

**Response to the
Welsh Sustainable Farming Incentive Scheme consultation**

The Sustainable Soils Alliance (SSA) was launched in 2017 to address the current crisis in our soils. Its aim is to campaign to restore UK soils to health within one generation by seeing soil health elevated to where it belongs as a priority alongside clean air and clean water. The SSA is a non-profit organisation (CIC number 10802764).

Q2. There will be Universal requirements in the SFS to have woodland cover at least 10% of suitable land, and to manage a minimum of 10% of your farm for biodiversity.

a) What are your views on these requirements?

b) What support might you need to achieve them?

Whilst we welcome the emphasis on woodland creation and nature recovery within the scheme, we also recognise the concerns among farmers about the effect of taking up to 20% of land out of production, and the impact this will have on margins, given that little detail is provided on how this will be compensated.

There is an opportunity to partially mitigate these concerns by helping farmers generate income from the emerging private markets for ecosystem services - biodiversity, soil carbon, afforestation etc. This includes land given over to nature or woodland, but we would like to draw the Welsh Government's attention specifically to the marketplace for farm soil carbon. This market is particularly important because, unlike woodland and nature conversion, farmers can receive investment for improved management practices while continuing to produce food.

Ecosystem markets are new, and evolving rapidly, meaning it is unclear to farmers how they can get involved, what the long-term implications are for their business and who they should trust. Dedicated advice and support is needed here, as well as clarity about the legal, practical, and technical issues that need to be addressed to ensure that the SFS and private markets will align.

To facilitate this process, we advise the Welsh government to:

- Evaluate the potential of Welsh agriculture to remove carbon from the atmosphere and store it in soils through sequestration resulting from improved management techniques. This would be facilitated by investment in soil carbon baselining, and we would draw the Welsh Government's attention to Northern Ireland's Soil Nutrient Health Scheme which gives every farmer in the country a baseline estimate of the amount of carbon stored in their soils, hedgerows and trees. This information will not only indicate those areas that have the greatest potential to increase carbon stock, but also help open the door to investment from other sources.
- Incorporate into the CPD programme a specific module designed to help farmers understand the private marketplace for ecosystem services, the different opportunities to get involved (carbon, BNG, water management), the different income sources and the approaches taken to outcome measurement. In carrying out this work, we would draw your attention to the

work of the British Standards Institute (BSI): developing [standards](#) around ecosystems markets which should be used to inform the development of the SFS.

- Alongside this, aligned with the objective *Helping rural communities to thrive and strengthening links between agricultural businesses and their communities* we see a role for the SFS in helping farmers establish 'clusters' on similar farmland/farming types in their region. These clusters will not only promote informal peer-to-peer knowledge exchange, but also help make these markets more profitable for farmers by enabling them to bundle different nature projects together, bring down project overheads (scheme design, measurement etc) and maximise both economic and environmental impact.
- Investigate and clarify that, by making the 10% nature/woodland increase compulsory, the requirement does not inadvertently disqualify landowners from benefiting from private schemes on the same parcel of land, specifically on the grounds that they might fail the legal additionality test whereby schemes cannot generate credits/certificates where the activity is being carried out to meet an existing regulatory obligation.

Promoting the roll-out of fair, high-integrity ecosystem markets is a potential win-win. If administered correctly, the market could enhance farm incomes, combat climate change and lead to a healthier environment.

Given the concerns around the 20% target, and the surge in interest from investors buying up farmland in rural Wales for the planting of woodland at the expense of rural communities, a policy framework that rewards soil carbon sequestration in harmony with food production would be seen as pragmatic and balanced.

There are valid concerns about the farm carbon marketplace, specifically that farmers might inadvertently be contributing to greenwashing by helping businesses offset their emissions. However, we would highlight that the majority of market growth is coming from businesses that want to avoid, reduce or sequester carbon upstream or downstream within their own value chains (Scope 3 emissions). In the UK, the pioneers of this approach have been dairy businesses looking to secure low carbon futures, but other food and drink manufacturers and retailers are increasingly investing in supply chain emissions reductions and removals (soil carbon sequestration, tree planting). Banks have also identified a significant exposure to land-based emissions through their loans to the farming sector.

