less coverage of the topics of organic food, food waste, and animal welfare in the Czech press compared to the Austrian press, which perhaps indicates that, in order to legislate on these issues, strategies may need to be considered in order to raise more awareness of these topics in Czechia. Interestingly, the Farm to Fork Strategy itself also receives limited coverage in both countries, which may be a concern for the European Commission and its communication strategy. Topics related to social justice, such as working conditions and hunger and starvation hardly feature in the media coverage in both countries. It therefore appears that there is a need for this element of sustainability to be highlighted more often. Businesses, individuals, government authorities and politicians are the most prominent actors in the media discourse in both countries, while NGOs, the hospitality industry, and the United Nations only receive limited coverage in the Austrian and Czech newspapers.

In response to the second part of the question, on the basis of Entman's framing theory and employing a systematic approach to frame analysis as set out by van Gorp, five frames were identified: "Belief in the Power of the Market", "Belief in the Power of Lifestyle Change", "Belief in the Power of Regulation", "The Value of Regional Production", and "Belief in the Power of Science". Overall, in line with the findings of previous research, my analysis found

neoliberal framing, which emphasises the ability of businesses and individuals to solve sustainability issues, to dominate the media coverage of sustainable food systems in Austria and Czechia (Diprose *et al.*, 2018; Yacoumis, 2018; Atanasova, 2019). However, contrary to previous findings, regulatory solutions are also identified to be prominent in the debate; "Belief in the Power of Regulation" is a prominent frame especially in the Czech Republic. Furthermore, my analysis supports the results of previous researchers who have found the ideological position of a newspaper to influence its sustainability reporting; my analysis found neoliberal framing to be more prominent in the conservative publications, whereas the opposing frame emphasising regulatory intervention is more prominent in the liberal, left-wing newspapers. Additionally, my research was able to identify a second new frame, "The Value of Regional Production", which features almost exclusively in the Austrian newspapers. Framing where technological solutions are emphasised is more prominent in Austria than in Czechia, but overall this frame is identified the least often.

Further questions remain, however, for future research. Firstly, as previously highlighted, further investigation is needed to establish whether the high salience of regional food in the Czech and Austrian press persisted after the height of the Covid-19 pandemic, or whether this was merely a temporary phenomenon. Secondly, this thesis identified minimal discussions of the link between health and sustainable food systems. This is perhaps surprising in light of the salience of health and health policy in the time period analysed, when the second wave of the Covid-19 pandemic hit Europe. In the future, researchers may therefore wish to investigate more closely how the pandemic has impacted the media discourse on sustainable food systems, for example by comparing the discourse before, during, and after the pandemic. Thirdly, since Russia's invasion of Ukraine in February 2022, there have been considerable issues with global food supply chains as well as soaring food prices. In this context, there have been concerns that the EU's Farm to Fork strategy may be undermined, with economic concerns trumping environmental goals (Wax, 2023). Future research may therefore be able to investigate how the media discourse on sustainable food systems has been impacted by the war in Ukraine.

A main limitation of this study lies in its qualitative nature, as the analysis was undertaken by a single coder and when undertaking a frame analysis, the researcher's own mental constructs may affect which frames are identified (Van Gorp and van der Goot, 2012). In order to try to counter this, a systematic approach was employed, which involved several phases in which I regularly scanned and compared the research material (Van Gorp and van der Goot, 2012).

Furthermore, due to the close level of analysis undertaken, only three publications from each country were included, which does not necessarily represent the entire media landscape of each country. To strengthen the findings of this study, future research could therefore involve several researchers and include intercoder reliability tests, as well as expanding the analysis to include more publications. Additionally, this study focuses on the media discourse in just two EU member states. These countries were selected in order to try to represent the socioeconomic and cultural variations within Europe, however further research on the media discourse in other countries would be beneficial in order to build on the findings of this study. It is also important to consider that newspapers are not the only form of media to influence public opinion and elite actors. Social media undoubtedly has a role to play in shaping the discourse on sustainable food consumption and could therefore be a fruitful avenue for future research.

