



REEN BREXIT

Setting the Bar for
a Green Brexit in
Food and Farming



Table of Contents

Executive summary	3
Introduction	4
I. The shadow of the Common Agricultural Policy	5
a. The shadow of the past: The Europeanisation of agricultural policy-making	6
b. The shadow of the present: Devolution and internal UK policy divergence	6
c. The shadow of the future: CAP reform and future constraints on UK policy	8
II. Political commitments to policy change in the UK	9
a. Agriculture during the referendum campaign	9
b. UK Government commitments on post-Brexit agricultural policy	10
c. The Agriculture Bill and devolution	11
d. The Agriculture Bill: Easing or fuelling tensions?	13
III. The international trade context	15
IV. Setting the bar: Learning from innovative policies and practices within the EU	19
a. Spain: Strengthening fair trading practices in the food supply chain	20
b. Italy: Promoting social agriculture	23
c. France: Sharing knowledge for an agroecological transition	26
d. France: Removing barriers to agroforestry uptake	28
e. Denmark: Embracing organic food procurement	30
V. Pathways to deliver a Green Brexit in food and farming	32

Executive Summary

As the UK prepares to leave the European Union (EU), the future of agriculture is high on the political agenda. Since joining the EU, UK agriculture has been influenced by the Common Agricultural Policy (CAP).

For over twenty years, the CAP has been interpreted and implemented differently across the UK's four nations. Since the EU Referendum result, the UK Government has repeatedly promised a 'Green Brexit', whereby the UK would learn from the mistakes of the CAP and replace it with policies putting the 'environment first'. But what would this mean in practice, and are current developments going in the right direction?

This report, commissioned by the Soil Association, aims to set the bar for a Green Brexit in food and farming. To do so, it first sets out the context in which the UK will be determining policy. The CAP has shaped UK agricultural policy for decades and will continue to impact farming here due to the close competition between the two markets.

Second, it highlights the political promises made about post-Brexit agricultural policy. What have ministers at UK level promised they will do for food and farming, and how does this differ from on-going debates in the devolved administrations? Third, it examines what we can expect trade in agricultural products to look like after Brexit, including the rules and tariffs that will apply.

While the CAP has historically been linked to a deterioration in soil, air and water quality, habitat clearance, loss of biodiversity and the degradation of ecosystems, recent CAP reforms have attempted to 'green' agriculture. These reforms have made it possible for EU Member States to pursue ambitious, differentiated yet complementary policies for farming and food, alongside the CAP – belying the policy's one size fits all image.

The report reviews five such examples of innovative domestic policies in Spain, Italy, France and Denmark, and how the UK could adopt and adapt them.

Taken together, our review of the policy context and good practices across the EU leads us to draw some key take-home messages. Rethinking agriculture requires action beyond the silo of agricultural policy (incorporating education, land use rights and the whole supply chain) and the adoption of a holistic approach where food and farming policy are co-designed. Such a change will not happen overnight and requires long-term targets to secure investment and build collaboration. Finally, profound policy change does not necessarily require centralisation. Instead, a shared policy framework can accommodate and benefit from local divergence and innovation.

This report was made possible by the generous support of the **Mitchell Trust**.

Report authors: **Dr Ludivine Petetin** (Cardiff University), **Dr Viviane Gravey** (Queen's University Belfast) and **Dr Brendan Moore** (University of East Anglia.)

Introduction

The Common Agricultural Policy (CAP) has played a significant role in shaping farming policies and practices across Europe; domestic ambitions have also been an equal factor. A vision for food and farming that delivers a 'Green Brexit' must learn from, and seek to improve upon, experiences across the EU. Achieving an inclusive, environmentally-friendly and sustainable food and farming system must be the priority.

During the EU Referendum campaign, Vote Leave highlighted the replacement of the CAP and changes in environmental regulations as a key opportunity for the UK if it left the EU:

'EU regulations make life hard for the UK's farmers. If we have the courage to Vote Leave and take back control, we would be free to think again and could achieve so much more for farmers and our environment.'

George Eustice, former Farming Minister and Vote Leave lead on agriculture (2016)¹

Since the Referendum result in June 2016, the UK Government and the leadership of the Department for Environment, Food and Rural Affairs (Defra) have committed to creating a simplified, environmentally-friendly agricultural policy after Brexit. This 'Green Brexit' rhetoric from the UK Government has focussed on the environmental harm caused by the CAP and the opportunities of leaving the EU, especially for reducing red tape and regulatory constraints:

'Leaving the EU gives us the opportunity to improve our environment, to take leaps forward, to ensure that over a period of time—and again stressing that this is a smooth transition—we will have the chance to make sure that our environmental legislation focuses on what is right for the UK rather than on necessarily the lowest common denominator for 28 EU Member States.'

Andrea Leadsom, former Defra Secretary (2016)²

Since 2016, the push from the Westminster Government to overhaul agricultural policy has led to the publication of the Health and Harmony consultation, the draft Agriculture Bill and the Future for Food, Farming and the Environment policy paper in 2018. The Health and Harmony consultation states:

'Now we are leaving the EU we can design a more rational, and sensitive agriculture policy which promotes environmental enhancement, supports profitable food production and contributes to a healthier society'.³

The UK 25 Year Environment Plan published in January 2018 contends that Brexit offers a 'once-in-a-lifetime chance to reform our agriculture and fisheries management, how we restore nature, and how we care for our land, our rivers and our seas'.⁴

The devolved administrations took on board similar objectives for a green farming future and released consultations on these issues in Scotland, Wales and Northern Ireland.

Brexit has indeed put agriculture and the environment back on the political agenda across the UK, offering a key window of opportunity for change. However, new policies do not necessarily mean progress, or that the promised 'Green Brexit' will be delivered. To seize that opportunity, policy makers must deliver on their commitments, pay careful attention to the challenges posed by devolution and be open to lessons from innovative approaches in other countries (many of them carried out in the EU27 using existing flexibility provisions within the CAP).

This report seeks to inform the design of sustainable agricultural policy after Brexit. Section I summarises the long-term impacts the CAP has had and will have on British farming. Section II reviews the commitments on agriculture made during the referendum campaign and subsequently by the UK Government and the devolved administrations. Section III analyses the international context in which post-Brexit UK policy will be embedded and the important

role played by trade agreements. Section IV presents five innovative EU agricultural policies and practices on fair trading, social agriculture, agroecology, agroforestry and organic food procurement. Finally, Section V provides concrete recommendations for 'setting the bar' in a way that makes the delivery of a 'green farming' Brexit in the UK more likely.

I. The shadow of the Common Agricultural Policy

Since the UK joined the European Economic Community in 1973, the CAP has provided an overarching framework for its agricultural policy. This is set to change, with the UK planning to leave the CAP after Brexit.

While the future UK-EU relationship in other policy areas remains uncertain (in fields such as trade, migration or environment), the picture for agriculture and fisheries outside the EU is relatively clear: new domestic policies will be required to replace EU frameworks.

As the UK debates future agricultural policies in Westminster and the devolved administrations, it is key to remember that domestic agricultural policy development is taking place in the shadow of the CAP. This shadow can best be understood as comprising three elements: the shadow of the past, the shadow of the present and the

shadow of the future. In addition, farming and rural areas are affected by many other policies. Some of these additional policies—such as land use, planning, health and food policy—have remained overwhelmingly the competence of the UK and devolved governments during EU membership. Other areas—such as trade policy—are currently EU competences and may be repatriated to the UK after Brexit.

a. The shadow of the past: The Europeanisation of agricultural policy-making

Since its inception, the CAP has set many of the parameters for what is possible and acceptable when regulating the farming sector in EU Member States. While some of these rules are international, not European, in origin (such as the World Trade Organization's Agreement on Agriculture) the EU has largely decided how they have been applied and interpreted. This centralisation of power has consequences for policy-making capacity. Agriculture policies have largely been developed in Brussels and implemented in the Member States. As the UK leaves the EU, it will need to rebuild its capacity for policy development, not simply implementation and enforcement. This requires a profound shift in staffing, both an increase in the number of civil servants working in the relevant department and the recruitment of more policy experts, (as is already on-going in Defra). Policy-makers must also develop new approaches to engaging with civil society (which was very active in reforming the CAP over the last twenty years) and engaging the different administrations of Westminster, Wales, Scotland and Northern Ireland.

Future UK policy will also need to address the environmental impacts of agriculture. By encouraging the intensification of farming, the CAP has historically led to a deterioration

in soil, air and water quality, land clearing, loss of biodiversity and the degradation of marine, freshwater and terrestrial ecosystems.⁵

The CAP has been reformed many times, but in terms of its environmental impact the key reforms remain that of the 1990s and early 2000s, which saw the end to 'coupled payments' linked to production level and attempts at a 'greening of the CAP' to support sustainable agriculture. CAP 'greening' is visible under both its pillars. Under Pillar 1, direct payments to farmers are subject to cross-compliance and specific greening requirements. Under Pillar 2, rural development programmes (RDPs) aim to improve the social and environmental effects of agriculture by enhancing social cohesion and sustainability in rural areas, particularly through the development of agri-environment schemes.⁶

Despite these reforms and subsequent signs of progress, the CAP has failed to reverse its negative overall impact on the UK's environment. Moving forward, the EU will need to further reform the CAP. If the UK is to deliver a 'Green Brexit' in agriculture, the UK should continue to be prepared to learn from the CAP (both its positive and negative aspects).

b. The shadow of the present: Devolution and internal UK policy divergence

While the CAP started as a one-size-fits-all policy, today it offers a wide degree of flexibility to better accommodate the different preferences of the EU Member States and the diversity of the European farming sector. Crucially, this differentiation has not only taken place between countries but also within them (including within the UK). In the UK, there is not one but four implementations of the CAP for Northern Ireland, Scotland, Wales and England.

