

# Global Farm Metric 2.0

## Framework deep dive

June 2026



**GLOBAL  
FARM  
METRIC**

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# Acknowledgements

We would like to say a huge thank you to all of the farmers, researchers and people working across the food system who have contributed to this work. All of the conversations we have had have shaped the development of the Global Farm Metric framework which is now being used across the world to drive change.

We would also like to say thank you to all of the team at the Sustainable Food Trust who have worked tirelessly to help deliver this work and the actions needed to achieve our mission.



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# Contents

Executive summary	6
Why this work is needed	9
Our vision	10
Origins of the Global Farm Metric	12
Development methodology	14
Key framework developments	16
The framework structure	18
The Global Farm Metric wheel	20
Understanding indicators	22
Applying the framework in practice	24
Who can use the framework?	27
Considerations and limitations	28
Driving change	30
The framework	32
Appendix A: Indicator classifications	46
Appendix B: changes since 2025	58

## Executive summary

Developed through ten years of research, collaboration and trials, GFM 2.0 provides a shared language and structure for understanding and measuring environmental, social and economic outcomes, helping to support better decisions and drive positive change across the food and farming system.

We are excited to release the final version of GFM 2.0, the culmination of a decade of collaboration across six continents. Developed through engagement with more than 500 farmers and a wide range of stakeholders across the food and farming system, the framework is now being applied in research, data collection, education, product labelling and sustainability initiatives around the world.

This report explains the evolution of the Global Farm Metric (GFM), the methods used in its development and the principles that underpin the framework. It describes the structure of GFM 2.0 and explores how it can be used to overcome key barriers to sustainability by improving understanding, measurement and decision-making across the food and farming system. The indicators are included as an Annex, and complete the GFM 2.0 outcomes, categories and subcategories released in 2025.

This report comes at a time when pressures on climate, nature and society continue to grow. Agriculture sits at the centre of many of these challenges, but it is also central to the solutions. Since the GFM began, significant progress has been made. Markets and policymakers are beginning to recognise that carbon-centric approaches alone can create unintended consequences, and that biodiversity, soil, water and social outcomes must also be considered.

However, the need for a more holistic understanding of farm sustainability has never been greater. The role that farming plays in human health, community resilience and wellbeing is still not fully reflected in

mainstream sustainability discussions. Likewise, wider environmental impacts remain difficult to integrate alongside carbon, and many approaches continue to rely on practice-based or proxy indicators rather than direct measurement of outcomes.

By improving access to knowledge, creating robust and farmer-centred measurement systems and supporting incentives that reward positive outcomes, we can help build a food system that works for people, nature and future generations.

The Global Farm Metric will continue to evolve as knowledge grows and new applications emerge. Future work will focus on areas including minimum viable indicator sets, understanding impacts beyond the farm gate and exploring how farm data can support policy, finance and market mechanisms that reward positive environmental and social outcomes. All of our work is open source and freely available. We welcome collaboration from anyone interested in using, testing or developing the framework further.

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**The time for collaboration is now.  
The food and farming system must  
respond collectively and holistically  
to the challenges facing climate,  
nature and people.**



**The GFM works to unlock barriers to change from the ground up. It can be used for learning, strengthening measurement initiatives and driving systems change.**

## Why this work is needed

Almost half of the world's habitable land is now farmed to meet growing demand for food, feed, fuel and fibre. The way these products are produced has profound impacts on nature, climate and human health. Farming can help solve the challenges facing people and planet, but farmers face significant barriers to change.

### Barriers to knowledge and understanding

A key challenge is the lack of a shared understanding of what sustainable farming means across the whole system. Farmers, advisers, researchers, policymakers, retailers and consumers often use different language, definitions and priorities, with sustainability sometimes framed through fixed methods, labels or philosophies that may not feel relevant or practical across farm types, regions or business models.

This can make sustainability feel confusing, technical or disconnected from farm reality, limiting knowledge sharing and reinforcing skills gaps, confidence and engagement. Siloed approaches can also make it harder to see how outcomes (like soil health and biodiversity) influence other goals (like productivity and climate resilience). This can inhibit systems thinking and exclude farmers who are already working towards shared goals in different ways.

