

CLIMATE SOLUTION: SUPPORTING FARMERS TO REDUCE EMISSIONS



THE ROLE OF THE CHURCH

UK Churches and Christian organisations own or manage around 500,000 acres of land, much of which is agricultural land. This booklet will explore how:



Local churches can support sustainable farming to benefit climate, nature and people.



Larger Christian landowners, including national and regional church bodies, can support farmers to reduce emissions.



Churches and Christians can invest in climate solutions including better uses of land in sustainable agriculture.

WHY FARM SUSTAINABLY

For climate: Agricultural land is a significant source of greenhouse gas emissions although it also has potential to be a carbon sink. In 2022, 47.7 MtCO₂eq.* were emitted by UK agriculture (11.7% of emissions total, slowly reducing since 1990) according to the [Dept for Energy Security and Net Zero](#).

For nature: Reducing emissions, chemical fertilisers and pesticide use all have co-benefits for nature, and other farming practices actively support pollinators and biodiversity.

For people: Sustainable sources of food and water are vital for life. Better soil health supports long-term productivity. Reducing use of pesticides and fertilisers is better for health.

** This refers to the equivalent of 47.7 million tonnes of carbon dioxide but includes other greenhouse gases e.g. methane.*

PROJECT DRAWDOWN

[Project Drawdown](#) identifies methods linked to food and agriculture as 6 of the top 20 potential global climate solutions:

- 1) **Reduced food waste** (88.50 GT**)
- 2) **Plant-rich diets** (78.33 GT)
- 11) **Silvopasture** - trees with livestock (26.58 GT)
- 15) **Perennial staple crops** (16.34 GT)
- 19) **Regenerative annual cropping** (15.12 GT)
- 20) **Tree intercropping** - trees with annual crops (15.03 GT)

*** This is the additional CO₂eq. in gigatonnes that could be saved by these methods worldwide over 2020-2050, based on 'Scenario 1' which involves limiting warming to 2 °C by 2100.*

TOP CAMPAIGN AIM:

Denominations and dioceses which own agricultural land should actively support tenants to be working to reach farm net zero by 2030 or as soon as legally possible. (See [Church Land Use Campaign](#))

LAND IN THE BIBLE

'The land produced vegetation: plants bearing seed according to their kinds and trees bearing fruit with seed in it according to their kinds. And God saw that it was good.'
Genesis 1:12 NIV

'But in the seventh year the land is to have a year of sabbath rest, a sabbath to the LORD. Do not sow your fields or prune your vineyards. Do not reap what grows of itself or harvest the grapes of your untended vines. The land is to have a year of rest.'
Leviticus 25:4-5 NIV



Alan Radbourne

Soil scientist, farmer and church leader

'The Church is uniquely positioned to support transformational change towards sustainable food and farming, not just because it is geographically located across every corner of the UK, but because we have a biblical framework to steward the earth's resources well. So, let's see a Church in action (both the people and the organisation) with a creative, faith-filled, people-orientated approach to supporting our farmers to produce nutritious and delicious food in a way that works sustainably with creation, reducing emissions and enhancing biodiversity.'

LOCAL CHURCHES - FARMING BETTER

FOOD CHOICES

REDUCING FOOD IMPACTS

We all have a role to play in reducing food waste and eating more plant-rich diets. We can also support local farmers, recognising their efforts to farm sustainably and provide quality food with low food miles.



Think about the meals provided at your church and how you can reduce waste and emissions.



Could your church be part of a project to reduce food waste and provide food for people in need, even growing food together on church land?



Find out more about local farmers, what they can offer and any support they need. Tenant farmers are facing many climate and sustainability challenges. See the Wildlife Trusts' 'Help farmers help nature toolkit'.

PITFALLS TO AVOID



Rather than blaming farmers for pollution, pesticides or nature depletion, we need to work together to tackle these issues. Recognising farmers' expertise and knowledge of their land is vital in finding solutions to environmental problems.



Blanket solutions such as landscape-scale tree-planting or rewilding are not the best approaches for most productive agricultural land.



We need sustainable food production but agroforestry, soil management and better hedges and margins can improve carbon sequestration and support wildlife alongside farming.

Climate Solution: Supporting Farmers 2



REDUCING FOOD WASTE

GAMLINGAY FOOD PROJECT, CAMBS

Gamlingay Baptist Church and nearby St Mary the Virgin jointly run a project providing food parcels and a community fridge for those in need. They collect food that would be wasted from local shops and supermarkets and give it away from their community fridge and freezer. They also invite local people to share food they have grown or other donations.



LOCAL COMMUNITY

FALMOUTH, DIOCESE OF TRURO

The Diocese of Truro Glebe Management committee considers environmental credentials of applicants when they're looking for new tenants. One area of glebe land near Falmouth had previously been used for intensive potato cropping, with high levels of run-off.

It is now let to the Falmouth Food Co-op who, through their group 'Loveland' and with the consent of the diocese, have implemented a range of organic, low food-mileage, sustainable vegetable crop growing. They are also experimenting with grains which will be appropriate as the climate changes.



Michael Greet, Glebe Estate Manager for Diocese of Truro, (Savills) said:

'The Diocese of Truro were early advocates of considering environmental credentials alongside other factors in considering new tenancies. As well as requiring applicants to explain their soil health, cropping methods and nature plans, the Diocese has to balance against the Church Property Measure 'best value' requirements.

