

Farming Smarter

Investing in our future



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Foreword

In our 2019 report, 'Our Future in the Land', we made three sets of recommendations:

- Healthy food should be everybody's business, and we need to level the playing field for a fair food system.
- Farming can be a force of change, with a transition to agroecology by 2030.
- The countryside must work for all, with a land use framework to mediate all the demands placed on it.

Alongside many others, in businesses, governments, NGOs and communities, we are working to resolve a critical challenge of our time – how to feed a growing population with nutritious food, affordably, and within ecological boundaries. There are no easy 'silver bullet' answers. Meeting the challenges, including reversing the damage caused by post-war industrialised agriculture and acting on the climate and nature emergencies, requires the shared perspectives, balanced enquiry and collaborative actions of all of us.

This report forms part of a programme of work on changing food and farming systems in a thriving economy and for flourishing communities – from dietary shifts to healthy and affordable food environments, from the agronomics to the economics of sustainable farming, and a land use framework that ensures that the countryside can work for all.



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Contents

	Foreword	3
	Executive summary	5
1	Introduction	8
2	Finance as a catalyst for change	10
2.1	Why agroecology is good business	11
2.2	The finance challenge: maximising opportunities	12
2.3	The case for a development bank	19
3	Designing an effective development bank	24
3.1	More than just a bank	25
3.2	Mission, ownership and structure	27
3.3	Governance and accountability	34
3.4	Distribution, lending model and products	38
3.5	Capitalisation and funding	43
3.6	Legal and accounting constraints	47
4	Conclusions and recommendations	51
5	Endnotes	54

List of figures

Figure 1:	Aggregate funding of UK agriculture	12
Figure 2:	The UK's ageing farmers	15
Figure 3:	Eight agricultural system lock-ins	20
Figure 4:	The interrelation of supply and demand for finance	21
Figure 5:	Measuring what matters for sustainable food systems	27
Figure 6:	Comparison of mission, vision and objectives of national development banks	29
Figure 7:	Ownership and corporate structure of the British Business Bank and subsidiaries	33
Figure 8:	KfW functional divisions	34
Figure 9:	Illustrative balance sheet projection of the ADB	46
Figure 10:	Classification of public bodies for national accounts	47

List of tables

Table 1:	Overview of national development bank governance	35
Table 2:	Funding instruments used by national development banks in UK and abroad	41
Table 3:	Funding sources of national development banks in UK and abroad	44



Executive summary



Executive summary

It is now generally accepted that swift and substantial change is needed in food, farming and land use, to address the climate and nature emergencies, the public health crisis and now a fair and green post-covid economic recovery. The Food Farming and Countryside Commission's research demonstrates that a transition to agroecology could respond to these multiple challenges and allow farmers to grow enough nutritious and affordable food for a growing UK population, as well as supporting those farm businesses to thrive. Yet the practical realities of helping farmers make the transition are underdeveloped and the market alone is rarely capable of making the bold moves needed to accelerate change at the level it is needed. Under these circumstances, governments have, in the past, kick-started these vital transitions – to cleaner energy, housing and transport, and more. The same shift is now needed in agriculture.

Agroecology, a nature-based solution to climate change, has immense potential to yield multiple benefits including more healthy, home-produced food, biodiversity restoration, ecosystem services and higher quality rural employment.

Agroecology, a nature-based solution to climate change, has immense potential to yield multiple benefits including more healthy, home-produced food, biodiversity restoration, ecosystem services and higher quality rural employment. Although it has strong economic and business fundamentals, agroecology faces systemic barriers to adoption as well as shortfalls in provision of appropriate finance. We conclude that a well-designed green finance intervention is required to realise this potential.

In many cases farming businesses can access the bank finance they need, including to transform production methods. But there are also circumstances in which banks may find it difficult to lend, including:

- 1. Lack of security** – tenant farmers and/or farm contractors, who are unable to offer adequate security for loans
- 2. Smaller farms** – for which transaction costs of lending are proportionately larger relative to loan size
- 3. New entrants** – new farmers or succession within an established farm enterprise, where there is insufficient financial and management track record
- 4. Unfamiliarity** – unfamiliarity with business models based on new farming methods that, although potentially well evidenced in general, lack a track record in a particular setting and so appear risky.

In addition to these potential gaps, realising the full potential of agroecology will require broader transformation in the supply chain to stimulate and absorb more local food production. Furthermore, our analysis in our recent report, 'Farming for Change', demonstrated the productivity and environmental benefits of significant rebalancing away from intensive arable and livestock to mixed farms and increased horticultural production, and the requirement of a sustained phase of fixed and working capital investment over many years.

Agroecology is a science and a practice for improving food and farming systems, which also pays attention to the social and economic impacts for farmers, growers, businesses, citizens, communities, and countries. In applying ecological science to agriculture, it optimises beneficial relationships between plants, animals, humans, and ecosystems. As a global movement, helping achieve the UN Sustainable Development Goals, it exposes the complexities of global agribusiness and supports progress to a more sustainable and fair food system.

In view of this, we have explored the case for a new national development bank to support the UK agricultural sector. We conclude that there is a case for a new institution to work with the grain of policy and market developments towards agroecology. We argue that:

- The existence of positive environmental and social benefits justifies public intervention, including in the financial sector to unlock new sources of finance.
- Agroecology businesses are fundamentally bankable, but there are several gaps in the supply of finance by deposit-funded retail banks that a national development bank can help overcome.
- A new mission-driven national institution can play a broader role in overcoming 'lock-ins' that impede systems change, and it can drive a transition to agroecology at the pace and scale required to meet the UK's societal goals, in particular the need to transition to a net zero carbon economy.
- Measures to build demand for agroecological produce, to ensure that farmers have the information, advice and skills they need, and to spread awareness of the full range of available finance are all equally as important as measures to enhance the supply of finance.

Based on a review of national development banks across different sectors and geographies, our initial recommendation is that the UK government should establish a public development bank – the Agroecology Development Bank – which would have a research and leadership role to develop the agroecology sector, stimulating demand for finance as well as ensuring sufficient supply of appropriate finance. Its key features would be:

- a mission-oriented mandate, pro-actively steering finance towards agricultural practices and businesses that deliver positive societal benefits
- the provision of the full spectrum of finance from grants, equity and debt, working primarily through financial intermediaries and with some direct financing
- the promotion of the comprehensive regional distribution of financial products through regional presence and partnerships with financial and business advisory institutions at both regional and national levels
- a knowledge leadership role to improve methods of valuation and measurement of economic, social and environmental impacts of farming based on robust evidence.

The Agroecology Development Bank would be complementary to the British Business Bank, the newly established UK Infrastructure Bank, the Scottish Investment Bank and the Development Bank of Wales, and serve a distinct and specialised role in agricultural and rural transformation. Drawing on the experience of these other institutions, and learning from best practice internationally, we recommend that UK government lead a consultation with relevant stakeholders on detailed proposals for inclusion in the package of measures to be announced at the forthcoming COP26¹ in Glasgow.



1.

Introduction



1. Introduction



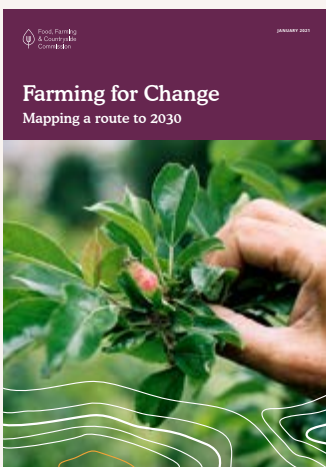
This report sets out proposals for the creation of a new Agroecology Development Bank to accelerate transition to agroecology in the UK.

It builds on the following publications:

- 1. Our Future in the Land** (July 2019) – which included an outline proposal for the National Agroecology Development Bank
- 2. Farming Smarter: The case for agroecological enterprise** (November 2020) – which set out evidence for why agroecology is good business and sound economics but faces barriers to adoption, and recommended better support for farming enterprises including access to appropriate finance
- 3. Farming for Change: Mapping a route to 2030** (January 2021) – which showed how, based on technical modelling, agroecology can produce enough healthy food for a future UK population while delivering carbon, biodiversity, social and economic benefits.



In examining the case for a new specialist national investment bank, we undertook desk research augmented by several stakeholder interviews. We are grateful to Andrew Voysey (Soil Capital), Alice Hu Wagner (British Business Bank), Mark Suthern (Barclays Bank) and Oli Rodker (Landworkers Alliance, Ecological Land Cooperative) who gave up their time to give us the benefits of their insights and experience. We are also indebted to Sue Pritchard and David Fursdon from FFCC for their comments and suggestions, and to Marcus Link whose earlier research as the co-author of 'Farming Smarter: The case for agroecological enterprise' has also informed this report.



These interviews were undertaken in late 2019 and early 2020 in preparation for a stakeholder workshop at St. George's House, Windsor. Based on the feedback from that event, further stakeholder discussions and further desk research, we here set out a blueprint for the Agroecology Development Bank.



2.

Finance as a catalyst for change



2. Finance as a catalyst for change

2.1 Why agroecology is good business

In our previous report, 'Farming Smarter: The case for Agroecological enterprise', we showed that agroecological methods can be both profitable, therefore ensuring farmer's livelihoods, and enhance our natural environment, therefore ensuring farming plays a pivotal role in the country's transition to net zero emission, while also creating high quality jobs.²

This positive assessment draws on three key components:

- The benefits of diversified agroecological farming are systematically undervalued by conventional measures of agricultural productivity.
- The financial position of existing farm businesses is overly reliant on inflated land values and direct farm payments through the Common Agricultural Policy (CAP).
- Despite the lack of subsidies given to agroecology businesses, their focus on profit through synergies, layering of different outputs and reducing non-labour inputs, as opposed to a focus on gross yield, have made it possible for agroecology enterprises to thrive.

Agroecology also has significant environmental benefits from a myriad of perspectives. Improvements in soil, water and biodiversity as well as reductions in greenhouse gas emissions have all been shown to be achieved through agroecology methods.

Finally, there are social benefits from agroecology, including the transformation of land workers from semi-skilled 'production line' operatives to skilled knowledge workers, exploiting innovation and automation, and improving both productivity and the quality of jobs. An increase in the quantity of jobs would also be likely, especially with a shift towards agroecological horticulture.

We conclude that agroecology is both bankable at the enterprise level and desirable at the societal level based on its underlying economic characteristics.

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2.2 The finance challenge: maximising opportunities

Does this mean that there is no need for any intervention in the supply of finance, as theoretically all viable projects would receive appropriate commercial finance?

Furthermore, if input costs can be reduced significantly early in a transition from industrial and intensive methods towards agroecology, can these cash savings be used to finance farm transformation without the need for external finance?

It is outside the scope of this project to carry out detailed market research on the current and likely future trends in the need for finance for a transition in farming to agroecology principles. However, we can estimate the scale and components of credit, the predominant form of finance, for all forms of agriculture at over £20 billion (see Figure 1).

Figure 1: Aggregate funding of UK agriculture

Source: New Economics Foundation, adapted from Defra (2020)³

SOURCE	SCALE (£ BILLION)
BANK LOANS	£9.70
BUILDING SOCIETIES	£1.60
AGRICULTURAL MORTGAGE CORPORATION / SCOTTISH AGRICULTURAL SECURITIES CORPORATION	£2.50
FAMILY LOANS	£0.55
TRADE CREDIT	£2.40
BANK OVERDRAFTS	£2.20
HIRE PURCHASE	£1.50
TOTAL	£20.45

Is the existing supply of finance already sufficient for an agroecological transition? On the basis of our research, we conclude that it can be possible to transition to agroecology either through self-funding or by accessing finance on commercial terms where the following conditions hold true:

- an agricultural enterprise has the vision and will to transition
- the management team are well established with a good track record
- the nature of the farm business provides opportunities for early no or low regret reductions in inputs or, if not, the transition is from a position of financial strength, including the ability to offer security for debt finance.

But what happens when these conditions do not hold true? There is some diversity of provision in the retail banking market for agricultural enterprises (see Box 1) but, as with the market for small and medium-sized enterprises, it remains highly concentrated with very few lenders that are specialists in agroecological systems or financing the transition in production methods.