In spite of these limitations, this thesis provides an innovative contribution to the literature by shedding light on the media discourse on sustainable food systems in two countries where this had not previously been investigated. Furthermore, the thesis has built on existing research by confirming the presence of previously identified frames that emphasise market-based and technological solutions, as well as identifying new frames where regulatory measures and regional production are foregrounded as solutions to the issues that exist with the food system. In light of the ongoing uncertainty regarding the implementation of the Farm to Fork Strategy, this thesis provides important insights into the discourse on sustainable food systems. These can be used by policymakers, NGOs, campaigners, and citizens who wish to ensure that the Strategy is successfully implemented and to avoid the alarming consequences that would result from the food system remaining in its current state.

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Appendices

Appendix I: List of Analysed Documents

Authors have been cited when the information is given in the online archives.

Austrian Newspapers

Kronen Zeitung

| No. | Title | Author | Date |
|-----|--|-------------------------------|------------|
| 1 | Viele Familien verbringen in der Pandemie mehr Zeit miteinander [Many families are spending more time with each other during the pandemic] ⁴ | | 15.11.2020 |
| 2 | Wo der Schneebesen einen Meter lang ist [Where the whisk is a metre long] | M. Mihajlovic | 10.11.2020 |
| 3 | Zu viel Essen landet im Mistkübel [Too much food ends up in the bin] | Karin Rohrer- Schausberger | 24.10.2020 |
| 4 | Die Feldkircher Lebensmitteltechnologin Julia Sackers hat sich der Entwicklung von pflanzenbasierten Fleischalternativen verschrieben. Der "Leberkäse" ohne ein Gramm Fleisch ist nun | Sandra Nemetschke | 27.09.2020 |
| | ihr neuester Coup. [Julia Sackers, a food technologist from Feldkirch, has dedicated herself to the development of plant-based meat alternatives. The "Leberkäse" without a gram of meat is her latest invention.] | | |
| 5 | Frischfisch am Festtagstisch [Fresh fish at the holiday feast] | | 20.11.2020 |
| 6 | Erlebnissennerei Zillertal: Bewährte Qualität umweltschonend verpackt; Ein Original in neuer Tracht [The Zillertal Dairy Experience: Proven quality packaged in an environmentally friendly way; An original in new garb] | | 20.10.2020 |

⁴ All translations are the author's own.

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| 7 | Was bei uns auf den Tisch kommt, beeinflusst die Umwelt der ganzen Erde; Essen für einen gesunden Planeten [What we put on the table affects the environment of the whole planet; food for a healthy planet] | Mag. Monika Kotasek-Rissel | 07.11.2020 |
|----|---|-------------------------------|------------|
| 8 | Das SalzburgerLand Genuss-Kisterl ist eine Geschenksidee für Weihnachten; Ein echtes Stück Salzburg [The Salzburg Gift Basket as a gift idea for Christmas; A real piece of Salzburg] | | 01.11.2020 |
| 9 | In Colour Cups steckt viel Know-how aus Oberösterreich; Michaelnbacher hat beim Essen die Kompromisse satt [Colour Cups offer considerable expertise from Upper Austria; a young man from Michaelnbach is tired of compromising on food] | | 11.10.2020 |
| 10 | Dank eines neuen Produzenten-Handbuchs findet man ab sofort die Lebensmittel-Fülle von 180 Innviertler Herstellern vereint vor [Thanks to a new producers' guide, you can now find an abundance of produce from 180 Innviertel producers brought together in one place] | | 08.10.2020 |
| 11 | 146.000 Tonnen Gebäck zu viel gekauft. Kampf gegen Verschwendung; Unser tägliches Brot im Müll [146,000 tonnes of baked goods wasted. The fight against waste; Our daily bread in the bin] | Martina Münzer | 17.10.2020 |
| 12 | Bei diesen CEOs ist die Umwelt in besten Händen [With these CEOs, the environment is in the best hands] | | 21.10.2020 |
| 13 | Für ihre Idee, durch frei zugängliche Kühlschränke der | | 12.11.2020 |
| 14 | Dritter Kostnix-Laden eröffnet. Lebensmittel retten: Auf den Teller statt in die Tonne [The third "Kostnix" shop opens. Rescuing food: On the plate instead of in the bin] | Elisa Aschbacher | 20.11.2020 |
| 15 | 10 Millionen Kinder durch Corona von Hungersnot bedroht [10 million children threatened with famine due to Covid-19 pandemic] | Mark Perry | 16.10.2020 |
| 16 | Pfandsystem, einheitliche Sammelmodelle, mehr Recycling, weniger Verpackung: Wo das | Karin Podolak | 21.11.2020 |