The starting point for post-Brexit policy is therefore heterogeneity: heterogeneity of the farming system and ecosystems across the four nations⁷, the resulting agricultural and environmental focus points within the RDPs, the economic importance of the agri-food sector, the political parties' preferences, and policy competence.

Box 1

Examples of differentiation within the 2014-2020 Common Agricultural Policy in the UK and Ireland

Minimum claim size:

England and Wales have a minimum claim size of 5 hectares, while Northern Ireland and Scotland have chosen 3 hectares. Outside of the UK, Ireland has chosen to have no minimum claim size.

Coupled support:

Northern Ireland, Wales and England have no coupled payments while Scotland and Ireland have chosen to re-introduce these payments in some cases (for beef calves and hill sheep in Scotland).

Capping payment size:

Northern Ireland and Ireland cap direct payments at €150,000. In Wales and Scotland, the caps are much higher (€300,000 and €500,000 respectively). England has no cap.

Agri-environment-climate payments:

These payments represent 21% of Northern Irish and 25% of Welsh Rural Development Funds compared to 19% in Scotland, 69% in England and 38% in Ireland.

Source: Allen et. al (2014) CAP Reform 2014-20: EU Agreement and Implementation in the UK and in Ireland, Northern Ireland Assembly Research and Information Service.

c. The shadow of the future: CAP reform and future constraints on UK policy

Finally, the CAP casts a shadow on future policy development. The CAP is not static – it is in the midst of yet another round of policy reform. This means that even if the UK were to keep its farming support system constant, the EU would not. Policy divergence is a given.

This divergence is important because farmers in the EU and UK will be in direct competition in UK, EU and international agricultural markets. If EU support is more generous, or if it incentivises different forms of farming, it will have a knock-on effect on UK farmers. One way of evaluating how the future CAP will develop is to consider the role of the UK in past reforms of the policy.⁸ The UK has played a major role in greening the CAP, leading a coalition of like-minded states such as, at times, the Netherlands, Sweden and Denmark. In the mid-1980s, it was the first Member State to adopt agri-environment schemes and was also a pioneer in cross-compliance. UK environmental charities have also played a central role in civil society campaigns for a more environmentally-friendly CAP and have long called for the CAP to better fit a 'public money for public goods' approach that would see funding go towards public goods (i.e. environmental or ecosystem services) such as clean air and healthy soil.

Removing the UK from future CAP negotiations creates a risk of decreased ambition at a time when the EU needs to step up climate action and its approach to other linked environmental challenges such as biodiversity loss, water and air pollution. The ongoing CAP reform proposal has raised a number of challenges. First, it offers Member States more flexibility. While flexibility can lead to innovative practices being developed, it also comes with a risk that many Member States will reduce environmental ambition. Second, the reform continues to adopt vague environmental objectives and generic indicators which makes it difficult to properly implement commitments and easy to shirk. Third, it continues to move away from rural development funding despite evidence that this funding has been best at achieving environmental aims.⁹ The current CAP reform outcome is still very uncertain. A new European Parliament, with a different political balance, will form in 2019 and will need to continue the reform work started by the current Parliament and Council of Ministers. However, during the 2013 reform, the legislative process further weakened the European Commission's proposal and recent votes in the Agriculture Committee in April 2019 appear to show history repeating itself.

II. Political commitments to policy change in the UK

The political commitments that have built the 'Green Brexit' narrative have emphasised the opportunity to freely amend UK food, farming and fisheries policies outside the EU. Delivering high food, farming and environmental standards in a devolved policy area with uncertain international trade outcomes is a challenge that current policy-makers have yet to resolve.

a. Agriculture during the referendum campaign

'The EU's Common Agricultural Policy (CAP) is an expensive, wasteful programme that dates back to the 1960s. [...] British farmers would continue to be supported after we Vote Leave. [...] Because it pays much more into the EU budget than we get out, Britain would have sufficient funds to continue supporting our farmers - and could even increase funds. [...] The thousands of badly designed EU regulations that aim to control everything farmers do would go. [...] If we vote to leave and take control, elected Ministers will be able to make the changes needed and put in place new policies to help farmers manage risk, boost their returns and reward the work farming does for the environment'.

Vote Leave, Farming, Fisheries and Food Briefing¹⁰

Vote Leave emphasised farming, fisheries and food during the referendum campaign. The pro-Leave group Farmers for Britain called Brexit a 'once-in-a-lifetime chance for significant and much-needed change in the agricultural industry'.¹¹ Vote Leave briefings argued that the CAP was burdensome, wasteful and expensive, and that the UK could 'easily continue to support farmers' with subsidies after Brexit'.¹² In addition, a key selling point was the ability to 'take back control of the regulation of agriculture' by reducing burdensome regulation, singling out environmental cross-compliance requirements in the CAP as well as EU laws on pesticides, genetically modified organisms, and crop rotation.¹³ In a separate publication on the EU single market, environmental policy was included in a list of the "most burdensome EU regulations", including agriculture-related regulations on animal welfare, nitrates and pesticides.¹⁴

b. UK Government commitments on post-Brexit agricultural policy

'Post EU exit the UK will be an environmental superpower'.

Defra Secretary Michael Gove, House of Commons January 2019¹⁵

Since the referendum, UK Government officials have made many public statements about the shape of UK agricultural policy after Brexit. When thinking about key governmental Brexit promises made in relation to food and farming, three are central: the commitments to 'take back control', to deliver a 'Green Brexit' that improves the environment and to ensure that international trade negotiations do not lead to a weakening of environmental standards.

Taking back control

'For too long, a bureaucratic system, which tries to meet the needs of 28 different Member States, has held farmers back. But now, we have the chance to design a domestic successor to [the] CAP that works for all of you, rather than the entire European Union'.

Defra Secretary Andrea Leadsom, Oxford Farming Conference 2017¹⁶

The EU referendum slogan 'taking back control' has been a key organising idea for the UK Government over the past three years. For agriculture, this idea has resulted in a willingness to move away from the CAP, which is seen as an overly complex and 'dysfunctional system'.¹⁷ Any future post-Brexit agricultural policy is aimed at simplifying the EU model.¹⁸

Three central aspects of the CAP are heavily criticised by the UK Government, all to do with direct payments: the basic payment scheme (which constitutes 70% of direct payments); greening requirements (linked to 30% of direct payments) and cross-compliance requirements.¹⁹ These requirements have been criticised for not ensuring environmental protection that is high enough, being too bureaucratic and procedural, not providing good value for money and resulting in excessive penalties. Further, it has been argued that cross-compliance requirements are already part of the UK legal baseline.²⁰ However, cross-compliance requirements go well beyond standards enshrined in law.

In particular, farmers' current obligations under the CAP to ensure good agricultural and environmental conditions (GAEC) go beyond the regulatory baseline in the UK and draw on existing good agricultural/farming practices.

Another central aim of the UK Government is to provide certainty for farmers by ensuring stable funding until 2022 (or more accurately until the end of this Parliament) with no redistribution around the UK (the process of 'Barnettisation').²¹ However, the level of support received by farmers beyond this date is uncertain.

A 'Green Brexit'

'Enhancing our natural environment is a vital mission for this Government. We are committed to ensuring we leave the environment in a better condition than we found it. And leaving the European Union allows us to deliver the policies required to achieve that - to deliver a Green Brexit'.

Defra Secretary Michael Gove, Oxford Farming Conference 2018²²

Brexit is seen as an opportunity to deliver a 'Green Brexit'. At the 2018 Oxford Farming Conference, Environment Secretary, Michael Gove, further stated that Brexit offers the opportunity to design:

'...our own agriculture policy, our own environment policies, our own economic policies, shaped by our own collective interests' and to ensure that we leave the environment in a better condition than we found it'.²³

The Agriculture Bill removes direct payments and builds upon Pillar 2 of the CAP, in particular agri-environment schemes. To deliver a 'Green Brexit', farmers will need to deliver 'public money for public goods' by, for example, creating ecosystem services, mitigating climate change and promoting animal and plant health and welfare.²⁴ Farmers will be financially supported by 'public money' only if they deliver 'public goods'. This means an end to payments directly supporting farmers' income – a central characteristic of the CAP and of UK agricultural policy before EU membership. However, if not managed appropriately, an agricultural transition away

from income support and towards 'public money for public goods' could be detrimental to the survival of farmers, especially small, family farms which are heavily reliant on EU direct payments.²⁵ Further, the new governmental policy on farming aims to adopt a holistic approach, as indicated in the Agriculture Bill, where agriculture and the environment are no longer perceived as competing priorities but as 'two sides of the same coin'.²⁶

Non-regression of environmental standards vis-à-vis trade

'...people know when they're buying British they're buying food which is guaranteed to be high quality and more sustainable. That's why it would be foolish for us to lower animal welfare or environmental standards in trade deals, and in so doing undercut our own reputation for quality. We will succeed in the global market place because we are competing at the top of the value chain not trying to win a race to the bottom'.

Defra Secretary Michael Gove, Oxford Farming Conference 2018²⁷

c. The Agriculture Bill and devolution

Tense relationships between the UK Government and the devolved administrations can be seen with the passage of the European Union (Withdrawal) Act 2018 and now the draft Agriculture Bill. Scotland refused to grant consent to the devolution aspects of the Withdrawal Act (as it is entitled to do so under the Sewel Convention³⁰) but the Act was passed anyway.