Box 1 – Finance for farming in the UK

- **Major UK commercial banks** – Most, although not all, of the biggest UK banks have specific agriculture divisions who provide a wider range of products to their customers from small overdraft facilities to large-scale, multimillion-pound loans.
- **Triodos** – Triodos is different from other UK commercial banks because they only fund ‘organic, biodynamic and sustainable farming’. They also provide a wide variety of products up to loan values of £20 million.
- **Oxbury** – This is a new entrant specialist agriculture bank that is focused on providing finance to British farmers, initially providing saving facilities and ‘Oxbury Farm Credit’ which provide short-term working capital, especially to buy inputs. They will also provide long-term loans in the future. Oxbury has received its backing from large-scale agribusinesses, such as Hutchinsons and Frontier Agriculture, as well as US commodities giant Cargill.
- **Loans for Enlightened Agriculture Programme (LEAP)** – Operated by the organisation Funding Enlightened Agriculture, the programme provides unsecured loans from £25–100k. As well as providing loans each successful applicant gets a grant worth 18% of the loan (i.e. for a loan of £50k, the farmer would also get a grant of £9k).
- **Community Shares** – These are a form of share capital unique to cooperative and community benefit society legislation, which allows them to raise capital, often from the community of users or customers. The Biodynamic Land Trust already uses a model like this to attract investment in order to buy farmland to put into trust.
- **Community Supported Agriculture (CSA)** – Under the CSA system, consumers connect with a specific farm or group of farms and pay, often in regular instalments, for the harvest output from that farm or group of farms. This provides a community-orientated version of the futures market and allows the producer and consumer to share the risks and rewards of farming.
- **Ecological Land Cooperative (ELC)** – The ELC receives donated land and raises funds to buy land in order to help new entrants start farming by enabling them to access land at below-market prices.

The evidence for agroecology is extensive but for individual farming enterprises and farmers it nevertheless can feel like a step into the unknown.

Our assessment of the financial state of agriculture in the UK suggests that there are a significant number of farms in a weak financial position.⁴ This impedes the ability to invest in business innovation and also undermines a farmer's ability and appetite to take risks. The evidence for agroecology is extensive but for individual farming enterprises and farmers it nevertheless can feel like a step into the unknown. We recognise that business success requires more than just finance, and we discuss other success factors below in section 2.3 ('Finance in context').

Our research indicated several circumstances in which banks may find it difficult to lend. In all these cases, and beyond, the lack of clarity about UK financial support schemes for agriculture, and their frailty in comparison to the tried and tested CAP schemes that banks were used to, is creating additional headwinds to the provision of bank finance. The identified specific gaps in the supply of finance are as follows:

- 1. Lack of security** – tenant farmers and/or farm contractors, who are unable to offer adequate security for loans. Farm tenants have been able to offer livestock and capital equipment as security, but with falling and uncertain livestock values and in the context of less capital and more knowledge-intensive methods of agroecology, this may become more of a barrier to loan finance.
- 2. Smaller farms** – for which transaction costs of lending are proportionately larger relative to loan size.
- 3. New entrants** – new farmers or succession within an established farm enterprise, where there is insufficient financial and management track record.⁵
- 4. Unfamiliarity** – unfamiliarity with business models based on new farming methods that, although potentially well evidenced in general, lack a track record in a particular setting and so appear risky to credit underwriters who may lack sufficient expertise or comparative data on which to base a lending decision.

For example, the proportion of agricultural land that is tenanted ranges from 20% in Scotland to up to 40% in England according to different data sources.⁶

In England well over half of farms (61,000 or 58%) are under 50 hectares of agricultural land, in Wales over half are under 20 hectares and in Scotland over 60% are under 20 hectares. In Northern Ireland 77% of farms are classified as very small.

Some 15%–30% of new tenancies are currently taken by new entrants to farming. However, the freehold farm sector is also likely to require an increasing number of new entrants as a result of the age profile of UK farmers (see Figure 2).

These gaps are all significant and, particularly in the case of farm succession, are likely to worsen over the next decade.

As Figure 2 shows in the UK a third of all 'holders'⁷ in the UK are over the typical age of retirement (65) and the median age of holders is 60. This is contrasted with the proportion of under-35s, which is just 3%. Whereas the proportion of holders

between 45 and 64 has remained flat since 2003, the big shift has been from those under 44 (decreased by 6%) to those over 65 (increased by 7%). Although figures should be treated with caution as the name on the legal title or at the head of a family enterprise does not necessarily reveal that younger relatives and children are active in the business, this clearly shows that on average the age of farmers is increasing and a planned national approach to turning this potential threat to the food and farming sector into an opportunity, to expand good work in the food and farming sector, is desirable.

Figure 2: The UK's ageing farmers

Source: Agriculture in the UK 2018, Defra⁸

	% OF FARMERS IN EACH AGE GROUP					
	2003	2005	2007	2010	2013	2016
UNDER 35 YEARS	3	3	3	3	3	3
35 - 44 YEARS	15	14	12	11	10	9
45 - 54 YEARS	24	23	23	25	25	23
55 - 64 YEARS	29	29	29	29	28	29
65 YEARS AND OVER	29	31	33	32	34	36
MEDIAN AGE (YEARS)	58	58	59	59	59	60

AGE OF FARMER

The issue is further compounded by the fact, highlighted recently by the president of NFU Scotland, that 'a huge number [of farmers] are approaching retirement, with no clear successor to run the operational side of their business'.⁹

The four barriers to finance identified above are often compounded, and in the light of the succession challenge we can assume that a large influx of young farmers without a track record, possibly operating small farms as tenant farmers, and potentially using different methods of farming on the land, will be a challenge for the conventional finance sector to fund at scale. Although many of these may be part-time, and have other employment or alternative sources of income that help finance the new farming business or enable access to credit, relying on this is suboptimal as it diverts energy and time away from making the new farming business a success.

Even assuming a successful establishment of, or transition to, agroecology farming, the finance barriers can persist. A study by the Landworkers' Alliance and Centre for Agroecology at Coventry University¹⁰ found that agroecology farmers encountered significant barriers to productivity which included:

- lack of capital to invest in equipment and infrastructure, meaning the efficiency of some holdings was less than optimal
- affordability of land and accommodation
- lack of technology suitable for small-scale farmers.

The lack of working capital 'was limiting efficiency by preventing respondents investing in adequate infrastructure and equipment'.¹¹

In many cases, the bulk of any start-up capital was spent on land, with insufficient funds being left over to invest in buildings, fencing and machinery. 'Although people manage and innovate with what is available, inefficiencies resulting from animals escaping due to poor fencing, machinery breaking down when needed and forage being ruined when stored under tarpaulins rather than in a barn were seen as a drain on the business.'¹²

Recent research commissioned by the Landuse Policy Group, based on interviews with farmers across England, Scotland and Wales, identified access to capital and finance as one of the most significant external factors preventing them from diversifying into more sustainable systems.¹³

So to open the sections opening questions, while some agroecology businesses can access finance on viable terms, many cannot and therefore some specific and targeted intervention is warranted. However, while identifying and addressing gaps in finance for economically viable businesses is important, this 'market failure' approach does not paint the full picture.

Agroecology is a nature-based solution to emissions reduction, and in this context the optimum availability of finance may be significantly greater than that needed simply to address gaps in supply in the current market.

We face a pressing societal challenge, being enshrined in law, to reduce carbon emissions. Agroecology is a nature-based solution to emissions reduction, and in this context the optimum availability of finance may be significantly greater than that needed simply to address gaps in supply in the current market.

For example, the significant succession challenge being faced by UK farming sector over the next 10 years also creates an opportunity because it will unfold at precisely the point that we need a transformation in business practices, one that can grasp the full potential of agroecology to play a full part in the UK's transition to a net zero carbon economy.

Our 'Farming for Change' report demonstrated on the basis of rigorous modelling that the UK can grow enough healthy food for a future population while:

- eliminating synthetic fertilisers and pesticides
- nearly doubling amount of land available for green and ecological infrastructure (ponds, hedges, meadows, etc.)
- releasing 7.5% of current agricultural area for more flexible use
- reducing greenhouse gas emissions from agriculture by at least 38% by 2050 (with potential to offset 60%+ of remaining emissions through an afforestation scenario)

While risk taking is part and parcel for entrepreneurs, in the case of farm businesses the stakes are unusually high – betting not just the farm but the family home and history on a potential leap into the unknown.

- neither compromising food security nor offshoring food production and the associated environmental impacts.

This represents a huge opportunity for win-win outcomes for public policy and the food and farming sector, but also requires a significant degree of transformation in farms and farming methods. For example, reductions in intensive meat production will lead to a dramatic reduction in fodder crop production in the grasslands of the UK, and significant increases in production of roots, legumes and pulses. Conversely, arable-dominated regions will need to reintroduce grazing livestock to close the nitrogen cycle and eliminate the need for artificial fertilisers. All this will require fixed and working capital investment. Sufficient finance may be forthcoming from traditional sources, but not necessarily at the speed and scale required.

Another factor is the supply chain transformation that will be required for a re-localisation and reorientation of domestic agricultural production to create a lower carbon, more self-sufficient and healthier system from field to fork.

A final area in which a national development bank would play a complementary role to existing providers is in pooling of risk. As identified above, for farming businesses in a fragile financial position, facing significant uncertainty in economic, trade and climate factors on their business, it requires a significant appetite for risk to depart from business as usual. While risk taking is part and parcel for entrepreneurs, in the case of farm businesses the stakes are unusually high – betting not just the farm but the family home and history on a potential leap into the unknown. Part of the answer to this is good business support – advice, training, education and mentoring – as we explore further in the next section. However, there is also a case for innovation in green finance to address a ‘fallacy of composition’ problem: that because society as a whole will benefit from transformation in farming towards agroecology, it is assumed all will benefit, including those experimenting locally as to what works best. But not all will be financially successful and the potential asymmetry of risk for the farmer between increased profitability on the one hand, and business failure on the other, may hold back the optimum level of risk taking for society as a whole. Agriculture has been the source of financial innovation in the past, for example the origin of financial derivatives in transferring risk of weather events and crop failure from farmers to financiers. Stimulating financial innovation to meet the agriculture challenges of today would capitalise on the UK strengths in financial services and could lead to more effective and efficient investment in the transition to agroecology.

WHAT INFRASTRUCTURE DOES AGROECOLOGY REQUIRE?

One of the consequences of increased centralisation in the UK food system is the disappearance of much of the local supply chain infrastructure which historically supported more mixed farming practices. A prime example of this has been

the decline of small abattoirs, with 1 in 3 small abattoirs for red meat in the UK closing over the last decade and a longer term decline from 1,890 in 1971 to 249 in 2017.¹⁴ Mapping livestock farms across the UK against the location of abattoirs already reveals substantial gaps in the country, even where livestock production is dominant. For many farms, the lack of a local abattoir, particularly in areas currently dominated by cropping, will remain a substantial barrier to starting the transition to a more agroecological approach. Added to this, is whether or not an abattoir can carry out 'private kills' (the one-off, or small-scale throughput, often used by small farmers developing direct sales) as well as the associated on-farm butchery and processing facilities that will be required to get that product to market. 'Farming for Change' identified an important role for ruminant livestock production in a future agroecological food system, but on the basis that these are managed on extensive, pasture-based, high-nature-value systems, to optimise their role as ecological upcyclers. The economics of this kind of system will be highly dependent on farmers retaining more value from their stock, being able to have them slaughtered locally, in small batches and sold direct to customers from the farm. Achieving this at scale will require widespread investment in turning back the tide on the decline of local abattoirs and enabling the growth of on-farm butchery and retail.

Perhaps nowhere is investment more needed than in the establishment of more horticultural enterprises.

Perhaps nowhere is investment more needed than in the establishment of more horticultural enterprises. In 2019, the NFU president, Minette Batters, called for a 'horticultural revolution' to increase the production fresh fruit and vegetables and reverse a multi-decade decline in self-sufficiency. Currently the UK only produces 16% of its fruit and 57% of its vegetables, yet the IDDRI UK model shows that if the country is going to both meet the need for nutritious food for all and tackle climate change, this will need to increase to 63% on both counts by 2050. Increasing the production of fruit and permanent horticultural cropping by 47 percentage points by 2050 is not a cheap undertaking. Underpinning this will have to be substantial investment in water infrastructure, including rain-water harvesting and distribution systems, on-farm reservoirs, and trickle irrigation systems, as set out in the NFU's 'Integrated Water Management' report.¹⁵ But in addition to this will be infrastructure for protected cropping, in-field harvesting machinery, and processing, packing and cold storage areas. The combination of these elements is likely to be capital intensive and prohibitively expensive for new entrants, smaller farms and tenants, especially with the time needed to get a crop from top fruit production. But even for established businesses of scale, the risk of taking on a new enterprise and new techniques could be a block in itself, so it will be important to ensure there is intelligent financial support to support the process.

