

Environment Policy Development Group

24 May 2022

Briefing Report: Sustainable Farming in Mid Devon

Cabinet Member(s): Cllr C R Slade - Cabinet Member for the Environment and Climate Change.

Responsible Officer(s): Andrew Busby - Corporate Manager Property, Leisure & Climate Change.
Jason Ball - Climate and Sustainability Specialist.

Reason for Report: To receive a briefing on local sustainable farming. Members to discuss the issue and to provide a steer to Officers on how the PDG wishes to proceed to investigate the subject.

Recommendation: That the Environment Policy Development Group (PDG) notes and accepts this report with regard to the Climate and Sustainability Programme (climate change and other environmental issues).

Financial Implications: Financial implications associated with this report are the costs / budgets of the overall Climate and Sustainability Programme, specifically linked to the Council's Corporate Plan, Climate Strategy and Climate Action Plan (CAP).

Budget and Policy Framework: Budgets specifically linked to the Council's Corporate Plan, Climate Strategy and CAP.

Legal Implications: Full Council declared a Climate Emergency in June 2019. The Environment Policy Development Group (PDG) is responsible for developing relevant council policies; considering how best to implement the Council's approved policies; and for making informed recommendations to Cabinet on the matter. [Link to declaration decision.](#)

Risk Assessment: Progress on Performance Indicators (PI) is provided separately on regular Performance and Risk Reports. There are 2 main risks (to the Council): 1) that the Council does not take sufficient actions to enable it to meet its Climate Emergency declaration ambitions; and 2) that the financial implications of Climate Change are not adequately measured and reflected in the Council's decision making.

Equality Impact Assessment: There are no equality impacts associated with this report. (No recommendations.) Specific projects and policies are subject to the Public Sector Equality Duty. (Assessing the equality impacts of proposed changes to policies, procedures and practices is not only a legal requirement, but also a positive opportunity for authorities to make better decisions based on robust evidence.)

Relationship to Corporate Plan: This briefing report relates to the following aims in the 2020-2024 Corporate Plan:

- Promote sustainable farming practices in partnership with local farmers, district and county councils; including research into best practice re better soil management and animal husbandry.
- Promote the development of the farming economy and local food production.
- Working in partnership with farmers to develop and grow markets on the principle of reducing carbon emissions and sustainability.
- Explore large-scale tree-planting projects and re-wilding to enhance biodiversity and address carbon pressures.

Impact on Climate Change: The role of the Climate and Sustainability Specialist in support of the corporate officer team is central to the Council's Climate and Sustainability Programme by actions

such as the development of strategic positions and delivery of projects through internal, community and partnership work.

Farmland makes up the vast majority of the Mid Devon landscape and contributes a significant portion of the district's annual greenhouse gas emissions (carbon footprint).

1.0 Introduction / Background

- 1.1. This report aims to support the Environment PDG to explore ways the Council might address Corporate Plan aims related to sustainable farming (listed earlier).
- 1.2. There is a colossal capacity for farming and land management to support actions to address climate change, promote landscape and ecosystem recovery, and ways to improve soil, water and air quality.
- 1.3. Farming involves over 90% of the Mid Devon landscape, therefore it connects with all elements of environmental issues and resource management. A significant proportion of the district's carbon footprint is linked to agriculture; estimated to be around 33% according to the impact-tool.org.uk community carbon calculator. (Based on 343,756 tCO₂e of the 1,035,092 tCO₂e [annual territorial total](#) or approximately 9.87 tCO₂e per household.)
- 1.4. At a national level, agriculture is reported to comprise around 10% of [the UK carbon footprint](#) (depending on data included, confidence, analysis method etc.). According to the [Climate Change Committee \(CCC\) analysis of 2018 BEIS data](#) the *agriculture* sector created 10% plus the *land use, land use change and forestry sector* (LULUCF) accounted for another 2% of UK Greenhouse Gas (GHG) emissions. [Defra described 2019 data](#) as 46.3 MtCO₂e or 10% of GHG emissions in the UK (68% of total nitrous oxide emissions; 47% of total methane emissions; 1.7% of total carbon dioxide CO₂ emissions).
- 1.5. Awareness of the imperative to support sustainable farming and stewardship of the land is reflected in local community dialogue as well as national subsidy policies. Sustainability was raised by local farmers during the Council's 2022 State of the District Debate and in preparatory stakeholder dialogue (the theme was *Mid Devon's Communities and Climate Change*). Mid Devon farmers have initiated and participated in a range of trials and research related to environmental policy development, innovation and best practice. Local sustainability campaign groups (including food producers) often seek to enhance local supply chains, source sustainable food, reduce food-miles and cut out waste.
- 1.6. Council committees and working groups have sought input from farmers e.g. talks by Andrew Butler of the National Farmers Union (NFU) and Mary Quicke. The Council has engaged with rural food and farming supply chains and networks through its Economy work e.g. Team Devon, Visit Mid Devon, farmers' market events and 'buy local' campaigns such as [Food Drink Devon](#) or [Made in Devon](#).