| | funktionieren kann, und wo es sich "spießt"; Brauchen wir das ganze Plastikzeug? | | |
|----|--|-------------------------------|------------|
| | [Deposit system, standardised recycling schemes, less packaging: Where this can work and where it doesn't; Do we need all this plastic?] | | |
| 17 | Stoppt endlich den Verpackungswahn! [Stop the packaging madness at last!] | | 21.11.2020 |
| 18 | Warum veganes Essen die Welt retten kann [Why vegan food can save the world] | | 21.10.2020 |
| 19 | Lebensmittelhandel kritisiert Plan; "Einkaufen teurer mit Plastik-Pfand" | | 16.10.2020 |
| | [Food retailers criticise plan; "Shopping will be more expensive with a plastic deposit scheme".] | | |
| 20 | Vorteile durch Sortenvielfalt und Flexibilität. Nachhaltigkeit erweist sich in Corona-Krise als Fels in der Brandung: "Die Bio-Landwirtschaft ist kerngesund" | Mark Perry, Oliver Papacek | 20.10.2020 |
| | [Advantages gained through variety and flexibility. Sustainability proves to be resilient in the Corona crisis: "Organic agriculture is in good health".] | | |
| 21 | Pioniere im Kampf gegen Kunststoff. Illegale Exporte: Rückholung von 100 Tonnen Plastikmüll nach Österreich | Mark Perry | 05.11.2020 |
| | [Pioneers in the fight against plastic. Illegal exports: 100 tonnes of plastic waste brought back to Austria] | | |
| 22 | Immer größeres Flaschen-Angebot [Increasingly large range of bottles] | | 19.11.2020 |
| 23 | Umweltschützer, Spar und Wirtschaft leisten Widerstand: Gemeinsam gegen den Pakt | Mark Perry | 29.11.2020 |
| | [Environmentalists, Spar and businesses take a stand: United against the trade agreement] | | |
| 24 | Anders als Umweltschützer lehnen die heimischen Lebensmittelhändler und Getränkehersteller ein Pfand auf PET-Flaschen rundweg ab | | 17.10.2020 |
| | [Unlike environmentalists, domestic food retailers and beverage producers flatly reject a deposit on PET bottles] | | |
| 25 | FH-Student entwickelt nachhaltigen Gin. Auch Ouzo und Wodka destilliert; Altes Brot wird hochprozentig | Thomas H. Lauber | 16.11.2020 |
| | [Student at the University of Applied Sciences develops sustainable gin. Ouzo and vodka are also distilled; alchol made from stale bread.] | | |

| 26 | Kauffrau unterstützt Produzenten Absatz von Frischem aus dem Ort steigt: Regionalität weiter gefragt [Businesswoman supports producers. Sales of fresh local produce on the rise: regionality is still in demand] | Eliisabeth Nachbar | 03.11.2020 |
|----|---|-----------------------|------------|
| 27 | Lebensmittelhändler gehen gegen Pfand auf PET- Flaschen in die Offensive; Appell: Ökologische Vernunft [Food retailers go on the offensive against deposit on PET bottles; Appeal: Ecological reason] | Mark Perry | 22.10.2020 |
| 28 | Leitfaden präsentiert Gesunde Ernährung in Kindergärten und Schulen; Bio-Essen für die Kleinsten [Guide showcases healthy nutrition in kindergartens and schools; organic food for the little ones] | Carina Lampeter | 05.09.2020 |
| 29 | Kärntner Landwirtschaftskammer hat zur Keksback- Zeit 79 Produkte untersucht; Augen auf beim Butterkauf! [The Carinthian Chamber of Agriculture examined 79 baking products; watch out when buying butter!] | | 24.11.2020 |
| 30 | Salzburg; Im Schmaus & Browse in Salzburg können Gerichte abgeholt werden [Salzburg; Meals can be picked up at Schmaus & Browse in Salzburg] | | 08.11.2020 |
| 31 | Land Tirol unterstützt Schlachtmöglichkeiten im Oberland und im Außerfern; Mehr heimisches Fleisch [The province of Tyrol supports slaughtering facilities in the Oberland and Außerfern; more domestic meat] | | 22.11.2020 |
| 32 | Nachhaltig ist bestens verpackt [Sustainability comes in the best packaging] | | 20.11.2020 |
| 33 | Lidl als erster Discounter bei Öko-Eigenmarke klimaneutral: Besonderes "Stück Heimat" von heimischen Biobauern [Lidl is the first discounter to be climate neutral with its organic own-brand: A special "piece of home" from local organic farmers] | Mark Perry | 22.11.2020 |
| 34 | Brennende Wälder für Hormonrinder [Burning forests for hormone beef] | Mark Perry | 27.09.2020 |