In view of the multiple weakness and opportunities, we need a forward-looking approach to determining what scale and form of finance is needed for agroecology. The question is not 'how big are the gaps in the supply of finance today?' but instead 'how can we ensure supply of the right quality and quality of finance to transition to agroecology tomorrow and in the coming decades?'

2.3 The case for a development bank

FFCC argues that there is an urgent need to transition to agroecology not only so that the UK can meet its goal of becoming carbon net zero by 2050, along with serious reductions by 2030¹⁶, but also to grow more of its own food and provide new knowledge intensive jobs. The evidence suggests that existing streams of private finance in the UK will not be able to meet this challenge at the pace and scale required.

We therefore consider how we might mobilise the public sector, and the money it can unlock, to meeting this important challenge through the creation of an Agroecology Development Bank (ADB). We also consider what such a new institution can and cannot be expected to achieve, and therefore how it fits within a broader context of what is required for such a major transformation in the UK's food, farming and countryside.

OVERCOMING SYSTEM INERTIA

The viability and bankability of agroecology does not mean that solving the issue of the availability of finance will by itself lead a transition at the speed and scale that we need: only some of the eight lock-ins highlighted in 'Farming Smarter: The case for Agroecological enterprise', and reproduced in Figure 3, relate to finance.

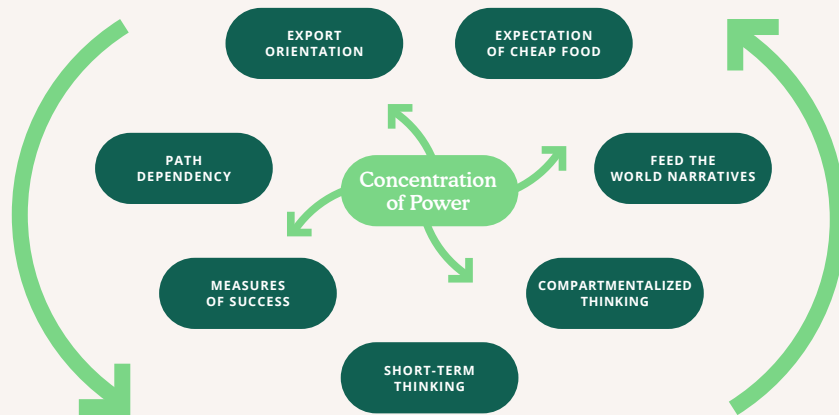
This insight does not diminish the case for a financial intervention, but rather should inform both the context and objectives of any new financial institution, and help to identify opportunities to tackle multiple barriers in an integrated way. As an illustration, new forms of measurement and reporting tools focused on ecological outcomes could allow innovation in green finance by aligning repayment schedules and cost of finance to positive non-financial outcomes, such as soil health indicators. An example of this is already evident in the incorporation of soil degradation by landowners under the definition of dilapidations in farm tenancies, tying financial liabilities directly to ecological outcomes.

Another example of a broader benefit of an Agroecology Development Bank is the more nuanced but potentially powerful signalling effect that a new initiative or institution can play in the market. Already in 1993, Ikerd saw 'the role of public policies in moving agriculture toward a sustainable path as being either to (a) impose environmental constraints on producers, or (b) *provide incentive payments or targeted subsidies to encourage adoption of sustainable practices*'.¹⁷

The viability and bankability of agroecology does not mean that solving the issue of the availability of finance will by itself lead a transition at the speed and scale that we need

Figure 3: Eight agricultural system lock-ins

Source: IPES-Food, 'From uniformity to diversity'¹⁸



But as important as economic incentives are, this is as much about hearts as minds. In a period of change, what will feel natural and normal 10 years hence will potentially feel unnatural and outside social norms today. In the words of IPES-Food, we ‘must shift the centre of gravity in food systems, allowing harmful dependencies to be cut, the agents of change to be empowered, and alliances to be forged in favour of change’.¹⁹

MARKET PIONEERS

The analysis of systems inertia demonstrates that market practice can lag underlying economic and policy signals. In the case of an underdeveloped skills and knowledge base, the role of the Green Investment Bank (GIB) in stimulating of the supply of finance to the offshore wind sector is instructive.²⁰ Offshore wind was economically viable, but was an early-stage technology with minimal financial track record and historical performance data. The level of skill, experience and institutional capability of commercial banks in financing oil and gas was not mirrored in offshore wind. The GIB acted as a centre of expertise, crowding in private sector finance to robustly profitable but as yet unproven projects. The barriers were as much institutional (skilling up banking staff, developing technical expertise and data, and evolving risk appetites and risk management frameworks for a new technology) as about availability of capital at the right price.

We note that, unlike offshore wind, agroecology has multiple yields and impacts, extending beyond food products to timber and textiles, and across environmental outcomes from carbon sequestration to biodiversity restoration. This adds to the case for a specific institution that can manage this complexity and reveal, research and quantify trade-offs.

While a new development bank could make a significant difference, it is important to consider other factors that would contribute to, or inhibit, its success.

FINANCE IN CONTEXT

Financial innovation is a necessary but not sufficient piece of the puzzle. In ‘Farming Smarter: The case for Agroecological enterprise’ we also highlighted

- an urgent need for relevant research into the most efficient approaches and combinations of approaches in different ecoregions of the UK – including, in particular, more robust methods to measure and quantify ecologically meaningful outcomes
- the benefit of supporting agroecological entrepreneurs with comprehensive business support including training, mentoring and effective diffusion of knowledge.

In Figure 4 we set out these and other success factors for a rapid transition to agroecology, noting that a new development bank cannot solve all problems or overcome all barriers.

Our initial proposition is that the ADB should be the primary institution in the UK responsible for developing and supplying innovative financial products tailored to supporting a rapid transition to agroecology.

Second, it should also have a remit to generate knowledge on agroecology, in particular on outcome measurement and verification, which can help to underpin finance as well as be of public benefit to all farms regardless of whether they use ADB finance.

Third, as with other development banks such as the British Business Bank (BBB) and Big Society Capital (BSC), it should have a public information role to spread awareness of both agroecology and finance for agroecology.

Finally, it should distribute its products through other financial institutions and, once again in common with BBB and BSC, seek to encourage a diversity of institutions both in terms of location and business model.

Figure 4: The interrelation of supply and demand for finance

Note: AE = agroecology
Source: authors

ADB has primary responsibility
 ADB partners with other institutions



Beyond simply accessing appropriate finance, we see access by agroecology entrepreneurs to high quality and comprehensive business support services as critical to the overall success of individual businesses and the competitive position of the UK's food, farming and countryside over the long term.

Although beyond the scope of this report, we note that it will be important to work down the supply chain to ensure rising demand for the output from agroecology businesses from consumers, retail business, food service and especially public procurement. The government's goal of achieving net zero by 2050 will help to drive some of that demand, although without intermediate targets the long time frame could mean that pressure is not felt immediately.

Furthermore, developing the capacity of farming enterprises to meet changing consumer demands efficiently, and becoming investment-ready and able to make best use of the available finance, will be critical to the effectiveness of a new development bank and to the success of the transition to agroecology.

Beyond simply accessing appropriate finance, we see access by agroecology entrepreneurs to high quality and comprehensive business support services – including business advice, agronomy consulting, skills and mentoring – as critical to the overall success of individual businesses and the competitive position of the UK's food, farming and countryside over the long term. Such services are of course already present in many forms, and in future work FFCC intends to engage with stakeholders to examine options for enhancing business support for agroecology, in particular to see how comprehensive and easily accessible support can be available across all areas of the UK.

IS A NEW INSTITUTION NECESSARY?

Many of the gaps in finance identified in section 2.2 are circumstances that are familiar to the financing of infrastructure projects and of SMEs (small and medium-sized enterprises). In the case of SME finance, there can be significant barriers to lenders, in particular the lack of sufficient collateral, start-up finance being too risky for deposit-funded banks, and smaller loans sizes being commercially less viable relative to the costs of transacting and servicing them.

The British Business Bank (BBB) addresses this need through a combination of provision of financial products, initiatives to expand the diversity of SME finance providers, publication of market intelligence and data, and improving the matching of demand and supply of finance through signposting and engagement.

As BBB products and agricultural subsidies under the EU's Common Agricultural Policy are both classified as state aid, there has been a general exclusion for the agriculture sector. This is set to change with the UK's departure from the EU, and the BBB may be able to fulfil market gaps in the agriculture sector with no further intervention.

Furthermore, there are examples of successful development banks that support different sectors and types of lending under one roof, typically by establishing multiple operational arms that house different skills and offer different financial products. There is therefore a wealth of international experience to learn from in pursuing this approach.

However, there are also several potential drawbacks to consider. First, the need to finance a transformation in industrial practice to a different model is a quite different type of mandate to the BBB's role in development and improvement of existing markets. Second, the BBB's 'sector neutral' approach to its lending prevents it from targeting specific sectors or industries. Third, the spatial pattern of the target customers for finance is quite different, with SME's concentrated in more densely populated urban areas compared to the rural focus of agriculture. Partly for this reason, and the specialist knowledge required for successful lending in this sector, agriculture is seen as a specialism within commercial banks and there are examples of specialist state development banks in other countries.

As for infrastructure, the new UK Investment Bank has been mandated to expand the provision of finance for infrastructure in the UK. Initially the bank will be using the definition of infrastructure from the Infrastructure (Financial Assistance) Act 2012, including:

- water, electricity, gas, telecommunications, sewerage or other services
- railway facilities (including rolling stock); roads or other transport facilities
- health or educational facilities
- court or prison facilities
- housing.

While there are parallels with the mission to finance low carbon transition and support regional productivity and jobs, this is ultimately a different type of lending and skill set to that required for the financing of the transformation of the UK's food and farming enterprises.

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Perhaps for these reasons, there are 39 specialist agricultural development banks across the world, including one multi-national institution. This is not just a need identified in pre-industrial nations with much proportionately large agriculture sectors: of the G20 group of industrialised nations, 6 have agriculture development banks, and there are 18 such banks in 15 countries classified as high or upper-middle income. We examine international comparisons in greater detail in the following section.

We conclude that it would require a material change to the mandate, expertise and borrowing powers of the BBB or the UK Infrastructure Bank to address the needs and opportunities set out above, and hence we set out in the next section our proposal for a dedicated, independent Agroecology Development Bank as the best solution.

3.

Designing an effective development bank



3. Designing an effective development bank

In this section we explore the key design features of successful development banks²¹ especially those with transformational missions. We address constraints, such as national accounting and state aid rules, which have often hindered UK implementation of such ideas.

In each section we describe and evaluate design elements in the context of UK and international examples that we can learn from.

3.1 More than just a bank

As examined in section 2, in order to successfully transition UK farming to agroecological methods it will be critical that the ADB is an institution that understands not just finance, but also the needs of farmers and what it takes to transition to agroecology.

A key difference between development banks and private financial institutions is the breadth of expertise and capacities contained within staff. In many cases, this includes not only financial expertise but significant in-house engineering and scientific knowledge about the sectors the bank is active in, and the nature of the investments being made. This enables investment decisions to be based on a wider set of criteria than relying on market signals alone. It also acts as a powerful way to crowd-in private investment, as development bank approval acts as a hallmark of quality which gives private sector actors the confidence they need to invest.²²

As well as people with banking expertise, it is therefore vital that the ADB recruits experts in farming, especially those with knowledge and experience of managing the transition from conventional to agroecology methods – as well as scientists, engineers and researchers – to ensure that they are able to offer a more complete package of help, especially for larger projects. Building on this wide knowledge base, the bank should be able to make lending decisions based on a much better understanding of the sector and with reduced reliance on market and price signals.

In addition, many successful development banks such as Germany's KfW have in-house research departments to provide analysis and market intelligence.²³ As such, we recommend that the ADB should operate as a research institute in order to help breach the gap in scientific research in specific areas vital for the

transition, including topics such as the most effective ways to draw down carbon into the soil and other important areas that would benefit from more research.

