

# Soil in the UK Supply Chain

*How the food and drink industry can support the transition to sustainable, regenerative agriculture and Net Zero*

December 2021

SUSTAINABLE  
**SOILS**  
ALLIANCE



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Executive Summary

During the Summer of 2021, the Sustainable Soils Alliance (SSA) carried out a piece of research into how major food and drink businesses – retailers, manufacturers and others – impact the management of British soils.

As a policy-focused organization, we were familiar with the formal drivers – regulations, advice, incentives etc. that might influence farmer behaviour, but far less aware of what impact the farmer’s ultimate customer for their produce – the major food and drink brands – might be having.

These businesses have an obvious vested interest in healthy soil for the long-term supply of safe, high-quality, nutritious food that they sell to their own consumers, and our first observation was how the businesses involved acknowledged this. Indeed, our research uncovered over 50 separate initiatives designed to promote better soil management, in-field research, scientific collaboration, financial support etc. – some running back decades.

The food industry’s impact on British soils isn’t just about individual, proactive initiatives, however, and as part of the research, we also asked businesses about the potentially negative impacts their supply chain relations might be having on soil – either directly or indirectly.

Here our research was less fruitful, and a second observation was the overall absence of any business oversight over the potential harm their sourcing operations might be causing to soil health – no safeguards or mechanisms are in place to identify, prevent or correct them.

Our third observation was the growing trend among businesses to include soil management and regenerative farming in their sustainability narratives alongside established themes – air, water and waste etc. This reflected the growing understanding of soil’s importance over and above productivity for providing a variety of critical ecosystem services including carbon sequestration, flood risk management, a home for biodiversity and water filtration.

This raised the question of what tangible impact – collective or individual – these businesses were actually having on soil and its ability to deliver these services? Where was the evidence base to connect the on-the-ground initiatives we identified with productivity or environmental outcomes? How was research being communicated throughout the industry or best practice turned into universal practice? Were the initiatives actually reflecting genuine farmer needs and expectations?

Everywhere we looked we identified gaps – in resource, ambition or strategy – that prevented the realization of these corporate ambitions, or the 50+ initiatives from adding up to more than the sum of their parts.

To address these gaps, we developed five recommendations aimed at food businesses as follows.

- 1. Ensure you and your intermediates suppliers are not contributing inadvertently to increased soil degradation and decline. Use all mechanisms (advisors, contracts, certification schemes) to embed regulatory compliance and safeguards against soil-damaging practices into supplier relations.
- 2. Show your commitment is real, tangible, traceable and measurable. Develop metrics and performance indicators that connect corporate regenerative ambitions with on-the-ground projects – and regularly and publicly report on progress against them.
- 3. Make the most of available and future research. Ensure it translates into practice change on the ground as widely as possible.
- 4. Be a catalyst for system-wide change. Spread ambition and best practice throughout the industry both vertically – via intermediaries that source on your behalf – and horizontally to competitors and hard to reach/invisible supply chains.
- 5. Anticipate and address farmer needs at a time of great uncertainty. Demonstrate alignment with policy-makers, market forces and other drivers through whole system thinking, consistent metrics and leadership.

There was one final observation we drew from our research and the conversations we had with the participating businesses. That was the recognition that the soil they source their produce from is shared with other businesses across the supply chain and that only through collaboration, cooperation, alignment and leadership could they deliver meaningful change at scale.

This desire to work together could not be more timely with the publication in Autumn 2021 of the government’s Net Zero strategy and the conclusion of COP26.

Both initiatives highlighted the importance of agriculture in delivering Net Zero and other outcomes, the need for all businesses to exploit every aspect of their operations to deliver the urgent change needed, and finally the need for clear, robust, tangible ‘decisions-grade’ data to drive future, evidence-based action.

These conclusions endorse and complement this report and its recommendations. We hope that it will unlock a new era of collaborative, ambitious, tangible action and in so doing ensure that our soils and our food supply chain work in harmony for generations to come.

Matthew Orman  
SSA Director  
December 2021



# 1 ▶ Background

Around the world, governments, businesses, NGOs and other stakeholders are increasingly aware of the importance of soil for productivity and the environment and are developing policies to measure, improve and even monetise soil health.

In the UK, this is happening at pace with the (English) government placing soil health at the heart of the Sustainable Farming Incentive scheme (SFI) and developing nationwide metrics and indicators to understand how the country's soils are changing over time. A fledgling market for soil carbon is emerging that has the potential to generate significant private investment for farmers who sequester carbon in exchange for the ecosystem benefits it delivers.

UK food retailers, manufacturers and growers have an important role to play in this space by promoting a transition towards sustainable and regenerative farming practices through their supply chain relations. However, until now there has been no attempt to collate, share and analyse the soil health and regenerative agriculture policies of these businesses, understand their collective impact on soil health or consider the merits of a more aligned, joined-up approach.

**“Retailers, manufacturers and growers have an important role to play in the transition towards sustainable and regenerative farming practices.”**

## 2 ▶ Objectives

In June 2021, the Sustainable Soils Alliance (SSA) was commissioned by WWF and Tesco Partnership to address this by carrying out an examination of the sustainable/regenerative farming initiatives pursued by major food and drink businesses in the UK. The objective of this work was to:

- Identify and categorise business-led initiatives that impact upon soil health; understand the motivation behind them, and the processes, timeframes and metrics used.
- Highlight examples of best practice which can then be promoted as universal practice throughout the supply chain.
- Evaluate these initiatives and their likely impact against both corporate and nationwide sustainability targets.
- Provide a mechanism to help businesses examine their own policies and explore the merit and viability of a more collaborative industry approach to soil health.
- Identify opportunities to demonstrate to farmers, government, customers and stakeholders the steps that businesses are taking to promote improved soil management.
- Help businesses explain to internal audiences the importance of soil, and the need to elevate it as a priority indicator, alongside air and water.



## 3 ▶ Process

In June 2021, the SSA wrote to the CEOs of 25 businesses (see Annex 1) that they estimate to have the largest impact on UK agriculture practices. The correspondence highlighted the importance of soil health to their operations and requested the participation of their business in the project via a nine-question survey (see Annex 2).

Over 75% of the businesses polled responded to the correspondence, and throughout July and August 2021 the SSA held online interviews with the agricultural/sustainability leads or equivalent at many of these businesses which was supplemented with web-based research.

This report looks to summarise this work and offers conclusions and observations about the implications of its findings for overall soil management in the UK. As part of this process, the SSA has also gathered feedback from experts at relevant organisations, such as the Environment Agency, BITC, WRAP, LEAF and NIAB. The WWF has also provided strategic input on the report's content throughout.