Agriculture and environmental protection are devolved powers. There are currently four heterogeneous agricultural policies across the UK to take into consideration. In 2018, England, Wales, Northern Ireland and Scotland set the scene for their future agricultural policies in consultation documents. The UK Government has since followed up its policy with the Agriculture Bill. The Agriculture Bill is seen by some commentators and the Scottish Government as a means of recentralising powers in Westminster to the detriment of the devolved administrations, especially with Clause 28 of the Bill related to the WTO Agreement on Agriculture. Clause 28 gives broad powers to the Secretary of State to: (i) conclusively determine the classification of financial support across the UK; (ii) set limits on

Michael Gove has consistently stated that the ratification of trade deals after Brexit will not result in a reduction of environmental and animal welfare standards.²⁸ In addition, the draft UK-EU Withdrawal Agreement committed the UK not to lower the level of protection provided by 'common standards' generally in line with the EU environmental acquis.²⁹ Dynamic alignment with the EU would also maintain high standards. However, ongoing discrepancies between Gove's statements ('achieving a higher level of environmental protection') and those of International Trade Secretary Liam Fox related to allowing imports with lower environmental and animal welfare standards have raised concerns and uncertainties as to the future of environmental protection across the UK.

spending for the whole of the UK; (iii) set individual ceilings of support across the devolved administrations; (iv) create different ceilings of financial support in each devolved administration; and (v) fix the upper limits spent under specific programmes by each devolved administration – despite the Agreement on Agriculture of the World Trade Organization not imposing any such limits.³¹ Clause 28 also exceeds what is required in the Agreement on Agriculture.³²

The utilisation of reserved powers on finance, trade and compliance with international agreements recentralises financial support for farmers and the design of support schemes across the UK. The issue of concurrent powers between central government and the devolved administrations has been exacerbated by the development of agricultural policies across the UK.³³

The similarities, differences and concerns raised by the different policies are explored in Box 2. The policies place at their heart the twin aims of improving productivity and delivering public goods/ecosystem services. Thus, the old habit of increasing production of food, feed, fuel and fibre remains present.

Post-Brexit agricultural policies in England, Wales, Northern Ireland and Scotland.

	England	Wales	Northern Ireland	Scotland
Stage in policy process	'Health and Harmony' consultation completed (Feb.-May 2018). Draft UK Agriculture Bill. 'The Future for Food, Farming and the Environment' Policy Paper (Sept. 2018).	'Brexit and Our Land' consultation completed (July- Oct. 2018).	Northern Ireland Future Agricultural Policy Framework' engagement completed (July-Oct. 2018).	'Stability and Simplicity' consultation completed (June-Aug. 2018). Strategy document from Agriculture Champions (May 2018).
Key themes	Public money for public goods based on payment by results/ outcomes. Productivity (Clause 1.2, Agriculture Bill).	Public goods based on payment by results/outcomes. Economic resilience.	An environmentally sustainable agriculture sector based on payment by results/outcomes. Productivity. Economic resilience. Supply chains.	Maintain environmental standards based on payment by results/ outcomes. Production efficiency. Natural capital. Simplification during the transition.
Change to policy instruments	No direct payments. Mentions regulatory baseline but also willingness to abolish cross-compliance and greening	No direct payments. Regulatory baseline building upon the Well-being of Future Generations (Wales) Act 2015 and the	Some direct payments (but more limited than under CAP). Regulatory baseline and incentives.	Some direct payments (but more limited than under CAP). Regulatory baseline.
Concerns and gaps	Focus on productivity and natural capital rather than sustainable food production. English RDP funds from the CAP are broader in scope than the delivery of public money for public goods.	Focus on productivity and natural capital rather than sustainable food production. Welsh RDP funds from the CAP are broader in scope than the Public Goods and Economic Resilience schemes.	Focus on productivity and natural capital rather than sustainable food production. Northern Irish RDP funds from the CAP are broader in scope than the new suggested schemes.	Focus on productivity and natural capital rather than sustainable food production. Scottish RDP funds from the CAP are broader in scope than the new suggested schemes

Table adapted from Hart & Maréchal³⁶ and Petetin, Dobbs, Gravey³⁷

Another key similarity is the focus on training in all four policy proposals.

Two key concerns can be highlighted from Box 2. First, the willingness to remove cross-compliance requirements, in England in particular, could lead to a lowering of the regulatory baseline. No governmental commitment has been expressed to ensure regulatory standards would actually be maintained. Second, if public goods/ ecosystem services are defined narrowly, this would prevent the creation of schemes that would encompass multiple aspects of the countryside and could reduce what is currently feasible under the RDPs. This could be highly detrimental to the future of rural areas and decrease rural vitality.

The UK and the devolved administrations are at risk of missing some of the key opportunities presented by being outside

of the CAP. For example, a recent decision by Defra to reject a crop rotation trial under its new Environmental Land Management scheme (ELM) raises concerns as to the actual meaning of 'public goods'. It appears that Defra considered 'good soil management' as a 'natural asset' but not as a 'public good'.³⁴ This stands in contrast to the Health and Harmony consultation, which clearly highlighted 'improved soil health' as a public good.³⁵ Doing more of the same will not suffice to tackle the challenges faced by agriculture. This contrast highlights the difference between ambitious policy statements and the practicalities of achieving a policy based on public money for public goods and the issues relating to what constitutes a public good, as well as the assessment and evaluation of such public goods for financial support (e.g. whether support will be based on habitats, species, specific achieved steps, or some other metric).

d. The Agriculture Bill: Easing or fuelling tensions?

The move towards 'public money for public goods' has been generally welcomed by stakeholders. With this new approach, England has set an innovative pathway for the design of a future agricultural policy and the setting up of financial limits (related both to the types of schemes allowed and at which level of funding such schemes would be supported). As such this pathway is likely to be followed by the devolved administrations. However, numerous concerns have been raised following this planned policy overhaul (Box 3). While all four nations of the UK appear set on 'greening' their agricultural policies, policy divergence after Brexit could mean very different shades of green existing side by side (Box 2).

The key element will be the implementation and delivery of such policies across the UK. Such a forward-looking approach requires innovative pathways to deliver a 'Green Brexit' in agriculture building on the already existing diversity of farming policies in the UK.

However, leaving the EU and the CAP means abandoning a shared framework of agricultural, environmental and trade policies. Some of these areas of policy are devolved (agriculture, environment), while others are not (such as trade). While more diversity can be desirable to a certain extent, common frameworks are necessary to avoid a race to the bottom and to foster a race to the top in environmental, food and farming standards.

Overall, the four nations of the UK must carry forward the opportunity created by leaving the CAP and embrace 'public money for public goods' as a driver of

Ongoing tensions

Governmental promises

Ongoing developments and concerns

Taking back control

- Control for the UK Government but not necessarily for the devolved administrations. Example: no co-design in Agriculture Bill.
- The unwanted consequences of free trade deals when modifying UK policies and legislation.

Simplification

- The drafting of environmental land management contracts could result in increased bureaucracy.

Holistic approach

- No links between agricultural policy and a food strategy in UK governmental policy/Agriculture Bill.

Green Brexit

- Discrepancies between statements by Defra Secretary, Michael Gove and International Trade Secretary Liam Fox: Free trade deals and problems with imports that lower environmental and animal welfare standards.

In line with EU environmental and animal welfare standards

- The Secretary of State, Michael Gove, is keen to embrace gene editing technology (which could lead to a difficult trading situation with the EU).

Cross-compliance requirements are guaranteed by UK legal baseline

- The relevant legal instruments (acts, regulations and statutory instruments) could be repealed.

Maintaining UK environmental and animal welfare standards

- Defra Secretary, Michael Gove and former Farming Minister, George Eustice, refused to amend the Agriculture Bill to ban imports of food produced with lower production standards. They have argued that these amendments should be included in the Trade Bill.

Public money for public goods

- No agreement on the definitions of public goods – creating uncertainty.
- The assessment of the delivery of public goods (whether delivery will be assessed through e.g. the presence of habitats/species, environmental outcomes, or intermediate steps towards outcomes).

Budget

- Multi-annual (EU and CAP) vs. yearly budget (post-Brexit UK).
- Support only guaranteed until the end of this Parliament (not necessarily 2022 – it could be earlier).
- Uncertainty relating to the overall amount of financial support that will be available after Brexit.

Devolution issues

- Shift in authority to Westminster in the Agriculture Bill to comply with international agreements.
- Tensions between reserved powers (especially trade and finance) and devolved powers.

III. The international trade context

In addition to leaving the CAP, the UK will change its trading relationship with the EU. As part of the EU Customs Union, the UK currently faces no tariffs and no non-tariff barriers to trade within the EU. Goods that can be commercialised in the UK can also be sold across the EU.

The UK also has easy access to labour for the agri-food industry from within the EU. While the exact nature of the future trading relationship between the UK and the EU has not yet been negotiated, it is noteworthy that UK agri-food products exported to the EU would face very high EU tariffs under World Trade Organisation (WTO) rules (what some commentators have called 'falling back on WTO terms').

Box 4 reproduces modelling results from the Agri-Food and Biosciences Institute detailing the expected impacts of three scenarios: a bespoke deal with the EU, WTO terms and unilateral free-trade.⁴²

Tariffs under the 'WTO default' scenario discussed above are the EU's current WTO 'Most Favoured Nations' (MFN) tariffs – i.e. the tariffs that the EU must apply across the board to all goods coming into the EU market if they are not covered by a Free Trade Agreement. This scenario assumes that the UK would apply the same high levels of tariffs. This scenario would have a differentiated impact across the UK farming sector. Sectors where the UK is a net exporter, such as sheep and barley, would suffer most. In contrast, sectors where the UK is a net importer, such as beef and dairy, could see increased domestic demand if the price of imports rises sharply as a result of tariffs.⁴³

But in response to EU tariffs, the UK could decide to apply lower tariffs – or even no tariffs. This is what the unilateral trade liberalisation scenario assesses. In this scenario, net exporters are still harmed by high EU tariffs, and net importer sectors such as beef and dairy are also negatively affected because they are put in direct competition with products from across the globe at lower prices (and potentially lower standards).

In March 2019, the UK Government announced that it would not apply tariffs to 95% of goods imported to the UK in the case of a no-deal Brexit.⁴⁴ However, tariffs will remain for most agricultural products (apart from i.e. eggs, wheat and potatoes) to ensure a certain protection for British farmers from world markets.