In this particular case there was a unique opportunity to grant a tenancy that met all the requirements and all being well will be a long-term partnership.'

LANDSCAPE SCALE - FARMING BETTER



CLIMATE ACTION GROUP FARM PROJECT

FFERMWYR YR WNION PROJECT, GWYNEDD

The Church in Wales hosted a summit on [Restoring Welsh Rivers](#) in November 2024. Environmental impacts from agriculture were a key theme, including a [presentation](#) from Rhys Evans on Ffermwyr Yr Wnion's [Climate Action Group Farm Project](#).

Ten farms in the Wnion catchment are working together to address flood risk and water quality. They have planted 7km of hedgerows with over 50,000 trees, and blocked man-made drains on upland peatland to restore this vital habitat.

They have established flood pools which can also become sources of water in times of drought. Increasing hedgerow habitat and controlling invasive species are additionally good for local biodiversity.

“Farmer and Nature Friendly Farming Network Wales Manager Rhys Evans said:

‘The work being done by each farmer not only yields positive results for water and flood protection but also delivers benefits for biodiversity, pollinators, and air quality and helps tackle climate change.

On a more personal level, the project also increases our sense of well-being as farmers – we take pride in knowing that our little corner of the world is helping to address some very serious issues.’

NATIONAL CHURCH

C^{OF}E CHURCH COMMISSIONERS

The Church of England Church Commissioners own around 82,000 acres of agricultural land, let to tenant farmers. They have featured a number of positive case studies in their [‘In Conversation with’](#) series. [Richard Castle’s farm](#) on the Rochester Estate is working with the RSPB and Natural England to enhance natural marshes. They use conservation agriculture methods, improving the soil, and have 60 acres of solar power on the land they own. We need to see wider support of these approaches.



PLANNING

ASSESSING YOUR LAND

Regional and national Church bodies sometimes own considerable areas of land. Steps to improving the environmental credentials of this land include mapping your land and creating a land management plan. The Diocese of Oxford share how they went about the mapping task in the CofE document: [Managing Glebe Land for Climate and Biodiversity](#).

Land farmed by tenants is less controlled by the landowners but they have scope to review letting agreements as these are renewed and require more environmental improvements.

Farm carbon audits can be encouraged and incentivised by landowners, allowing tenants to baseline emissions and choose the methods of emissions reduction which fit with their business model. Farm Carbon Toolkit, Agrecalc and Cool Farm Alliance are now [working together](#) to harmonise their methodologies and outputs.

FABULOUS FARMERS

Functional AgroBiodiversity is a set of measures which enhance biodiversity on farms. These include crop rotation, field margin management and non-inversion tillage. More information about the methods and successful implementation in UK and EU farms is available on the [FABulous Farmers website](#).

INVESTMENT - SUSTAINABLE FARMING

INVESTMENT OPPORTUNITIES

FIIND IMPACT HOW TO INVEST IN CLIMATE

FIIND Impact Foundation's Faith Impact Project published a report in 2021 on [How to Invest in Climate](#). This report identifies the most investable climate solutions from Project Drawdown's top climate solutions which include food and agriculture.

They discuss sustainable bonds, listed equities, private equity and venture capital investing in food and agriculture making it the second most investable area after electricity production. They found 179 funds and strategies totalling over \$365bn.

GREEN INVESTMENT DECLARATION

Is your Church body making progress towards investment in Climate Solutions? Join our [Green Investment Declaration](#) to recognise the steps you are taking and encourage others to do more too!



RESOURCES

Find more resources and actions to take on Supporting Farmers to Reduce Emissions [here](#).



INVESTING IN SUSTAINABLE AGRICULTURE

FARMING THE FUTURE

[Farming the Future](#) is a partnership between Croatan Institute, New Economics Foundation and the Soil Association. One of their aims is to redirect the flow of finance away from old and fragmented arrangements towards a wholistic, regenerative food system. They are seeking to introduce the finance sector to regenerative agriculture and the wider impact of their investments and loans. Their report '[Credit Where Due](#)' includes varied finance options.



REGENERATIVE FARMING AND SOIL CARBON OFFSETS

BLASTON FARM, LEICESTERSHIRE

In recent years Christian landowner Hylton Murray-Philipson and the team at Blaston Farm have completely transformed their farming model. They moved from conventional arable farming to regenerative farming with integrated livestock, reduced fertiliser, use of cover crops and minimal soil disturbance.

The independent soil carbon specialist firm Ecometric measures the annual sequestration of carbon into the soil. This generates credits which have been sold to companies including Mercedes-Benz F1 and soft drinks manufacturer Dash via carbon financier Respira International.

Their first year sequestered 5000t of CO₂, after accounting for all on-farm emissions and setting aside a 20% buffer pool. Stopping ploughing has led to vastly increased worm numbers which are improving the soil naturally.

“Landowner Hylton Murray-Philipson said:

'I'd overlooked a little phrase in Genesis 1:28, between go forth and multiply and having dominion. It says replenish the earth. So it's right there from the very beginning of time. And after all, what is Adam in Hebrew? Adamah is the earth. You know, we are the earth. If we destroy the earth, we destroy ourselves.

Time is of the essence. I think that the key thing is to put soil centre stage and if you look after the soil at the end of the day, the soil will look after you.' (Full interview [here](#))