May 2022

Soil Health Industry Platform (SHIP)
Meeting Summary

Introduction

On 25 May 2022, the Sustainable Soils Alliance (SSA) hosted the second meeting of the **Soil Health Industry Platform (SHIP)** - a collaborative initiative that aims to discuss, harness, align and amplify the efforts of major food and drink businesses (retail and manufacture) to improve soil health and address soil damage throughout the UK supply chain.

The meeting was attended by representatives of Tesco, Sainsbury's, Waitrose, Kellogg's, Nestlé, Yeo Valley, G's Fresh, Arla, Nomad Foods and Bakkavor, as well as guest organisations, NIAB and the National Trust. Representatives of Morrisons, PepsiCo, McDonald's and WWF sent their apologies.

The following is a summary, under Chatham House rules, of the discussions and decisions made during the meeting, organised according to the three key SHIP components, **Knowledge Exchange, Projects** and **Public Commitment.**

1. **Knowledge Exchange:** *An overview of relevant soil initiatives*

The meeting began with a discussion on developments in relevant soil related policies and initiatives that have taken place since the previous (March) SHIP meeting, based on the briefing note that had been disseminated before the meeting. Nestlé and Yeo Valley provided further detail on their new schemes:

- *Nestlé's Landscape Enterprise Networks*
  Nestlé and Anglian Water have invested in a landscape initiative working with 3Keel across East Anglia as part of a trading community called Landscape Enterprise Networks (LENs). The project is a partnership between different industries and businesses financing practices mutually agreed between farmers and businesses to improve their mutual natural setting (including soils). Through this collaborative model, businesses are able to gain an understanding of ways to reverse nature degradation and support farmers in doing so. For Nestlé, this is an opportunity to improve climate resilience and soil health within their supply chain.

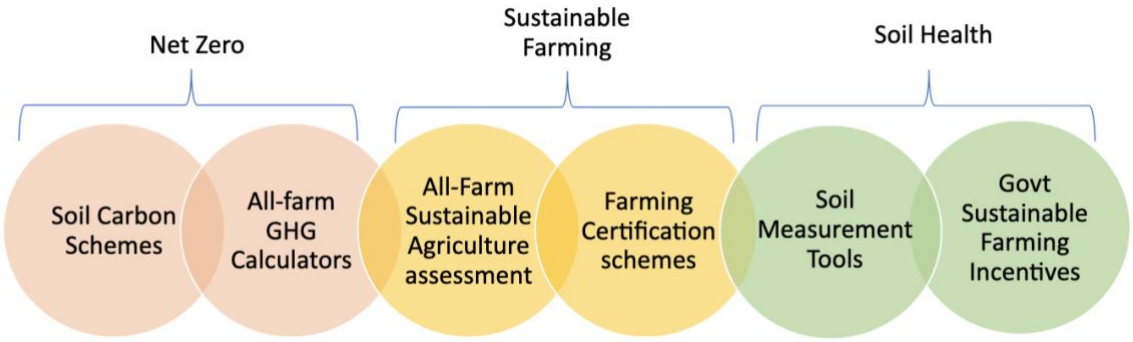
- *Yeo Valley's Regenerative Organic Farming Project*
  Yeo Valley has launched its Regenerative Organic Farming Project in partnership with the Farm Carbon Toolkit (FCT). The project is working with 25 dairy farms and monitoring changes in soil carbon. They are in the process of completing baseline measurements for these farms which they will reassess in 5 years time. The project has two outcomes: 1. Knowledge exchange between farmers 2. Robust data to identify which management practices sequester carbon.

Both businesses invited participants to get in touch to learn more and discuss either one of these initiatives further.