The report's outcomes were discussed at an October 2021 workshop attended by participating businesses and other stakeholders. This gave participants an opportunity to clarify any details, consider the report's recommendations and debate the viability and merit of a more long-term, aligned position by supply chain players and the tools that might achieve this.



**95%<sup>1</sup>**  
of global food supplies  
are directly or  
indirectly produced  
on soil













**Over 75% of the businesses  
polled responded to the  
correspondence and took an  
active part in the research.**



# 4 Outcomes

The analysis unearthed over 50 initiatives pursued by participating businesses that champion or promote soil health.

A non-exhaustive list of these can be found in Annex 3. We have organized them according to the following 10 categories.

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
									
<b>Subsidies, Grants, Incentive Schemes</b>	<b>On-going Advice</b>	<b>Guidance and Toolkit Development</b>	<b>Information Collection</b>	<b>In-field Research</b>	<b>Academic Research</b>	<b>Pan-industry Collaboration</b>	<b>Standards/ Metrics Implementation</b>	<b>Consumer Engagement</b>	<b>Strategic Target Setting</b>
That reward specific soil management practices	Via in-house/ 3rd party agronomists	In partnership with 3rd party expert	Data, surveys, benchmarking	Including pilot and demonstration farms	On both science and behaviour change	Either crop or geography specific	According to owned or 3rd party schemes	And education about soil health through marketing, comms etc	Through CSR, ESG reporting that highlights soil's importance

## 5 Summary of Findings

The following is a summary of the information gathered from the survey responses, on-line research and interviews:

### General

- Initiatives by major businesses to research, measure, improve and influence soil management in their supply chain have been underway for some time, with some going back to the 1980's.
- Broadly speaking, 'manufacturers' focus their efforts on soil management specific to select ingredients/commodities (wheat, milk etc.) sourced in the UK. As expected, 'retailers' efforts address a wider range of products and are more likely to include fresh produce. The level of farmer engagement reflects the nature of contact with suppliers - those that buy directly have more input, oversight and knowledge, and therefore more power to influence than those that purchase via intermediaries.
- Many of the initiatives are borne out of a long-standing relationship with critical suppliers and reflect a very specific need (e.g. the impact of a specific intervention) identified either by the farmer themselves or the in-house agronomist. In many cases research institutes have been involved to address particular knowledge gaps relating to either soil science or management behaviour change.

### Strategic

- When detailing the heritage of many of the initiatives, respondents explained that these have historically been small-scale and bottom-up. As a rule, they are focused on localised knowledge-transfer and application. The efforts made to communicate activities or outcomes did not extend beyond niche sustainability/farming press/communities.
- Net Zero and the regenerative agriculture agenda has changed this, giving greater strategic significance to farmer-focused efforts that are now understood to impact both the delivery and the communications of business-critical targets. Farming now sits within corporate sustainability narratives (websites, CSR/ESG reports) alongside established themes of waste reduction, water management, biodiversity etc.
  - 20 of these businesses claim or commit to supporting sustainable/regenerative agricultural practices on their website and/or ESG reports.
  - 23 have Net Zero commitments or commit to reducing their greenhouse gas emissions.
  - 13 refer to soil health specifically within these claims/commitments.
- Some respondents acknowledged that this created a challenge, in that historical initiatives had to be retro-fitted to align with recently created (strategic or corporate) targets. In some cases this meant a limited trail of evidence to demonstrate how or why highlighted initiatives contributed concretely to specific outcomes.
- Businesses also acknowledge that some of the initiatives are by necessity short-term and were designed with the objective of achieving immediate PR wins/marketing outputs if not necessarily long-term results.
- A number of businesses acknowledged that this was partly due to internal knowledge gaps. Soil was not understood by senior leadership as well as other environmental indicators, and the lack of universal metrics made it hard to make the case internally for investment.

### Supply chain relations

- There is very low awareness within businesses as to whether or how their formal/contractual relations with suppliers might directly or indirectly impact upon soil health. There seems to be little or no consideration of how these relations – either company by company or on a system-wide basis - might inadvertently lead to farming practices that damage the soils - e.g. contract lengths or requirements to sow/harvest crops in adverse conditions.
- No companies reported safeguards or procedures to understand or prevent this. An example suggested by the SSA was to embed regulations (e.g. 8 Farming Rules for Water) into contracts to ensure farmers weren't put in a position where they might have to choose between breaking the law and breaking the terms of an agreement.
- Similarly, there was no knowledge of whether such assessment/safeguards were in place between intermediary suppliers and the farmers they source from.

### Soil carbon

- Most businesses are interested in exploring the potential of soil carbon sequestration. They are keen to know how it fits with their Net Zero calculations and reporting (especially for Scope 3 emissions), but also the non-climate change/GHG co-benefits (flood risk mitigation, biodiversity increase etc.).
- Among the companies interviewed, there is consensus that there are knowledge gaps in scientific evidence and the Monitoring, Reporting and Verification (MRV) protocols, but once the industry's understanding and credibility of carbon sequestration in soil is defined and agreed, this is likely to be part of their Net Zero strategies.
- There is a clear need for improved understanding about the science and behavioural aspects of soil carbon sequestration – and what this means for food/drink businesses, the evolution of soil carbon markets and the role of the government and the Climate Change Committee in creating a structure around it. Some of these questions are being addressed through WRAP and the Net Zero target of its Courtauld agreement.

**There is very low awareness within businesses as to whether or how their formal/contractual relations with suppliers might directly or indirectly impact upon soil health.**



## Regenerative farming

- In recent years the terms regenerative agriculture, agroecology, conservation agriculture, sustainable intensification etc. have been used to describe sustainable farming practices. Some of these have a soil health focus, and within most approaches the components/characteristics of soil health are similar.
- ‘Regenerative’ is currently the most popular. 13 businesses use the term in their comms/marketing materials and website. A table of these usages and the definition employed (where available) can be found in Annex 4.
- There are multiple definitions of ‘regenerative’ within the agricultural community. This has benefits and drawbacks. Whilst some flexibility/adaptability to suit individual farm requirements is important, businesses highlighted that the lack of a consistent definition of regenerative agriculture can be a barrier to farmer engagement, or to achieving senior stakeholder buy-in.
- A number of respondents expressed caution that the corporate imposition of uniform metrics and standards for regenerative agriculture, for certification for example, could be harmful and stifle innovation. Regenerative agriculture is and always has been a bottom-up philosophy, and this informality has allowed it to thrive, with farmers able to take the core principles and apply them to their own operations as they see fit.
- The regenerative brand can also be off-putting to farmers because of cost, fear of restrictions etc. Some businesses do not see regeneration as a black-and-white/‘you are or you aren’t’ issue, but instead look to weave regenerative principles into widespread practice. They see their role as encouraging and educating rather than imposing generic expectations or unworkable conditions.
- The use of the regenerative approach needs to be understood in the context of the product being grown, the use of break crops and the type of crop rotations involved. Fresh produce in particular has the challenge of applying the regenerative approach to crops that are not grown in an annual field rotation.