The multiple trade scenarios will have different consequences for domestic agriculture and differential environmental impacts requiring a policy response. But overall it is vital that any future trade policy supports UK agriculture.

IMPACT OF DIFFERENT TRADING SCENARIOS ON UK AGRI-FOOD SECTORS

(AFBI MODELLING)

- Price
- Production
- Output value
(output value = price x production)



BESPOKE FREE TRADE AGREEMENT WITH THE EU

- UK retains tariff and quota free access to the EU and EU retains tariff and quota free access to the UK
- UK maintains EU tariff structure to rest of the world
- 5% trade facilitation costs on UK-EU27 trade

WTO DEFAULT

- MFN tariffs applied to imports from the EU
- TRQs from 3rd countries retained
- MFN tariffs applied to UK exports destined for the EU

UNILATERAL TRADE LIBERALISATION

- Zero tariffs applied on imports to the UK from both the EU and the rest of the world

Source: Davis, J., Feng, S., Patten, M., Binfield, J. 2017. Impacts of Alternative Post-Brexit Trade Agreements on UK Agriculture: Sector Analyses using the FAPRI-UK Model. <https://www.afbi.gov.uk/publications/afbi-report-post-brexit-trade-agreements-uk-agriculture>

IV. Setting the bar: Learning from innovative policies and practices within the EU

There are a number of experiences and good practice cases of innovation in agricultural policy across the EU Member States happening under the umbrella of the EU and the flexibilities provided by the CAP. Some of these policies take advantage of the different options offered by the CAP, while others build on national policy competences to complement European policies. This section draws lessons for the future of British agriculture from five examples of innovative practices: fair trading practices in Spain; social agriculture in Italy; agroecology and agroforestry in France; and public procurement in Denmark.





a. Spain: Strengthening fair trading practices in the food supply chain

The establishment of balanced, just contractual relations is central to a fair and transparent food supply chain. UK Governments can learn from the Spanish case that better agri-food supply chain regulation that recognises power imbalances in the food chain offers primary producers' higher levels of protection.

Spain is one of the most active EU countries in this area. The Spanish agricultural production sector is highly fragmented and mostly comprised of small and medium-sized enterprises. Spain has adopted a mixed model of regulatory/statutory instruments and voluntary initiatives to rebalance the deficiencies within the supply chain. The model is based on both public enforcement and private control. The legal basis for this new model is Act 12/2013 on Measures to Improve the Functioning of the Food Supply Chain.⁴⁵

The Act regulates contractual relationships in the food supply chain and acknowledges the 'asymmetries in bargaining power' and 'a lack of transparency in price formation and potentially unfair and anticompetitive commercial practices' that negatively affect competitiveness in the food sector.⁴⁶ The 2013 Act also sets the foundations for a self-regulating private system, which resulted in the creation of the 2016 Code of Good Business Practices in Food Contracting.⁴⁷

This system is quite comprehensive, combining synergic statutory and voluntary

instruments. It adopts a holistic approach to solving unfair trading practices by fostering fair, balanced and loyal relations between the operators within the food supply chain (Box 5.). A tenet of this mixed approach is the focus on the first and last actors of the supply chain, the agricultural producers and the consumers.

Existing information indicates a progressive improvement of Spanish commercial relationships in the food supply chain since the creation of the mixed model. To date more than 100 operators have adhered to the 2016 Code. However, a number of supermarkets still have not adhered to it (e.g. Carrefour, Lidl and Aldi).

Between January 2014 and the end of 2016, the Agency for Food Information and Control (see Box 5.) carried out almost 4,000 controls and inspections. The most common infringements are breaches of payment deadlines (44% of the overall number of fines), followed by the absence of written contracts.

A key obstacle remains the unequal negotiation footing of the parties to a food

Box 5

Eight components of the Spanish fair trading practices pricing model

Compulsory baseline rules for all operators included in the 2013 Act:

1. The establishment of a food contract or the contractualisation of commercial relationships in the food supply chain. The Act enshrines the mandatory use of written contracts to regulate sales, provide legal certainty and guarantee operator's rights. There are two main provisos:
 - The value of the contract must exceed €2,500.
 - There must be an imbalance between the contracting parties.
2. Unfair trading practices: the Act defines and establishes a list of specific unfair trading practices. To stop them, the Act prohibits the following practices:
 - Unilateral modification of the contractual terms (unless by mutual agreement of the parties).
 - Additional payments over the agreed price.
 - The demand for commercially sensitive information from the supplier beyond the relevant product.
 - The improper use by an operator of another's business initiative for its own profit and initiatives constituting unfair advertising.
3. The creation of an infringement and penalty system to achieve balanced and loyal relationships between operators of the food supply chain. The Act creates a penalty procedure that includes three types of sanctions that can be imposed: minor, serious and very serious infringements.
4. An autonomous public enforcement body, the Agency for Food Information and Control (AICA), implements the new approach, checks compliance with legal provisions and ensures fair commercial relations between farmers, food industries and distribution companies in the agri-food sector.

Self-regulation or voluntary measures included in the 2016 Code:

5. The Code creates a voluntary control system that offers the opportunity to go beyond legal requirements for operators who wish to adhere to it.
6. Clauses on specific commercial practices for primary producers: operators in the food supply chain undertake to respect the following aspects in their commercial relationships with primary producers:
 - To encourage the adoption of measures that help to achieve the sustainability of the primary sector and to remunerate proportionally the value provided to the supply chain by agricultural production.
 - To pay special attention to compliance with the applicable regulations on food-related information furnished to consumers about the origin of products (in particular fresh fruits and vegetables).
7. The Code establishes a dispute resolution system. When a dispute arises, the operators agree to resolve the conflict or discrepancy within 10 days or 20 days for companies larger than SMEs from the presentation of the request. If no resolution occurs, the dispute will be submitted to a mediation or arbitration system.

Monitoring and surveillance body:

8. The model is monitored by the Food Supply Chain Observatory, which has a double role:
 - To guarantee the reviewing and strengthening of the law by identifying improvement pathways.
 - To provide a better knowledge of markets and analysis of the basic structure of cost and prices and the factors responsible for their evolution.

contract. The economic and organisational strength of one of the contracting parties (industry, distribution) against the fragility of the other (farmers) when negotiating the contractual conditions is a continuing problem.

Agricultural producers (who act as the first link in the chain) should take advantage of the incentives and opportunities to group around organisations and associations to

increase their power. Cooperatives and producer organisations of agricultural producers introduce economies of scale, more efficiency and competitiveness.⁴⁸ Only with these organisations will it be possible to reinforce the negotiating position of agricultural producers in the market, creating better prices and fairer conditions in agri-food contracts.

Lessons for the UK

Fair dealing practices play a key role in the 2018 Agriculture Bill. The relevant clauses build upon the existing Groceries Code Adjudicator⁴⁹ (GCA), which was established by the 2009 Groceries Supply Code of Practice.⁵⁰ However, neither the Agriculture Bill nor the Code of Practice acknowledge the weak position of farmers in contract negotiations. Furthermore, the Bill oddly restricts fair-dealing requirements to the first purchaser of agricultural products. This is an important first step. Nonetheless, to deal with the issue of unfair trading practices, the entire food supply chain should have the same requirements.

Three lessons can be drawn from the Spanish example. First, better regulation of the agri-food supply chain would improve the position of primary producers (with a strong focus on local, seasonal and sustainable products). This could be achieved by acknowledging the weak position of producers and encouraging them to form producer organisations. Second, the

development of best practices in commercial and contractual relations between operators in the chain should be encouraged – leading to higher levels of protection. Third, a rapid and efficient dispute resolution system could be established as well as a monitoring and surveillance body that identifies potential problems and assesses the quality of commercial relations. This could be achieved by widening the remit and powers of the GCA – as put forward by Sustain.⁵¹

b. Italy: Promoting social agriculture

Social agriculture occupies an increasingly important place in the Italian agricultural sector. Lessons from Italy for the UK Governments indicate that support for social agriculture can stimulate economic diversification in rural areas, while linking communities and enhancing mental and physical health.

Underpinned by the values of solidarity and inclusion, social agriculture is a practice of local development that aims to be socially, economically and ecologically sustainable. It generates two types of production: services such as those related to health, the environment and education; and products such as food, fibre and energy.

Social farms are often linked to sustainable farming practices, including organic farming, local food systems and short food supply chains. They are able to create niche markets with their produce that has an important social value and link agriculture to the service economy with a focus on care, education, therapeutic uses of farming and training (see Box 6). Farms and relevant agricultural techniques and practices – e.g. horticulture, livestock husbandry or woodland management – can promote human mental and physical health, as well as quality of life. In addition, they offer the opportunity for women to create their own employment, strengthening rural women's economic empowerment.

Italy has 400 social agricultural cooperatives (out of 14,000 cooperatives in total) involved in the entire agricultural supply chain. They have 4,000 employees across Italy (out of 320,000 total) and a production value of €200 million.⁵² Italy has strong regional, social farming networks. The Italian regions, in particular Tuscany, have been very proactive in embracing this type of agriculture. In 2011, Italy initiated a National Forum on Social Agriculture to promote social farming as an innovation to the agricultural system.⁵³ To reinforce the role of social farming, in 2015 Italy passed a law to promote social agriculture's contribution to local communities and rural areas.⁵⁴ The Act also established an Observatory on Social Agriculture.⁵⁵

Social farming is also an instrument of re-appropriation by the individual of their social role from two perspectives:

- A professional perspective: to facilitate reintegration in the labour market through the acquisition of agricultural techniques and practices;

The structure of social agriculture in Italy

Types (both not-for profit)	Models	Activities	Aims	Funding
Social co-operatives	Green care, i.e. care-based social agriculture	<ul style="list-style-type: none"> On-farm child and elderly care Educational services (food and environmental) Therapies 	<ul style="list-style-type: none"> Provision of health, social and educational services Promoting human mental, emotional, social and physical wellbeing 	Payment or monetary compensation for the services paid by public bodies
Social co-operatives and 'social-private' organisations	Inclusion, i.e. employment-oriented; acquiring skills and job prospects	<ul style="list-style-type: none"> Rehabilitation Professional training Employment 	<ul style="list-style-type: none"> Integration Engagement of disadvantaged and vulnerable groups in production activities (e.g. people with mental or physical disabilities, offenders, homeless and marginalised people) Increase employability 	Partial support from public bodies (directly or indirectly), including rural development funds

- Personal development and empowerment: personal capabilities are valued and enhanced to increase self-confidence and independence.