Die Presse

| No. | Title | Author | Date |
|-----|--|----------------------|------------|
| 1 | Filzpatschen statt Plastikschlapfen [Felt slippers instead of plastic slippers] | | 19.06.2020 |
| 2 | Industriell verarbeiten, Eigenschaften verbessern [Industrial processing, improving properties] | Claudia Dabringer | 02.05.2020 |
| 3 | Was der Bauer nicht kennt, lässt sich lernen [What the farmer doesn't know, he can learn] | Claudia Dabringer | 08.08.2020 |
| 4 | Wir verbrauchen die Rohstoffe von drei Erden [We consume the raw materials of three earths] | | 30.08.2020 |
| 5 | Verschwendete Lebensmittel belasten das Klima [Food waste is a burden on the climate] | Cornelia Grobner | 16.05.2020 |
| 6 | Den Teller leeren für das Wohl- des Klimas [Emptying the plate for the good of the climate] | Veronika Schmidt | 10.10.2020 |
| 7 | Wie die plastikfreie Zukunft aussieht [What the plastic-free future looks like] | | 13.09.2020 |
| 8 | Wort der Woche [Word of the Week] | | 24.05.2020 |
| 9 | Essen, heizen und kochen für ein besseres Klima [Eating, heating and cooking for a better climate] | | 22.09.2020 |
| 10 | Mondi verpackt nachhaltig- 1. Platz [Mondi's sustainable packaging - 1st place] | Christian Scherl | 24.11.2020 |
| 11 | Pflanzen und Fische leben im Gleichgewicht [Plants and fish living in equilibrium] | Veronika Schmidt | 06.06.2020 |
| 12 | Die unsichtbare Revolution [The invisible revolution] | Christian Lenoble | 11.11.2020 |
| 13 | Mit Insektenburger die Welt retten [Saving the world with insect burgers] | | 27.09.2020 |
| 14 | Supermarkt zum Mitmachen [A supermarket where you can get involved] | Christine Imlinger | 09.10.2020 |
| 15 | Was der Agrarsektor Anlegern bietet [What the agricultural sector offers investors] | Raja Korinek | 08.05.2020 |
| 16 | Mehr Transparenz bei Lebensmitteln | Fritz Floimayr | 05.11.2020 |

| | [More transparency in the food sector] | | |
|----|--|--|------------|
| 17 | Wie werden Getränkekartons in Österreich recycelt? [How are beverage cartons recycled in Austria?] | Adrian von Jagow | 08.08.2020 |
| 18 | Kritik an ÖVP-Plänen zu Plastiksteuer [Criticism of the ÖVP's plans for a plastic tax] | Anna Gabriel | 01.08.2020 |
| 19 | Wort der Woche [Word of the Week] | | 13.09.2020 |
| 20 | Wie viel Fleisch am Vegan-Hype dran ist [How much is to be gained from the vegan hype] | Madlen Stottmeyer | 10.08.2020 |
| 21 | Hohe Ertragseinbußen in der Landwirtschaft [High yield losses in agriculture] | | 20.06.2020 |
| 22 | Drehscheibe für Vergorenes [A hub for fermented products] | Anna Burghardt | 06.05.2020 |
| 23 | Ein Drittel der Nahrungsmittel nicht gegessen [A third of food is left uneaten] | | 29.09.2020 |
| 24 | "80 Prozent unserer Gäste sind keine Veganer" "80 per cent of our guests are not vegans". | | 17.09.2020 |
| 25 | Die Verantwortung steckt im Burger [The responsibility lies in the burger] | Gerhard Hofer | 23.10.2020 |
| 26 | Flasche leer - Was nun? [Empty bottle - What now?] | Matthias Auer, David Freudenthaler | 16.09.2020 |
| 27 | Wollen wir Corona stoppen, müssen wir Vegetarier werden [If we want to stop Covid, we have to become vegetarians] | Anna Goldenberg | 09.07.2020 |
| 28 | Wort der Woche [Word of the Week] | | 19.07.2020 |