## Consumer and stakeholder engagement

- Communicating the merits of sustainable sourcing to consumers remains a challenge in general. Currently campaigns focus on the emotive/high-profile issues of biodiversity loss, greenhouse gases, plastic and water pollution. Soil does not feature in consumer awareness campaigns or labelling. In corporate reporting it features under the banner of regenerative/sustainable farming.
- A barrier to increasing the profile of soil within sustainability commitments is the expectation (both corporate and amongst consumers) that farmers should already be taking responsibility for their own soils (as a private asset). Both groups need an explanation as to why they should receive external support for it.
- Many businesses say they look to the established schemes (Red Tractor, Organics, LEAF) to embed soil into their labelling criteria and make that the vehicle for educating about farming/soil. However, it is not transparent what coverage these schemes have over UK supply (the % of UK farms). For an overview of how/where soil sits within the most well-known certification schemes, see Annex 5.
- The growing expectations (internal and external) for more ambitious sustainable farming target setting means that this is a rapidly evolving space. Many businesses indicate that they have imminent announcements to make of relevance to soil health.







UK soils  
contribute  
**21%**<sup>3</sup>  
of total UK  
agricultural  
emissions

### Soil management research and training

- As scientific understanding of soil health continues to evolve, businesses expressed the view that there is a lack of a clear understanding of (a) what is meant by ‘soil health’ and (b) what approach they should take to deliver it. In practice this means businesses are uncertain as to whether they are promoting the right approaches/best practice, or connecting with the right research project/innovation. This uncertainty leads to caution and creates a barrier towards promoting these approaches internally or externally.
- Some in-house technical advisors may have good soil knowledge, based on third-party training curricula. However, it is not well known how up-to-date/consistent this knowledge is (it is rarely tested).
- Collaboration and partnership with universities and other research bodies is widespread. There is also a lot of interest in knowledge exchange between farmers and the research community and a potential role for businesses in promoting this. Businesses want to overcome knowledge silos and exploit different opportunities for communicating science to farmers and vice versa.
- Many businesses are reluctant to dictate or be seen to dictate what their suppliers should/n’t do. They would prefer to be a transmitter of knowledge around farming best practices. They see their role as informing farmers of the available training, with a view to finding ways of supporting research and development gaps where present.

### Soil measurement and monitoring

- Improvement in soil health can take time to measure and manifest in terms of benefits to crop production (yields, quality, resilience, costs of production etc.). Demonstrating need and benefit, and therefore getting buy-in both internally and across the value chain, can be a challenge as a result. Other sustainability interventions demonstrate more immediate, tangible impact, and so are an easier sell.
- In many instances, an individual farm/field will supply different food businesses with different crops, however there is no continuity between them (especially where farms are tenanted). This means individual businesses don’t see it as their duty to invest in promoting soil health at the farm level. Again, they expressed reluctance to intervene in what was a farmer’s private property.
- The lack of shared metrics/data is a barrier to dialogue or any kind of ‘conversation’ between these businesses, and therefore any sharing of the responsibility between them and with the landowner, for changes in soil health over time.
- Soil monitoring and data is only part of the picture. Promoting soil management change among farmers is very personal and requires case study examples (ideally local), relationship-building, interactions and knowledge exchange routes to inform best practice.
- Businesses recognize that farmers are going to be increasingly asked to collect metrics relating to Net Zero, soil health etc. However, if multiple stakeholders (e.g. retailers, regulators, schemes etc.) ask for different information this will become a burden. There is a lack of universal, practical and common metrics to measure soil health in a wide range of systems that can then be used over a suitable time period to assess change.
- Standardisation and accessibility are key issues when it comes to testing soils. The lack of standardised soil metrics and benchmarks makes it hard to influence or control farming practices, in particular when third parties are involved. There is a reluctance to embed soil sampling/monitoring expectations across the supply chain due to fear of over dictating what farmers should be doing and not wanting to be seen as hindering farmer livelihoods.



## 6 ▶ Observations and Analysis

We have divided our analysis of the research findings into two categories: 1. An examination of the ‘best practice’ initiatives and the barriers to rolling them out as universal practice, and 2. a consideration of ‘harm reduction’ – steps taken to limit the negative impact of the supply chain.

### Best practice

- a. As this research demonstrates, leading UK food and drink businesses are paying increasing attention to soil management and regenerative farming practices throughout their supply chains. This is demonstrable a) through the variety of initiatives outlined in Annex 3 (research, Incentivisation, education and collaboration) and b) in the corporate sustainability ambitions of these businesses where regenerative and sustainable farming targets increasingly features alongside air, water, waste and biodiversity as a critical environmental ‘pillars’ of their reporting.
- b. The stand-out observation from the analysis, however, is the lack of a tangible link between these two elements. There is no clear trail of evidence - no underlying metrics or key performance indicators explaining how specific initiatives will deliver the corporate – or even nationwide – environmental ambitions outlined. Where results are collected, they are project-specific, fragmented, siloed and non-comparable from one context to the next.
- c. This is understandable. Wherever one looks with soil, there is a lack of clarity. No universal soil quality indicators, no central definition of ‘regenerative’, ambiguity about responsibility (between grower, land-owner, customer etc.) as well as the challenge of context - different soils, crop and farming types across the country to contend with.
- d. This lack of universal performance indicators presents a number of issues. A lack of clear understanding of ‘what works’ that can then be highlighted as best practice and converted into universal practice. An obstacle to collaboration between farmers and businesses, and amongst businesses. A barrier to communicating to internal audiences what initiatives require investment and why. Between them these represent a clear systemic barrier to delivering change at scale.
- e. Regenerative farming is a good example, especially given the growing business interest in pushing that particular agenda. On the one hand, the lack of a universal definition creates confusion for farmers, customers and other stakeholders - is it a guiding philosophy or a defined set of practices? What are the underlying indicators? The need for consistency - to communicate, measure and reward outcomes - must be balanced with flexibility and the need for responsiveness to changes witnessed in-crop and in-field.
- f. This raises the bigger question of the role of businesses in driving change. If the big brands are going to be the ones to drive customer awareness/understanding of regenerative through marketing etc., they should arguably be the ones to set the parameters – since no-one else will.
- g. This in turn raises the issue of the regulatory gap. Businesses are understandably reluctant to dictate to farmers, but look to accreditation/certification schemes to promote sustainable practices in their place. However, these schemes are generally light touch when it comes to soil – with an emphasis on recommendations – leaving obligations to the regulatory bodies. Regulations are not well known and poorly enforced and rarely a disincentive to farmers – who prioritise their relationships with their customers – the businesses.
- h. Greater efforts are needed to turn available research into management change on farm. There is no formal process and little consistency in how results/outcomes are broadcast, meaning individual studies do not add up to more than the sum of their parts. There is a willingness to share – research outcomes are rarely seen as sensitive/proprietary, however there doesn’t seem to be the mechanisms to achieve this.