The main economic and social challenges faced by social agriculture are threefold: farm profitability; the economic comparisons between conventional and non-conventional farming components; and the viability of rural communities.⁵⁶

Agriculture is a sector uniquely placed to provide social inclusion and improve the durability of rural communities :

- With farming comes responsibility (rearing animals; taking care of living organisms);
- Similarity of the agricultural products created (these products do not indicate the characteristics of the people involved) - creating commercial opportunities.
- Involvement of relevant communities and professionals to improve working conditions and creativity on the farm.

Lessons for the UK

In the UK, social agriculture has the capacity to increase the multifunctionality of agriculture, as well as on-farm economic diversification, whilst stimulating rural areas and increasing rural vitality. Such a type of agriculture could be promoted by reinforcing the focus on rural areas and their multifunctionality within the drafting of future agricultural policies.

In 2018, Care Farming UK – the main UK civil society organisation dealing with social farming – was dissolved and merged with the Federation of City Farms and Community Gardens to create a new organisation called Social Farms & Gardens.⁵⁷ They work with

community farms and gardens, school farms, wildlife and roof gardens, community orchards, community-run allotments and community-supported agriculture schemes.

Three ways forward could promote social agriculture in the UK. 1) supporting measures to encourage favourable conditions for social agriculture. 2) improving knowledge exchange between the actors involved in social agriculture would encourage best practices and mutual support. 3) improving the economic and financial sustainability of social agriculture.

C. France: Sharing knowledge for an agroecological transition

The French agricultural education system has been reformed based on a simple idea: if farmers are to produce differently, the education system needs to teach them how to do so. Reforms in France offer hope that many challenges facing UK farming can be overcome through changes to the design and delivery of the agricultural curriculum.

Agroecology has become extremely popular in international debates on agriculture. It has been embraced by a variety of actors, from alternative farming movements such as La Via Campesina to the UN Food and Agriculture Organisation (FAO). With such a variety of supporters it is not surprising that many definitions of agroecology exist. Some definitions focus on techniques: how 'agroecological techniques, based on mimicking natural cycles, reduce the need for external inputs and help create growing ecosystems that foster more regenerative ways of producing food with nature'.⁵⁸ Others adopt a more holistic reading of agroecology as 'a way of redesigning food systems, from the farm to the table, with a goal of achieving ecological, economic, and social sustainability [that] links together science, practice, and movements focused on social change'.⁵⁹

In recent years, France has adopted ambitious environmental objectives and principles. The 2014 Agriculture, Food & Forest Act, which aims to help French farming pursue an agroecological transition, is one example

of this trend. The Act formalises some of the commitments and objectives of the agroecology project called 'Produce Differently' pushed by the Ministry for Agriculture since 2012. This project rests on 12 pillars, with reforming farmers education coming first (see Box 7).

Between 2015 and 2018 the French agricultural education system (which brings together up to 450,000 students) was profoundly reformed to put agroecology at its core, by building on a simple idea: if farmers need to produce differently, the education system needs to be able to teach them how to do so. This required further education for teachers, changes to degree content and the creation of regional networks of farming colleges and farms interested in participating in pilot projects to demonstrate new approaches. Farmers can, in addition to engaging with the different life-long training opportunities, set up their own groups to share good practices for sustainability, known as economic and environmental interest groupings (EEIGs).

Box 7

12 Pillars of the French agroecology project

1. Reform agricultural training
2. Share good practices by setting up EEIGs
3. Reduce the use of phytosanitary products
4. Provide advice
5. Overhaul public support programmes to support an agroecological transition
6. Increase support for organic agriculture
7. Strengthen local supply chains
8. Reduce use of antibiotics
9. Implement changes in seed evaluation
10. Increase carbon sequestration
11. Foster beekeeping
12. Support agroforestry

On-going evaluation of agroecology teaching shows mixed, albeit encouraging results. According to the French Agriculture Ministry, agroecology requires a 'holistic consideration of each farm in order to take account of every aspect of its operation and the balances within its agro-ecosystem'.⁶⁰ Some teachers adopt this holistic approach to challenge 'common sense' such as inviting farmers to re-think what is a clean, tidy field, or a clean, tidy hedge – to learn to work 'with' not 'against' nature.⁶¹ They also change pedagogy to place a greater emphasis on preparing students to deal with uncertainties and controversies in their professional life. But agroecologist supporters have also faced backlash and resistance on the ground, with the transition rejected by some farmers as a 'new religion' with its 'missionaries'.⁶²

But this is also changing. First, while some farmers remain reluctant to change their

practices, others are leading the way by setting up EEIGs. Since 2015, close to 500 EEIGs have been created, bringing together over 9,000 farmers interested in transitioning to agroecology and complementing changes to formal training with peer-to-peer support and shared innovation.⁶³ Second, key actors in the French agricultural system are slowly coming on board and developing their own agroecology programmes – from the 'Chambres d'Agriculture (local farming bodies with elected representatives from different farming trade unions), to major agri-food actors such as the fast food chain McDonald's (which works with 39,000 farmers in France) or one of the largest cooperatives in France, Terrena (22,000 farmers).⁶⁴ Awareness of agroecology among farmers is increasing across the board: 50% of farmers had heard of the concept in 2014, a proportion which increased to 83% by 2016.⁶⁵

Lessons for the UK

The French agroecology project shows, firstly that a profound shift in agricultural practices takes time beyond one parliament, requiring cross-party support to provide certainty for all involved. Second, training is critical to teach new practices and demonstrate their successes, both through formal courses and peer-to-peer learning. No rethinking of agricultural practices is possible without a new approach to how farmers are trained (or not trained – currently in Northern Ireland '62% of working owners and 40% of employees [hold] no formally recognised

qualifications'⁶⁶). The 2014 Agriculture, Food & Forest Act echoes on-going discussions in the UK with all four policies mentioning training and knowledge exchange as key to deliver future farming. Third, farmers are more likely to apply these new practices if they are supported by other actors in the supply chain – no systemic change is possible if only public actors are involved.

d. France: Removing barriers to agroforestry uptake

Integrating trees with farming systems has frequently faced economic, regulatory and cultural barriers. UK Governments can learn from this approach to provide security of funds, deliver joined up advisory services and find the cultural cross-overs to make agroforestry visible and relatable to citizens.

Agroforestry covers a wide range of land-use systems and technologies where woody perennials (trees, shrubs, palms, bamboos, etc.) are deliberately used on the same land-management units as agricultural crops and/or animals, in some form of spatial arrangement or temporal sequence.⁶⁷ The benefits of agroforestry include increases in soil organic carbon and reductions in erosion,⁶⁸ better water management, increased wildlife habitats and better animal welfare (by providing shade and shelter for livestock).⁶⁹

Recent studies estimate agroforestry covers between 15 and 20 million hectares in Europe. The most prevalent form of agroforestry is silvopasture (85% of agroforested areas), such as 'forest or woodland grazing and pastoral land with hedgerows, isolated/scattered trees or trees in lines or belts', combining trees and shrubs with forage animal production.⁷⁰ Conversely, silvoarable systems (mixing trees, shrubs or fruit trees with arable crops) represent only 2% of agroforested areas. Today, both forms of agroforestry cover only a tiny share of the land they could potentially cover in Europe – leaving huge room for improvement. Yet while agroforestry is becoming more popular, traditional agroforested areas in Europe faced a sharp decline during the 20th century.⁷¹

This raises a dual challenge for policy-makers: first, how to reverse the decline in traditional agroforestry practices; and second, how to foster the development of new forms of agroforestry. At the heart of this challenge is tackling the existing regulatory barriers to agroforestry uptake – primarily present in the CAP.

The CAP is often portrayed as preventing agroforestry uptake. The French example shows how that same policy can be used to support certain forms of agroforestry and how domestic policies adopted alongside the CAP can increase this support.

Regulatory barriers to agroforestry under the CAP fall into two categories. The first category of barriers is related to rules surrounding eligibility for direct payments related to the number of trees that can exist on a hectare of land. The rules changed during the 2013 CAP reform – from 50 to 100 trees per hectare (excluding fruit trees where there are no limits). After this reform, the French Government and farming representatives provided information to farmers that stressed these levels and offered dedicated support in putting together an agroforestry plan. The second hurdle is whether agroforestry is supported by agri-environmental measures and what type of support is offered.⁷²

Access to agri-environment funding for agroforestry turns the spotlight away from Brussels and squarely on the Member States. France was one of the rare countries in the EU to choose to support new agroforestry development in both the 2007-2013 and 2014-2020 CAPs. The 2007-2013 funding supported 80% of installation costs, while 2014-2020 funding (which did not cover all of France) also covered maintenance costs.

However, not all barriers to the adoption of agroforestry are regulatory – and not all regulatory barriers are of EU origin. Supporting agroforestry is the 12th pillar of the French plan for agroecology. As such, measures aimed at changing the farming

curriculum and fostering peer-to-peer learning (discussed in the previous section), also cover agroforestry. In addition, a specific agroforestry plan (2015-2020) saw the French Government implementing the following activities in recent years:

- Commissioning research to improve knowledge of the different forms of agroforestry currently practiced in France and their impact on the environment and food production;
- Fostering synergies between existing French and European quality and origin labels and agroforestry practices, making more visible the agroforestry nature of specific products such as rare-breed pig production in the French Basque Country⁷³;
- Running agroforestry competitions at a regional and national scale, both for farmers intending to start a new agroforestry project⁷⁴ (Arbres d'Avenir) and for farmers in two categories, with projects that have been running for at least 5 or 10 years, respectively.⁷⁵ These competitions are funded, in part, by large French companies and foundations, and make examples of good agroforestry practice easily available.