2. **Specific Actions:** *How can the Supply Chain contribute to the improvement of soil health*

Project 1 - Soil Measurement 'Drivers': Why, what and who is responsible

The SSA reiterated concerns raised by businesses at the previous SHIP meeting about the vast number of initiatives that include soil measuring and monitoring (public, private and NGO) which, it was feared, might lead to farmer confusion, disincentivizing behaviour change and a continued sense of a lack of leadership. The SSA presented an overview of these initiatives, in particular the three critical drivers: Net Zero, Sustainable Farming and Soil health as follows:



What	High-integrity, high-cost soil carbon measurements	Low/medium integrity/cost soil carbon (modelling)	Core soil health (specified)	Core soil health metrics (non-specified)	Core soil health metrics (specified)	Incentives for soil tests & management practices
Why	Insets/Offsets	Farm GHG calculations	Improve on-farm decision-making	Consumer/ stakeholder Information	To understand change in soil over time	A condition for payments
Who (e.g.)	Soil Capital, VERRA, Agreena	Cool Farm Toolkit, Agrecalc, Farm Carbon Toolkit	Soil Association Exchange, Global Farm Metrics, SAI Platform	LEAF, Red Tractor, Soil Association	NIAB/AHDB scorecard	SFI Soil Standards

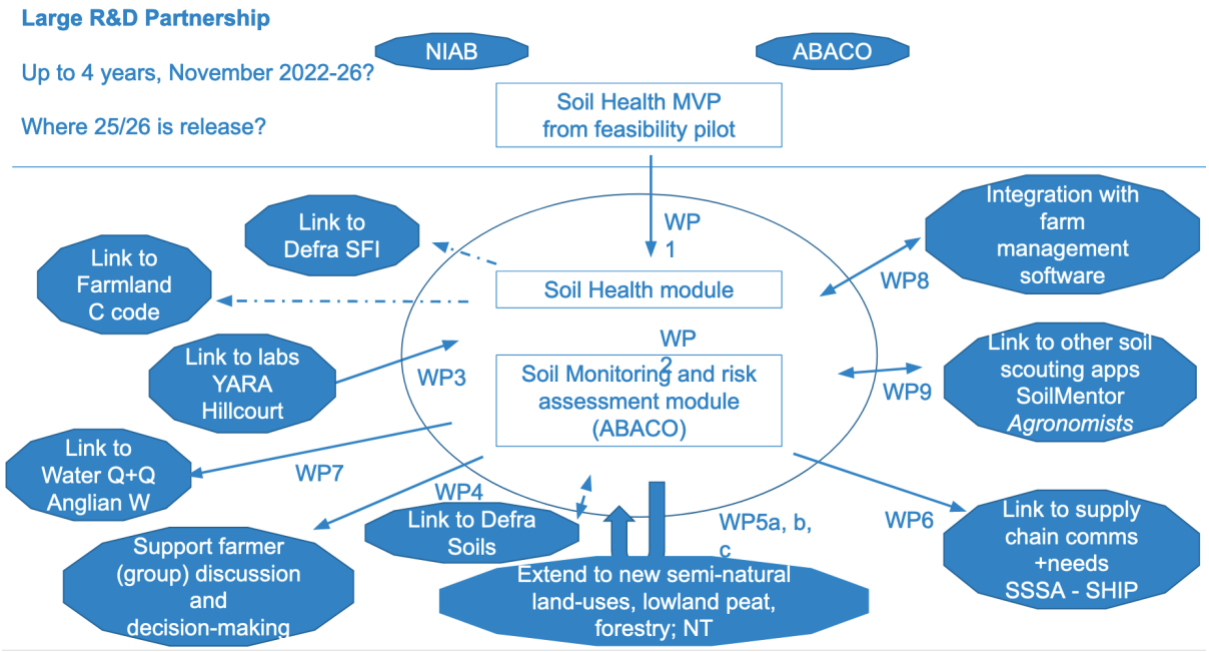
Discussion and next steps

- During the discussion that followed, it was agreed that many initiatives will fit into more than one of the three categories identified. For example, the Farm Carbon Toolkit offers both a GHG calculator as well as soil measurement tools and advice on sustainable farming practices. However, this exercise allows for a clearer understanding of the different drivers of soil health measurement. It would also enable the mapping/evolution of these schemes over time.
- Technology and innovation was highlighted as an area that runs through all three drivers. For example, Yeo Valley is participating in the RETINA project which they are currently applying to Defra funding for with the James Hutton Institute and other organisations including UKCEH, FWAG, Leeds University and Aberdeen University. The project is using field sensors to give live information on soil moisture and temperature, as well as satellite imagery to monitor farm management practices. There may be potential to develop an app from this that will advise on appropriate day-to-day farm practices. The project is also looking at modelling for soil sequestration baseline measurements.
- It was noted that it would also be helpful to explore the more widely available finance mechanisms for farmers and how to link these funds to soil health outcomes and practices. Some retailers have had encouraging conversations with banks who are willing to loan to farmers to enable them to better perform environmentally. It was understood that such loans would be given based on the indication that farmers are looking to improve their soils through farming practices.
- **The SSA will continue to update and adapt its model (diagram above) for mapping the different drivers of soil measurement and identifying new ones as they emerge.**

