The impact of climate change on European agricultural policy

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Abstract
Agriculture in the context of climate change is often a provocative subject because agriculture is both heavily impacted by the warming world and also a principal contributor to climate change. As efforts to reduce greenhouse gas emissions increase, the EU is pushing all sectors to integrate measures to combat climate change. This article argues that the agricultural sector has instigated a process of integrating climate concerns. However, these efforts will not lead to a large number of disruptive changes in the agricultural sector. While the EU is putting climate change firmly on the agricultural agenda, ranking the issue even higher than the environment, the Union’s primary goal is still to support the income of farmers. Hence, the EU’s intentions will likely lead to raising awareness of the issue of climate change in the context of agriculture but will not lead to any transformative changes in European agricultural policymaking.

Keywords
Climate change, Agriculture, Common Agricultural Policy, CAP, Climate policies, Exceptionalism

Introduction
The EU and its member states, as well as countries around the world, have adopted legislation and policies that address various aspects of climate change (Fleig et al. 2017). However, even though the impressive number of policies reveals the extent to which climate concerns have been integrated into adjacent domains, some sectors seem to have fallen between the cracks of policymaking. For instance, energy policies include a great
number of climate-related objectives (Adelle and Russel 2013; Schmidt and Fleig 2018), which is not the case for the agricultural domain. This is surprising because agriculture is a major concern for many countries as it is a principal contributor to the phenomenon (Lipper et al. 2014). Agricultural emissions—caused by fermentation, rice production, stockbreeding, synthetic fertiliser usage, agro-biomass burning and various other agricultural production practices—are significant and rising (Bennetzen et al. 2016; Gerber et al. 2013). In addition, greenhouse gas (GHG) emissions which stem from increased agricultural production, such as methane and nitrous oxide, are much more potent and their concentrations are rising more rapidly than those of carbon dioxide (Bennetzen et al. 2016; UNFCCC 2019). In conjunction with emissions from land-use change, which are declining (Lipper et al. 2014), they account for roughly one-quarter of global GHG emissions—rendering them almost as extensive as emissions from the electricity and heat production sectors (Smith et al. 2007).

Of course, agriculture is also riven by vulnerability and very susceptible to weather changes. Therefore, much of the literature regarding agriculture and climate change generally stresses the sector’s vulnerability and its capacity (or lack thereof) to adapt to the various impacts of climate change (Berry et al. 2006; Ford et al. 2015).

This article argues that agriculture—despite some efforts to integrate climate concerns—is still an ‘exceptional’ sector (Daugbjerg and Feindt 2017; Skogstad 1998). Even as it is dawning upon policymakers that action across all sectors is needed to reach the goal of the Paris Agreement of limiting GHG emissions to well below two degrees Celsius (UN 2015), relatively few efforts have been made in the agricultural domain. After describing the ‘specialness’ of the agricultural sector in more detail, this article explores the actions that the EU has undertaken thus far in the context of climate change. The measures the EU is planning to integrate in the next budgetary period are then discussed before the paper concludes with a summary.

The expansion of agricultural policymaking

Agricultural policies, since they concern the vital securing of livelihoods, are usually regulated at higher levels of government, for instance, at the national or supranational level. The EU’s Common Agricultural Policy (CAP) is often characterised as one of the most important and ‘Europeanised’ policy areas, given that it takes up the biggest part—more than 35% (37.72%, Moës, 2018)—of the European budget. In addition, it drives a lot of legislation on agriculture in the respective member countries (Daugbjerg and Feindt 2017; Greer 2017).

Compared to other policy fields, agriculture is special—or as previous research has put it, ‘exceptional’—because it is essential in generating and securing food production (Daugbjerg and Feindt 2017; Skogstad 1998). This explains the privileged position of farmers and farmers’ unions generally, who, it has been argued, ought to be supported. In the past, this strong support for farmers has made it difficult to make changes to agricultural policies. Studies have shown, for example, a strong connection between political
parties and farmers. In Germany, the Christian Democratic Union (Christlich Demokratische Union, Deutschlands) has supported the interests of farmers very well (Tosun 2017). This, in turn, makes it challenging to impose additional climate-related measures on farmers.