2.0 Report context and guidance notes

- 2.1. Content herein does not constitute technical or legal advice.
- 2.2. No proposals or recommendations are given.
- 2.3. This report uses information from a range of sources to provide local and national context. Key sources include publications, correspondence and informal / unattributed conversations with: local farmers; local farming advisors; Exmoor and Dartmoor hill farmer networks; the Blackdown Hills Area of Outstanding Natural Beauty; Farming and Wildlife Advisory Group (FWAG) South West, the National Farmers Union.
- 2.4. All sampled materials, such as maps and graphics, are acknowledged. All rights e.g. copyright remain with the originators.
- 2.5. Abbreviations
 - AD = Anaerobic Digestion.

- BEIS = Department for Business, Energy & Industrial Strategy.
- Defra = Department for Food Farming and Rural Affairs.
- ULEV = Ultra-Low Emissions Vehicles.
- tCO₂e = tonnes of carbon dioxide equivalent. This is the standard measure of greenhouse gas emissions, which compares all greenhouse gases to the equivalent carbon dioxide Global Warming Potential (GWP) impact during a 100-year period.

3.0 Strategic context

- 3.1. The UK Government set out environmental ambitions in the [25 Year Environment Plan \(25YEP\)](#) along with [The Path to Sustainable Farming: An Agricultural Transition Plan 2021 to 2024 \(ATP\)](#) and the Environmental Land Management (ELM) scheme. The [Farming is Changing](#) guide for England summarised the 2021-2028 transition and the phasing out of Basic Payment Scheme (BPS) which had comprised a major portion of income for many farms.
- 3.2. The 25YEP sets out key priority areas for [Clean air](#); [Clean and plentiful water](#); [Thriving plants and wildlife](#); [Reducing the risks of harm from environmental hazards](#); [Using resources from nature more sustainably and efficiently](#); [Enhancing beauty, heritage and engagement with the natural environment](#); [Mitigating and adapting to climate change](#); [Minimising waste](#); [Managing exposure to chemicals](#); [Enhancing biosecurity](#).
- 3.3. The 2021 Environment Bill introduced Local Nature Recovery Strategies, Biodiversity Net Gain and Conservation Covenants.
- 3.4. The [UK's Net Zero Strategy](#) and legally-binding targets e.g. cutting Greenhouse Gas (GHG) Emissions by 78% compared with 1990 levels by 2035, trigger a need for system-wide change. Local supply / sale can help reduce transport impacts. Electricity is key to decarbonise heat e.g. grain dryers and poultry housing. Decarbonisation of transport means rapid ULEV market growth. Gradually low carbon technology must become widely adopted for farm vehicles / machinery, and for heavy goods vehicles transporting supplies and produce. For large farm machinery able to run long days of energy-intensive activities, biogas, biodiesel or hydrogen engines might be preferred over electric vehicles with a heavy battery.
- 3.5. A long term legacy of success in addressing climate change and other (interlinked) environmental challenges will depend on appropriate systemic transformation of land uses ([such as advised by the CCC, 2020](#)). Not only with food production methods and making the right choices for land use, but also government policy, supply chain infrastructure and the decarbonisation of transport; in addition to wider cultural support (regulatory levers and influencing consumer behaviour) and the socio-economic environment (viable jobs, businesses, communities). A lasting legacy of success also depends on the effective monitoring and protection of all gains made e.g. improved soil characteristics such as high levels of sequestered carbon or permeability to rainwater can be lost rapidly if the land is managed poorly. (Reference: [Soils of the Culm - YouTube](#).)
- 3.6. [Risks posed by a changing climate](#) inherently threaten the benefits that sustainable farming in Mid Devon might seek to achieve such as better food security, soil conservation and improved condition, recovery of wildlife and ecosystems, or flood resilience. UK data shows the most recent decade 2011–2020 has been on average 1.1°C warmer than 1961–1990. (Reference: [Met Office article](#).)
- 3.7. The full consequences of climate change are hard to forecast but significant problems are expected e.g. altered population patterns and seasonal behaviours in wild species including pollinators and beneficial pest-predators, winter survivability of disease (pathogens), pest and disease migrations, and altered timing of crop germination, flowering, fruiting/seeding, dormancy etc. (Reference: [Connecting the Culm article and webinar videos](#).) Forecast consequences for a high-impact warming scenario include a huge rise in [the number of days cattle would suffer from heat stress](#) in South West England.