## Harm reduction

- a. As outlined above, the research gave businesses the opportunity to demonstrate the positive impact they are having on improved soil management throughout their supply chain. However, it also asked for evidence of the other side of the story – how businesses are identifying and addressing the possible harm that sourcing policies might inadvertently be causing – either individually or system-wide through their supplier relations.
- b. Here the story is less encouraging. Indeed, none of the businesses had specific processes in place to identify harm or formal safeguards to prevent it. Neither was there a mechanism for evaluating any collective impact – the sum of different corporate policies on shared land parcels over an extended period of time.
- c. This lack of focus on these negative impacts needs addressing. Informally, the Environment Agency (EA) and farmer groups have given the SSA detailed examples of the impact that supply chain relations might have. By way of example, these include:
  - Farmers often deploy practices that they know will damage their soils because they fear failing to deliver on an agreement – and losing a contract as a result. Low levels of regulatory enforcement means this concern outweighs any fear of regulatory punishment.
  - Short supplier contracts mean that farmers don't have the opportunity to invest in their soils by building rotations or fallow periods into their system. Non-productive years don't pay and cover crops represent a cost.
  - A fragmented approach to the 'marketplace' for improved soil. For example, farmers know which crops will help restore their soils, improve structure and sequester carbon, however if there is no market for those products, improvement alone is not sufficient impetus.
- d. In many cases this harm – environmental and economic – will be invisible to the businesses who are indirectly responsible. The EA has no mandate to report on them, and the farmers have limited capacity for recourse. The situation is made more complicated by short tenancies, further fragmenting the link between manufacturers/retailers and farmers, and undermining the potential for continuity.

**“In many cases this harm – environmental and economic – will be invisible to the businesses who are indirectly responsible.”**



Corporate Initiatives that Impact Soil Health





## 7 ▶ Rationale for Collaboration

The result of all these factors is clear. Despite good intentions, the initiatives identified in our research will not contribute meaningfully to businesses' own sustainable/regenerative agriculture or Net Zero objectives, or deliver the tangible change at scale that is needed to address the climate or nature emergencies. The intent, investment and expertise of these businesses is not being exploited to its full potential.

This, we feel, makes a powerful and convincing argument for greater collaboration. The research added further rationale as follows:

- a. Ultimately, soil improvement is incremental, non-excludable and reversible – the benefits are spread among the farmer, land-owner, other users of the soil and the environment in general. By the same token, benefits accrued over decades by the right management approach can be reversed in a matter of months by the wrong ones. This makes it hard to make the case for individual, small-scale interventions, but does support the argument for greater collaboration and industry alignment. There is no point in a food business trying to create better soil in their supply chain on their own.
- b. A clear argument for greater collaboration is farmer reassurance. At a time of great uncertainty (post Brexit) about long-term income, and the introduction of new schemes (SFI, soil carbon market), farmers are receiving mixed messages from their customers about the nature and scale of their expectations regarding land management, leading to confusion and inconsistency.
- c. The businesses that participated in this research represent a certain segment of the food industry. Because most are visible 'brands', they are both required and able to reward the most progressive farmers. This raises the question of their role in reaching and raising the bar among 'under the radar' businesses. This includes both intermediary suppliers (who will have direct relationships with suppliers) and those who sell to catering, public sector etc. Any efforts to improve soil management must be universal since it only takes a small number of players to cause significant damage.
- d. There are organisations (LEAF, WRAP, NIAB, AHDB, Sustainable Food Trust) who have a critical role in education and behaviour change to exploit their profile with farmers and consumers, and their very specific points of influence should be leveraged. However, the best conveyor of a message to farmers about what works – and therefore what they should do is other farmers, and this should be central to any action in this space.

**“Soil improvement is incremental,  
non-excludable and reversible.”**





1/3<sup>5</sup>

of UK soils are  
thought to be  
degraded

## 8 Recommendations

The high response levels and interest in this project demonstrated a clear willingness to learn more, engage and collaborate – and new plans and commitments to sustainable agriculture also show that this is a rapidly moving space.

This raises the question of ‘how’ to scale up these efforts from piecemeal initiatives into universal practice. In the words of one participant describing an existing project: *“I want to profile, emphasise and accelerate work that is already going on and put some structure around it”*.

**With that in mind, we propose the following recommendations to UK food and drink businesses.**

- 1. Ensure you and your intermediates suppliers are not contributing inadvertently to increased soil degradation and decline. Use all mechanisms (advisors, contracts, certification schemes) to embed regulatory compliance and safeguards against soil-damaging practices into supplier relations.**
  - Analyse and understand the impact that supply chain processes and dynamics might have on soil management, in particular contract and tenancy lengths. The following might support this:
    - Survey supplying farmers to understand how/where pressure points are that might lead to soil damaging practices.
    - Consultation with the Environment Agency, water catchment schemes etc. to better understand the nature/cause of soil degradation and how it can be remediated.
    - Examine the knowledge/awareness of in-house/contracted agronomists about both recent science and policy as it relates to soil.
  - Evaluate how farming regulations are currently reflected in farmer contractual relations. Establish whether safeguards are in place to ensure farmers are not required to deliver produce in a way/timeframe that places them in breach of critical regulations.
  - Review existing certifications/standards (LEAF, Red Tractor, Soil Association) to establish whether they go far enough to protect and improve soils. A baseline should include regulatory compliance and the requirement – not recommendation – to regularly monitor soil health.
- 2. Show your commitment is real, tangible, traceable and measurable. Develop metrics and performance indicators that connect corporate regenerative ambitions with on-the-ground projects - and regularly and publicly report on progress against them.**
  - Review existing regenerative/sustainable farming policies alongside existing and proposed corporate objectives and identify gaps. Examine how this link can be strengthened through the use of tangible internal metrics and KPIs (e.g. soil health measurements, farmers reached, area of land affected).
  - Develop toolkits to educate and inform corporate leadership about the importance and complexities of soil as a critical pillar of sustainability – one that is a shared responsibility like clean air, water etc. This process should demonstrate what a realistic ambition should look like, the role of that organization in achieving it and where collaboration is needed. Where possible, personal senior buy-in should be sought (through farm visits etc.).
  - Promote and incentivise soil monitoring by farmers throughout the supply chain using all consistent, universal, farmer-friendly metrics and Soil Quality Indicators. This should be based on available best-in-class tools ([Soil Biology and Soil Health Scorecard](#)) and consistent with ‘official’ guidance (e.g. SFI soils standards) to demonstrate to farmers consensus about core parameters of soil health



**3. Make the most of available and future research. Ensure it translates into practice change on the ground as widely as possible.**

- Create a forum for sharing research, best practice, case studies amongst industry farming experts and advisors. This should include both academic and in-field research, and relate to behaviour change and soil science. Collaborate with established mechanisms for knowledge dissemination (AHDB, LEAF etc.) to signpost to farmers what research is underway, and pick and choose which research to learn from and engage in. This can also be a mechanism to enable sustainability experts to benchmark soils policies.
- Establish an industry-led open access repository of soils data and knowledge based on consistent monitoring, collection and submission of soil health statistics. This should sit alongside existing data sources (RPA etc.) to help build a nationwide picture.
- Promote the use of farmer-farmer information channels (farm clusters, demonstration farms, living laboratories and lighthouses) as the most effective means of transmitting expertise and experience.