However, this special treatment and the privileged position of farmers and the sector in general are changing. In addressing new policy issues and integrating concerns related to development, trade and, indeed, climate change, scholars have noted an increasing multidimensionality (Daugbjerg and Feindt 2017; Tosun 2017). For instance, scholars have highlighted the expansion of policymaking in the agri-food sector by showing how environmental concerns have been integrated into the CAP (Alons 2017; Greer 2017). Such emerging ‘multidimensional’ concerns have introduced new preferences and ideas. Scholars, however, have also noted that efforts to include concerns related to the environment in agricultural policies are not significant (Alons 2017).

**How has the EU dealt with climate change and agriculture?**

Thus far, climate change has not really been a top priority in the CAP. However, environmental concerns have been addressed by means of ‘greening’ measures. Introduced in 2013, the objective of these measures was to improve the environmental and climate aspects of the CAP. ‘Greening’ payments can make up 30% of direct payments under the CAP, which is a rather significant amount and rewards farmers financially for taking care of the environment (European Court of Auditors 2017). However, studies have found that these greening measures have not had a significant impact on the CAP’s environmental performance (Alons 2017). The European Court of Auditors (2017) could only attest to a positive impact on about 5% of agriculture, meaning that the majority of farming practices were not affected by these measures. Hence, while the integration of measures related to the environment is important and admirable, the results suggest that it will not lead to any transformative changes in European agricultural policymaking. Rather, the agricultural sector—despite some visible efforts—remains largely unchanged.

Looking at climate change, it is also true that European legislation as well as member countries’ climate policies have, on average, integrated agricultural concerns to a greater degree than those of any other group of countries around the globe (Schmidt 2019). This is surely a result of the efforts of the CAP to become ‘greener’.

Research has further shown that the EU has previously adopted a number of ambitious legislative measures in the context of climate change. For example, the EU’s Climate and Energy Package, adopted in 2009, while primarily geared towards energy by aiming to increase the use of renewables and improve energy efficiency, also addressed the agricultural sector (Bäckstrand and Elgström 2013).

For the next budget period, 2021–27, the Commission has defined a number of key policy objectives for the CAP. Ensuring a reasonable and just income for famers
continues to be the top priority. This is followed by increased competitiveness and a rebalancing of power in the food chain. Following these three objectives is action on climate change. This puts climate change as a remarkably high priority for the CAP, even higher than tackling environmental concerns, which come next. The other objectives are the preservation of landscapes and biodiversity, generational renewal, support for rural areas, and protecting food and health quality (European Commission 2019). For each objective, the EU has put together special action plans and, given that these commitments will be taken seriously, climate change is likely to become a key priority in the CAP.

Furthermore, the European Commission has stated that it views agriculture as playing a role in efforts to combat climate change, ‘helping to reach the commitments of the Paris agreement and EU strategies on sustainability and bioeconomy by stepping up its ambition in terms of GHG emissions’ (European Commission 2019: 1). With regards to the production of the Nationally Determined Contributions (NDCs), the main instrument of the Paris Agreement, the EU will also include—for the first time—the goal of incorporating land use and forestry into the EU’s emission-reduction efforts for the upcoming period (Tobin and Schmidt, forthcoming). This is remarkable because the integration of land use into climate policy is a complex challenge to which the EU did not commit in the previous submission of their NDC (Tobin et al. 2017).