3.8. Other strategic factors

- 3.8.1. Core subsidies are decreasing fast, forcing a long-term change.
- 3.8.2. Food Security being affected by events such as the war in Ukraine.
- 3.8.3. Volatile livestock feed prices and Futures Markets raising production costs.
- 3.8.4. Energy price rises leading to higher production costs and a shopping squeeze.
- 3.8.5. A reliance on Fossil Fuels and derivatives e.g. Nitrate fertiliser, CO₂ supplies.
- 3.8.6. Reliance on imported inputs e.g. phosphates. Fertiliser price volatility.
- 3.8.7. Workforce factors e.g. labour / skill shortages, automation, demographics.
- 3.8.8. Trade deals, market access, standards conflict and competition.
- 3.8.9. Expansion of carbon markets and related land investment schemes.

3.9. Enabling local food supply networks

- 3.9.1. Business advisors and knowledge exchange networks are likely key to help landowners / farmers to adopt innovations that would enable enhanced local supply networks such as smart supply systems, online ordering, apps or community supported agriculture projects.

3.10. Enabling local renewable energy and other green business diversification.

- 3.10.1. Landowners / farmers are well placed to deliver large-scale solar parks and wind parks in Mid Devon, supported by battery storage and flexible power management systems. (As noted in the recent report to Environment PDG about local electricity networks, this is a vital part of system development.)
- 3.10.2. Landowners / farmers are often well placed to deliver or support rural enterprise and innovation, in addition to their own commercial diversification.

3.11. What is Sustainable Farming?

- 3.11.1. The term is subject to a range of opinion. Whilst definitions vary, sustainable farming can generally be thought of as progressively developing food systems to move away from reliance on external inputs and environmentally harmful practices to produce healthy food in an economically and socially viable way.
- 3.11.2. The [United Nations Environment Programme](#) (UNEP) describes it as: “farming that meets the needs of existing and future generations, while also ensuring profitability, environmental health and social and economic equity”.

- 3.12. Agriculture has a track record of immense potential to adapt and transform, led by monumental achievements of scientific research, technological innovation and the industrialisation of the food production and trading systems. The ongoing cultural shift pulls in many directions - influenced at a local level by traditions and knowledge exchange networks, and at national or international levels by subsidy policies, educational institutions, membership bodies and the (often multinational) companies and consortia controlling markets, commodity trade, biotechnological / intellectual property and finance driving the modern food scene.

4.0 Local Context

4.1. Farmer views from around Mid Devon

4.1.1. Perspectives.

- Farmers would appreciate positivity. To be seen in a good light, a vital part of the rural Mid Devon landscape and communities, delivering food and public goods.
- Farmers are part of the solution.
- Strengths include mixed farming systems, mixed landscapes with hedges etc.

- Concerns over the loss of mixed farming, integrated systems.
- Environmental grants a good thing, possibly not attractive enough yet.
- Concerns over rewilding and tree planting as issues for land prices and future use.
- Concerns about how farmers are able to / will need to respond to funding changes and rising prices of inputs.
- Cutting down on inputs is a problem for some, an opportunity for others.
- Concerns over the barriers to young farmers e.g. capital hungry business models.
- Concerns about AD plants, more specifically that the whole system should be sustainable e.g. transport, avoid the most intensive or damaging crop feedstocks.
- Concerns over pollution from poor storage and handling of materials e.g. silage, AD feedstock and digestate, or wastes / resources such as slurries.