Although perhaps not immediately obvious that a bank should concern itself with research and the development of better market data, ultimately the efficient allocation of finance rests on high quality and comprehensive information about business and market fundamentals. The example of soil tests in Box 2 demonstrates how partial information can lead to misallocation of finance.

Box 2 – How partial soil tests can lead to resource misallocation

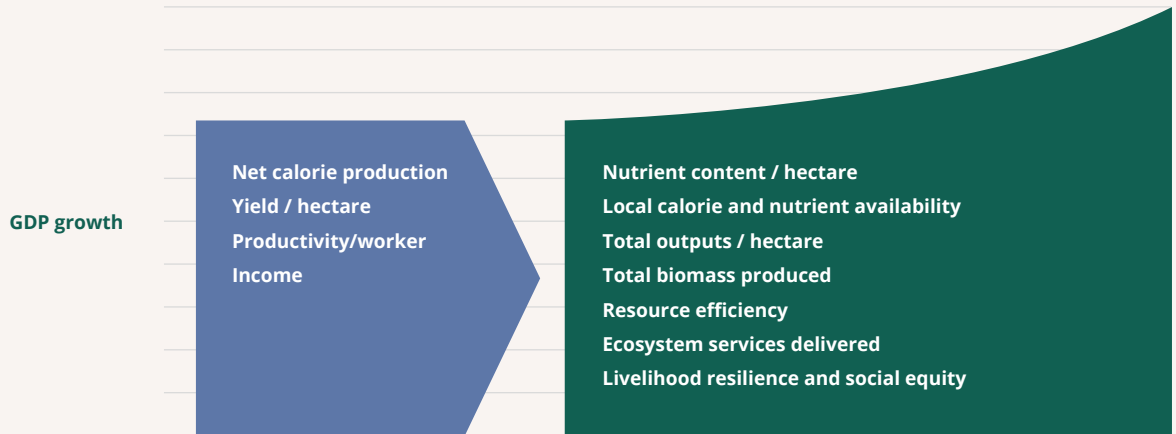
Conventional soil tests evaluate only the chemical and physical properties of the soil and use caustic, reactive acids (nitric and sulfuric acid). These tests ignore the fact that 90% of the nutrient cycle is biological and therefore does not mimic the interaction of soil nutrients and root systems. Conventional soil tests, therefore, do not work well for estimating nutrient levels and give an incomplete picture of soil health which favours the fertiliser industry. This can result in farmers being recommended to apply significant additional inputs (the whole rationale behind testing in the first place) that can affect ecosystem health negatively – and unnecessarily. By comparison, the Haney soil test biomimics the three most common acids (oxalic, malic and citric acid) emitted by plant roots and uses water as an extract based on the fact that it rains water. This test then measures seven parameters related to soil biology much more accurately, arriving at a final soil health score and estimating any necessary nutrient input based on a more holistic assessment of the soil.²⁴

This matters because the former test favours an approach to agriculture which the Director of Healthy Soils Australia, climate scientist and microbiologist Walter Jehne, describes as ‘mining’ and ‘extractive nutrient harvesting’²⁵ which lead to declining productivity in the long term.²⁶ The latter testing approach favours agriculture techniques that regenerate soil.²⁷ To allocate resources well, markets depend on accurate and complete information.

More broadly, an IPES-Food report, ‘From Uniformity to Diversity’, makes a number of suggestions for more adequate measurement of the economic performance of agriculture. These are summarised in Figure 5, which provides an illustration of the data sets that the ADB might play a leading role in developing for the benefit of both the farming and financial sectors.²⁸

Figure 5: Measuring what matters for sustainable food systems

Source: IPES-Food, 'From uniformity to diversity'²⁹



Research into better measurement of economic, social and environmental business success are needed. Although individual private finance institutions may develop their own approaches over time, greater efficiency can be gained by public investment in an open-source knowledge base which can lubricate the whole market.

3.2 Mission, ownership and structure

Not all development banks are successful. Learning what works and what doesn't is key. One such lesson is the importance of a clearly defined purpose that is cemented into the bank's operations. Another is that ownership and organisational structure can either help it achieve its purpose or undermine it, depending on its design.

MISSION

A key reason why development banks can be powerful agents of economic transformation is that they traditionally execute their roles *in coordination with* governmental policies. Indeed, one of the primary roles of development banks around the world has been to promote specific public policy objectives by directing investment to specific sectors in quantities *and on terms* that the private sector would be unable, or unwilling, to match.

In recent years a new breed of development bank has been emerging, with key examples in Germany³⁰ and China³¹, that go beyond the traditional role of such institutions to provide large scale infrastructure investment or act counter-

There is a growing consensus that development banks that are ‘mission driven’, with investment activities guided by specific missions aligned with industrial policy, can be more effective at delivering structural transformation than those that are focused on more neutral economic objectives such as promoting ‘growth’ or ‘market fixing’.

cyclically. They are mission-oriented and play a key role in confronting the key social and environmental challenges of the 21st century, such as climate change. We view the ADB as a mission-oriented public bank, following the definition and framework of the UCL Institute for Innovation and Public Purpose.³²

Whereas orthodox economic policy focuses on ‘de-risking’ and ‘levelling the playing field’, mission-oriented policy seeks to tilt the playing field in the direction of desired goals. It involves strategic thinking about the desired direction of travel, the kind of technologies and industrial landscapes needed to get there, and the policy frameworks required to make it happen. In this sense, mission-oriented policy is concerned with co-creating and shaping markets to achieve societally agreed missions driven by public purpose, rather than limited to ‘market fixing’.³³ This may well involve structural economic change across multiple sectors as well as difficult-to-predict spill-over effects outside the immediate policy area.

Most development banks have their mandate, including the range of activities they should pursue, set out clearly in law or in their articles of association. They are not static, however, and it is common for mandates to evolve over time as priorities and contexts change and political attention shifts.

There is a growing consensus that development banks that are ‘mission driven’, with investment activities guided by specific missions aligned with industrial policy, can be more effective at delivering structural transformation than those that are focused on more neutral economic objectives such as promoting ‘growth’ or ‘market fixing’. Although presented differently in each case, the mandates of many leading development banks are linked to overcoming specific economic, social and environmental challenges, which enables them to play a leading strategic role in their respective economies. This is also the approach that has been adopted by the Scottish National Investment Bank.³⁴ In other cases however, such as the UK’s British Business Bank, the mandate is focused on sector neutral objectives such as fixing market failures in access to finance. Figure 6 shows the missions and visions that major development banks around the world operate under.



Figure 6: Comparison of mission, vision and objectives of national development banks

Source: Bank annual reports and websites

BANK	MISSION	VISION / OBJECTIVES THAT GUIDE ACTIVITY
KFW (GERMANY)	To 'improve the economic, social and ecological living conditions around the world'.	Activities are guided by four key challenges: 1) climate change and environmental protection 2) globalisation and technical progress 3) digitalisation and innovation 4) social change.
BNDES (BRAZIL)	To 'foster sustainable and competitive development in the Brazilian economy, generating employment while reducing social and regional inequalities'.	Investments are guided by the three major challenges: 1) innovation 2) socio-environmental development 3) local and regional development, prioritising the less developed regions in Brazil.
CDB (CHINA)	To 'enhance national competitiveness and improve people's livelihood'.	Five core values shape the bank's activities: 1) responsibility 2) innovation 3) green growth 4) prudence 5) win-win development.
CDP (ITALY)	'We foster sustainable development in Italy, using the country's savings responsibly to support growth and boost employment, supporting innovation, business competitiveness, infrastructure and local development.'	Activities are guided by four 'major socio-economic trends': 1) innovation and digitalisation 2) energy transition and climate change 3) developing countries and international trade 4) social change.
BRITISH BUSINESS BANK (UK)	'To help drive economic growth by making finance markets work better for smaller businesses – wherever they are in the UK and wherever they are on their business journey – enabling them to prosper and grow.'	Four objectives focused on improving the finance marketplace for smaller businesses: 1) increase the supply of finance 2) help increase diversity of finance 3) address regional imbalances in access to finance 4) encourage and enable SMEs to find appropriate finance.
GREEN INVESTMENT BANK (UK)	'To provide financial solutions to accelerate private sector investment in the UK's transition to a green economy.'	The GIB had a statutory role to pursue five 'green purposes': 1) reduction of greenhouse gas emissions 2) advancement of efficiency in the use of natural resources 3) protection or enhancement of the natural environment 4) protection or enhancement of biodiversity 5) promotion of environmental sustainability.
SCOTTISH NATIONAL INVESTMENT BANK (UK)	'We are a mission-led development bank providing patient capital to build a stronger, fairer, more sustainable Scotland.'	1) supporting Scotland's transition to net zero by 2045 2) building communities and promoting equality by 2040 3) harnessing innovation to enable our people to flourish by 2040.

In addition, a report by the UCL Institute for Innovation and Public Purpose found that 'a mandate to provide high-risk, patient finance to firms and other organisations that are willing and able to tackle key challenges, and go beyond fixing market failures, would maximise additionality'.³⁵ This fits exactly with the need for the transition to agroecology in the UK, which represents a key challenge and is an area where traditional financial institutions have been unable or unwilling to lend – this means that the lending activity of any development bank focused on that challenge would provide finance that would otherwise not be available. The mission of the German agriculture bank, Landwirtschaftliche Rentenbank (see Box 3), is a good example of how one bank has defined its mission to 'promote and support agriculture and rural areas'.³⁶

Box 3 – Landwirtschaftliche Rentenbank Mission³⁷

(1) The Bank serves to promote agriculture and the rural areas, whereby the national and state responsibilities are to be taken into consideration. To fulfil its responsibilities, the bank may undertake development measures in accordance with the more specific stipulation of its statutes, in particular by financial instruments, in the following areas:

1. agriculture industry, including forestry, horticulture and fishing, as well as upstream and downstream areas,
2. sales and warehousing of agricultural and food products, including development and consolidation of markets in member states of the European Union and in other states which are parties to the Agreement on the European Economic Area,
3. agriculture related environmental protection, the promotion of renewable energies and renewable raw materials from agriculture, the expansion of ecological farming, protection of animals within the agriculture industry,
4. the improvement of the infrastructure in predominantly rural areas,
5. agriculture related consumer protection.

As well as the overall mission to transition the UK to agroecology it is vital that the ADB also provides finance to small and medium-scale farmers, who will be critical to the transition. This is absent from the mission of the German agricultural bank. The British Business Bank (BBB) however does have such a mission and therefore demonstrates that this could also be a priority for the ADB, enabling such lending (see Box 4). We need to ensure this because it is small and medium-scale farmers who often struggle the most to access finance credit from commercial banks, especially when the loan is to enable to transition to a new method of farming – agroecology in this case – since there is no track record or history for the bank

to base the projected profit and loss of the business on. We would also want to see the ADB take on the objective, as the BBB has done, to 'create a more diverse finance market for smaller businesses, with a greater choice of options and providers'. This diversity should include regional stakeholder banks, cooperative banks and specialist credit unions alongside strong public finance institutions.

Box 4 – The British Business Bank Objectives:³⁸

1. We will increase the supply of finance available to smaller businesses where markets don't work well.
2. We will help to create a more diverse finance market for smaller businesses, with a greater choice of options and providers.
3. We will identify and help to reduce imbalances in access to finance for smaller businesses across the UK.
4. We will encourage and enable SMEs to seek the finance best suited to their needs.
5. We will be the centre of expertise on smaller business finance in the UK, providing advice and support to Government.
6. We will achieve our other objectives while managing taxpayer resources efficiently within a robust risk management framework.

The evidence clearly demonstrates that only with the ADB as a mission-oriented development bank could it hope to achieve its mandate to transition the UK farming sector to agroecological methods. As with the KfW in Germany, it is vital that the mission is set out in law.³⁹ This will ensure that the ADB is laser focused on the challenge at hand, help prevent mission creep and ensure transparency.

OWNERSHIP

Development banks must be, by definition, at least majority owned by public institutions. This does not, however, mean that the central government must own 100% of the institution's shares; it can be co-owned by regional and local public bodies and in rarer cases by private sector investors.