Investment from these businesses has the potential to stimulate and accelerate the growing commitment to net-zero farming by farmers, supply chains, consumers and financial institutions and the adoption of nature and carbon-positive farming practices - a transition that has been limited to date, reflecting diverse economic, social and environmental barriers which the Welsh government has a responsibility to address.

Q.3 Aside from the 10% woodland and habitat requirements, will the Universal Actions:

a) Provide benefit for your farm business?

b) Provide an achievable set of actions paid for through the Universal Baseline Payment?

We welcome the focus on soil health planning and the steps proposed are practical, proportionate and achievable and send an important message to land managers about the importance of soil health. We have suggestions about areas where further detail/consideration is needed to ensure the soil universal action can benefit farm businesses:

- We would like to see soil health built into the general farm benchmarking process since the ability for farmers to compare their soil with neighbours on similar land and in similar land

management is critical to context-specific interpretation, long-term engagement and driving management change. To that end we look forward to seeing further detail about how RPW online will be used to demonstrate trends over time and enable farmers to make future decisions. To what end will this data be available, and will it be connected with nationwide soil monitoring?

- The Universal Soil Action Plan is described as ‘linked’ to a farmer’s requirements for a Nutrient Management Plan (NMP), and we feel this should be clarified. Our experience (e.g. in England) is that farmers are often confused (especially when it comes to measuring soil chemistry) about what is a legal requirement, what is best practice and what is a baseline for payments. As such we would like to see this made explicit in the *detailed guidance on the soil testing methodology* to ensure farmers are not getting mixed messages about what is expected of them. This guidance should direct the parameters of soil measurement purposes of both compliance and the SFS, with the aim of making it as straight-forward as possible for farmers to carry out one test.
- The scheme refers to the use of ‘competent laboratories’ for testing soil (esp SOM). To what extent has the Welsh government established that these laboratories have the capacity to cope with a sudden increase in demand for their services? Unforeseen delays in receiving test results (especially for soil organic carbon) could undermine confidence in the scheme.
- We question why soil structure (VESS) and biology (earthworms) are not included among the metrics for immediate roll-out of the soil testing plan since these are critical indicators of soil health and increasingly well understood by farmers. They are included in the AHDB Soil Health Scorecard – the set of practical indicators for the routine measurement and monitoring of soil health – which has been developed with and validated by Welsh farmers. The scorecard includes a series of [benchmark values](#), developed on Welsh farms that can be tied in with the on-farm benchmarking proposed.
- When it comes to incorporating soil structure into the scheme, we would highlight the importance of subsoil – that soil which lies below the depth of regular cultivation, and in particular the importance of understanding sub-soil compaction. One of the most widespread causes of soil loss and erosion is compacted subsoils, resulting from heavy machinery use on wet ground. This restricts water drainage causing run-off, the formation of gullies and erosion. Compacted subsoils also restrict root growth and therefore the plant’s ability to access water and nutrients – exacerbating problems related to water scarcity and pollution. Welsh sub-soils are particularly susceptible to sub-soil compaction due to slow permeability and high rainfall, or high groundwater.
- The document is right to raise the need for soil assessments to be compatible with carbon calculators. Soil measurement is of growing importance in these tools since removals via carbon sequestration can help offset emissions elsewhere and bring a farm’s footprint closer to zero.

The choice of which measurement method to use will be directed by the outcome desired, the integrity/accuracy of the results required, and the cost incurred. It is necessary to distinguish between the integrity/accuracy of soil organic carbon measurement for the purpose of understanding overall soil health, and for quantifying it for sale in a carbon marketplace.

The impetus to meet Net Zero and to farm in a low carbon manner as well as the prospect of a new source of income from selling farm soil carbon are all driving farmers to measure their SOC/SOM. We see a role for the SFS in advising on the opportunities and limitations of different measurement approaches – to ensure farmers understand what is expected of them, keep their costs down and access emerging ecosystem marketplaces.

Q4. On-farm data reporting allows the Welsh Government to confirm actions are being undertaken and help you to make decisions about your farm. In your view, is the reporting requirement for the Universal Actions appropriate?