- **The SSA will research the issue of funding streams and how this might drive investment in both soil measurement and practice change.**

AHDB Soil health Scorecard

- Discussion then turned to the AHDB soil health scorecard, presented by Dr Elizabeth Stockdale (NIAB). Elizabeth explained that the final report summarising the work is due to be published in the months ahead including the scorecard itself and accompanying benchmarks. The full slide presentation is available upon request.
- The next step in the scorecard's development will be to digitise the process for easier adoption by farmers, land managers and growers, using a common standard to establish a baseline from which to measure improvements. NIAB has begun this work with a technology partner, ABACO (who work with the RPA and farmers across Europe). Next steps are as follows:
    - A Minimal Viable Product (MVP) has been developed, aimed at creating a useful tool to embed soil indicators and create conversations around soil health. It has an API (Application Programme Interface) with easy data entry to allow for data collection.
    - ABACO will be submitting a joint bid (on 29th June) with NIAB and other partners to the Farming Innovation Programme in order to develop the tool further.
    - This R&D partnership bid aims to work with as many partners as possible, so far these include: retailers (Tesco, Sainsbury and ASDA), laboratories (Yara and Hillcourt), water companies (including Anglian Water), National Trust (applicability to non-agricultural land including semi-natural habitats) and other soil applications such as Soilmentor. The aim is to collaborate and align with existing initiatives.
    - Arms-length bodies including Natural England and the Environment Agency have been informed of this work although they aren't able to be part of the bid due to it being government funded.
    - The project also seeks to align with Defra's Sustainable Farming Incentive (SFI), this will ensure farmers do not need to collect data more than once (for public and private schemes).

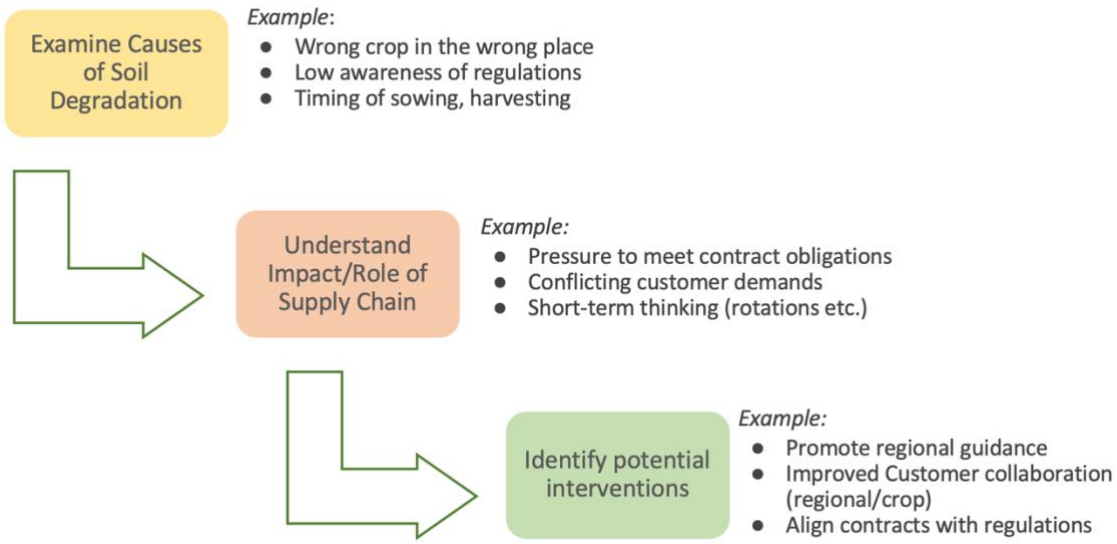


- During the discussion that followed, businesses already using the scorecard noted the following:
    - The scorecard is a practical tool to use and is applicable to most farming types.