Many national development banks around the world are in fact 100% owned by the central government. This is also the case for many agriculture banks around the world. For instance, the German Landwirtschaftliche Rentenbank and the Indian National Bank for Agriculture and Rural Development are fully owned by central government.

In a smaller number of cases, private sector investors can be part owners of national development banks, although they can never be majority owners.

The German KfW breaks the mould slightly because it shares ownership between the national and regional governments. The KfW is 80% owned by the central government, in the name of the Federal Republic of Germany, with the remaining 20% owned by their regional government institutions, known as the *'Länder'* (the 16 federal states). This helps to ensure that both regional and national interests are considered in the activities of the bank.

In a smaller number of cases, private sector investors can be part owners of national development banks, although they can never be majority owners. There are reasons why it may seem attractive to include private capital since it will reduce the need for the public sector to find all the money to establish the bank, bring private sector expertise into the board-level management and share the risk if things go wrong. However, private co-ownership brings with it the pressure to deliver short-term returns. This can lead to a reduction in lending to more high-risk environments or areas which necessitate patient finance due to the long-term nature of the transition. One example here is the Italian development bank, Cassa Depositi e Prestiti (CDP), which is 84.1% is owned by the Italian government⁴⁰ with the remaining 15.9% owned by 60 banking foundations. To facilitate private sector investment, the bank was established as a joint stock company, meaning that it faces many of the pressures of any listed company. This can lead it to prioritise the short-term profitability of its investments in pursuit of the best interests of shareholders. A recent study submitted to the UK Labour Party found that 'some studies have suggested that this impacts CDP's investment patterns, given that CDP's lending is mostly directed at supporting lower risk, established businesses rather than higher-risk, transformational investments'.⁴¹

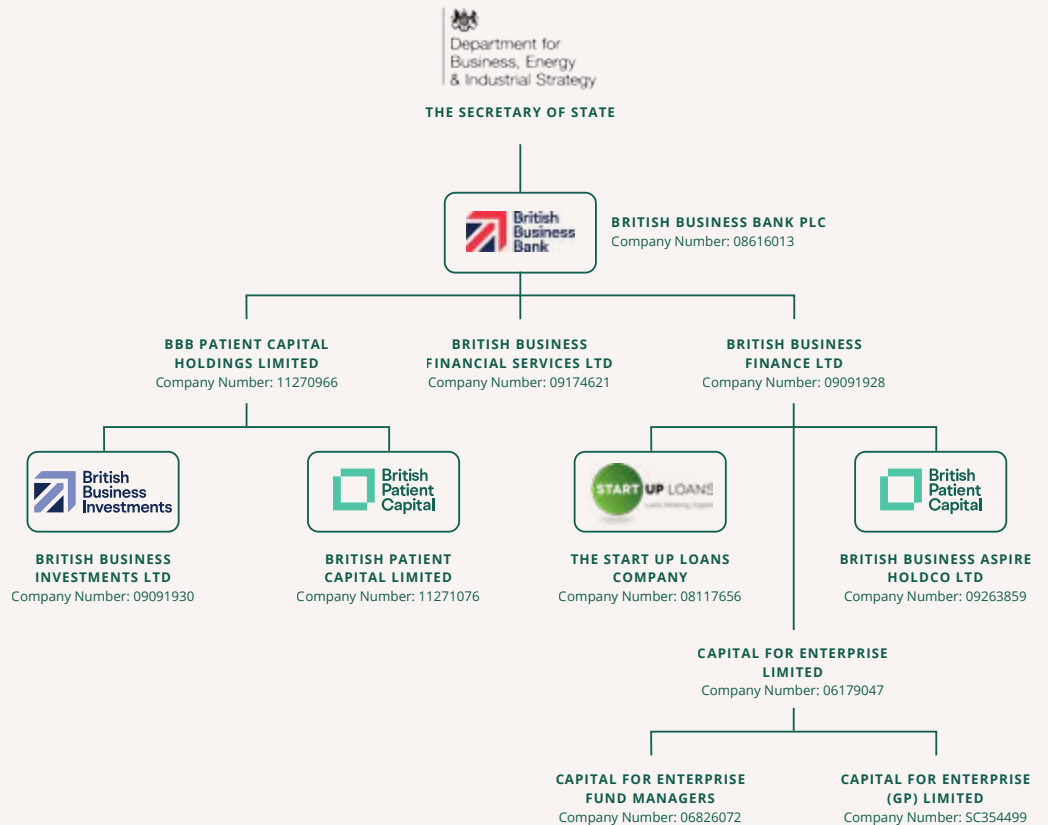
In the UK the BBB, including all its subsidiary companies, are 100% owned by the UK government through the Department for Business, Energy and Industrial Strategy (see Figure 7). Although ideally the ADB would have a structure that follows that of the KfW with a regional ownership element, the fact that the UK lacks such regional bodies means that we recommend that it be 100% owned by central government, probably through the Department for Environment, Food and Rural Affairs.



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Figure 7: Ownership and corporate structure of the British Business Bank and subsidiaries

Source: British Business Bank⁴²



ORGANISATIONAL STRUCTURE

The organisational structure of development banks varies between countries according to the bank's mandate, socio-economic circumstances and the country's stage of development. Some large development banks serve many different sectors, and are structured around multiple different functional 'arms' which focus on different types of investment. Common examples include:

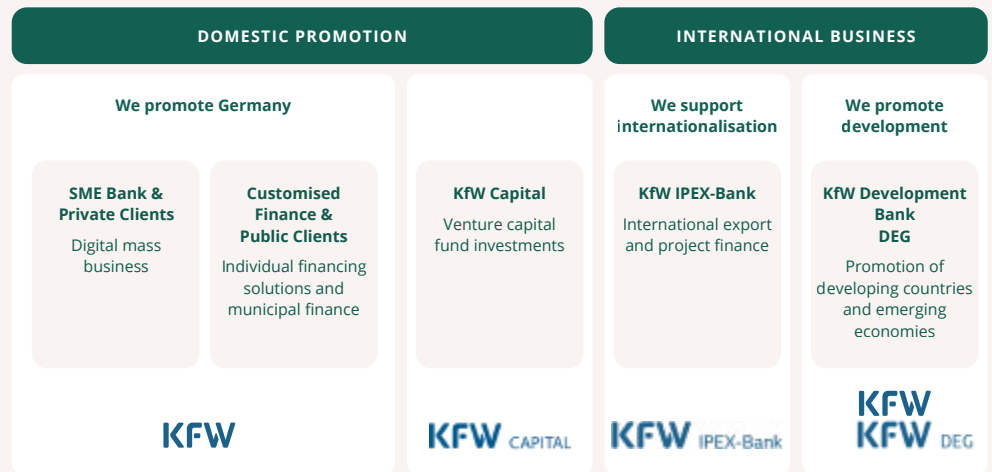
- infrastructure finance
- SME lending
- corporate lending
- housing development finance
- innovation (R&D investment, high-tech start-ups)
- agricultural finance
- export finance (playing the role of export credit agency)
- holding company (owning equity stakes in strategically important sectors on behalf of the state).

The organisational structure of development banks varies between countries according to the bank’s mandate, socio-economic circumstances and the country’s stage of development.

While in some countries these are undertaken under one roof by different arms of a single entity (see the example of KfW below, Figure 8), in other countries these functions are carried out by different standalone institutions that have a specific sectoral focus (such as national infrastructure banks, business development banks, green investment banks and agricultural banks). As we discussed in section 2.3, we argue that a specialist Agroecology Development Bank is appropriate to the scale and nature of the task, particularly in the light of the need to implement a rapid shift to a low carbon economy.

Figure 8: KfW functional divisions

Source: KfW⁴³



3.3 Governance and accountability

GOVERNANCE

The governance structure of any national development bank is critical to its success. In particular, achieving the right balance between political representation and independent decision making is a key challenge. National development banks that stay focused on their democratically determined mission, while also taking into account the interests of their customers and owners, are best able to meet the challenges set for them – allowing them to play a fundamentally different role in the economy compared to private sector institutions. The governance of many of the best-known development banks is heavily weighted with political appointments, and governments often have the power to remove board members and the CEO (see Table 1).

Table 1: Overview of national development bank governance

Source: Bank annual reports and websites

BANK	KfW (Germany)	BNDES (Brazil)	CDB (China)	CDP (Italy)	BBB (UK)	GIB (UK)	SNIB (UK)
% of senior governing body made up of political representatives	61%	90%	100%	21%	8%	9%	0%
Does government have power to appoint and remove board members and CEOs?	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Assuming that the development bank is fully publicly owned, it will be able to invest in and provide finance for projects that will only deliver returns over a long time frame, where the risk profile is higher than would be acceptable in a private bank, or where the outcomes produce wider social and/or environmental benefits, such as soil carbon sequestration. Poor systems of governance, however, are highly correlated with poor performance and an inability to address the economic transformation they were set up to facilitate.

As noted in Table 1, often the majority of senior board members are from government, but for a national development bank to achieve its goals it is vital to ensure the right mix of political, independent financial and sector specific representation. Each serves a distinct role within the organisation.

Political and stakeholder representation in strategic oversight can be distinguished from day-to-day operational management, for it is vital that ‘management teams are free to make sound, long-term decisions in line with the development bank’s mandate, free of day-to-day political interference’.⁴⁴ Some national development banks achieve this by appointing independent, non-political representatives on the most senior decision-making body.

In the case of the BBB, the government is responsible for appointing ‘the Company Chairman and Senior Independent Director, and one senior UK government official as its representative director to the Company Board’⁴⁵ within a board of at least eight people. This means that, for the BBB, non-political appointees outnumber direct government appointments, although ‘prior written consent of the relevant shareholder’⁴⁶ (i.e. government) is required for their appointment.

The diversity of membership within the governance structure of the German agriculture bank, Landwirtschaftliche Rentenbank, is a particularly good model on which an ADB could base its own governance. The governance structure is laid out in the law codifying and establishing the bank (see Box 5). One of the excellent features is the very diverse composition of the board of supervisory directors that, in addition to financial experts, includes representatives from farmers and food producers, local and national politicians and trade unions.

Box 5 – Governance structure of the German agriculture bank, Landwirtschaftliche Rentenbank⁴⁷

(1) Executive bodies of the Bank are

1. the Board of Management

- a. The Board of Management comprises at least two members. The board members are appointed and dismissed by the Board of Supervisory Directors.
- b. The Board of Management shall be responsible for conducting the business of the Bank.
- c. The Board of Management represents the Bank in court and out of court.

2. the Board of Supervisory Directors

- a. comprises
 - i. eight representatives of agricultural and food organisations
 - ii. three agricultural ministers from states
 - iii. trade union representative
 - iv. Federal minister of food and agriculture
 - v. one representative from ministry of food & agriculture and ministry of finance
 - vi. three representatives from credit institutions or other credit experts.

3. the General Meeting

- a. The General Meeting comprises 28 members, of which two members in each case shall be appointed by the states of Baden-Württemberg, Bavaria, Brandenburg, Hessen, Mecklenburg-West Pomerania, Lower Saxony, North Rhine Westphalia, Rhineland-Palatinate, Saxony, Saxony-Anhalt, Schleswig-Holstein and Thuringia and one member in each case by the states of Berlin, Bremen, Hamburg and Saarland. During the selection of the representatives, the individual agro-business size-categories, in particular family farms, are to be taken into consideration appropriately.

We recommend that, similar to the BBB, the government should appoint many of the key people within the ADB, while ensuring that there are highly competent and diverse non-political appointees also at the top table. We then recommend adapting a structure similar to the Landwirtschaftliche Rentenbank when looking at the composition of the various boards to ensure that all those impacted by the mission of the ADB also have a seat at the table.

Whereas private banks tend to be evaluated on the basis of their financial performance, this is not appropriate for development banks.

ACCOUNTABILITY

Whereas private banks tend to be evaluated on the basis of their financial performance, this is not appropriate for development banks. Although development banks are typically not profit maximising, they must manage a balance sheet and thus ensure that they are investing prudently. This means that the projects they invest in must be 'bankable' – i.e. projects must be expected to generate future revenue streams that can be used to repay the finance.

However, development banks must also be evaluated on the extent to which they are achieving their mandate. Sometimes development banks are often criticised on the basis of 'picking winners' or 'crowding out'. While there are instances where criticism is merited, part of the reason for criticism often lies in the absence of monitoring and evaluation frameworks which adequately capture the dynamic outcomes and additionality being generated by the banks' activities.