Der Standard

| No. | Title | Author | Date |
|-----|--|--------|------------|
| 1 | Klimagesetze; statt Bio-Avocado | | 18.09.2020 |
| | [Climate laws; instead of organic avocado] | | |

| | | | 24.07.2020 |
|----|---|----------------------|------------|
| 2 | Grünere Regeln für öffentliche Vergabe [Greener rules for public procurement] | | 24.07.2020 |
| 3 | Jetzt reicht es mit den Ökoschmähs! [Enough with the eco-smears!] | Guido Gluschitsch | 23.06.2020 |
| 4 | Grüne Welle [Green Wave] | | 27.10.2020 |
| 5 | Köstinger beharrt auf Nein zum Mercosur- Abkommen; Börsen feiern asiatisches Freihandelsabkommen [Köstinger insists on rejecting the Mercosur agreement; stock exchanges celebrate Asian free trade agreement] | | 17.11.2020 |
| 6 | Mit Transparenz gegen Billigfleisch [Transparency against cheap meat] | Philippe Narval | 18.05.2020 |
| 7 | Wie aufwendig klimafreundlichere Ernährung ist [How costly climate-friendly nutrition is] | | 08.10.2020 |
| 8 | Die Grenzen des regionalen Konsums [The limits of regional consumption] | | 25.07.2020 |
| 9 | Felder werden neu bestellt [Fields are tilled anew] | | 08.06.2020 |
| 10 | Teure Billigproduktion [Costly cheap production] | | 20.06.2020 |
| 11 | Ein Kisterl Freude [A basket of joy] | Nina Wessely | 16.09.2020 |
| 12 | Auf eine engagierte Entwicklungspolitik darf nicht verzichtet werden [A committed development policy must not be neglected] | Annelies Vilim | 19.06.2020 |
| 13 | Die Zukunft schwimmt; im Karpfenteich [The future swims; in the carp pond] | | 26.08.2020 |
| 14 | Der Lachs, der aus dem Drucker kam [The salmon that came from the printer] | | 28.08.2020 |
| 15 | Der Evolution nachhelfen [Helping evolution along] | | 02.10.2020 |
| 16 | Verdorbene Diskussion [A rotten discussion] | | 27.06.2020 |

| 17 | Zu den herausforderndsten Phasen im Leben einer Milchkuh zählen die Zeitspannen rund um die Geburt eines Kalbes [The time around the birth of a calf is among the most challenging phases in the life of a dairy cow] | 16.09.2020 |
|----|--|------------|
| 18 | Ackerdroiden versus Unkraut [Farm robots versus weeds] | 14.10.2020 |
| 19 | Milkywaste [Milkywaste] | 24.10.2020 |
| 20 | Rüsselkäfer als Feigenblatt [Weevils serving as a fig leaf] | 28.08.2020 |
| 21 | Kultur als Belohnung [Culture as a reward] | 23.07.2020 |