    - It allows for data to be collected for supplying farmers and growers to report back to their customers and enables them to adopt more sustainable farming practices according to their farming context.
    - It can demonstrate whether businesses are taking the right actions when it comes to soil health by quantifying the impact of such policies on the ground – representing an opportunity for retailers and suppliers to aggregate this data.
- Participants agreed that the digitalisation of the scorecard would allow for industry to align on what the core soil indicators should be (these can involve and be amended) and ensure data on soil health is collected and used to report on business's efforts around sustainable agriculture and Net Zero.
- **The SSA will continue to liaise with Defra with the aim of ensuring the scorecard aligns with/is consistent to both the SFI and soil monitoring schemes.**
- **The SSA will propose itself as a partner in the tender for the Farming Innovation Programme, which will include using its role as the convenor of SHIP to disseminate the scorecard throughout the industry. SHIP members were invited to inform the SSA by the 10th June if they objected to this approach, and would like to discuss.**
- **Participants were also invited to get involved in the bid separately, and if so to contact Elizabeth Stockdale (NIAB) directly:** Elizabeth.Stockdale@niab.com**.**

Project 2 - Soil Degradation and the Supply Chain: Understanding food businesses' role and impact

In line with the conclusions in the SSA's *Soil in the UK Supply Chain* report, a priority project under SHIP will be the issue of soil degradation and erosion, its causes and the role businesses can have in addressing it. To better understand this process – and to show a proposed direction of travel this project area has been broken into 3 elements:



Discussion and next steps

- The businesses present agreed that the steps outlined were sensible, and it was an area in which businesses would be open to recommendations from the SSA.
- It was noted that the interaction of tenancy and ownership of land with soil degradation should also be considered as part of this project. Short term land ownership may both be the cause of soil damage as well as inhibit the adoption of practices to remediate soil damage which often require long term management practices.
- The role food businesses can play in addressing soil damage also needs to factor in what else is being grown as part of a rotation. For example, energy crops will also be having a significant impact on soils and will involve different players.

- Some businesses highlighted that it could be useful to look at the issue of soil degradation through the wider lens of food systems and food security, and what this might mean for consumer choices and diet changes.
- Another aspect of this work that was of interest is understanding the ways in which 'regenerative practices' may at times be causing further soil degradation or may not be addressing the causes of soil degradation. It is often assumed that regenerative projects tackle soil damage, so it would be useful for businesses to get a clearer understanding of what regenerative companies are asking of farmers and the impacts this is having on the ground.
- **The SSA will start by building the evidence base for the first two elements (through expert stakeholder engagement), before considering the third.**
- **It was agreed that representatives from the Environment Agency and 3Keel will be invited to the next SHIP meeting to explain the soil damage caused on farms and explore the ways in which businesses can help support farmers and mitigate such risks to soil health.**

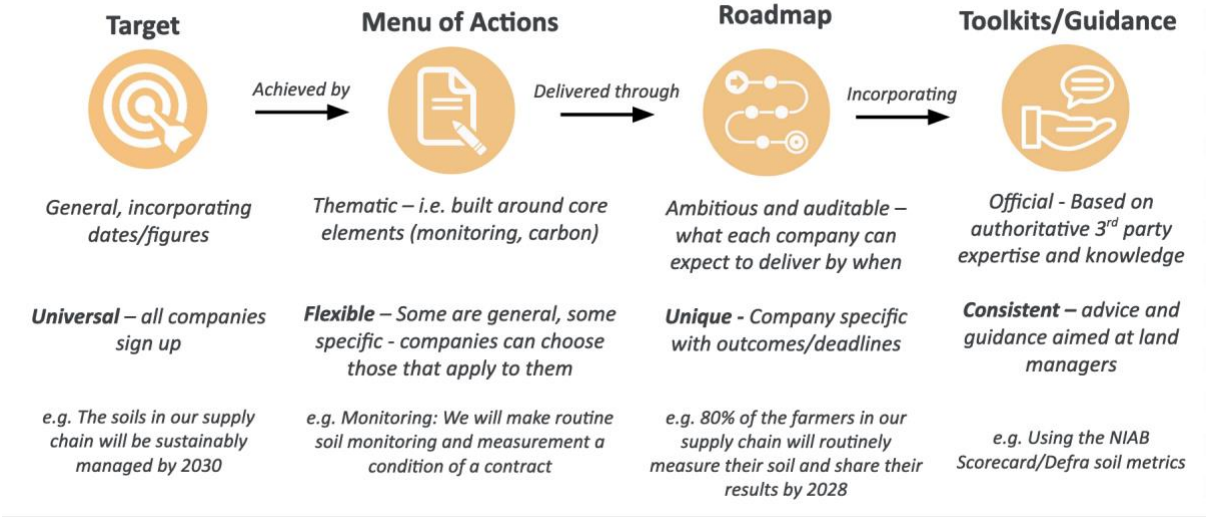
3. **Shared Commitment/Target:** *How can the Supply Chain demonstrate collective/measurable commitment to delivering soil health*