New monitoring and evaluation frameworks may be required to assess the ADB's performance. These should focus on its contribution to transitioning the UK farming sector to financially sustainable agroecology methods. Key metrics will have to be developed to allow the government, the ADB and citizens to measure its progress as well as evaluate when the bank's mission is complete.

As well as this wider goal, the ABD should seek a return on its loans in line with the government's mid-term cost of capital. This would mimic the target set for the BBB.⁴⁸ At the level of individual lending decisions, the ADB should take rigorous steps to assess the impact in scenarios with and without the bank's intervention, and evaluate success against the non-intervention scenario at project completion.

The German agriculture bank provides an interesting example (see Box 6) of how an existing sector specific bank is accountable to the government. These oversight mechanisms are written into the law that enacted the bank.⁴⁹



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Box 6 – Supervision of Landwirtschaftliche Rentenbank⁵⁰

- (1) The Bank is subject to the supervision of the Federal Ministry of Food and Agriculture (supervisory authority), which makes its decisions in agreement with the Federal Ministry of Finance. The supervisory authority ensures that the business operation of the Bank complies with public interest in particular in the promotion of agriculture and rural areas as well as with the laws and its Statutes.
- (2) The supervisory authority is empowered to request information from the executive bodies of the Bank on all business matters, to view any books and correspondence of the Bank and to participate in meetings [...].
- (3) The supervisory authority is also authorised to request the calling of meetings of the executive bodies and the announcement of subjects to be decided as well as to prohibit the implementation of directives or resolutions, which contravene public interest in particular the promotion of agriculture and rural areas or are in breach of the laws or the Bank's statutes.
- (4) Otherwise, the Bank is independent with regard to its administration and management, likewise in the appointment of personnel.

3.4 Distribution, lending model and products

The structure and range of activities of the ADB will be fundamental in determining whether it is able to meet the goal of transitioning the UK farming sector to agroecological methods. In order to achieve its mission, it needs to serve all regions and nations of the UK equally well, and needs to go far beyond the narrow confines of providing finance, vitally important though that is. This will mirror the best performing development banks, which all offer more than finance alone.

LENDING MODEL – DIRECT V ON-LENDING

When considering the best lending model there are two main options to choose from, as well as a combination of both. The ADB could either lend directly to customers through a network of regional offices or it could use the on-lending model whereby the ADB would provide discounted lending facilities to other financial institutions, such as commercial banks, who would then lend to customers. In this on-lending model the low interest rates that the public sector is able to access can be passed on to other financial institutions in order to help

make lending happen in certain sectors that would not otherwise be as attractive to commercial operations.

There are a number of clear benefits to using the on-lending model, such as the ability to leverage the diffuse networks of branches that private financial institutions already have, access their customer base and, not least, enlist the many thousands of bank employees to aid in the mission of the ADB. Some of the best development banks such as the KfW, the European Investment Bank (EIB) and the Nordic Investment Bank (NIB) all use the on-lending model to deliver an important proportion of their lending. The German agriculture bank, Landwirtschaftliche Rentenbank, also conducts its business through on-lending programmes stating that they 'lend to banks operating in European Union countries regardless of their legal structure or the associations they are affiliated to'.⁵¹

We recommend that the ADB should seek to promote a more diverse banking system in the UK by actively seeking to expand the range of partners beyond the big five.

The BBB also pursues an on-lending model and states on its website that they 'don't lend or invest directly. Instead, we work with over 130 partners such as banks, leasing companies, venture capital funds and web-based platforms'.⁵² They were given a specific mandate to try and expand the variety of organisations providing finance to the SME community in the UK. Therefore, as well as partnering with the big commercial shareholder banks, the BBB has also pioneered greater cooperation with emerging players such as peer to peer finance platforms⁵³ and challenger banks⁵⁴.

There are however also some general issues with the on-lending model, as well as some that are more UK specific. The UK-specific issue concerns the very concentrated and homogenous nature of commercial banking in the UK. On-lending works well in countries like Germany which already have a very diverse banking system, including many cooperative banks and public regional banks as well as private banks.⁵⁵ The UK, however, is almost unique in that business banking in particular remains dominated by five shareholder-owned banks whose market dominance is reinforced by customer inertia in switching and a still significant too-big-to-fail subsidy.^{56,57} It is therefore questionable if they should be the recipient of a further subsidy in the form of cheap money to lend to farmers. This would be less of an issue were the other main problem with on-lending not that it is in fact difficult to prove the money given to the banks for a specific purpose was used to provide additional financing for that purpose beyond loans that the bank would have made in any case. This makes the on-lending model difficult to police and could lead to public money being used by the banks, through cross-subsidising lending in other sectors, to fund activities that were not within the mission of the ADB.

Therefore, we recommend that the ADB should seek to promote a more diverse banking system in the UK by actively seeking to expand the range of partners beyond the big five. Market development has been a specific goal of the BBB, which has expanded its roster of partner finance providers to over 180.⁵⁸ The ADB

may engage in some limited direct lending where the loan amount is significant. Consequently, where direct lending might be suitable would be larger projects, especially those involving rural infrastructure development, such as building a new distribution hub or community warehouse. Most farmers who we have identified as lacking access to finance are in the SME category and therefore will be best served through the network of on-lending banks that the ADB partners with.

An important point to note is that both making direct loans and on-lending show up in the balance sheet of the ADB. Because the money originates from the ADB – even where the actual relationship is held and the loan is made through another financial intermediary – the ADB will still be negatively impacted if the loans go bad. In the case of direct lending, the loan will appear on the balance sheet with the contract of the borrower to repay on the asset side and the loaned amount on the liability. In the case of on-lending, the full on-lent loan will not appear but instead what will show is the series of agreements with financial institutions to receive money from the ADB. In such cases, the asset will be the promise of the financial institution to repay and the liability the amount transferred to the financial institution.

Ultimately it may make most sense to operate a hybrid model with smaller loans channelled through existing financial institutions and larger loans made directly through the regional offices of the ADB. It will be important to carefully consider where to set the threshold for when the ADB should engage directly. Considerations should also be given to whether to direct the on-lending only through specific financial institutions. Should on-lending be part of the mix, then it will be important to examine whether any conditions could be established to help ensure that the money provided by the ADB is for additional lending to the sector and does not become another subsidy to the commercial banking sector.

DISTRIBUTION

In order to meet the varied needs of farmers across the country, the ADB will need to ensure that it has a regional as well as national presence. We suggest that the headquarters should be outside London, located somewhere more relevant to the rural communities that it is meant to serve. It should then have regional offices around the UK.

Although the national headquarters should take on some important functions, such as ensuring that the overall mission is adhered to and setting success metrics, the ADB should operate as much as possible on the principle of subsidiarity. Subsidiarity is a general principle which holds that issues should be dealt with at the most immediate (or local) level that is consistent with their resolution.⁵⁹ Agricultural banking is foremost a relationship banking model and, therefore, it is the regional branches, including any potential on-lending partners, who should be in charge of making the specific lending decisions. It should seek to work in partnership with business support organisations to build expertise and channel finance to the farming community.

In order to meet the varied needs of farmers across the country, the ADB will need to ensure that it has a regional as well as national presence.

FINANCIAL PRODUCTS

Development banks around the world generally provide a wide range funding instruments, as Table 2 demonstrates. While some mainly provide long-term loans, others provide a wide range of products including equity investments, grants and working capital. The BBB also uses a variety of different funding instruments, working in partnership with the private sector, such as guarantee structures, loans and equity investments.⁶⁰

Table 2: Funding instruments used by national development banks in UK and abroad

Source: Bank annual reports and websites

BANK	KfW (Germany)	BNDES (Brazil)	CDB (China)	CDP (Italy)	BBB (UK)	GIB (UK)	SNIB (UK)
Long-term loans	✓	✓	✓	✓	✓	✓	✓
Equity	✓	✓	✓	✓	✓	✓	✓
Guarantees	✓		✓	✓	✓	✓	
Export finance	✓	✓		✓			
Grants	✓	✓					
Technical assistance	✓		✓	✓	✓	✓	✓

The existing financial system already makes a variety of loans and financial products available, although many are hard to access for farmers without collateral. Box 1 highlighted some of the options already available. Owning the land is one of the key determinants of whether you will be able to get any significant finance from a commercial bank, since collateral is often required. A second key factor to securing a loan from a commercial bank is whether a farmer has a good track record. The banks assess this from two perspectives. First, the number of years the farmer has been with the bank, and second, the years that the farmer has been using that particular method of farming, including the profit and loss (P&L) that the farmer has generated over the years. Therefore, a farmer who owns their land and has been with a specific bank for a number of years with a good P&L will probably be able to find additional credit to change to agroecology methods with their existing bank. As we examined earlier in section 2.2, although many parts of the farming community can meet these requirements, there are many others that need the financing but struggle much more to get it from the commercial banks. Also, as the average age of farmers continues to increase, farmers with all the necessary components to enable commercial banks to lend to them will be fewer and fewer.

The most crucial help that the ADB will offer to the farming community will be the long-term loans needed to help people convert to agroecological farming.

Some farmers do currently rely on banks to enable them to purchase their inputs to their processes. For a horticulturalist, finding the available cash can be difficult since they will not see the return until the crops are harvested and sold. Some banks do provide overdrafts that charge interest while input manufacturers also often offer credit agreements. New entrant Oxbury, a specialist agriculture bank, is proposing to enter this part of the market by providing 'Oxbury Farm Credit' as a 'flexible, convenient and competitive alternative to a bank overdraft, trade finance or additional credit line', which allows farmers to 'buy inputs when you need them and pay for them when it suits your cash flow'.⁶¹ Although agroecology methods generally require much fewer inputs this will remain a need for farmers and one that the ADB will need to consider when developing its products, ensuring that it can make short-term loans and working capital available to farmers.

The most crucial help that the ADB will offer to the farming community will be the long-term loans needed to help people convert to agroecological farming. These loans will need to be made available to the widest range of farmers possible, including those who do not own the land they farm. In order to meet the needs of farmers they will need to set interest rates as low as possible and they will need to be flexible around repayments, especially during the transition.

The administration of a grants programme funded by government could be a great way for the ADB to build relationships and a reputation with farmers around the UK. Farmers are a community that are used to seeing what financial help is available and grabbing it with both hands. During the interviews conducted as part of this report we spoke to a senior banker who relayed to us a story about a grant programme to build barns. Farmers were quick to jump on the opportunity leading to the wide proliferation of barns around the country, initially without strategic purpose. Of course, the ingenuity of farmers meant that today, many years on from the programme, these are all now being put to good use, but initially they were just following the money. Therefore, well-targeted grants could be a way to shift farmers' behaviour as well as build those initial relationships with the ADB. As Table 2 shows, there are a minority of national development banks that do administer grant programmes. For instance, the KfW currently administers a large home insulation grant programme for the German government.⁶² Giving the ADB a role in distributing the as-yet-to-be-developed Environmental Land Management Scheme payments that the UK government is proposing to replace the old EU Common Agricultural Policy payments could be a way for it to take on such a role.⁶³

The ADB will also have to think beyond the normal scope of banking products to both finance the knowledge process with a loan and provide specific consultancy and expertise together with the financial product. One such area that the ADB will need to be active in is helping develop farm management plans, especially when the farmer is changing to a new method of farming. The plans could be delivered through a grant system when a farmer takes out a loan. The ADB could follow the loan model of the Loans for Enlightened Agriculture Programme (LEAP), which

in addition to the loan provides a grant worth 18% of the loan to each successful applicant.⁶⁴ This would benefit all parties since it would make the farm more likely to succeed post transition, which would help the ADB achieve its mission to aid the transition of the UK farming sector, help ensure the farmer can service the loan and help ensure the ADB meets its return target. The ADB could also fund apprenticeship schemes that incorporate 'knowledge building' into them. This is especially true given the increased importance of knowledge to making agroecological land management work well. The ADB will also need to support ongoing training for farmers if the transition is to be successful.

