Global Farm Metric
UK Trials and Case Studies 2022

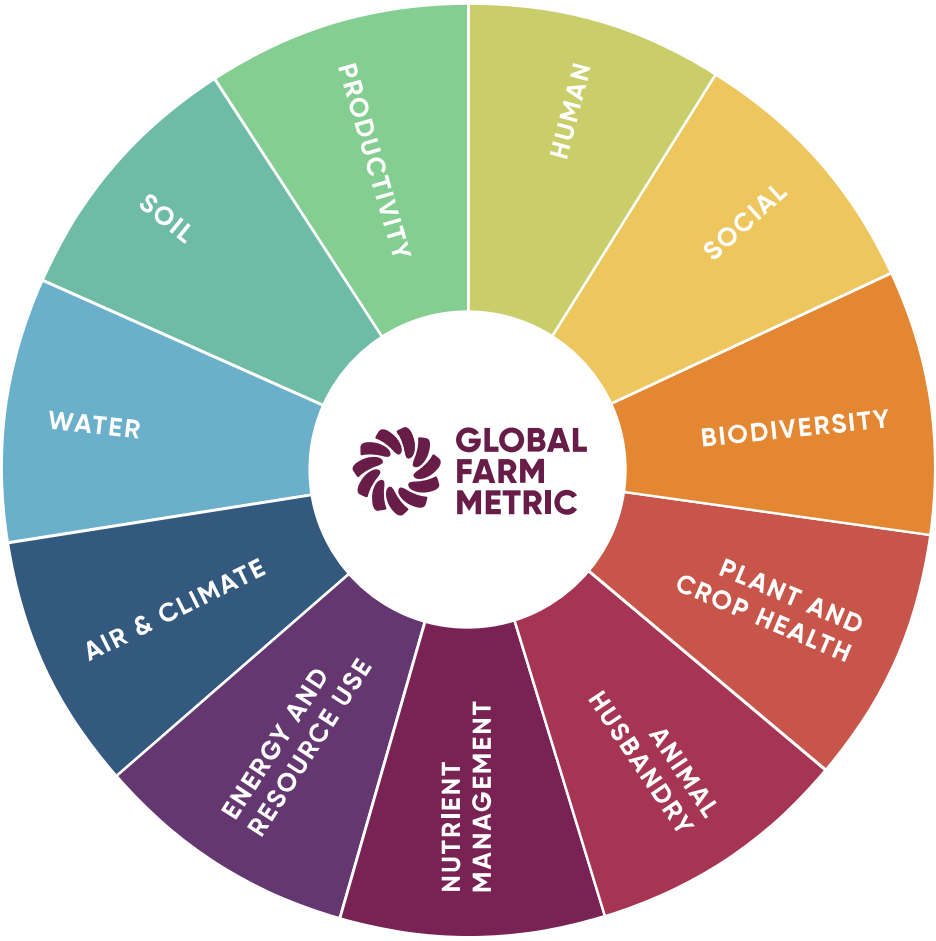
GLOBAL FARM METRIC

www.globalfarmmetric.org

Almost half of the world's habitable land is now farmed to feed our global food production system. What happens on this land will determine future biodiversity, climate and health.

The Global Farm Metric measures whole-farm impacts to define sustainability and drive change.

It is designed to align existing metrics, connect food and farming stakeholders around the world and enable collective action towards more sustainable food and farming systems.



The categories of the Global Farm Metric framework capture key on-farm impacts

The Challenge

Our mission is to enable the transition to more sustainable food and farming systems. However, there are barriers that prevent food producers from becoming drivers of positive change.

Lack of a common language. There is no consistent definition of on-farm sustainability. This limits understanding of key impacts and where to drive change.

Where definitions exist, they often overlook the interconnectedness of the farming system. Sustainability must be understood holistically, taking into account environmental, social and economic impacts.

Assessments based on narrow definitions mean some impacts can be overlooked. The pursuit of a single outcome, such as carbon reduction or biodiversity gain, can come at a cost to other parts of the system, giving rise to unintended consequences.

There is no consistent way of measuring and monitoring sustainability at farm-level. Farmers are asked to collect data in different ways, increasing the time-burden and complexity of assessment.

Food and farming stakeholders do not have a consistent baseline of farm-level data. This hinders transparency, the ability to track change over time and the creation of a system that rewards sustainable farming outcomes.

Measuring Sustainability

The Global Farm Metric enables farmers to understand, identify and measure outcomes in a rigorous and consistent way.