In sum, it is clear that climate objectives have become more present in European policymaking in general, but also in agricultural policy in particular. Scholars and policymakers alike have stressed the important and beneficial role of agriculture (Loránt and Allen 2017; Schmidt 2019) and the EU surely sees the potential role that agriculture can play in the context of combating climate change. The introduction of climate change combative actions into the CAP shows that climate change constitutes a ‘new’ concern in agricultural policymaking. The EU has addressed this by updating its set of policy ideas and creating new policy instruments. By stating it so explicitly and undertaking such actions, the EU has also staked its claim as a global leader in combating climate change (Dupont 2016; Tobin et al. 2018).

However, the top objective is still to guarantee a fair income for farmers. This shows that the EU does not intend to pursue a complete transformation of the CAP. Thus, it remains to be seen whether these stated efforts will truly make a real difference in tackling climate change, and reducing agricultural emissions in particular. In this regard, it also needs to be noted that—in comparison with other continents such as South America, or countries such as Brazil—emissions from the agricultural sector have been declining in recent decades in the EU anyway, due to increased productivity and greater professionalisation (Bennetzen et al. 2016). Hence, it is much easier for the EU to attain a reduction in emissions than it is in other parts of the world. As a result, the EU’s actions will likely help to raise awareness of the issue of climate change in the context of agriculture but are unlikely to lead to any transformative changes in European agricultural policymaking.
Conclusions

Looking ahead, four developments will likely be important in determining how far agricultural policymaking will focus on climate change in the future. First of all, the ability to make the CAP more climate-friendly and sustainable will be determined by the presence of a sufficient budget. In the event that the UK leaves the EU, the significant sum that the UK has contributed in the past will be missing. This is relevant given that funding for agriculture, in particular in the context of climate change, is insufficient.

However, the European election results of May 2019 may be crucial in redirecting enthusiasm and resources towards high-reaching EU climate policy objectives. The clear focus on climate- and environment-related issues during the campaign resulted in a substantial gain of 19 more seats for the Greens in comparison to the 2014–20 period and could also mean that the issue of climate change will stay on policymakers’ agendas (European Parliament 2019). In addition, the ‘Fridays for Future’ movement, inspired by Greta Thunberg’s decision to advocate for more climate action, has brought renewed attention to the issue. In addressing this movement, the new president of the Commission, Ursula von der Leyen, has also repeatedly stated that climate change will be a top priority during her upcoming presidency.

Moreover, vulnerabilities are changing. With 2019 looking as though it will be the hottest year on record (just as the previous four years were before it), some actors, including farmers, hope that heatwaves and other extreme weather events may increase the pressure on policymakers to take action that combats climate change. In Germany for example, farmers have called upon the government to compensate them for their lost harvests. However, gaps remain apparent—even within the increasingly ‘better integrated’, comprehensive CAP that now also addresses climate change. If we are to achieve the goal of the Paris Agreement of limiting global average temperature rises to well below two degrees Celsius, efforts in all sectors—including agriculture—need to intensify.

On the international level, the issue of agriculture and climate change has also gained increased attention. After many years of gridlock and heated discussion, policymakers initiated the Koroniva Dialogue in 2017, making the decision to work together on agriculture and climate change (UNFCCC 2018). This forum is meant to be a neutral platform where parties openly discuss the impacts on and contributions of the agricultural sector to climate change. As agriculture involves a high number of stakeholders including (smallholder) farmers, lobby groups, politicians and non-governmental organisations, there are many different interests at stake, which may explain the difficulty surrounding reaching any type of consensus (Fouilleux et al. 2017).

In sum, the current efforts of the EU to foster rules and regulations related to climate change in the agricultural sector mean that societal demands are being addressed. This in itself represents progress. Integrating climate concerns into the CAP shows a more comprehensive and encompassing understanding of the cross-cutting, long-term problem climate change represents. At the same time, expanding policies to include a
variety of different aspects is also an ambivalent process (Adam et al. 2019), primarily because it creates demands. These range from increasing financial resources, to fostering administrative capacity and increasing coordination, and to the provision of knowledge and guidance on how to prioritise climate-change concerns in agricultural policymaking.

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