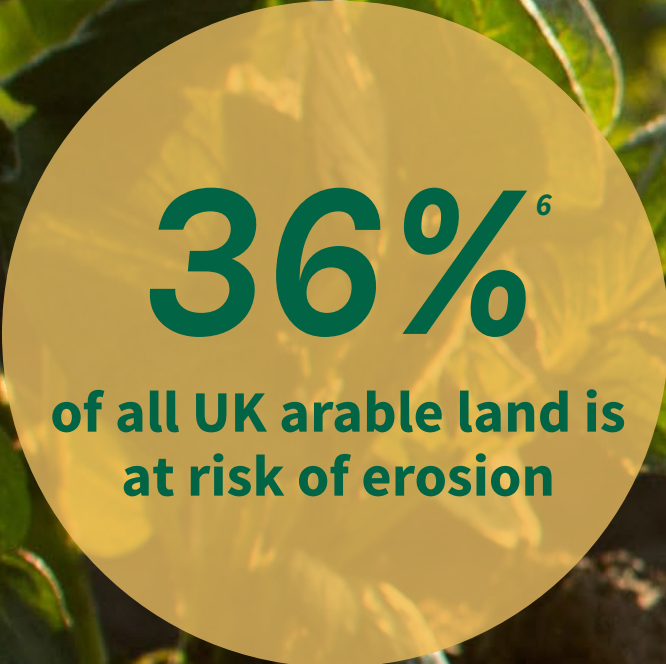
**4. Be a catalyst for system-wide change. Spread ambition and best practice throughout the industry both vertically – via intermediaries that source on your behalf - and horizontally to competitors and hard to reach/invisible supply chains.**

- Create a pan-industry written commitment to long-term soil management outcomes. This commitment should reflect an agreed role for industry – one that is ambitious and proportionate. It should signpost to internal audiences a clear pre-competitive ‘space’, and to farmers the common ground and intent to avoid conflicting advice. By way of a model, consider the WRAP Courtauld commitment to Reducing food waste, cutting carbon and protecting critical water resources.

- Underpin this commitment with a delivery roadmap, based on realistic but tangible outcomes, indicators and accompanying timeframe. As well as being measurement-based, it should incorporate a consistent approach to terms like ‘regenerative’.
- Create toolkits for intermediary supplier businesses to embed soil/regenerative practices in their own supplier relations/ farmer contracts and align them with the commitment of the larger brands. This might (for example) define what the component elements of a regenerative farming policy should look like. It should be aimed at all players in the supply chain – and act as a galvanising force for those back-markers to consider the transition.

**5. Anticipate and address farmer needs at a time of great uncertainty. Demonstrate alignment with policy-makers, market forces and other drivers through whole system thinking, consistent metrics and leadership.**

- Identify and fill the knowledge gaps relating to soil carbon measurement, reporting and verification so that its impact on climate change and other public goods can be better understood and reflected in Net Zero accounting and GHG reduction strategies. This will ensure that future ecosystem markets are credible, verifiable and follow industry-agreed, scientifically robust best practice
- Survey farmers to better understand their needs and concerns about the changing policy and market dynamics, and hence their requirements of customers and advisors. This should include all the relevant market ‘forces’ (carbon markets, SFI etc.), and reflect the fact that farmers are increasingly looking at their soil as a commodity that can generate income.
- Engage with governments across the UK. Volunteer research and support to help the communication and the roll-out of future farming schemes (e.g. SFI), and alignment with the core structures (metrics etc.) proposed.



“Be a catalyst for system-wide change. Spread ambition and best practice throughout the industry.”



# Annex 1 ► Businesses researched for this report

- |                             |                 |
|-----------------------------|-----------------|
| 1. Arla                     | 14. McDonald’s  |
| 2. Asda                     | 15. Mondelez    |
| 3. Associated British Foods | 16. Morrisons   |
| 4. Bakkavor                 | 17. Muller      |
| 5. Cargill                  | 18. Nestlé      |
| 6. Coca-Cola                | 19. Nomad Foods |
| 7. Co-op Food               | 20. PepsiCo     |
| 8. Danone                   | 21. Sainsbury’s |
| 9. G’s Fresh                | 22. Tesco       |
| 10. Heineken                | 23. Unilever    |
| 11. Kellogg’s               | 24. Waitrose    |
| 12. M&S                     | 25. Warburtons  |
| 13. McCain                  |                 |



# Annex 2 ► Survey questions

1. Does your business have an overarching regenerative/ sustainable farming/soil health ambition or commitment? Is it owned or linked to a third-party scheme with a specific target and definition for the terminology used? e.g. the 10 elements of agroecology as defined by the FAO or the Groundswell 5 principles of Regenerative Agriculture?
2. Does regenerative agriculture or soil management contribute to your company’s net zero/emission reduction strategy, if so how?
3. Do you generate (alone or in collaboration with others) advice or guidance aimed at farmers/land managers relating to soil management? Who are your partners in this work?
4. Do you champion specific soil management techniques (cover crops, minimum tillage, rotations etc.)? Do these focus on specific crops/farming types?
5. Do you undertake research (academic or in-field) that contributes to overall understanding of soil health including measurements of changes in soil health?
6. In general terms, can you share whether/how soil management features in your relations with suppliers (e.g. sowing/harvesting times) or the use of premiums/penalties?
7. How do you communicate with your consumers on soil health/ regenerative agriculture? Do you collect your consumer views/ opinions on soil health/regenerative agriculture and whether it affects purchasing behaviours? If so, what results do you get?
8. Is soil health reflected in your consumer communication or product certification campaigns? (n.b. those you own/drive, not 3rd party schemes e.g. LEAF, Red Tractor etc.)?
9. When developing soil health/regenerative agriculture policies, what challenges did you face?