The framework establishes a consistent set of indicators for data collection on key areas of impact. These are whole-farm, outcomes based and practical to collect. They enable farmers to identify areas for improvement, support decision making, reduce negative impacts and mitigate unintended consequences.

A common language aligns existing metrics. The framework is to be embedded into farm assessments, audits, certification schemes and management tools. This will reduce duplication of data collection and input by farmers.

When adopted, the Global Farm Metric establishes a baseline of data for sustainability. This provides a starting point to monitor progress towards sustainability goals and to identify unintended consequences. A common thread of data connects food and farming stakeholders around the world, enabling knowledge sharing and collective action.

We are a coalition supported by over 100 partners. This includes farmers, consultants, researchers, educators, environmental groups, certifiers, food companies, financial services and government agencies.

Driving Change

A consistent baseline of farm–level data can underpin future farm policy, supply chain transparency, green investment and food labelling to drive positive change. It creates a supporting policy and economic environment that can shift the balance of financial advantage towards more sustainable production.

UK Farm Trials

The Global Farm Metric is co-designed and tested by farmers. Over the past six years, our UK farm trials have built a body of evidence to develop the framework and demonstrate value to farmers and the wider food and farming system.

In 2022, the Global Farm Metric framework was trialled using a research tool to self-assess farm sustainability. Reaching over 100 farmers, more than 40 farms across the UK completed the assessment. Feedback was collected from all farmers and tested with multiple enterprises, such as mixed, arable, livestock and value-added products. Farm types ranged from two to 2000 hectares, and included intensive, organic, conventional and regenerative systems. Farmers signed up to the trials directly or were recruited via stakeholders in government, finance, retail and wholesale.

Results were analysed to understand and improve:

- **Relevance** across different farm types, scales and systems
- **Usefulness** for farmers in identifying impacts, areas for improvement and to assist in decision making
- **Value** for farming businesses, food companies and governments
- **Pathways** to adoption by the public and private sector

Survey Results

- **All farmers who completed the trial gained a better understanding and developed a more targeted approach to on–farm sustainability.** Discussion changed from general statements of intent to specific actions that could improve outcomes.
- **Over 70% of farmers had a wider and more nuanced definition of sustainability.** Farmers considered their impacts beyond carbon and the environment to include social and economic impacts.
- **80% of farmers had reconsidered the sustainability of their own farm.** 60% viewed this as more critical than before the trial and subsequently considered new approaches and avenues for improvement.
- **71% had a better understanding of the positive relationship between sustainability and their farm business.** This empowered them to use their learning in daily decision making.

Case Study 1: Defining Sustainability

Rachael Davies, mixed farm, Monmouthshire (Wales)*

In collaboration with Monmouthshire County Council, we tested the Global Farm Metric with farmers across south-east Wales to explore the value of a common language, the use of a holistic framework and the benefit of a sustainability assessment.

The GFM framework initially helped Rachael, a mixed farmer of 130ha, to broaden her understanding of sustainability.

She completed a self-assessment using the GFM framework and developed a whole-farm plan to improve sustainability with support from a farm advisor. The holistic scope of the GFM highlighted that "by changing our ways of working we can benefit both farm productivity and the environment — beyond just re-wilding or no-till".

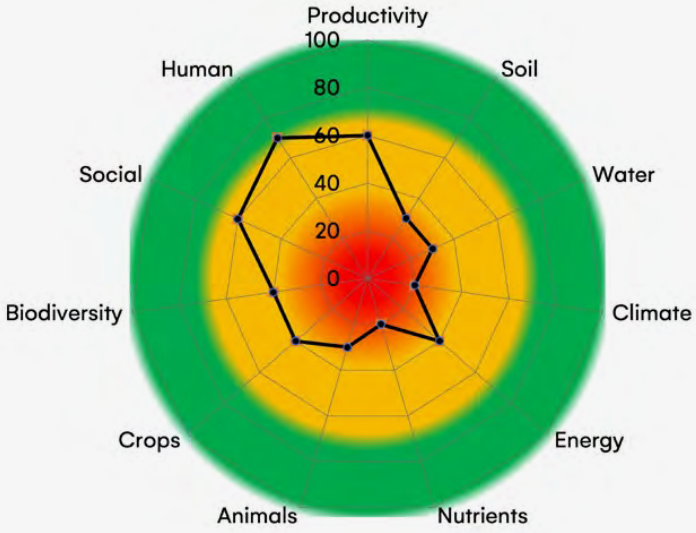
Rather than prescribing practice, the plan focused on deliverable outcomes and set out achievable changes to improve her business and reduce negative impacts: "I can see that to improve our soil health and productivity, we need to change our animal and nutrient management — we don't just need to switch to min -till which wouldn't work with our clay type soils".