Czech Republic

Blesk

| No. | Title | Author | Date |
|-----|---|--------|------------|
| 1 | Výživový hit, který milují i slavní: Znáte flexitariánství? [The diet trend that even celebrities love: do you know about flexitarianism?] | | 26.11.2020 |
| 2 | Budeme jíst burgery z řepky? Žlutá pole skrývají "nálož" bílkovin, říká odborník [Are we going to eat rapeseed burgers? Yellow fields hide a 'glut' of protein, says expert] | | 14.11.2020 |
| 3 | Je libo zvěřinu? Mendelu nabízí maso z univerzitních lesů, má i vlastní bourárnu [Would you like some venison? The Mendel University offers meat from the university forests and has its own butchery] | | 16.09.2020 |
| 4 | Jaká je uhlíková stopa průměrného Pražana? Nejvíce zatěžujeme přírodu spotřebou masa, uvádí výzkum [What is the carbon footprint of the average Prague resident? Meat consumption is the biggest burden on the environment, says study] | | 15.09.2020 |
| 5 | Ohrožuje palmový olej naše zdraví a pralesy? Odborník řekl, jak to opravdu je | | 07.09.2020 |

| | [Does palm oil threaten our health and forests? An expert tells it like it really is] | | |
|----|---|---------------------|------------|
| 6 | Pandemie přinesla záplavu plastů. Expert: Máme problém, před kterým nelze zavírat oči [The pandemic has brought a flood of plastic. Expert: We have a problem we can't turn a blind eye to] | Nikola Forejtová | 16.08.2020 |
| 7 | Chcete uchovat pečivo déle čerstvé? Tenhle nápad dvou žen vás nadchne [Want to keep baked goods fresh longer? You'll love this idea of these two women] | | 12.08.2020 |
| 8 | Průměrný Čech loni vyhodil 351 kg směsného odpadu. Jak toto číslo můžeme snížit? Tyhle maličkosti zvládne každý! [The average Czech threw away 351 kg of waste last year. How can we reduce this number? Everyone can do these little things!] | | 07.08.2020 |
| 9 | Praha pronajímá zdarma půdu ekozemědelcům: Vypěstované potraviny by mohli dodávat do škol [Prague rents land to eco-farmers for free: They could supply the food they grow to schools] | | 21.07.2020 |
| 10 | Nákup bez kelímků a sáčků? V Karlíně se otevřel info point o udržitelnosti [Shopping without cups and plastic bags? An info point on sustainability opened in Karlín] | | 02.07.2020 |
| 11 | Nevyhazujte slupky a stonky z ovoce a zeleniny. Mají zdaleka nejvíc vitamínů [Do not throw away the peels and stems of fruits and vegetables. They have by far the most vitamins] | | 27.06.2020 |
| 12 | Čeká nás průvan v regálech a zdražování? Ostré hádky o kvóty na české potraviny [Are we in for a draught in the shelves and price hikes? Fierce arguments over quotas for Czech food] | Jaroslav Šimáček | 03.06.2020 |
| 13 | "Neakceptovatelné." Čeští zemědělci bouří kvůli návrhu EU, bez masa bude větší sucho ["Unacceptable." Czech farmers revolt over EU proposal, without meat there will be more drought] | Markéta Mikešová | 01.06.2020 |
| 14 | Pomozte své imunitě, srdci i planetě jedinou potravinou [Help your immunity, your heart and the planet with one single ingredient] | | 01.06.2020 |
| 15 | Všichni budeme jíst brouky. EU tlačí na pojídání hmyzu, tradiční maso je prý neudržitelné | | 30.05.2020 |

| | [We're all going to be eating bugs. EU pushes for insect consumption, says traditional meat is unsustainable] | | |
|----|--|---------------------|------------|
| 16 | Šéf zemědělců zmínil "facku do tváře": Dostat do obchodů víc českých potravin je nutnost [Farmers' boss calls it a 'slap in the face': getting | Markéta Mikešová | 28.05.2020 |
| | [Farmers' boss calls it a 'slap in the face': getting more Czech food into shops is a must] | | |