4.1.2. Suggestions of opportunities in Mid Devon (for the Council or others).

- There are very skilled farmers in the area.
- Knowledge-sharing on farming techniques e.g. appreciation of how to work different soil types, slopes near water courses, direct drill, soil management methods to boost carbon capture and food resilience and how it relates to soil types and water regimes, monitoring soil quality.
- Climate adaptation knowledge sharing - how farmland might be impacted in future, so farmers can start adapting their landscapes now to increase their resilience.
- There is an opportunity to promote Mid Devon's best farming (most climate friendly). Key message: grass-fed livestock and regenerative / agroecological farm systems can produce meat with a fraction of the impacts of imported meat. (No soy, lower inputs, less transport, less polluting, more wildlife, etc.)
- Opportunities local level e.g. farm diversity, climate and nature friendly, nutritious, affordable food with local and regional hubs to add value, reduce food miles, including powerful educational engagement.
- Access to advice and support (boost or help promote).
- Farmers should be provided with free advice to help integrate the environmental enhancements into their businesses. Farm system transition plans.
- Extra grant / reward / benefits for exceptional achievement.
- Networks between groups e.g. researcher organisations, campaign organisations and farm advisory services such should be supported where possible for a cross-sectoral approach.
- Perhaps prohibiting planning e.g. for new AD plants unless a clear plan for sustainable feedstock etc, can be demonstrated.
- Consider the potential role of farms in any planning work around renewable energy and transportation e.g. placement on key routes could make them community energy hubs, EV charging points, local facilities such as a farm shop or café.
- Enable diversification of rural enterprises, look to progressive markets.
- Start-up business support.
- Could the Council reduce barriers to greater use of renewables on farms? Can they help boost it e.g. green hydrogen production plants,
- Could the Council be a financial partner or help with land allocations or agreements to support Landscape Recovery projects?

- Prioritise any carbon or biodiversity offsetting funds to be local so they support local farmers.
- Can the Council boost food security?
- Prioritise purchases / procurement of local sustainable food.

4.1.3. Good practice examples.

- No till / minimum till and direct drill arable technique innovations.
- There are some very good examples e.g. maximising outputs for limited inputs.
- Upstream Thinking - learning from mire restoration projects supported by e.g. South West Water.
- Learning from [ELM trials](#) in Mid Devon plus the Exmoor and Dartmoor hill farmer networks. Summarised in a report by Devon Local Nature Partnership.
- Blackdown Hills Area of Outstanding Natural Beauty – with land advisors linked to Farming in Protected Landscapes (FiPL).
- [Farm Carbon Toolkit](#) has developed a strong network of farms monitoring and enhancing soil carbon.
- [Ruby Country Net Zero Beef Farming Forum](#).
- Devon Wildlife Trusts culm grassland restoration and enhancement project championing the habitat restoration.
- The *Connecting the Culm* partnership project is proactively working with landowners / farmers / foresters and other stakeholders, on climate adaptation, flood resilience, a future vision, etc. (The Council is one of the partners).
- [Mid Devon Silvopasture Group](#). (Innovative Farmers.)

4.1.4. Key players and networks when it comes to promoting sustainable farming.

- Advisory consultants for agricultural and rural business
- Those with furthest reach such as [AHDB](#), [CLA](#), [CFE](#), [NFU](#)
- Farming and Wildlife Advisory Group (FWAG) South West
- LEAF (Linking Environment And Farming)
- [Innovative Farmers](#), a farmer-led research network.
- Sustainable Farming Trust
- Nature Friendly Farming Network
- Soil Association
- Real Farming Trust.
- Groundswell
- Pasture Fed Livestock Association
- RSPB
- [Food, Farming and Countryside Commission \(ffcc.co.uk\)](#)
- [Fabulous Farmers](#).
- [UK Centre for Ecology & Hydrology](#).
- Over 500 farmers in Devon and Somerset have been supported by local advisors through the [Future Farming Resilience scheme \(businessinfopoint.co.uk\)](#) with partners including the Soil Association.