She plans to repeat the annual assessment to create a baseline of data to monitor the impact of changing her farming system.

The outcomes from this trial have been used to inform Welsh policy, including the future Sustainable Farming Scheme, Brand Wales, the Well-being of Future Generations Act and the Natural Resource Policy and Environment Act. Throughout 2023, we will be running two DEFRA ELMS trials alongside major certification bodies to demonstrate the value of farm-level data collection.

*Name and details have been changed for anonymity.

Assessment Results and Farm Overview



Farm size:	130ha
Location:	Monmouthshire, Wales
Food produced:	Oats, Carrots, Barley, Dairy, Goats
Approach:	Conventional
Key concerns:	Viability of new trends and where to start a transition to regenerative farming
Trial outcomes:	Understanding sustainability, ability to monitor progress and integrate learnings into daily management decisions

Case Study 2: A Common Language

Harry Taylor, horticulture, East Sussex (England)*

Food retail and wholesale partners, including Morrisons and Natoora, recruited farmers to test the Global Farm Metric. The trials explored the value of a common language for farmers, food producers and suppliers, with a focus on enabling transparency along the supply chain.

Safe storage and sharing of data was a priority for farmer Harry Taylor, who found the GFM process to be an efficient way to assess his farm's sustainability: "If you could trust your data was protected and all audits asked for the same set of information — and built on this for their own analysis — it would save so much time that could be better used to expand my business".

Harry shared that being able to compare data within the framework of the GFM enabled knowledge exchange between farmers with a diversity of enterprises and sizes, where conversation had previously been limited by lack of common ground.

Negotiations with his wholesaler, Natoora, also benefitted from the additional evidence the GFM assessment provided beyond certification: "The GFM assessment allowed us to communicate directly with Harry and understand more about the positive impacts of his farm — we hope that in future we can use a baseline of GFM data to inform our procurement strategy and communicate with our customers". — Natoora, 2022

The Global Farm Metric's ability to strengthen relationships, increase transparency and improve business security will be further tested in future trials. These will look at the GFM data and its ability to measure scope 3 environmental impacts within wider and more complex supply chains, as well as its use in consumer labelling.

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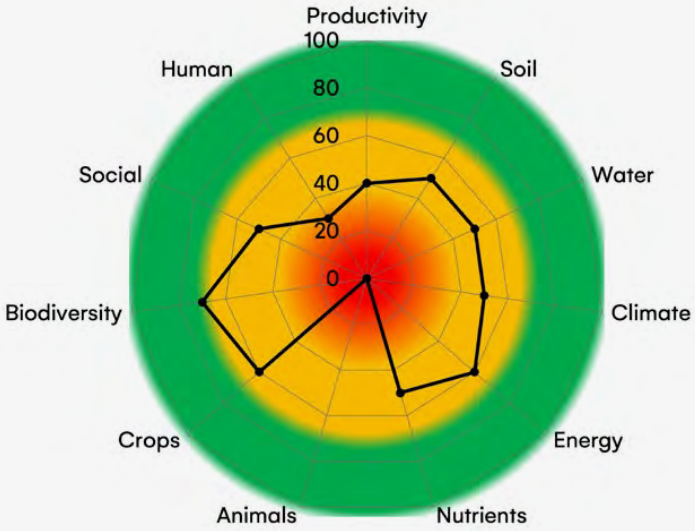

Farm size:	70ha
Location:	East Sussex, England
Food produced:	Pears, Apples
Approach:	Regenerative
Key concerns:	Scaling up sustainably and gaining organic certification. Limited time and money.
Trial outcomes:	Better knowledge exchange, alignment and transparency

Case Study 3: Beyond Net Zero

George Dunne, livestock, Fermanagh (Northern Ireland)*

Collection of primary data can be used to understand whole-farm impacts and monitor progress towards sustainability targets throughout the supply chain. Trials with government and the finance industry have looked at the potential of this data to inform farm support payments, access to new markets and sustainable investment.

George used the GFM framework to better understand his farm impacts and begin to tell an evidence-based story of the benefits and risks of different livestock production systems.

While his emissions were higher than arable systems, they were significantly lower than other livestock farmers of his type. His soil, water and biodiversity outcomes also demonstrated the positive impacts and trade-offs of his management system: "We need to go beyond emissions and the net zero agenda to get a comprehensive idea of the impacts we're having".