Mladá Fronta Dnes

| No. | Title | Author | Date |
|-----|---|-------------------|------------|
| 1 | Cena rozhoduje. Většinu Čechů balení potravin nezajímá [The price decides. Most Czechs don't care about food packaging] | | 18.11.2020 |
| 2 | Blíží se konec hnojení? [Is the end of fertilisation approaching?] | Jiří Valenta | 18.11.2020 |
| 3 | "Jsme střechou celé Evropy" ["We are the roof of Europe"] | Jaroslava Šašková | 16.11.2020 |
| 4 | Britští lékaři volají po klimatické dani na maso, pokud se trh nezmění sám [British doctors call for climate tax on meat unless the market makes changes of its own accord] | | 08.11.2020 |
| 5 | Svět se bojí hladomoru. Kvůli jídlu může koncem roku umírat 12 tisíc lidí denně [The world fears famine. 12,000 people a day could die of hunger by the end of the year] | Ladislav Kryzánek | 12.10.2020 |
| 6 | Veganské potraviny táhnou, řetězce musejí rozšiřovat sortiment [Vegan food is on the rise, chains need to expand their range] | | 01.10.2020 |
| 7 | Bio v regionu. Kuchaři poznávali lokální potraviny [Organic food in the region. Chefs got to know local food] | | 24.09.2020 |
| 8 | Konec plastů na jedno použití [The end of single-use plastics] | Jitka Vlková | 03.09.2020 |
| 9 | Evropa hledá náhradu palmového oleje. Zbytečné, říkají naši odborníci [Europe is looking for a replacement for palm oil. Unnecessarily, say our experts] | | 01.09.2020 |
| 10 | Velká Británie chce zakázat nákup potravin od firem, které ničí lesy [UK wants to ban buying food from companies that destroy forests] | | 26.08.2020 |

| 11 | Fastfood nabídne hamburgery z "nízkoemisních" krav, které se nenadýmají [Fastfood joints to offer burgers from 'low-emission' cows that don't get bloated] | | 14.07.2020 |
|----|---|----------------|------------|
| 12 | Lidstvo by potřebovalo až sedm planet, pokud by jedlo jako v zemích G20 [Humanity would need up to seven planets if it ate like the G20 countries] | | 19.07.2020 |
| 13 | DS Smith s Multivakem snižují množství plastů v obalech o 85 % [DS Smith and Multivak reduce plastic in packaging by 85%] | | 03.07.2020 |
| 14 | Vařit ve státním z českého. Ministerstvo chce zvýhodnit zemědělce a výrobce [Cooking in the public sector with Czech food. The Ministry of Agriculture wants to favour Czech farmers and producers] | Lada Režňáková | 28.06.2020 |
| 15 | Plýtvání zakázáno [Waste forbidden] | Sára Mazúchová | 29.06.2020 |
| 16 | Není důvod dovážet jablka z Ameriky, české nerovná se drahé, řekl Toman [There is no reason to import apples from America, Czech apples are not expensive, said Toman] | Josef Kopecký | 03.06.2020 |
| 17 | Z odpadu budou lavičky i palivo pro vozy MHD [Waste will be used to make benches and to fuel public transport vehicles] | Martin Bajtler | 30.05.2020 |
| 18 | Nařídí nám EU snížit spotřebu masa a mléka? [Is the EU going to order us to cut meat and milk consumption?] | Filip Horáček | 23.05.2020 |

Lidové Noviny

| No. | Title | Author | Date |
|-----|--|---------------|------------|
| 1 | Oxid dusný ohřívá planetu. Jeho emise rostou a škodí planetě | Jaroslav Petr | 30.10.2020 |
| | [Nitrous oxide is heating the planet. Its emissions are rising and harming the planet] | | |
| 2 | Farmářské mléko Moravia má světové prvenství [Moravia Farmers' Milk is a world leader] | | 29.10.2020 |
| 3 | Vegetariánské párky, hamburgery a klobásy nemusí měnit název, rozhodli europoslanci | | 23.10.2020 |
| | [Vegetarian sausages, hamburgers and sausages do not have to change their name, MEPs decide] | | |