# Annex 3 ▶ Soil health initiatives

## 1. Subsidies, Grants, Incentive schemes that reward sustainable farming practices and the implementation of specific soil management practices:

- **Tesco** has [subsidised](#) cover crops for potato farmers (over the last three years).
- In **Tesco's** Dairy group, if a farmer is in the bottom 5% in overall performance, the farmer will lose the **Tesco** contract.
- **Tesco's** [Sustainable Farming Groups](#) complete a 'sustainability scorecard' through which they are Incentivised to adopt soil management and improvement plans (higher scores can mean increased sourcing from them in the future or other incentives).
- **Tesco** has partnered with WWF to launch a [new subsidy scheme](#), providing 15 dairy farmers with an 80% seed subsidy for plants and herbs that boost animal health, water and soil quality while also cutting emissions.
- **Nestlé's** [Sustainability Bonus](#) seeks to incentivise soil sampling.
- **Müller** incentivised up to 600 **Müller** Direct farmers in Britain to participate in **Müller Advantage**, a programme providing farmers with the tools and support that they need to address a range of issues including reductions in environmental impact.

## 2. On-going advice via in-house/3rd party agronomists, technical partners :

- Both **Morrison** and **Waitrose** have technical advisors with close working relationships with their supplying UK farmers to advise on harvest times (no set rules, only informal agreements).
- **Kellogg's** collaborates with experts including the Game and Wildlife Conservation Trust (GWCT) to offer soil advice to Origins farmers.
- **Waitrose** runs a [training course](#) for technical managers and agronomists in their grower base with the University of Lancaster.
- **Sainsbury's** Agronomy lead is a recognised soils and farming systems expert, previously Head of Farming Systems research at NIAB.

## 3. Guidance/toolkit development in partnership with 3rd party experts:

- **Tesco** created [guidance](#) on how to create a soil management plan for their Sustainable Farming Groups (distributed to over 1,000 farmers and made available to first tier suppliers who have relationships with farmers and growers).
- **Kellogg's** collaborated with NIAB TAG to produce a [cover cropping guide](#) for wheat farmers.
- **PepsiCo** [Oat Growth Guide](#) was a 5 year research project co-funding by Innovate UK and Biotechnology and Biological Sciences Research Council (BBSRC). Growers can assess the progress of their crops against the benchmarks in the guide and modify their management practices accordingly.
- **Asda** partnered with the University of Cambridge Institute for Sustainability Leadership and NIAB to launch a [soil assessment tool](#) (covers physical, biological and chemical assessment).
- The **Tesco-WWF** partnership funded [guidelines for soil management on farm](#), a series of sector-targeted leaflets, with CFE and the UK Soil Health Initiative.
- **Asda** and LEAF developed a publicly available '[Simply Sustainable Soils](#)' booklet for their farmers and growers.

## 4. Information collection on soil health/management practices (data, surveys, benchmarking etc.):

- **Nestlé** is working with First Milk and Agricarbon on a [soil carbon capture project](#) to establish a scientifically robust soil carbon baseline for FirstMilk farms and carry out intensive soil carbon analysis at a fraction of usual costs.
- **Nestlé** is working with the GWCT to create a [bespoke web-platform](#) to record details of the environmental measures on their dairy farms.
- The **Arla** [360 programme](#) includes a plan to maintain and enhance soil quality over a 5 year period, soil sampling regularly and optimising nutrient balance.
- **Waitrose** is looking to relaunch the **Waitrose Farm Assessment** through which they assess their farms on a number of sustainability measures including soil health.
- **McDonald's** is [monitoring](#) some of their sustainable beef farms to measure progress and aim to launch a farmer training program based on this.
- **ASDA** in partnership with NIAB conducted a [Sustainable Soils Survey \(2018\)](#) with their suppliers of leafy salads, field vegetables and potatoes.
- **Sainsbury's** have recently become involved in the collaborative [SEEBEYOND project](#) with the Environment Agency looking at metrics and the potential for earned recognition based on metrics collected and reported.

## 5. In-field research including pilot/demonstration/model farms :

- **Waitrose** is a founder of [Innovative Farmers](#), a group of farmers, land managers and advisors working on on-farm trials. Farmer Field Labs have projects focussing on topics including soil health and management practices. The network is backed by a team from LEAF, Innovation for Agriculture, the Organic Research Centre and the Soil Association.
- **M&S** '[Farming with Nature](#)' is a collaborative programme to support its Select Farmers to become more resilient to the biggest environmental challenges they face, including soil health. Supported by the Wildlife Trusts, the Farming & Wildlife Advisory Group, the GWCT and FERA.
- **Kellogg** has partnered with wheat farmers in [Northampton](#) focused on identifying ways to help improve soil health, boost yields and reduce the environmental impact on the farms.
- The **McDonald's** [FAI Adaptive Multi Paddock \(AMP\)](#) project looks to gain valuable insight into what AMP grazing looks like on a successful commercial UK beef system. The project is also creating a training platform that will help industry and other producers.
- **Kellogg's** [Origins programme](#) includes more than 40 active projects encouraging better soil management practices, including cover cropping, nitrogen management, silvopasture, expanded field margins, integrated pest management and crop rotation.
- **Heineken** is working with Sustainable Futures to launch pilot farm trials focusing on low carbon farming within barley production (30 farms over 3 years).
- **Mondelez** [Harmony Wheat program](#) across Europe aims to improve local conditions and farming systems, including to reduce pesticides. The aim is for [100%](#) of EU wheat to be sourced via this program by 2022.
- **Sainsbury's** worked with their orchard crop growers to practically develop and test soil health assessments for orchards.



## 6. Academic research on both science and behaviour change (partnership and funded) :

- **Arla** has secured BEIS funding for a [biochar innovation project](#) to explore greenhouse gas removal for farmers.
- **Morrisons** is working with Harper Adams University on a virtual collection of existing and new programs on best practices for farming and wider industry.
- **Waitrose** obtained funding from the BBSRC for their [Collaborative Training Partnership](#) scheme, to offer over 30 PhD studentships in sustainable agriculture topics including soil management.
- **G's Fresh** is working with the Cambridgeshire peatland commissions and Reading University on understanding the condition of peatland and GHG mitigation.
- **Sainsbury's** is supporting PhD projects at Cranfield University (e.g. looking at the impacts of bio-stimulants on soil health).
- **McDonald's** and the Prince's Countryside Fund are [collaborating](#) on research to help farmers make their farms more resilient, how to adapt their activities and make informed decisions about their businesses.
- **McDonald's** is working with the Allerton project and other universities on how to get behavioural change in farmers.
- **Pepsico** is working alongside Cambridge University Farms to develop [iCrop](#), an innovative system of sensors which measure soil moisture.
- **Pepsico** has partnered with [CCm Technologies](#) to turn potato waste into fertiliser. Long-term use will improve soil health, aiding a natural carbon sequestration process.