### Barriers to measurement and monitoring

Sustainability measurement in farming is fragmented, with different models used for carbon reporting, biodiversity monitoring, productivity, assurance and supply chain claims. These often use different metrics, methods and definitions to answer similar questions. As a result, the same farm may provide similar data multiple times without producing a clear whole-system picture, creating duplication, cost and inefficiency for farmers, while making it difficult to align tools, compare results or build credible datasets.

There is also an over-reliance on practices as proxies for outcomes. For example, cover cropping may be used as evidence of improved soil health, when its long-term impacts on soil structure, carbon, water retention or biodiversity is not measured. Co-benefits and trade-offs thus remain hidden, limiting the usefulness of this data for farm decision-making. This also reduces the transparency of data shared along the value chain, as the actual impact of these practices remains unknown.

### Barriers to systems change

Farmers' ability to achieve sustainability outcomes is shaped not only by their own decisions, but by the environmental, economic and policy context they operate within. Soil type, weather, water availability and local ecological conditions all affect what is practical and achievable on different farms. This means sustainability cannot be assessed through one-size-fits-all practices and targets. It needs to recognise context, constraints and different starting points.

At the same time, the current food and farming system often makes sustainable farming harder to pursue. Many positive outcomes, such as healthier soils, cleaner water, biodiversity recovery and lower emissions, are not properly rewarded by markets, while the costs and risks of transition often fall on farmers. High input costs, limited market access, weak or inconsistent financial incentives, fragmented policy and low transparency can make less sustainable approaches more financially viable in the short term.

## Our vision

The GFM is designed to overcome the barriers that prevent farmers from transitioning to more sustainable systems. It aligns understanding, improves sustainability assessment and drives systems change. This empowers all farmers and stakeholders to create farming systems that tackle global challenges from the ground-up.

The Global Farm Metric's mission is to drive systems change by creating a shared framework for understanding, monitoring and improving whole-farm sustainability. It enables farmers, value chains, policymakers and researchers to work from a common language and support farming systems that deliver positive outcomes for climate, nature and people.

Our vision is a world where farmers are recognised, supported and rewarded for the positive impact they deliver across the whole farming system. In this future, food and farming systems work towards shared outcomes that restore nature, tackle climate change, strengthen resilience, support livelihoods and nourish people.

The Global Farm Metric enables this by making farm-level sustainability measurable in a holistic, practical and context-sensitive way. It addresses the current fragmentation in sustainability language, data and assessment by providing a framework that captures environmental, social and economic outcomes on the farm that impact the wider world. In doing so, it supports systems thinking, enables alignment and action across the value chain, from the ground up.