The French agroforestry plan further identified French tenancy agreements as a major regulatory hurdle to agroforestry development (70% of farmland in France is under tenancy arrangements). The French Rural Code states that the tenant cannot plant trees or hedgerows without the consent of the landowner, and conversely, the landowner cannot plant trees without the consent of the tenant. Trees are inherently considered immovable property and therefore belong to the owner. The farmer can only plant trees if there is a clause to this effect in their tenancy agreement. Specific clauses have been introduced in tenancy agreements relating to orchards and these set the values of the planted trees to protect farmers in these circumstances. Generally, however, the farmer planting trees is in a situation of insecurity, unable to benefit from the added value of the land when the tenancy agreement comes to an end. In response, in 2018 the Ministry for Agriculture published a guide for tenants and landowners providing advice on how to write or amend tenancy agreements to accommodate a new agroforestry project and provide greater security for tenants.⁷⁶

Lessons for the UK

While the UK had the same opportunities as France to support agroforestry within the CAP, support has been patchier. Under the 2007-2013 CAP in the UK, Northern Ireland was the only country budgeting for the measure supporting new agroforestry development,⁷⁷ yet it failed to implement it. The situation is slightly better under the 2014-2020 CAP, as all but England have chosen to implement a measure to support the establishment and maintenance of agroforestry systems. Northern Ireland, Scotland and Wales have each set different rules for tree density, land eligibility and the type of shrubs or trees supported.⁷⁸

Critically, no agrarian land is eligible for the new agroforestry support in Wales, only municipal or private land, while in Scotland a minimum density of 200 trees per hectare is required. This means that farms cannot receive both agroforestry support and general CAP income support – and that farms with

a tree density between 100 and 200 trees per hectare are eligible for neither. This pre-existing divergence within the UK stresses that, especially in the case of England, the CAP is not a barrier to agroforestry uptake – lack of domestic government support is.

The French example shows how government schemes can be designed to ensure farmers do not need to choose between general support and specific agroforestry funding. At the very least, future agricultural policy in the UK should not disadvantage farms pursuing agroforestry. Agroforestry pilot schemes should be encouraged to help other farmers learn about the practice. Finally, agroforestry is not a short-term investment for farmers – which raises questions about how to make agroforestry work for tenant farmers and landowners, and whether tenancy agreements in the UK need to be adapted for delivering long-term projects.

e. Denmark: Embracing organic food procurement

Other nations have developed their own food policies within the confines of the CAP. In Denmark setting targets for the use of organic food in public procurement has stimulated the domestic organic agriculture market. UK Governments should take confidence from this approach and work to connect sustainable production with healthy consumption through public procurement channels.

A key criticism of the Agriculture Bill as it stands is that it 'has no vision for food' because it focuses on agricultural production and its environmental impact but provides no broader strategy to improve the quality of food and access to food in the UK.⁷⁹ But other European countries have managed to develop their own food policy within the confines of the CAP. Denmark in particular is recognised for its approach to organic food procurement that both supports Danish organic food production and increases the quality of food available in the country.

The Danish approach to organic food procurement is an interesting example of bottom-up, local-government led initiatives being supported and expanded at national level. It also illustrates how public procurement policies can be used to support sustainable agricultural production. Finally, it exemplifies the key role that cities can play. While many municipalities in Denmark have engaged with organic public procurement, Copenhagen has been especially ambitious.

In 2007, the Danish capital adopted a strategy to turn Copenhagen into an 'eco-metropolis', which included commitments for 'at least 20% organic food in the city's food consumption, with the city taking the lead with at least 90% organic food in municipal institutions'.⁸⁰ It has since met its 90% target. This target was reached without increasing food procurement costs by focusing on conversion (change in food habits, increased share of vegetarian food) instead of substitution (replacing like for like non-organic/organic produce).

Building on the success of municipal policies, the Danish Organic Action Plan 2020 (released in 2012) aimed to double the organic agricultural area in Denmark by 2020 (already at 57% in 2018) with a core focus on public procurement, using the 500,000 daily meals in the public sector to boost demand for organic products.⁸¹ The Action Plan received a UN silver Future Policy Award for Agroecology in 2018.

As part of its push for targeted pro-organic public procurement, Denmark created a label for public kitchens serving organic food – bronze (between 30-60% organic food), silver (over 60%) or gold label (over 90%). The objective is for all public kitchens to achieve at least silver by 2020. To that end, the Plan offers funding for conversion projects. Conversion requires training kitchen staff in budgeting, menu planning, practical cooking

classes and learning from conversion pioneers.⁸² Between 2012 and 2014, the percentage of organic food in Danish public kitchens rose by 24%. Organic public procurement policies were key to driving the market for organic food in Denmark, with 40% of all organic food sales going to public bodies in 2013 and 2014, and organic sales more than doubling since 2011.

Lessons for the UK

In contrast to the Danish Government, the UK Government has set no targets for the use of organic food in public procurement. The initiatives that exist are instead organised by charities. For example, Food for Life Served Here (run by the Soil Association) provides an accreditation scheme for schools, hospitals and care homes interested in improving the quality of their food by making it healthier and more sustainable. The scheme gives awards ranked from bronze to gold to recognise best practices. 1.8 million meals are certified under the scheme each day.

However, the Danish and UK awards are far from equivalent. The Food for Life awards favour a broad commitment, covering nutrition, provenance, welfare and sustainability in various dimensions, versus the more targeted Danish approach, which is focussed solely on organic products. Hence, a Gold award for UK schools requires a minimum of 15% organic food – only half the minimum level of 30% to be awarded a bronze award for Danish schools. But the Food for Life programme has a broader aim: it is not solely focused on increasing organic food production. Instead, it includes the development of cooking activities, school gardens, farm visits and discussions about

food choices.⁸³ Beyond the differences in focus, it is worth keeping in mind that Food for Life is a charitable initiative which schools, hospitals etc. can pay to join and participate in, and which public health teams in local authorities may commission. It is not a national strategy for which public funding is available.

A government set of criteria does exist in the UK: Defra's balanced scorecard for public procurement.⁸⁴ The scorecard provides straightforward criteria, such as cost, to be 'balanced' against more complex criteria, such as health and wellbeing, resource efficiency and quality of service when making procurement decisions. It has been mandatory across central government since 2017.

Learning from the Danish example and the different levels of Food for Life Served Here, future government food procurement policy could be 1) expanded to all public organisations, not only central government; 2) have clear awards with different degrees of ambition; and 3) be accompanied by funding for training for catering staff to facilitate the transition.

V. Pathways to deliver a Green Brexit in food and farming

Presented as a 'once-in-a-lifetime opportunity', new UK policies need to be ambitious. They need to go beyond addressing issues with the CAP and set out policies for tomorrow and a direction for the medium and long term.

The examples of innovative practices in Section IV highlight ways of moving beyond the current agricultural policy status quo and tackle key problems in our existing agri-food systems. Irrespective of the outcome of the Brexit process, the Agriculture Bill in Westminster and parallel developments in the devolved administrations offer the opportunity to rethink public support and policies on agriculture. As part of these processes, collaboration between the different levels of governance across the UK is vital.

Developing new policies for agriculture in the context of a 'Green Brexit' needs to acknowledge the major contributions the farming and food sectors can make to address the major environmental threats we face. A recent report from leading scientists for the Intergovernmental Panel on Climate Change (IPCC) stressed the short timeline – 12 years – to limit climate change to 1.5°C.⁸⁵ The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) came to a similar conclusion of the need for urgent action in the face of mass species extinction.⁸⁶ And in May 2019, the UK Committee on Climate Change recommended net-zero greenhouse gas emissions by 2050.⁸⁷ New policies need to rise to this urgency.

In order to build such a long-term perspective, we can learn from the many different foresight exercises conducted to map sustainable agricultural futures. In February 2019, the leading European environment think tank, the Institute for European Environmental Policy, published a review of foresight exercises which looked at how European agriculture could reach net-

zero emissions (carbon neutrality) by 2050.⁸⁸

The review highlighted that for European agriculture to become net-zero and sharply decrease its emissions, 'three levers of actions' were needed to: 1) change production to less carbon-intensive products; 2) make production more carbon efficient; and 3) increase carbon sequestration potential on agricultural land.

In early 2019, the NFU advocated a three-pronged approach for British agriculture to become carbon neutral by 2040 with some notable overlaps (on carbon sequestration and carbon efficiency) and differences (change production to increase biofuel production, not less carbon-intensive products).⁸⁹

In terms of greenhouse gas emission reductions, none of the studies in the IEEP review show a clear and distinct path towards net-zero farming – but they do show a wide range of emission reduction from -16% to -60%. They also differ sharply in how they deliver other environmental objectives as well as the trade-offs they accept. In contrast, the Ten Years for Agroecology (TYFA) foresight exercise, produced by a team led by IDDRI, a Paris-based sustainable development think tank, stands out for its focus on co-benefits for human health and biodiversity, which is critical in light of the new IPBES report.⁹⁰ This foresight exercise aimed to demonstrate how agroecology could be mainstreamed in the next CAP reform. It is particularly useful when considering how to introduce agroecology in the Agriculture Bill and future UK agricultural policies.