We welcome the prospect of soils data reporting, since we see the generation of soils data (in exchange for public money) as a public good in its own right. To be valuable, however, this data collection needs to be consistent and comparable with data generated by other sources and accompanied by clear safeguards around its storage and use by third parties.

As it stands, the soil health planning UA indicates that records will need to be retained and made available to the Welsh Government on request, but not (so far) what data on soil will be collected, how it will be used, stored, processed and used more widely etc.

It would add considerable value to this data (farmer and national benefit) if data collected through the SFS can be collected in a manner that makes it consistent/inter-operable with that collected by other stakeholders – food and drink businesses, banks, insurance companies etc, as well as nationwide via soil monitoring schemes. The SFS has a role here in establishing a universal approach – metrics and protocols – that can be adopted by others.

The indicators the SFS has identified represent the core metrics, but numerous different methodologies are employed elsewhere to collect data for different outcomes with diverging technical detail. A universal approach championed by government would help overcome this.

Q7. We are proposing the use of a single carbon calculator for everyone in the Scheme. Do you agree and how might we best support you to complete this?

We would draw the Welsh Government's attention to the recently launched report by Defra – [‘Harmonisation of Carbon Accounting Tools for Agriculture’](#) which might provide insights into which tools would be most effective for your purposes.

An argument against a single calculator would be that these tools are emerging rapidly, and some degree of competition will help drive innovation and the application of new technologies to increase the value and accuracy of the results.

Soils are a good example of an area where more research and innovation is needed. According to the DEFRA report: *There was no single consistent approach taken to assess carbon removals or emissions from soils, vegetation and land use change within the calculators, reflecting a lack of clear and consistent guidance in this area.*

The report concluded that: *‘Improved guidance on a standardised approach to assessing and quantifying carbon removals in soils, vegetation and from land use changes will support greater harmonisation of approaches in calculators around carbon removals.’*

Whatever calculator(s) are chosen, they should be expected to be able to incorporate new generation software available which can account for the complexity of farm systems, including the measurement/modelling of soil carbon change under different management systems, while still being practical to use at farm-level.

Q8. To ensure continued high standards on our farms, we have outlined a proportionate approach to controls and sanctions, including compliance with additional legislation as a condition of Scheme payment. Do you have any views on this approach?

When it comes to soil, there is overlap between the soil health UA and the requirement under The Water Resources (Control of Agricultural Pollution) (Wales) Regulations 2021 - details [here](#) whereby farmers must produce and maintain a risk map, consider their soil when spreading fertilisers and develop a nutrient management plan.

There is a resulting danger of confusion between what is required by regulation and what is a UA condition for payment which needs to be addressed. Regulations and incentives need to act in harmony and the UA needs to be used as a vehicle to drive regulatory compliance. However, as it stands the soils UA makes no mention of the 2021 regulations.

There needs to be clear explanation in the objectives and in the supporting material and guidance for both policies about how they interact, as well as the consequences for any breach (loss of payment, the triggering of inspections, other sanctions) of any actions/negative outcomes.

Specifically, farmers need to be given clear advice to help them carry out soil and nutrient management tests that achieve regulatory and UA compliance simultaneously so they don't have to repeat the exercise for different outcomes.

Q10. We would like to know your views on the proposed approach to:

- a) the SFS universal baseline payment**
- b) the SFS stability payment**

The foundation for the Universal Baseline Payment is defined as Income Forgone Plus Costs (IFPC). In advance of the publication of the proposed rates, we have some questions/observations about this approach:

- We question whether the use of IFPG is based on the need to achieve compliance with 'green box' World Trade Organisation (WTO) rules on state aid. To that end, we would urge the Welsh Government to consider that putting productive land into environmental options (the 20% requirement) will limit – not promote – national agricultural production, increasing Wales's reliance on imports. This should protect the scheme against any WTO complaint on the grounds of unfair trade distortion and open the door to a more generous outlay than is currently proposed.
- A logical approach to be considered alongside IFPG would reflect the natural capital approach to valuing nature – and the societal cost of degradation. In the case of soils, the cost of degraded soils (UK and Wales) is estimated at £1.2 billion per year. This needs to be factored into the calculation, alongside those of other environmental indicators to understand if the scheme is adequately targeted at procuring priority environmental goods.
- We consider it vital that the underlying figures behind the income/costs assessment are published to demonstrate transparency about how calculations are made, specific to each of the individual actions. This should be accompanied by a commitment to review regularly, especially in the face of extreme weather/geopolitical events (Ukraine etc).
- Ultimately the scheme payment must make participation attractive enough to incentivise those who need to make the fundamental shift and change their farming system rates, rather than those farmers who are already on a journey to sustainable farming.
- The IFPC – as a one size fits all approach fails to account for variations between different farms and the financial risk to which growers are exposed as a result of the much greater amount of time required to establish small areas of wildlife habitat/trees compared to equivalent areas of crop, particularly in a difficult year. The 'costs' calculation needs to

reflect the considerable time and resource needed to upskill land managers on new aspects of the scheme.

Q12. What actions and support within the Optional and Collaborative layers do you believe should be prioritised?

When considering what actions the government should support through the Optional and Collaborative layers, the Welsh government should consider the financial opportunities represented by the emerging market for ecosystem services, and not duplicate them (i.e. spend taxpayer money where private income is available) or inadvertently crowd them out.

A good example is long-term soil carbon storage. As it stands, farmers who have historically managed their soils well and so maintain high levels of soil organic carbon stock will be particularly disadvantaged by the new farming regime. Like their peers, they will lose their basic payments, but unlike their peers they will be unable to participate in the emerging carbon market since their soils will be at or close to SOC saturation levels – meaning they cannot sequester more carbon.

The private sector is interested only in ‘Additional’ carbon sequestration and is unable to pay for carbon maintenance.

Soil organic carbon is a key component in soil health, and maintaining high levels of SOC, which often requires decades of dedication, learning, experimentation, labour and capital investment – should be considered a public good to society, similar to maintaining, for example, species rich hay meadows to support biodiversity.

Rewarding carbon storage should be considered where more profitable (e.g. arable) options are available to farmers and with it the temptation to plough up the land and thus release carbon into the atmosphere.

Such recognition would also be consistent with the growing appreciation within the UK political system of a resilient, domestic food system, shorter supply chains, and food security - maintaining the availability of food in face of increasingly common extreme weather events and trade disruptions is key to avoiding empty shelves on supermarkets.

There is precedent here. In its proposal for [Certification of carbon removals](#), the EU calls for future schemes *to positively recognise the action of first movers who have already engaged in carbon removal activities*.

Q16. We would like to know your views on which information and evidence should be used to monitor and evaluate the Scheme.

A variety of indicators should be used to evaluate the success of the SFS. These should embrace both environmental and financial outcomes, and proxy and direct results.

When it comes to soil, the following should be considered:

- An early indicator of the scheme’s impact on soil health will be the number of farmers participating in the scheme, and through compliance with the soil UA, routinely measuring their soils against the defined indicators. Soil measurement drives understanding and appreciation, an appetite to witness change over time and therefore the adoption of measures to protect and improve soils.

We would encourage the SFS to establish how many farmers have started to measure their soils as a result of their participation (i.e. those that had not done so before signing up) as this will be an important – and early – indicator of success.

- We welcome the inclusion of multi-species cover crop as a mechanism for delivering a variety of soil-specific benefits (erosion prevention, carbon sequestration etc). Through the collection of the data proposed it should be possible to illustrate the number of hectare under winter cover as a result of the scheme, and use that to model/estimate the likely impact on soil health, and the seven outcomes outlined. These estimations can then be reinforced over time through comparison with the data collected about changes in soil health.

Again, the impact of the scheme can be more clearly established if it can evaluate the number of farmers introducing a cover crop for the first time.

- Once full-scale soils data collection has begun, the results should feed into the overall picture of soil health in Wales, and should be used in comparison with national monitoring schemes (GB Countryside Survey, Glastir Monitoring and Evaluation Programme and Environment and Rural Affairs Monitoring and Modelling Programme) to assess progress against baselines.