Having a baseline of sustainability data enabled George to identify areas of strong performance which could lead to future resilience. "We need year on year data to compare progress and change across all elements of our system — without this, we cannot be resilient to future challenges that will no doubt arise with climate change".

We are working with NatWest to establish farm-level sustainability measurement. The ambition is to enable transparent investment schemes that take a whole-farm approach and work for all farmers: "The development of this Global Farm Metric will enable the bank to better understand the impact of its agriculture portfolio, as well as provide customers in the sector with individual support on their climate journey" — NatWest Group 2022.

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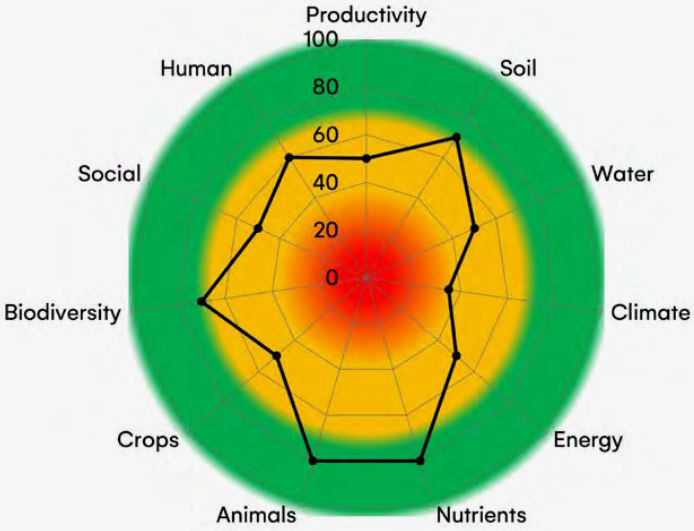
Assessment Results and Farm Overview



Farm size:	740ha
Location:	Fermanagh, Northern Ireland
Food produced:	Beef, Sheep
Approach:	Organic, Conservationist, Regenerative grazing
Key concerns:	Countering growing criticism and homogenisation of the livestock industry
Trial outcomes:	Holistic reporting and monitoring of impacts

Key findings

A holistic understanding of sustainability must precede farm assessment. Understanding the interconnectedness of the farming system prevents impacts from being considered in isolation and makes environmental, social and business trade-offs visible. Assessments can then build on this understanding and establish a baseline to monitor progress.

Measuring outcomes facilitates better decision making. Going beyond a prescriptive approach to sustainability supports a diversity of solutions suited to local conditions, regardless of scale or system. This enables a targeted approach to sustainability that helps with daily decision making and leads to incremental change.

We need a common framework to align existing data-collection systems. This reduces complexity, limits divergence between assessments and removes a key barrier to participation in schemes and new markets beyond certification. Crucially, a Global Farm Metric belongs in the commons and data should remain in the hands of the farmer.

A consistent thread of farm-level data improves communication, knowledge-exchange and transparency. It enables dialogue between farmers and makes visible key sustainability impacts along the supply chain.

A common baseline can be used to benchmark and monitor progress towards sustainable development goals at a local, national and international scale. This can track change over time and underpin policy, investment, procurement and food labelling schemes.

Future Plans

The outcomes of our 2022 farm trials are being used to progress the Global Farm Metric from the ground up. At the beginning of 2023, we will release the next iteration of the framework and continue to trial with farmers, researchers and stakeholders from across the industry. Future trials will:

Continue to test and develop the framework for farmers: Trials will scale significantly over the next 12 months to test application across more complex farming systems and supply chains.

Begin to align the food supply chain: We are collaborating with major retailers, producers and suppliers to increase transparency and accountability in food production.

Demonstrate value to government: Trials across the UK will illustrate the use of a common framework in public policy, including direct input into new ELMS and SFI schemes.

Explore green investment opportunities: We will work to convene the finance sector around a common language of whole-farm sustainability that can underpin loans and investment to shift the balance of economic advantage towards producers delivering public goods.

Expand internationally: We are working with Regen10, a coalition of international organisations, to develop the framework and drive the transition to more regenerative food and farming systems globally. Alongside this, we will continue to develop our farm trials in the US, Australia and Malawi as a step towards our long-term vision for global adoption of a common framework for sustainability.

Get Involved

Contact info@globalfarmmetric.org to:

- Support the Global Farm Metric mission
- Join the coalition
- Adopt the framework
- Share knowledge
- Become an international partner

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WEIGHT (kg)
0.248
UNIT PRICE
TOTAL PRICE

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