Around the world, the translation of agroecology into public policy has, to date, been characterised by a selective pick-and-choose approach and a tendency to dilute key concepts.⁹¹ This tendency has been compounded by three challenges: the difficulties of making policy for the medium to long term; the sheer scale of changes to farming practices required to transition to agroecology; and the need to question our food habits and thus engage all citizens in the transition. These difficulties are apparent in the present French plan for agroecology – where an objective to halve pesticides use by 2018 failed (pesticides use increased instead).⁹² The TYFA foresight exercise offers an alternative to the weak, 'greenwashed' versions of agroecology. It offers a much more radical application of the conceptual understanding of agroecology 'as an approach that makes maximum use of ecological processes in order to redesign production systems and to radically reduce agricultural pressure on the environment'.⁹³

The TYFA model, takes into account the entire food chain in Europe (as well as European imports and exports) and builds hypotheses 'with a view to achieving sustainable food'. Their central starting point is the lack of sustainability of western diets.

In 2010, the average European diet was too low in fibre, fruits, vegetables and much too high in protein, on average consuming

200% of the daily recommended nutritional benchmark. This overconsumption of protein, mostly animal protein, is recent, with a 42% increase in animal protein consumption between the 1960s and 1990s. It has had major impacts on health, the environment and the farming sector. The TYFA foresight exercise thus argues that 'the increase in livestock production that has accompanied these changes in consumption is primarily based on the intensification of livestock farming, which is itself dependent on plant protein imports from the American continent (...) as things stand, it is the world that feeds Europe rather than the other way around, as is often claimed'.⁹⁴ This argument is critical in the context of CAP reform – where intensification is often linked to the need for Europe to help 'feed the world'. In the report, changing diets is key to offset the drop in production caused by the complete phasing out of pesticides and synthetic fertilisers that they model.

In that respect, TYFA is an example of what a 'healthy food first' rethink of our agricultural systems could look like. This approach further highlights the key missing component in the Agriculture Bill: the need to produce healthy and nutritious food. This is particularly problematic at a time when around two-thirds of adults across the UK are overweight or obese, with huge costs borne by the National Health Service.⁹⁵

Agricultural, trade and food policies should be mutually supportive and call for long-term, strategic and radical thinking and vision. They need to do more than simply address today's focus on delivering Brexit. They must set forward an ambitious agenda for the future that benefits the public, farmers and rural areas.

Taken together, these foresight exercises and good practice cases of innovation in farming lead us to draw five key take-home messages:

1. Re-thinking agriculture is not just about agricultural policy.

It requires changes to training, land-use rights, education, the entire supply chain (acknowledging that primary producers are often the weakest link in that chain), trade arrangements and consumption patterns.

2. Long-term targets are needed.

These targets should be based on cross-party and cross-sector consensus on a shared farming future – together with short- and medium-term evaluation to make it possible to hold decision-makers to account. Such long-term targets would create much-needed clarity and stability for all parts of the food supply chain to guide their investments.

3. Change takes time and requires collaboration.

Cooperation and collaboration between farmers, and between farmers and other stakeholders is key to deliver a sustainable farming future.

Collaboration is also needed to help farmers and the broader food system withstand shocks (both financial and climatic) and build resilience.

4. A shared policy framework can accommodate and benefit from local divergence and innovation.

Our examples of innovative policies and practices happened in countries working within and alongside the constraints of the CAP.

5. Holistic, complementary and forward-looking approaches

to food and farming are crucial to deliver a sustainable farming future where food and farming are co-designed.

Bibliography

- 1 Vote Leave (2016). Farmers will be better off if we vote to leave the EU.
- 2 Leadsom, A. (2016). Oral evidence to Environment Audit Committee: The Future of the Natural Environment after the EU Referendum inquiry. Answer to Question 343.
- 3 Defra (2018). Health and harmony: The future for food, farming and the environment in a Green Brexit, p. 5.
- 4 UK Government (2018). A green future: Our 25 Year Plan to improve the environment, p. 9.
- 5 Donald, P. F., Sanderson, F. J., Burfield, I. J., & van Bommel, F. P. J. (2006). Further evidence of continent-wide impacts of agricultural intensification on European farmland birds, 1990–2000. *Agriculture, Ecosystems & Environment*, 116(3–4), 189–196; Royal Society for the Protection of Birds (2016). *State of Nature 2016*. For further references, see: Gravey, V. (2016). Agricultural policy. In: Burns, C., Jordan, A., & Gravey, V. (Eds.) *The EU Referendum and the UK Environment: An Expert Review* (pp. 36–45).
- 6 Petetin, L. (2015). The EU Common Agricultural Policy: Towards a more sustainable agriculture? In: Ako, R. and D. Olawuyi (Eds.), *Food and agricultural Law: Readings on sustainable agriculture and the law in Nigeria* (pp. 201–224). Ado-Ekiti, Nigeria: Afe Babalola University Press.
- 7 For example, Wales, Northern Ireland and Scotland have banned the cultivation of genetically modified crops but England has not. See: Engel, A., & Petetin, L. (2018). International obligations and devolved powers – ploughing through competences and GM crops. *Environmental Law Review* 20(1), 16–31.
- 8 Gravey, V. (2016). Agricultural policy. In: Burns, C., Jordan, A., & Gravey, V. (Eds.) *The EU Referendum and the UK Environment: An Expert Review* (pp. 36–45).
- 9 Hart, K., & Bas-Defossez, F. (2018). CAP 2021-27 : Proposals for increasing its environmental and climate ambition. Brussels: Institute for European Environmental Policy (p. 62).
- 10 Vote Leave (2016). Briefing: The CAP and CFP are wasteful and bureaucratic.
- 11 Farmers for Britain (2016). Brexit is a once-in-a-lifetime chance for significant and much-needed change in the agricultural industry.
- 12 Vote Leave (2016). The CAP & CFP: the high price of EU membership for Britain's farmers and fishermen, p. 2.
- 13 Vote Leave (2016). The CAP & CFP, pp. 7–8.
- 14 Vote Leave (2016). The single market is failing British businesses.
- 15 Gove, M. (2019). Debate on the EU (Withdrawal) Act, Column 576.
- 16 Defra (2017). Environment Secretary sets out ambition for food and farming industry.
- 17 Gove, M., & Eustice, G. (2018). Oral Evidence to Environment, Food and Rural Affairs Committee: Scrutiny of the Agriculture Bill, HC 1591. Answers to Questions 333, 353 & 362.
- 18 Gove, M. (2018). Farming for the next generation. 2018 Oxford Farming Conference.
- 19 Gove, M. (2018). Farming for the next generation. 2018 Oxford Farming Conference.
- 20 Eustice, G. (2018). Oral evidence to Environmental Audit Committee: Nitrates inquiry. Answer to Question 225.
- 21 Gove, M. (2018). Agriculture Bill, 2nd Reading Debate, 10 October 2018.
- 22 Gove, M. (2018). Farming for the next generation. 2018 Oxford Farming Conference.
- 23 Gove, M. Oxford Farming Conference 2019 address by the Environment Secretary. 2019 Oxford Farming Conference. See also: Defra (2018). A green future: Our 25 Year Plan to improve the environment.
- 24 UK Government (2018). Agriculture Bill 2017-19, Clause 1.
- 25 See comments made by Ludivine Petetin at the Game and Wildlife Conservation Trust All-Party Parliamentary Group in March 2018, <https://www.gwct.org.uk/policy/appg/march-2018/>.
- 26 Eustice, G. (2018). Oral Evidence to Environment, Food and Rural Affairs Committee: Scrutiny of the Agriculture Bill, HC 1591. Answer to Question 328.
- 27 Gove, M. (2018). Farming for the next generation. 2018 Oxford Farming Conference.
- 28 See Gove, M. (2018). Agriculture Bill, 2nd Reading Debate. 10 October 2018.
- 29 UK-EU Draft Withdrawal Agreement, Annex 4, Article 2.
- 30 Memorandum of Understanding and supplementary agreements between the UK Government, Scottish Ministers, the Cabinet of the National Assembly for Wales, and the Northern Ireland Executive Committee (2001, Sewel Convention).
- 31 Petetin, L., & Dobbs, M. (2018). Written evidence submitted to National Assembly for Wales, Climate Change, Environment and Rural Affairs Committee: UK Agriculture Bill inquiry.
- 32 Petetin, L. (2018). Post-Brexit agricultural support and the WTO: Using both the amber and green boxes? Brexit & Environment Network.
- 33 Petetin, L., & Dobbs, M. (2018). Written evidence submitted to National Assembly for Wales, Climate Change, Environment and Rural Affairs Committee: UK Agriculture Bill inquiry.
- 34 Farmers Guardian (2019). Anger over Government refusal to pay farmers to improve soil health post-Brexit.
- 35 Defra (2018). Health and harmony: The future for food, farming and the environment in a Green Brexit, p. 32.
- 36 Institute for European Environmental Policy (2018). Comparison of the emerging agricultural policy frameworks in the four countries.
- 37 Dobbs, M., Petetin, L., & Gravey, V. Written evidence submitted to Environment, Food and Rural Affairs Committee: Scrutiny of the Agriculture Bill inquiry; Dobbs, M., Gravey, V., & Petetin, L. (2018). Written evidence submitted to Northern Ireland future agricultural policy framework, inquiry by DAERA; Petetin, L., & Dobbs, M. (2018). Written evidence submitted to National Assembly for Wales, Climate Change, Environment and Rural Affairs Committee: UK Agriculture Bill inquiry; Petetin, L. (2018). Written evidence submitted to Scottish Government consultation: Support for agriculture and the rural economy - post Brexit transition.
- 38 Engel, A., & Petetin, L. (2018). International obligations and devolved powers – ploughing through competences and GM crops. *Environmental Law Review* 20(1), 16–31.
- 39 Petetin, L., & Dobbs, M. (2018). Written evidence submitted to National Assembly for Wales, Climate Change, Environment and Rural Affairs Committee: UK Agriculture Bill inquiry.
- 40 Petetin, L., & Dobbs, M. (2018). Written evidence submitted to National Assembly for Wales, Climate Change, Environment and Rural Affairs Committee: UK Agriculture Bill inquiry.
- 41 Petetin, L. (2019). Oral evidence given to National Assembly for Wales, External Affairs and Additional Legislation Committee: Seminar session on international agreements.
- 42 Davis, J., Feng, S., Patton, M., & Binfield, J. (2017). Impacts of alternative post-Brexit trade agreements on UK agriculture: Sector analyses using the FAPRI-UK Model. The study's trade liberalization model assumes that EU Free Trade Agreements are rolled over and that the UK can still benefit from preferential trade terms.
- 43 Hubbard, C., Moxey, A., & Harvey, D. (2019). Brexit: Farming on the edge? UK in a Changing Europe.
- 44 HM Revenue & Customs (2019). Tax Information and Impact Note for the UK Tariff 2019.
- 45 Spanish Government (2013). Law 12/2013, of 2 August, measures to improve the functioning of the food supply chain.
- 46 Spanish Government (2013). Law 12/2013, of 2 August, measures to improve the functioning of the food supply chain.
- 47 Edwin, E. (2016). Certified translation: Spanish Code of Good Business Practices in Food Contracting. In April 2019, Directive (EU) 2019/633 of the European Parliament and of the Council of 17 April 2019 on unfair trading practices in business-to-business relationships in the agricultural and food supply chain, OJ L 111, 25.4.2019, p. 59–72 entered into force. EU Member States have until 2021 to transpose the directive.
- 48 Amat Llombart, P. (2016). Buenas prácticas mercantiles en la contratación alimentaria: códigos y autorregulación. In: *Temas actuales de derecho agrario y alimentaria* (pp. 15–35). Valencia, Spain: UPV.
- 49 UK Government (2019). Groceries Code Adjudicator.
- 50 UK Department for Business, Energy & Industrial Strategy (2009). Groceries Supply Code of Practice.
- 51 Sustain (2019). A fair and transparent supply chain.
- 52 Sinibaldi, A. (2018). Sustainability, biodiversity and territory: The Social Agriculture role. Interreg Europe.
- 53 See Forum Nazionale Agricoltura Sociale.
- 54 Italian Government (2015). Act 141 of 18 August 2015 on provisions on social farming.
- 55 Osservatorio Agroalimentare (2019). The National Social Agriculture Observatory is operational.
- 56 AGRIPSI (forthcoming 2019) Developing social agriculture in Tuscany: Recommended and guidelines (In Italian).
- 57 AGRIPSI (forthcoming 2019) Developing social agriculture in Tuscany: Recommended and guidelines (In Italian).
- 58 Ajates Gonzalez, R., Thomas, J., & Chang, M. (2018). Translating agroecology into policy: The case of France and the United Kingdom. *Sustainability*, 10(8), 1–19.
- 59 Ajates Gonzalez, R., Thomas, J., & Chang, M. (2018). Translating agroecology into policy: The case of France and the United Kingdom. *Sustainability*, 10(8), 1–19.
- 60 French Ministry of Agriculture, Agrifood, and Forestry (2016). The Agroecology Project in France, p. 4.
- 61 Champs Culturels (2018). The Agroecological transition: A new human-nature paradigm? New perspectives, new practices (In French).
- 62 Simonneaux, J. (2018). Didactics and the agroecological transition: Questions, issues, obstacles and ways forward (In French).
- 63 French Government (2019). Groups of economic and environmental interest (In French).