## 7. Pan-industry collaboration either crop or geography specific:

- The [Sustainable MacFries Fund](#) set up in partnership with **McDonald's** and **McCain** aims to support British potato farmers to use new techniques and technology that will improve soil quality and water management.
- [Water Sensitive Farming in East Anglia](#) (CameO/Broadlands) initially established by WWF-UK, **Coca-Cola** and supported by **Tesco** and **Asda** is providing confidential independent farm advice and funding on soil and water.
- **Sainsbury's** participated in the Rothamsted led BBSRC 'S2N' project, working with NIAB as part of their AHDB/BBRO soil work to develop guidelines for soil health assessment, resulting in the [Soil Health Scorecard](#).
- **ABF** have worked with [Jordan's Farm Partnership](#) (with Leaf Marque and the Wildlife Trusts) with their Rye growers which has soil management complements within it.
- **Nomad Foods** is a partner in the [The Sustainable Landscapes Humber Project](#), a 2020 pilot where 40 farmers growing peas for Birds Eye UK planted cover crops to capture carbon, reduce flooding and improve soil health. The project is being repeated in 2021.

## 8. Standards/metrics implementation according to 3rd party schemes:

- All of **Waitrose UK fresh fruit and vegetables** are grown to [LEAF Marque standards](#) (standard 2 covers 'Soil Management and Fertility' - see Annex 5).
- **M&S** ask all their [UK growers](#) to be LEAF Marque certified and as part of the M&S Farming with Nature programme, **M&S** will partner with LEAF to deliver a programme of modules for **M&S** growers.
- A number of retailers including **Morrisons** and **Waitrose** support the development of the [Global Farming Metrics](#) (soil is one of the 11 categories).
- **Tesco** will be ensuring its [14,000 fresh produce growers](#) are LEAF Marque certified by the end of 2022 and will begin the process of certifying the rest of its global grower base from 2023, with the aim of completing the transformation by 2025.

## 9. Consumer engagement and education about soil health through marketing, comms etc :

- **Waitrose** [Food Magazine](#) features publications that have touched environmental management of farms, soil management and the use of grazed cover crops.
- **Sainsbury's** ['Plan for Better' campaign](#) actively promotes recipe choices that help customers link healthy food to healthy soils.
- **Sainsbury's** is a primary sponsor of the [LEAF Farmer Time programme](#) which links schools with farmers to help school children better connect with food and farming (including soils).

## 10. Strategic Target setting through CSR/ESG reporting that showcases soil's strategic importance:

- **McCain** commits to regenerative agriculture across [all farms by 2030](#).
- **Tesco** has a public ambition in its Little Helps Plan to source all food sustainably. Within the Sustainable Agriculture agenda the ambition is to [improve soil health](#) within the supply chain.
- "Rebuilding soils" is part of **McDonald's** [Climate Action](#) strategy.
- **Waitrose's** [Agricultural Strategy](#) ambition is to introduce regenerative farming techniques as widely as possible. The aims include to adopt and encourage soil improvement and enhancement.
- **Pepsico** is working towards its global [Positive Agriculture ambition](#) including the spread of regenerative farming practices across 7 million acres.
- **Unilever** has developed a set of [Regenerative Agriculture Principles](#) (global), to have positive impacts from agricultural practices on soil health.
- Principle 14 of **Coca-cola's** global [Principles for Sustainable Agriculture](#) is on "Soil Management: Maintain and improve soils and prevent degradation, minimize greenhouse gas emissions, protect soil biodiversity and enhance soil structure".



# Annex 4 ▶ Regenerative Agriculture

Globally, there is no legal or regulatory definition of the term Regenerative Agriculture and no widely accepted definition ([Newton et al 2020](#)). Farmers and stakeholders in the UK often refer to the term as defined by [Groundswell](#) (the regenerative agriculture show and conference) as “any form of farming, i.e. the production of food or fibre, which at the same time improves the environment. This primarily means regenerating the soil. It’s a direction of travel, not an absolute.”

13 out of the 25 businesses studied in this report use the term “regenerative” in marketing material and/or their websites. 12 of these refer directly to soil health, however, they also use the term to refer to a broader scope of activities, including other sustainability outcomes such as climate and farmer resilience, water quality, animal welfare and biodiversity. Many of these businesses agreed with Groundswell’s philosophy that regenerative agriculture is a direction of travel rather than an absolute.

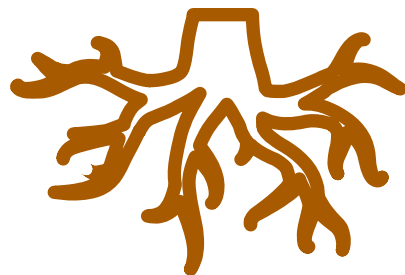
Groundswell state [5 principles of Regenerative Agriculture](#)



1. Don’t disturb the soil.



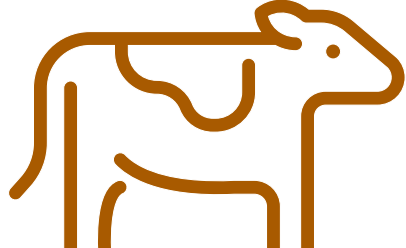
2. Keep the soil surface covered.



3. Keep living roots in the soil.



4. Grow a diverse range of crops.



5. Bring grazing animals back to the land.

Organisation	Use of the term regenerative (marketing material and/or website)	Definition of regenerative	Agricultural practices referred to as regenerative	Regenerative specific targets
Asda	Asda’s 2025 Nature goals refer to having “a regenerative impact on nature, all food sustainably produced”	N/A	Integrated Pest Management (IPM), cover cropping.	N/A
Cargill	Regenerative Agriculture is how Cargill is “working to mitigate climate change, regenerate soil and improve water use, while nourishing the world in a more sustainable way.”	N/A	Cover cropping, reduce soil tillage, optimize nutrient management, sustainable grazing techniques.	N/A
Danone	Since 2017 Danone has been working to develop and promote regenerative models of agriculture.	“Danone announced its intention to sharpen its focus on regenerative agriculture, our term for a combined set of practices that strengthen agricultural resilience. We see regenerative agriculture as resting on three pillars: protecting soil, empowering a new generation of farmers, and promoting animal welfare.”	Limit chemical inputs, crop rotation, reduce soil tillage, and use crop residues as compost.	N/A
G’s Fresh	G’s Fresh claims to “embrace the principles of regenerative agriculture and a circular economy”.	N/A	N/A	N/A
Kellogg’s	One of the aims of Kellogg's Origins programme is to “regenerate soil health”.	N/A	Cover crops, improved nitrogen management, IPM, silvopasture, field margins, crop rotation.	The Origins programme aims to support 1 million farmers by 2030.