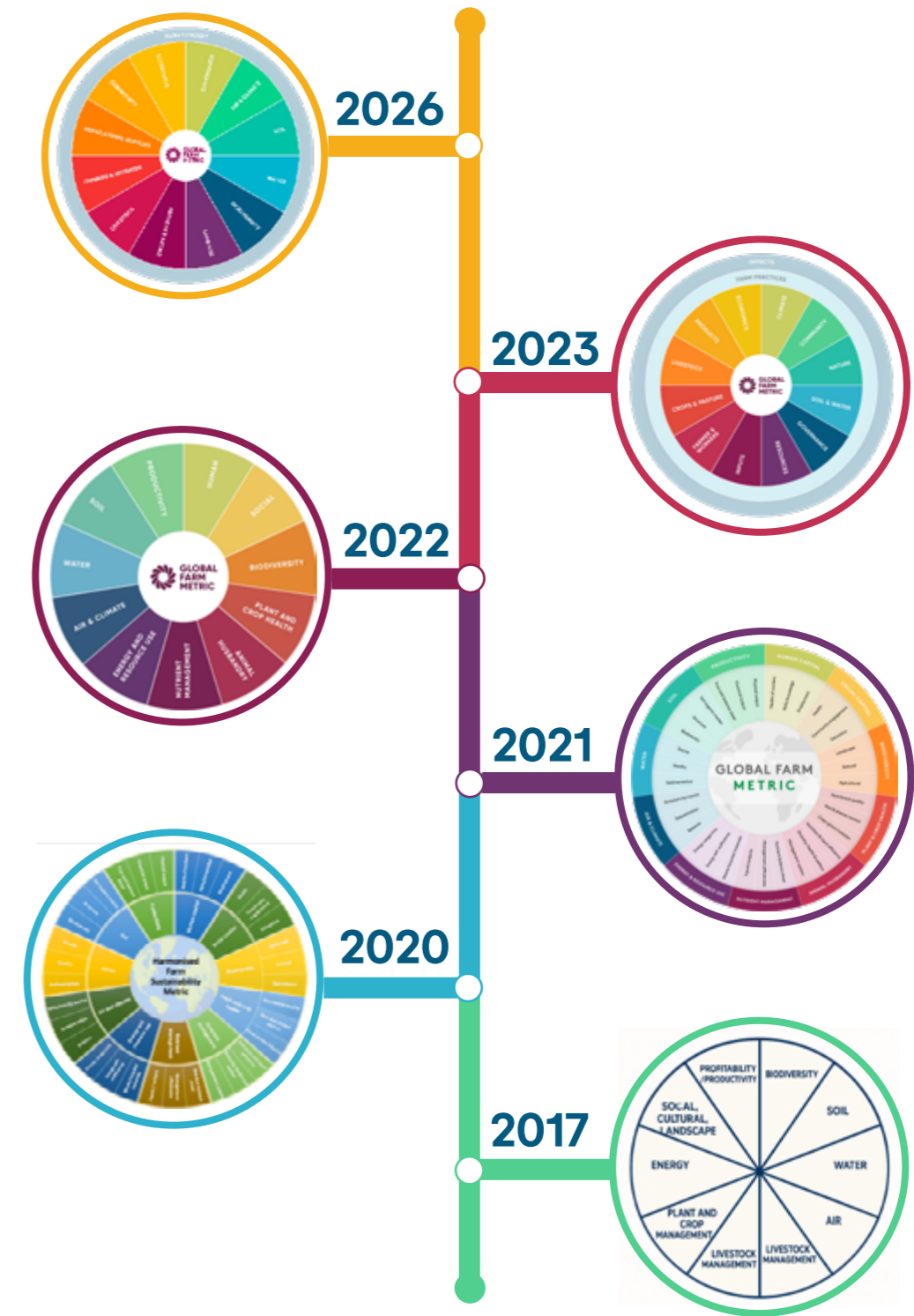
**The GFM framework captures the key parts of a farm system for sustainability. It can be used across the world and on all farm types.**

# The origins of the Global Farm Metric

Since 2012, the Sustainable Food Trust has worked to expose the true costs of food production and accelerate the transition to more sustainable farming systems. The GFM emerged as a way to reveal the hidden environmental, social and economic impacts of food production, while highlighting the value of farming systems that deliver positive outcomes.

From 2015, the Sustainable Food Trust (SFT) began spearheading international work on True Cost Accounting, a field which seeks to make the hidden costs and benefits of food and farming visible. This work showed that many of the costs of unsustainable production, including pollution, biodiversity loss, soil degradation and poor public health, are not reflected in the price of food, but are instead carried by society, nature and future generations. In 2019, the SFT estimated that harmful food and farming practices cost the UK public purse up to £116 billion each year. This strengthened the case for a transition towards farming systems that reward the delivery of public benefits and disincentivise practices that cause harm. However, without a consistent way to measure these benefits at farm level, it remained difficult to turn this ambition into practical policy, investment or supply chain action. In response, the SFT formed its Farmers Working Group in 2017 to explore the barriers to True Cost Accounting and sustainable land management. The farmers all shared challenges around economic disincentives, conflicting information, fragmented tools and duplicative measurement. The group recognised that better measurement could play a transformative role in addressing these challenges. To start, the group tested and reviewed existing agricultural sustainability assessments (REF). This review highlighted two key issues holding back change from the ground up. First, many definitions and assessments of farm-level sustainability were narrow in scope, often focusing on single issues rather than the whole farming system. Second, many sustainability frameworks operated at landscape, supply chain or global level, making them difficult to apply in a practical and meaningful way on farm.