64 Deloitte & France Nature Environnement (2017). Agroecology: Performance is everyone's business! (In French).

65 French Ministry of Agriculture and Food (2017). Infographic – Farmers' perception of agroecology (In French).

66 DAERA (2018). Statistical Review of Northern Ireland Agriculture 2017.

67 Food and Agriculture Organization (2015). Agroforestry: Definition.

68 Cardinael, R. Chevallier, T., Germon, A., Jourdan, C., Dupraz, C., Barthès, B., Bernoux, M., & Chenu, C. (2015). Agroforestry for a climate-smart agriculture – a case study in France.

69 Soil Association (2018) 'Agroforestry in England: Benefits, barriers and opportunities

70 Mosquera-Losada, M.R., Santiago Freijanes, J.J., Pisanelli, A., Rois, M., Smith, J., den Herder, M., Moreno, G., Malignier, N., Mirazo, J.R., Lamersdorf, N., Ferreiro Domínguez, N., Balaguer, F., Pantera, A., Rigueiro-Rodríguez, A., Gonzalez-Hernández, P., Fernández-Lorenzo J.L., Romero-Franco, R., Chalmin, A., Garcia de Jalon, S., Garnett, K., Graves, A., & Burgess, P.J. (2016). Extent and success of current policy measures to promote agroforestry across Europe.

71 Agriculture Chambers France (2017). 10 misconceptions about agroforestry - a review before you start (In French); Paris, P., Carnilli, F., Rosati, A., Mantino, A., Mezzalana, G., Dalla Valle, C., et al. (2019). What is the future for agroforestry in Italy? Agroforestry Systems.

72 Santiago-Freijanes, J. J., Pisanelli, A., Rois-Díaz, M., Aldrey-Vázquez, J. A., Rigueiro-Rodríguez, A., Pantera, A., et al. (2018). Agroforestry development in Europe: Policy issues. Land Use Policy, 76, 144–156.

73 French Ministry of Agriculture and Food (2018). Agroforestry and signs of quality: a winning duo! (In French).

74 French Ministry of Agriculture and Food (2018). Agroforestry enthusiasts, participate in the Trees of the Future Contest! (In French).

75 French Ministry of Agriculture and Food (2019). #SIA2019: Awards presentation for the "Agro-ecological Practices - Agroforestry" competition (In French).

76 French Ministry of Agriculture and Food (2018). Agroforestry and tenancy agreements: Knowledge support and recommendations for the drafting of rural tenancy agreements (In French).

77 Measure 222 – first establishment of agroforestry systems on agricultural land.

78 Santiago-Freijanes, J. J., Pisanelli, A., Rois-Díaz, M., Aldrey-Vázquez, J. A., Rigueiro-Rodríguez, A., Pantera, A., et al. (2018). Agroforestry development in Europe: Policy issues. Land Use Policy, 76, 144–156.

79 Lang, T. (2018). The new Agriculture Bill has no vision for food. The Green Alliance Blog.

80 Copenhagen Municipality Technical and Environmental Administration (2009). Eco-Metropolis, Our vision for Copenhagen 2015.

81 Organic Denmark (2018). UN award for Denmark's Organic Plan.

82 Sørensen, N. N., Tetens, I., Løje, H., & Lassen, A. D. (2016). The effectiveness of the Danish Organic Action Plan 2020 to increase the level of organic public procurement in Danish public kitchens. Public Health Nutrition, 19(18), 3428–3435.

83 Food for Life (2019). Schools.

84 Defra (2015). A plan for public procurement: food and catering: the balanced scorecard.

85 Intergovernmental Panel on Climate Change (2018). Special report: Global warming of 1.5° C.

86 Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (2019). IPBES Global Assessment.

87 Committee on Climate Change (2019). Net Zero – The UK's contribution to stopping global warming.

88 Lóránt, A., & Allen, B. (2019). Net-zero agriculture in 2050: how to get there? Brussels: Institute for European Environmental Policy.

89 The Independent (2019). Farming chief calls for 'net zero' agriculture emissions in UK by 2040; Farmers Guardian (2019). NFU sets out three-pillar approach to achieve net zero emission goal by 2040.

90 Poux, P., & Aubert, P.M. (2018). An agroecological Europe in 2050: Multifunctional agriculture for healthy eating - Findings from the Ten Years For Agroecology (TYFA) Modelling Exercise. Paris: IDDRI.

91 Ajates Gonzalez, R., Thomas, J., & Chang, M. (2018). Translating agroecology into policy: The case of France and the United Kingdom. Sustainability, 10(8), 1-19.

92 Stokstad, E. (2018). France's decade-old effort to slash pesticide use failed. Will a new attempt succeed? Science.

93 Poux, P., & Aubert, P.M. (2018). An agroecological Europe in 2050: Multifunctional agriculture for healthy eating - Findings from the Ten Years For Agroecology (TYFA) Modelling Exercise. Paris: IDDRI. Pp., 13, 74.

94 Poux, P., & Aubert, P.M. (2018), p. 22.

95 Baker, C. (2018). Obesity statistics. House of Commons Library: Briefing Paper; Public Health England (2017). Health matters: obesity and the food environment.

Petetin, L., Gravey, V. and Moore, B. 2019. Setting the Bar for a Green Brexit in Food and Farming (Soil Association, 2019).

This report was commissioned by the Soil Association and written by Ludivine Petetin, Viviane Gravey and Brendan Moore on behalf of the **Brexit and Environment network**, a network of academic experts analysing how Brexit is affecting the environment.



Dr Ludivine Petetin is a Lecturer in Law at the School of Law and Politics of Cardiff University and an associate of the Brexit & Environment network. Her expertise lies in the areas of agri-environmental issues and international trade. Recently, her research focuses on the impact of Brexit, considering the potential challenges for agriculture, food and environmental law, policy and governance across the UK, and the specific challenges for Wales. She regularly engages with governments, legislatures and stakeholders across the UK on these matters.

Dr Viviane Gravey is co-chair of the Brexit & Environment network. She is a Lecturer in European Politics at the School of History, Anthropology, Philosophy and Politics at Queen's University Belfast. Her expertise lies in the area of European environmental and agricultural policies and, more recently, on the challenges that Brexit poses for environmental policy and governance in a devolved UK, with a focus on Northern Ireland. She regularly engages with governments, legislatures and stakeholders across the UK on these matters.

Dr Brendan Moore is network coordinator for Brexit & Environment. He is a Senior Research Associate at the School of Environmental Sciences at the University of East Anglia. His expertise lies in the area of climate change policy, with a particular interest in the EU Emissions Trading System and in UK climate policy after Brexit.





www.soilassociation.org

Soil Association
Spear House, 51 Victoria Street,
Bristol BS1 6AD

0300 330 0100 | 0117 314 5001