One of the major challenges of moving to agroecological methods is that it may also require the farmer to change the route to market of their produce. Many farmers are currently locked into a supermarket model which places extreme demands on the homogeneity of the produce – in terms of size, colour and texture – that can often only be achieved with high chemical inputs. Supermarkets also force farmers into accepting very low margins on their produce, which often requires large scale – again supplemented with high levels of inputs. As more farmers start to cultivate using agroecological methods, often on smaller scale operations and producing lower volumes of higher quality produce, they may have to seek to out new routes to market. The ADB will need to be able to provide finance and expertise to help farmers seek out these new routes, like direct sales, farmers' markets and other commercial opportunities.

The ADB could also consider transfer loans or consolidating debt that farmers have accrued from various private financial institutions into one more manageable package at lower rates than can be offered by the banks.

3.5 Capitalisation and funding

As with all banks, the ADB will need to start out with an amount of its own funds, or 'capital'. Having a strong capital base is important to ensure that any losses can be absorbed and that the bank is protected from insolvency.

The overall lending power of development banks is determined by the extent to which they are permitted to leverage their capital base. There are many ways that they can do this, including raising money in domestic or international capital markets, borrowing from other financial institutions, managing public pension or social security funds, or central bank financing through money creation. Most development banks are not deposit-taking institutions, and therefore do not typically have a banking license and do not engage in broad money-creation when making loans (i.e. their lending does not create new bank deposits as is the case with deposit-taking commercial banks).⁶⁵

After further analysis, and moving on from our initial recommendation in ‘Our Future in the Land’,⁶⁶ we do not consider that the ADB needs be deposit-taking in order to be well funded, and the additional complexity and regulation of offering retail deposit products would not add to the bank’s ability to fulfil its mission.

Table 3 shows the range of funding options used by some major development banks around the world.

Table 3: Funding sources of national development banks in UK and abroad

Source: Bank annual reports and websites

BANK	KfW (Germany)	BNDES (Brazil)	CDB (China)	CDP (Italy)	BBB (UK)	GIB (UK)	SNIB (UK)
Customer deposits				✓			
Return on investments	✓	✓	✓	✓	✓	✓	✓
Capital markets	✓	✓	✓	✓			
Treasury funds	✓	✓			✓	✓	✓
Public pension / social security funds		✓					
Other financial institutions		✓		✓			
Central bank (monetary financing)			✓				

The initial capitalisation of the ADB would have to come from the government through HM Treasury. A number of UK banks have been capitalised in this way. The BBB was initially funded with £1bn of government fund while the Green Investment Bank was capitalised with £1.5bn.⁶⁷ The Scottish National Investment Bank, which launched in 2020, has been capitalised by £2bn of Scottish government funding.⁶⁸ Most recently, the UK Infrastructure Bank has been capitalised with £5bn from HM Treasury, and will also be able to borrow up to £7bn and issue £10bn of guarantees.⁶⁹

Should the ADB require significantly more capital (the assessment of which has not yet been done) then the example of the Nordic Investment Bank (NIB), where government were required to guarantee a certain amount to the bank, is instructive. Under the guarantee model, the member governments ensure that the bank has the necessary capital cushion, through guarantees, should the need arise, but only required the member governments to actually transfer a fraction of the full amount up front.

Once capitalised, the ADB can raise additional funds to finance additional investment and grow its balance sheet. In deciding what funding options are best suited to the ADB, some important questions are as follows:

- 1) What funding sources are available and politically possible?
- 2) Is the funding source stable?
- 3) Is the funding source available at the scale required for the mission of the bank?
- 4) Is the funding source appropriate for the expected risk appetite of the bank?

In the UK context, raising finance from capital markets should not be a problem given the UK's strong credit rating and the historically low rates that the market is offering at the moment. A 10-year government gilt is currently yielding just 0.27%.⁷⁰ ADB bonds could provide long-term and relatively low-risk investment opportunities for investors such as local government pension schemes and private pension funds.

It remains to be seen whether the exit of the UK from the EU will permit the Bank of England to engage in direct monetary financing – which was limited under Article 123 of the Maastricht Treaty – allowing it to buy the bonds of the ADB on the primary market. The Chinese CDB is an example of a development bank that is directly financed by the central bank, and this was common practice across a wide range of countries in the period following the second world war.⁷¹ However, bonds can also be purchased indirectly through the secondary market, as the European Central Bank has already been doing with bonds of the European Investment Bank.

The Chinese CDB is an example of a development bank that is directly financed by the central bank, and this was common practice across a wide range of countries in the period following the second world war.

CAPITALISATION

For comparison, according to the 'Public Bank Database' maintained by Finance in Common there are currently 39 public agriculture banks in operation.⁷² Collectively they have over \$1.22 trillion of assets, although the Agricultural Development Bank of China (ADBC), whose lending extends far beyond agricultural and rural specific needs, holds \$990 billion. There are two other large agriculture banks in Germany and India, with \$103 billion and \$70 billion in assets respectively. Meanwhile the US 'Farm Credits' system currently has \$285bn of loans, to farmers and rural infrastructure projects, on their balance sheet, but does not operate as a public bank.

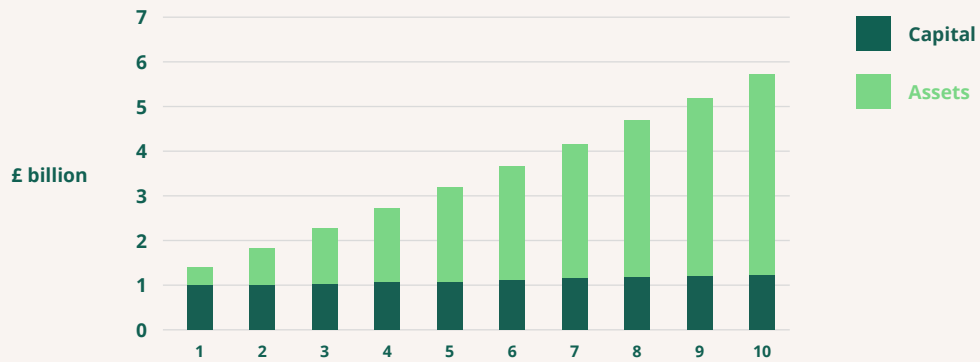
There are 18 agriculture banks in high and upper-middle income countries, those most analogous to the UK, operating in 15 different countries. Interestingly, Mexico has three agriculture banks while Paraguay currently has two in operation. The average assets, excluding the ADBC, is \$8bn, while the median value of assets is \$1bn.

As an illustration of relative scale, in these 15 more-comparable countries the total assets of agriculture development banks in relation to their populations equates to an average (mean) of \$202 per person and a median of \$68. Extrapolating for the UK population this would result in assets under management of between \$4.65bn (£3.34bn) to \$13.8bn (£9.94bn).

Figure 9 shows an illustrative example of how the ADB could turn a relatively small amount of public capital into a significant source of long-term finance. It assumes that with an initial capitalisation of £1bn and annual bond issues, within 10 years the bank could have a balance sheet of nearly £6bn – assuming that it is bound by a conservative leverage ratio (assets / capital). This could have a significant effect accelerating the rollout of agroecology in the UK.

Figure 9: Illustrative balance sheet projection of the ADB

Note: Assumes that the ADB achieves a return on capital at least equivalent to the government’s medium-term cost of capital, as with the BBB, which is currently 2.525%.



Case Study: How the European Investment Bank (EIB) leverages public money:

In 2012, the EU member states agreed to inject a further €10bn into the EIB. This allowed the EIB to raise a further €80bn through the long-term international and national capital markets. The requirement of the EIB to co-finance at least 50% meant that it had to seek out private sector capital to meet that objective. This meant that for €10bn of public investment the EIB was able to fund projects totalling around €160bn. This leverage can be especially valuable when public resources are constrained.

START-UP COSTS

As well as the cost of capitalising the bank, consideration should also be given to a new public bank’s start-up costs. Although detailed figures are hard to come by, a report by Vivid Economics and McKinsey & Co estimated that the initial start-up costs of the Green Investment Bank were to be in the range of £11 million.⁷³

As with all initial estimates for large public projects, it is highly likely that the final costs were much higher. However, this figure can act as a useful lower bound estimate of what it might take to establish the Agroecology Development Bank.

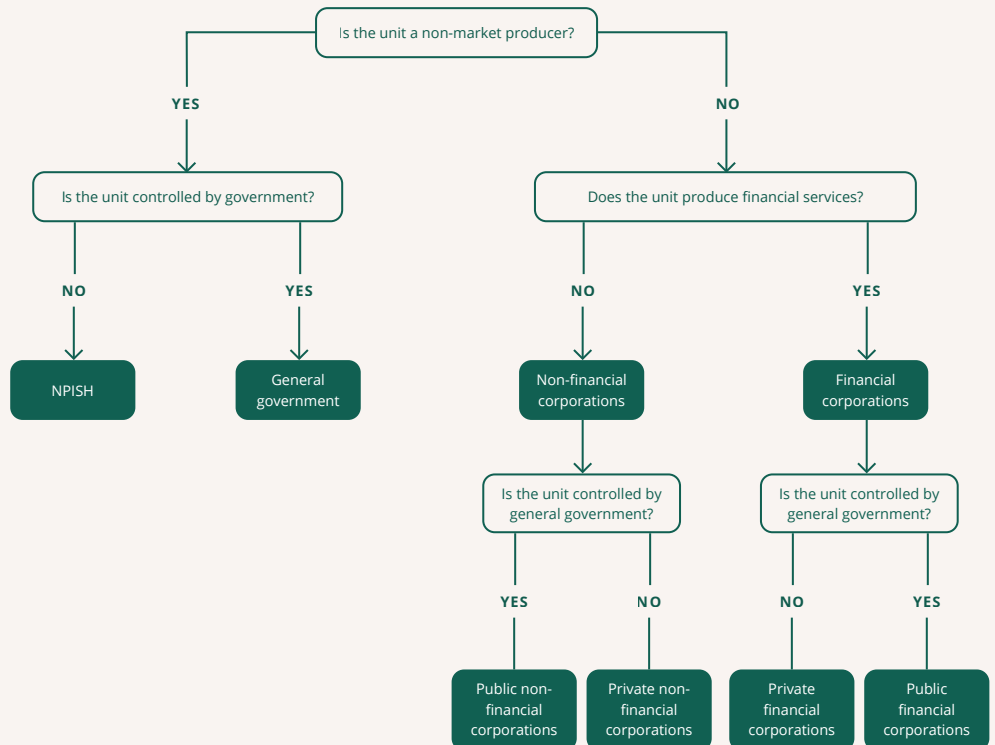
3.6 Legal and accounting constraints

NATIONAL ACCOUNTS

The creation of a new publicly owned Agroecology Development Bank will need to be assessed by the Office for National Statistics in order to ascertain how to classify it in the national accounts. This is significant because the choice of accounting treatments determines whether the bank adds to the UK’s national debt and annual public spending budget. The process by which it makes that classification is shown in Figure 10:

Figure 10: Classification of public bodies for national accounts

European Commission, ESA 2010⁷⁴



Interestingly neither the Green Investment Bank (GIB) nor the British Business Bank were classified as financial corporations due to their inability to borrow money, something that would be important for the ADB to be able to do. In its assessment of the GIB the ONS stated that:

Although its name suggests it is a Bank, and therefore a financial intermediary, UK GIB is unable to borrow. Under ESA 95 rules, to be classified as a “financial intermediary” and therefore as a financial corporation, in general bodies are required to be able to incur financial liabilities (i.e. borrow) on the market. In the absence of this ability, public sector bodies are classified into the Government sector, hence UK GIB is classified as a Central Government body from inception.⁸⁵

As can be seen from the classification process it is ‘control’ rather than ownership that is the key determinant. Given the design parameters that we have outlined in this document we will proceed on the basis that the ONS would classify it as a public financial corporation – although if the government chose to minimise or eliminate its governance role, which would not be recommended, then it might be able to be classified as a private financial corporation.

The UK is an outlier, by international standards, in how it measures its fiscal rules for the public sector due to its inclusion of public corporations within the calculation, which almost all other authorities do not include.

The ADB’s classification as a public financial corporation would have an impact on the Public Sector Finance statistics and the UK government’s fiscal targets. The principle rule by which the UK measures public debt is ‘Public Sector Net Debt’ (PSND). PSND balances liquid assets, comprising cash and other assets that can be easily converted into cash, against a defined set of liabilities including government borrowing. For the purposes of the definition, the public sector comprises central government, local government and public corporations.