Powered by this research, the SFT continued to reach out to farmers, researchers, retailers and finance, who agreed on the need to harmonise and expand farm-level sustainability approaches. This led to the development of the principles behind the Global Farm Metric. First known as the Harmonised Sustainability Assessment Framework, the GFM was initially created through the alignment of existing assessments, but its purpose has always gone beyond measurement alone. It was designed as a common language to help farmers understand their sustainability, support peer-to-peer learning, inform advisory services and enable more consistent decision-making across supply chains, finance and policy, grounded in transparent, farm-level data. Today, the GFM has been tested by over 500 farmers across 23 countries and continues to be co-developed with partners including farmers, cooperatives, NGOs, governments, researchers and global retailers. It supports practical action on farm while helping the wider food and farming sector align around a shared understanding of sustainability. By defining whole-farm outcomes and the indicators needed to measure them across all farming systems, the GFM makes the impacts of farming visible. This visibility is essential if positive outcomes are to be recognised, valued and rewarded by supply chains, policy and consumers. In this way, the GFM provides a practical route to realising the aims of True Cost Accounting, supporting the transition to farming systems that deliver for climate, nature and people. *Previous GFM frameworks can be found in the archive on our website. We recommend using the most up to date version where possible.*



**The framework has evolved through trials and testing with over 500 farmers across six continents over 10 years. This development is shown in the progression of our colourful wheel (above).**

# Development methodology

Since the launch of GFM 1.0 in January 2023, the GFM has undergone three years of testing and refinement with international farmers and farming stakeholders. This includes on-farm trials, stakeholder engagement, academic research, framework mapping and analysis of assessment.

Our methodology was designed to strengthen the credibility, practicality and global relevance of the framework.

The aim has been to ensure that the GFM is not only scientifically robust, but also usable in real farming contexts and relevant to the needs of farmers, advisers, supply chains, policymakers, researchers and investors.

## Farm trials

Farm trials have been central to the development of the GFM. Delivered in close collaboration with farmers, researchers, advisers and supply chain partners, these trials have tested how the framework works in practice across different farm types, geographies and production systems, primarily through its application in a farm sustainability assessment.

Between 2023 and 2025, ten applications of the framework were tested on more than 240 farms across 23 countries and six continents, from South American smallholdings to European dairy farms and large-scale Australian operations. These trials used the GFM Research Tool, or tools aligned with the GFM categories, subcategories and indicators, to support consistency and comparability across contexts.

This work has shown that the GFM can be applied across a wide range of farming systems while remaining grounded in farm-level reality. It has also helped refine the framework so that it better reflects the diversity of agricultural contexts, including differences in climate, ecology, management, scale, markets and data availability.

Trial feedback has demonstrated the practical value of holistic assessment. At farm level, GFM-aligned

data has supported sustainability conversations, informed advisory work, identified opportunities for practice change and enabled farmers to track progress against their own goals. At a wider level, partners have highlighted the potential for GFM data to support evaluation, investment and reward for positive outcomes delivered by farms.

Trials have also provided important lessons on feasibility. They confirmed that data can be collected across all GFM categories, while highlighting barriers around time, cost, technical capacity and complexity. These challenges were reduced where trials included adviser support, strong digital tools and/or financial incentives. This has reinforced the importance of clear framework design, proportionate data collection and effective delivery support.

## Stakeholder engagement

The GFM has been shaped through continuous engagement with stakeholders across the food and farming system. This includes farmers, advisers, researchers, NGOs, retailers, financial institutions, certification bodies, industry initiatives and policymakers.