An ambition for SHIP is for participating businesses to establish a soil-specific target by the end of the year. This target will be co-created with the businesses and should balance ambition, alignment and flexibility. A target must be real, credible, measurable, accountable, as well as reflect some inherent limitations when it comes to soil, which are:

- The challenge of measuring 'soil health outcomes' (i.e., what metrics and timeframes to use).
- Soils are not under a business's direct 'purview' as they are not directly owned by businesses themselves and will be shared with other customers.
- Individual businesses also need to align with international ambitions.
- There are many other externalities (policies, science, funding streams) that are currently being developed which creates a certain degree of uncertainty, i.e., changing policies on soil management and nature-based carbon markets. A SHIP target must achieve consistency with these drivers, but not delay action while they come into force.

Based on all the above, the SSA proposed the following model for achieving industry alignment:

- **A target:** Something general like the government target of sustainably managed soils by 2030 which is easily communicable to a wider audience.
- **A menu of actions:** Through which the target is achieved. These actions will balance the need for flexibility and uniformity. Some actions will be crop or region specific, some will be more general, and some will incorporate SHIP-specific projects. These actions can be added to and evolve through time.
- **A roadmap:** Every business publishes a roadmap as to how it will achieve sustainably managed soils in their supply chains in order for progress to be measured. This ensures both accountability and transparency as well as recognises the need for different businesses to have different journeys.
- **Toolkit/guidance:** To inform the above, businesses are encouraged to take advantage of universal/authoritative third-party materials to ensure no work is duplicated and farmers are getting advice and guidance that aligns throughout the industry.



This model will be populated and built as the year goes on and businesses will be able to feed into draft iterations throughout the year. It looks to reflect the challenges outlined above and the fact that the Platform consists of very different businesses, from UK retailers to international manufacturers, hence the target will need to align with both internal and external commitments set at both a national and global level which relate to a sustainable farming agenda. Any commitment target should also look to align with and complement existing industry targets.

Discussion and next steps

- As a first step it was suggested that businesses may want to create their own draft business-specific roadmap for the SSA's input.
    - This roadmap will allow businesses to come up with an ambition that is reflective of their own unique circumstances. This will also allow businesses to sell the target internally once it is to be adopted.
    - This first draft will allow for the identification of gaps present in the current approaches businesses are adopting when it comes to soil health, which is something the *Soil in the UK Supply Chain* report identified. This will help ensure a future target is realistic as well as help identify which actions individual businesses should adopt to effectively deliver a target.
- **The SSA will look to discuss the model with individual businesses and develop the concept – including the 'menu of actions' for discussion at future meetings.**

<u>Next Steps</u>

- **Project 3 - *Expanding the scope of the SHIP*: Businesses were invited to share with the SSA suggestions for businesses who have clear and direct influence on farming practices and soil health but lack a public profile, and so might be harder to reach.**
- **Paying vs non-paying businesses: Given that eight businesses have now signed up to participate in the Platform, it was agreed that non-paying members would not be invited to participate at future meetings. However there will be opportunities for these businesses to receive an update on what the Platform is working on and businesses will be welcomed to join SHIP at any point.**
- **Next meeting: The SSA will send a doodle poll for the next meeting that will take place at the end of July.**