The UK is an outlier, by international standards, in how it measures its fiscal rules for the public sector due to its inclusion of public corporations within the calculation, which almost all other authorities do not include. Indeed, the UK, while it was a member of the EU, had to prepare figures removing public corporations to comply with the Maastricht treaty to ensure that all EU countries report comparable figures.

Leaving this issue unaddressed would mean that the ADB could not borrow and invest without impacting the PSND figures and seeming to be responsible for an increase in the level of public sector debt. This is at odds with similar development banks in the EU and around the world. A logical case can be made for aligning the UK’s approach to that witnessed in other countries. The case for doing so is strong: there is a significant difference between general government borrowing arising because spending exceeds tax revenues, and a public bank raising funds in capital markets to finance projects that will generate a stream of income in the future.

It is important to note that international accounting does not require public banks’ liabilities to be included in measures of government spending and debt, and experience clearly shows that when there is political will there can be flexibility

in the way public finances is assessed and measured. Also, as we exit the pandemic the huge level of borrowing (over £300bn), that has been required to fund the variety of schemes, from furlough to 'eat out to help out', has changed the debate around public debt along with the recognition that public finance will need to be mobilised to continue to help with the recovery.⁷⁵

The UK government is considering the establishment of a National Infrastructure Bank,⁷⁶ which, depending on the intended size of its balance sheet and detailed structure, would have to overcome the same challenges that we note above or jeopardise the UK's ability to meet its current fiscal targets. This means that the UK government may have already agreed on a way to resolve the issue of public banks and the national balance sheet. This could be through the UK's alignment with global practice around fiscal targets and public corporations, where they are excluded, or a major change to the fiscal targets themselves, for instance by targeting fiscal space.⁷⁷

STATE AID RULES

We will not attempt in this document to try and evaluate the exact potential impact of the state aid rules, since there is overwhelming uncertainty, even now that the UK has fully left the EU, but instead reflect on the issues and point to several factors which should make overcoming them possible. An important point to note is that agriculture, via the Common Agricultural Policy (CAP), has for decades been one of the most highly subsidised areas of the economy within the UK and EU. The UK has already left the CAP and has committed, after a multi-year transition, to making payment based on the provision of public goods under an Environmental Land Management Scheme.⁷⁸ Depending on how exactly these payments are structured they may not be considered state aid.

We do not currently know what state aid rules will apply from 2021 now that the transition period is over and a deal with the EU has been agreed (albeit a deal that leaves many areas still to be finalised).⁷⁹ With regard to state aid rules, more work is needed to operationalise the agreement. Specifically, 'the U.K. needs to create a body to oversee its own subsidy control regime'.⁸⁰

Even if we assume that the UK will continue to adhere to EU state aid rules, a sort of worst-case scenario, then the UK will still have several EU texts to rely on that could allow the ADB to function as we describe. It is important to reiterate that agriculture is already a massive recipient of state aid through the CAP, which consumes 37% of the total EU budget.⁸¹ The UK's allocation alone of that sees UK farmers currently receive £24.6bn from the CAP.⁸² The EU has therefore had to create special regulatory conditions to ensure these massive payments are legal. The CAP is therefore enshrined in Article 39 of the Treaty on the Functioning of the EU. Article 42 of the same treaty also allows for additional support for agriculture in order to ensure 'the protection of enterprises handicapped by structural or natural conditions' or 'within the framework of

Even if we assume that the UK will continue to adhere to EU state aid rules, a sort of worst-case scenario, then the UK will still have several EU texts to rely on that could allow the ADB to function as we describe.

economic development programmes'. In addition, Regulation 702/2014, commonly known as the 'Agriculture Block Exemption Regulation', provides a further range of circumstances in which, as its title makes clear, 'declaring certain categories of aid in the agricultural and forestry sectors [...] are compatible with the internal market'.⁸³ This all leads to the conclusion that a well-designed programme could be made to fit within the significant exemptions already agreed and set out in EU law.

Finally, it is important to note that although in the past UK governments have accused state aid rules of tying their hands and preventing direct support to companies or whole sectors, when there is political will, as for instance was the case after the 2008 financial crisis, then the state has shown it can intervene.

Our conviction is further re-enforced by the example of the German agriculture bank which has to comply with all current EU rules, and on its website lists its activities as follows:

*'Our loans can be used for agriculture-related projects of all kinds, as well as for providing finance in rural areas, for example infrastructure. The scope of our lending extends from agriculture, forestry, viticulture, horticulture and fisheries to manufacturers of agricultural supplies and commercial and service enterprises with close links to agriculture and forestry. In addition to financing businesses involved in the food industry, food as a craft and the food trade, we also finance other businesses and institutions associated with agriculture and the food industry. We offer loans to local authorities and other public bodies in rural areas.'*⁸⁴

We therefore conclude that if there is the political will to do so, state aid rules should not be an impediment to the implementation of a well-designed ADB.





4.

Conclusions and recommendations

4. Conclusions and recommendations

We conclude that there is a case for a new institution to work with the burgeoning evidence, the grain of policy and market developments towards agroecology.

We argue that:

- The existence of positive environmental and social benefits justifies public intervention, including in the financial sector to unlock new sources of finance.
- Agroecology businesses are fundamentally bankable, but there are several gaps in the supply of finance by deposit-funded retail banks that a national development bank can help overcome.
- A new mission-driven national institution can play a broader role in overcoming 'lock-ins' that impede systems change, and it can drive a transition to agroecology at the pace and scale required to meet the UK's societal goals, in particular the need to transition to a net zero carbon economy.
- Measures to build demand for agroecological produce, to ensure that farmers have the information, advice and skills they need, and to spread awareness of the full range of available finance are all equally as important as measures to enhance the supply of finance.

We recommend a state-owned Agroecology Development Bank should be established with a mission to accelerate the transition to agroecology.

Capitalised by HM Treasury, the ADB would be able to borrow on wholesale markets, benefitting from low borrowing costs as a state-backed institution. The ADB would encompass a range of complimentary activities 'under one roof' including research, market development and the supply of finance.

We contend that the positive impact of a new ADB is as much captured in the word 'development' as in the word 'bank'. The need extends beyond simply a need to plug gaps in the supply of finance.

We recommend that research and trials be undertaken into how to ensure consistent and comprehensive support to farming enterprises for the transition to agroecology.

In 'Farming Smarter: The case for agroecological enterprise' we recommended that the farming entrepreneur be placed at the centre of the UK's national strategy to realise the potential economic, social and environmental gains from a transition to agroecology. The ADB will be most successful if it is able to partner not just with private sector finance providers but also with local agencies across the UK that can provide, singly or in partnership, the range of knowledge, skills, training, mentoring and innovative finance required to stimulate and support a new wave

of agroecological entrepreneurs. Such services are of course already present in many forms, and in future work FFCC intends to engage with stakeholders to examine options for enhancing business support for agroecology. This research could include pilots in different geographic contexts across the UK that operate as proactive agroecology development agencies, bringing together in a one-stop shop the finance and support needed for an agroecological transition.

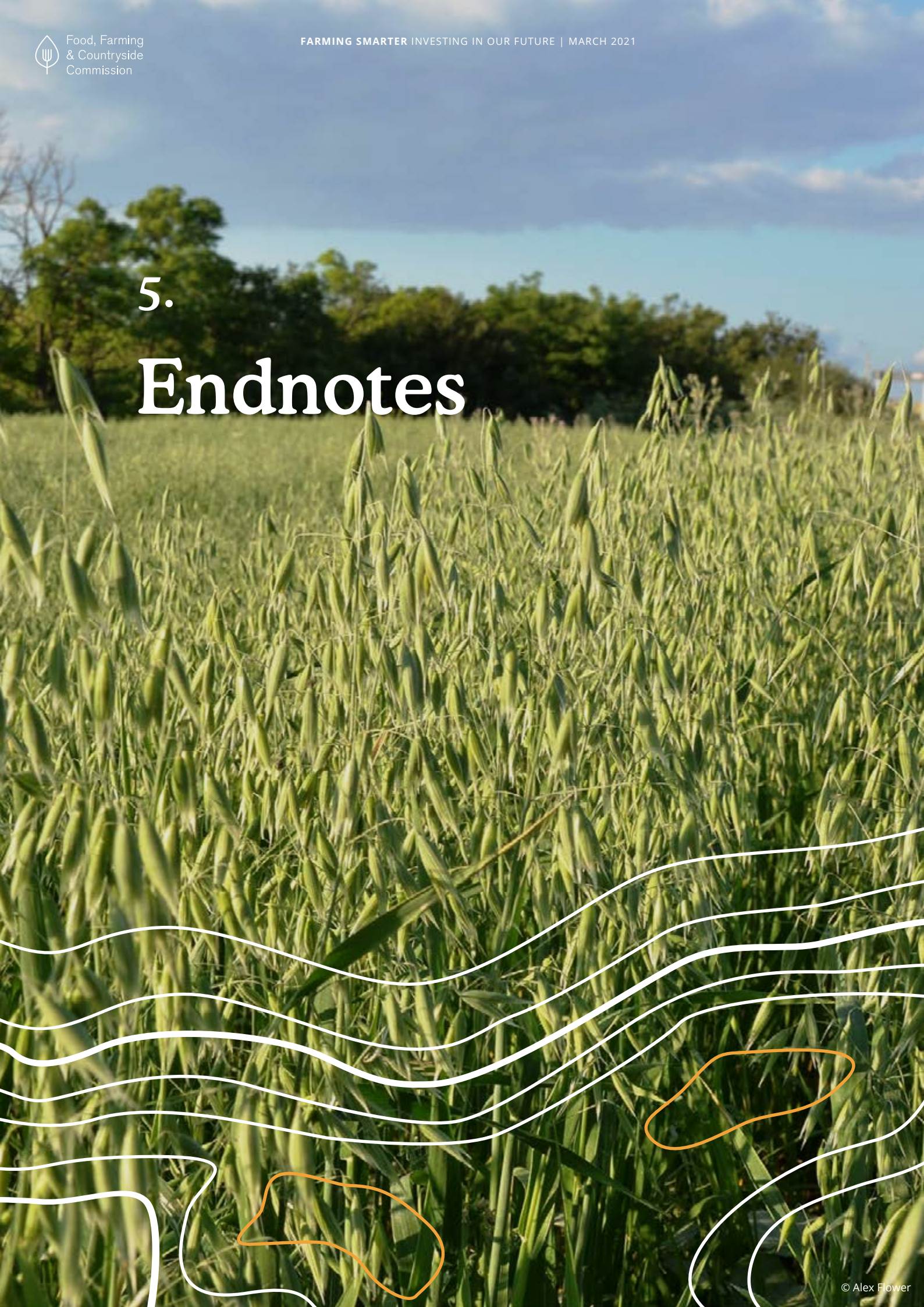
We note that in order to stay on a pathway to meet the UK's legal commitments to hit a net zero carbon economy by 2050, many commentators believe the country's carbon emissions need to peak now.

Accordingly, **we recommend that HM Government lead a consultation with stakeholders, including national governments, to develop a detailed plan for establishing the Agroecology Development Bank to be included in the package of measures announced by the UK government at COP26 in November 2021.** This will demonstrate global leadership in innovation on nature-based solutions and green finance as part of delivering a just transition to a zero carbon Britain.



5.

Endnotes



- 1 26th UN Climate Change Conference of the Parties.
- 2 Greenham, T, and Link, M (2020) Farming smarter: The case for agroecological enterprise. *Food, Farming and Countryside Commission*. Retrieved from <https://ffcc.co.uk/library/farming-smarter-report>.
- 3 Defra, DAERA, Welsh Government and The Scottish Government (2020) Agriculture in the United Kingdom 2019. Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/950618/AUK-2019-07jan21.pdf.
- 4 Greenham, T, and Link, M (2020) Farming smarter: The case for agroecological enterprise. *Food, Farming and Countryside Commission*. Retrieved from <https://ffcc.co.uk/library/farming-smarter-report>.
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The Food, Farming and Countryside Commission focusses on food and farming, climate, nature and the public's health, for a just transition to a greener, fairer world. With partners in governments, businesses and communities, we generate radical ideas and practical actions to transform our countryside and our economy. We help convene collective leadership on the difficult questions and resource communities to become more resilient and adaptable for the challenges ahead.