| 4 | Zemědělská politika EU potřebuje změnu [EU agricultural policy needs change] | Luděk Niedermayer | 20.10.2020 |
|----|---|----------------------|------------|
| 5 | Londýn chystá bič na odlesňování [London plans to crack down on deforestation] | Ondřej Hudec | 19.10.2020 |
| 6 | Nobelovu cenu za mír získal Světový potravinový program za boj proti hladu. Nedostatek potravin zhoršil i covid [The Nobel Peace Prize is awarded to the World Food Programme for its fight against hunger. Food shortages have also been exacerbated by Covid] | | 09.10.2020 |
| 7 | Nemáme maso, máme nemaso [We don't have meat, we have non-meat] | Natálie Veselá | 10.10.2020 |
| 8 | Gastronomii ted' není úplně přáno, je to náročná doba, říkají majitelé Zona Bistro [Gastronomy is not in good shape right now, it's a challenging time, say the owners of Zona Bistro] | | 25.09.2020 |
| 9 | Místo chipsů sušení červi. Jíst maso není trvale udržitelné, lidé stále přibývá a spotřeba roste, říká zakladatel WormUp! [Instead of chips, dried worms. Eating meat is not sustainable, people are gaining weight, and consumption is increasing, says the founder of WormUp!] | Alena Pecháčková | 18.09.2020 |
| 10 | Nad brčky a míchátky se smráká. EU chystá zúčtování s jednorázovým plastem, některé výrobky úplně zmizí z trhu [The end is nigh for straws and stirrers. The EU plans a crackdown on single-use plastics, with some products disappearing from the market altogether] | Eliška Nová | 06.09.2020 |
| 11 | Jak nakrmit hladovějící a nekrást [How to feed the hungry without stealing] | Pavel Nováček | 01.09.2020 |
| 12 | Košík.cz představuje energetický model budoucnosti [Košík.cz presents the energy model of the future] | | 24.07.2020 |
| 13 | Nutricia dává stopku plastovým brčkům [Nutricia stops using plastic straws] | | 09.07.2020 |
| 14 | Izraelský podnik bude dodávat "maso" vyrobené na 3D tiskárnách [Israeli firm to produce 'meat' made on 3D printers] | | 01.07.2020 |
| 15 | Stát chce do škol více lokálních potravin. Ministra Tomana inspiroval návrh na povinnou kvótu českého zboží | Eliška Nová | 18.06.2020 |

| | [The state wants more local food in schools. Minister Toman was inspired by the proposal for a mandatory quota of Czech produce] | | |
|----|--|----------------|------------|
| 16 | Jak žít udržitelněji? Minimalizujte konzum a přemýšlejte nad tím, co doopravdy potřebujete [How to live more sustainably? Minimize consumption and think about what you really need] | | 06.06.2020 |
| 17 | Hitem pandemie jsou plasty na jedno použití. Zájem je o jednorázové kelímky, rukavice, nádobí a sáčky [Single-use plastics are the hit of the pandemic. There is interest in disposable cups, gloves, utensils and bags] | Eliška Nová | 23.05.2020 |
| 18 | Brusel chce omezit pesticidy i hnojiva [Brussels wants to limit pesticides and fertilisers] | | 21.05.2020 |
| 19 | Teplota na Zemi je o stupeň vyšší než před průmyslovou revolucí. Nejhorší znečišťovatelé jsou Čína a krávy [The Earth's temperature is one degree warmer than before the Industrial Revolution. The worst polluters are China and cows] | Eliška Nová | 12.05.2020 |
| 20 | Čeští designéři vyrábí pratelné a opakovaně použitelné odpadkové pytle. Jsou téměř nezničitelné [Czech designers produce washable and reusable rubbish bags. They are almost indestructible] | | 04.09.2020 |
| 21 | KFC chce nugetky tisknout na 3D tiskárně, pomoci má ruská laboratoř. Receptura kuře jen připomene [KFC wants to print nuggets on a 3D printer, with the help of a Russian laboratory. The product will only resemble chicken] | Andrea Řepková | 21.07.2020 |
| 22 | Hříchy v olejové lahvi [Sins in an oil bottle] | Jaroslav Petr | 18.07.2020 |
| 23 | Slavná skotská značka vyzkouší lahve z papíru [Famous Scottish brand to trial paper bottles] | | 15.07.2020 |
| 24 | Odpad musíme vnímat jako vlastní zodpovědnost. Cesta k udržitelnosti je věci odmítat, říká odborník na třídění [We must see waste as our own responsibility. The way to sustainability is to say no to things, says sorting expert] | | 14.06.2020 |
| 25 | Mattoni 1873: Covid-19 přinesl důležitá poučení pro udržitelnost | | 25.05.2020 |
| | | | |

| [Mattoni 1873: Covid-19 provided important lessons | |
|--|--|
| for sustainability] | |