4.2. Mid Devon Strengths and Resources.

4.2.1. Within and around Mid Devon there are important agricultural and rural business advice sources, researchers, projects, and partnerships that potentially present opportunities for land managers and others. **The following examples add to the list of key players and networks above.**

- Rothamsted Research at North Wyke.
- [FFCC – the Devon Grass Roots report](#)
- [Future Farming Resilience Project - Economy and Enterprise \(devon.gov.uk\)](#)
- Schools, colleges and practical training centres e.g. [The Apricot Centre](#).
- [Devon Environment Foundation](#).
- Community supported agriculture projects.
- Devon Climate Emergency (The Council is one of the partners) has published research and YouTube video recordings of webinars about food, farming and land. These feature farmers and advisors local to Mid Devon or nearby.

5.0 What is the Local Authority role?

5.1. As a Local Planning Authority (LPA) the Council could:

- 5.1.1. Utilise the Local Plan to set progressive phases of ambitions and expectations. (Climate Change will be the overriding priority for the 2023-2043 Local Plan.)
- 5.1.2. Optimise planning policy and practices to support farm enterprise adaptability and eco-friendly innovations. Backed by clear, accessible guidance.
- 5.1.3. Encourage or require developers to submit, within relevant proposals, appropriate designs and assessments for climate and other environmental impacts.

5.2. How might the Council address Corporate Plan aims linked to sustainable farming?

5.2.1. *Promote sustainable farming practices in partnership with local farmers, district and county councils; including research into best practice re better soil management and animal husbandry.*

- Research that involves or is led by farmers is happening in and around Mid Devon, on the topics above. The Council could help to promote key projects and share their findings / outcomes.

5.2.2. *Promote the development of the farming economy and local food production.*

- With a clear priority focus on *sustainable* farming and *sustainable* local food supply (as distinct from a general approach) promotional partnership work has the potential to differentiate Mid Devon markets, add value, recognise local needs, address local vulnerabilities, promote low-carbon sourcing and raise economic resilience. Such an approach would align to the Council's direction of travel with regard to building community prosperity, which in turn values and invests in local skills, resources and capability.

5.2.3. *Working in partnership with farmers to develop and grow markets on the principle of reducing carbon emissions and sustainability.*

- As above. Being led by farmers would also recognise local needs and opportunities.
- Where institutions and business can demonstrate a demand for sustainable production e.g. through dynamic procurement, this can draw the attention and shift priorities for the major influencer networks and traders.

5.2.4. *Explore large-scale tree-planting projects and re-wilding to enhance biodiversity and address carbon pressures.*

- These topics are driving interest in land investments with a long-term management legacy, which links directly to addressing climate and ecological challenges. Yet the carbon rush can feel disconnected from the local communities, and the vision of Mid Devon's future rural landscape is not yet clear.
- The Council's role is important (albeit constrained in influence) with statutory roles in planning, economy and the environment.
- Signposting could include advice on [woodland creation](#), [grants](#) and [carbon codes](#).

5.3. Other ways the Council could promote progress toward a greener farming system.

5.3.1. Through the Forward Planning process (consultations etc.) keep farmers informed, and encourage active participation in stakeholder engagement cycles.

5.3.2. Consult within a partnership of farmers, other rural businesses and communities to identify and adopt ways to accelerate progress through a 'Landscape Strategy' that sets out the district's aims and ambitions for specific areas including – for example - sustainable farming, local food and produce networks, natural resource conservation, Nature Recovery Networks.

5.3.3. Seek partnership solutions to achieve strategic investment.

5.3.4. The Council's approach to influencing land use and management could be to lead by example and demonstrate with long-term data, how it utilises partnership working and the tools at its disposal.

6.0 Challenges

6.1. There can be tensions between district ambitions and national level policy. The Council has a duty to deliver on targets linked to the national Net Zero Strategy (Climate Change Act 2008) and yet has limited capacity to e.g. drive infrastructure development, or behavioural change and financial investment within communities. The Council may facilitate change through e.g. the Local Plan and supporting policies, and can push beyond basic requirements of building regulations yet also has to comply with the [National Planning Policy Framework](#) (NPPF) and has less influence over rural land uses than it does over urban / town planning.

7.0 Caveats

7.1. The subject is complex and often highly specialised. Statements, evaluations and estimates are reported as found, and details are not fact-checked.

7.2. Data and statistics are liable to change, as this field is highly dynamic.

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Circulation of the Report: Cabinet Member for the Environment and Climate Change, Leadership Team.

List of Background Papers: None.