Organisation	Use of the term regenerative (marketing material and/or website)	Definition of regenerative	Agricultural practices referred to as regenerative	Regenerative specific targets
<u>McCain</u>	In 2020 McCain committed to supporting regenerative agriculture.	“Regenerative Agriculture is an ecosystem-based approach to farming aiming to increase farmer resilience by enhancing soil health, and protecting biodiversity to improve yields, while reducing dependencies on synthetic inputs”.	Cover cropping, minimise soil disturbance, diversify crops and ecosystems, reduce agro-chemical impacts, optimising water use, integrating organic and livestock elements.	Commit to regenerative agriculture across all farms by 2030.
<u>McDonald’s</u>	McDonald’s <u>Plan for Change</u> strategy includes a goal on regenerative agriculture. McDonald’s has also partnered up with FAI to trial a regenerative grazing technique: Adaptive Multi Paddock (AMP) grazing.	McDonald’s <u>A-Zero guide</u> in partnership with the Prince’s Countryside Fund, defines regenerative agriculture as “a range of farming principles and practices that aim to optimise food production and improve the environment. The fundamentals of regenerative agriculture are increasingly seen as good practice, such as reduced tillage, leaving crop residues on the soil, and the use of cover crops. Examples of environmental improvements from regenerative agriculture include increased biodiversity and carbon sequestration in the soil”.	AMP grazing, reduced tillage, leaving crop residues on the soil, cover crops.	By 2025 have regenerative agriculture initiatives in each of their priority supply chains to promote soil health, water management and biodiversity.
<u>Nestlé</u>	Nestlé is investing CHF 1.2 billion by 2025 to contribute to building regenerative agriculture practices because nearly 2/3 of their emissions come from agriculture.	N/A	Tree planting.	Aim to source 20% of key ingredients through regenerative agricultural methods by 2025, 50% by 2030.
<u>Nomad Foods</u>	Nomad Foods has partnered with WWF to promote sustainable agriculture including regenerative agriculture to enhance biodiversity.	N/A	Flower borders, cover cropping.	N/A
<u>PepsiCo</u>	Pepsico’s global Positive Agriculture ambition includes the spread of regenerative farming practices.	N/A	Low-carbon fertiliser, using moisture sensors.	Spreading regenerative farming practices across 7 million acres.
<u>Sainsbury’s</u>	Sainsbury’s mentions the value of regenerative agriculture in their 2019 Future of Food report.	N/A	Tree planting, holistic management process for grassland grazing, saltwater farming, re-establish native species, IPM.	N/A
<u>Unilever</u>	In 2021 Unilever developed a new set of “Regenerative Agriculture Principles” to enhance their existing Sustainable Agriculture Code.	The Unilever Regenerative Agriculture Principles “are agricultural practices focused on delivering positive outcomes in terms of nourishing the soil, increasing farm biodiversity, improving water quality and climate resilience, capturing carbon and restoring and regenerating the land”.	Cover cropping, wildlife corridors, straw rich manures, nesting facilities, crop rotation, crop diversification, intercropping, strip cultivation, diverse field edges, farming perennials, agroforestry.	N/A
<u>Waitrose</u>	The Waitrose Agricultural Strategy’s ambition is to: "Support farmers to farm with nature, by enhancing biodiversity and playing our part in regenerating the natural resources we all rely on".	Waitrose responded to the SSA questions using Cranfield University’s <u>definition</u> of regenerative agriculture: “A system of principles and practices that generates agricultural products, sequesters carbon, and enhances biodiversity at the farm Scale”.	IPM, mixed lays and planting legumes, planting wildflowers.	N/A



# Annex 5 ▶ Soil in certification schemes

## Red Tractor Certification

Red Tractor is the UK’s largest food chain assurance scheme, covering animal welfare, food safety, traceability and environmental protection. The Standards most relevant to soil are under the ‘Environment Protection’ section of all six of the scheme’s sectors. In an industry-wide consultation in March 2021, Red Tractor proposed several soil specific amendments, including the inclusion of the Farming Rules for Water, which are already legislation and aim to reduce soil erosion and nutrient run-off. However, these soil-related amendments are not in the [revised Standards](#) coming into effect in November 2021.

## LEAF Marque Standard

LEAF Marque is a leading global assurance system, recognising more sustainably farmed products. Principles of Integrated Farm Management (IFM) underpin the requirements of the LEAF Marque certification. Standard 2 in the [LEAF Marque Standard](#) covers ‘Soil Management and Fertility’, with 14 standards (three of which are recommended rather than essential), including implementing a Soil Management Plan and measures to conserve and build up soil organic matter (both of which are essential). In the newest version of the LEAF Marque Standard (which came into force in January 2020), it is now recommended (not essential) to measure soil health (Standard 2.14).

## Soil Association Certification

Soil Association Certification is the UK’s largest organic certification body. Section 2.4 on ‘Managing your soil’ in the [Soil Association Farming and Growing Standards](#) details how an organic production system must maintain and enhance natural soil fertility, good soil structure, stability and biodiversity, preventing and combating soil compaction and soil erosion. The section includes 2 standards, one on managing soil fertility, including guidance on how to achieve this and another prohibiting hydroponic production.

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7. According to the Environment Agency, intensive agriculture has caused arable soils to lose 40 to 60% of their organic carbon, and the impacts of climate change pose further risks.

8. 1/3 of UK soils are thought to be degraded

9. 36% of all arable land in the UK is at risk of erosion.

10. Out of the 25 businesses studied in this report, 52% make reference to the importance of restoring and/or maintaining soil health.





SUSTAINABLE  
**SOILS**  
ALLIANCE

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Sustainable Soils Alliance is a non-profit organisation (CIC number 10802764)

The Sustainable Soils Alliance (SSA) was launched in 2017 to address the current crisis in our soils. It campaigns for soil to be placed at the heart of post-Brexit farming and environment policies - including regulations, incentivisation, guidance and advice. To learn more about our work, please visit our website: <https://sustainablesoils.org>.

The report was funded by the Sustainable Agriculture Workstream of the WWF-UK and Tesco Partnership.

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With food production at the centre of many environmental issues, WWF-UK and Tesco have come together with a shared ambition: to make it easier for customers to access an affordable, healthy and sustainable diet. Through the partnership we aim to halve the environmental impact of the average UK shopping basket. In order to deliver this, we are focusing on three key areas: helping customers to eat more sustainably, restoring nature in food production and eliminating waste.

To learn more about the WWF-UK and Tesco partnership, and our work on sustainable agriculture, at [www.wwf.org.uk/basket-metric](http://www.wwf.org.uk/basket-metric).

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