Engagement has taken several forms. Conversations have helped identify the practical challenges and drivers affecting sustainability measurement across the value chain. Collaborations have tested how the GFM can support different applications, including assessment, education, evaluation, supply chain alignment and policy development. The GFM framework has also been used to structure and inform consultations, supporting others to move towards more holistic, outcomes-based and farmer-centric initiatives. This process also helps build alignment across groups that often use different language,

methods and priorities around farm sustainability. This ongoing engagement has ensured the GFM responds to real-world needs rather than being developed in isolation.

## Research and evidence review

The GFM is grounded in more than a decade of research, expert consultation and framework development led by the Sustainable Food Trust and its partners. This research includes reviewing existing sustainability tools, mapping indicators, comparing assessment approaches and contributing to scientific literature.

Over the last three years, more than 75 scoping reviews of farm assessments have been conducted and over 1,700 sustainability indicators have been extracted and evaluated. This builds on the 2017 review of major farm sustainability tools, which identified the need for greater harmonisation in how sustainability is understood and assessed at farm level.

The GFM has also been informed by specialist research, including an extensive Delphi review engaging experts in the evaluation of on-farm biodiversity indicators. GFM-related work has been cited in more than 50 publications, including academic articles, reports and policy-facing documents such as the National Food Strategy. Together, this research strengthens the scientific credibility of the framework, supports the development of its categories and indicators, and helps position the GFM within wider efforts to align sustainability measurement across the food and farming system.

## Framework mapping and alignment

A core part of the GFM methodology has been the mapping and comparison of existing tools, frameworks and assessment approaches. This work has helped identify areas of common ground, gaps in current measurement and opportunities to strengthen consistency across the sector. Through this process, the GFM has increasingly evolved into a unifying framework for understanding whole-farm sustainability. It provides a shared structure of outcomes, categories and subcategories that other tools, standards and assessment approaches can align with.

This enables consistency in how sustainability is understood and communicated, while still allowing flexibility in the specific metrics and methods used to collect data. For example, biodiversity may need to be assessed differently in different ecological contexts, with earthworms acting as a relevant indicator in some UK systems and termites being

more appropriate in some US contexts. By separating shared outcomes from context-specific measurement approaches, the GFM supports both harmonisation and adaptability. This creates a common language for whole-farm sustainability that can be applied across different geographies, production systems and data collection methods, while remaining grounded in real-world farm contexts.

Ongoing mapping continues as new tools, standards and frameworks emerge, helping strengthen alignment around the GFM structure and supporting greater coherence across the wider food and farming system.

## Framework mapping and alignment

GFM-aligned trial data is now being aggregated and analysed to explore patterns in whole-farm sustainability performance. This includes examining the relationships between outcomes across environmental, social and economic categories, identifying trade-offs and unintended consequences, and exploring how different farming systems deliver benefits in different contexts.

A key purpose of this analysis is to inform the ongoing development of the framework itself. Reviewing real-world assessment data helps identify where indicators are meaningful, where gaps or overlaps exist, which areas require greater clarity or contextualisation, and how different parts of the framework interact in practice. This iterative process supports continuous refinement of the framework structure, categories, subcategories and indicators, helping ensure the GFM remains practical, scientifically credible and relevant across diverse farming systems.

The analysis also demonstrates the wider potential of holistic farm-level data to build a more robust and verifiable evidence base. Over time, this evidence can help challenge assumptions, support more informed policy-making and strengthen the case for recognising and rewarding positive outcomes.

**Diverse and inclusive methods strengthen the robustness and usability of the framework.**

## Key framework developments

The latest GFM developments strengthen the clarity, usability and interoperability of the framework to support more consistent interpretation and practical application across different farming systems, assessment approaches and use cases, while remaining adaptable to context.

- **New indicators:** Indicators have been added to the GFM 2.0 categories to measure progress towards the outcomes. Read more on the next page.
- **Outcome and subcategory updates:** The development of the GFM 2.0 indicators resulted in some tweaks to the outcomes and subcategories published in 2025. The full updated framework is shared at the end of this report and changes are included in Appendix B.
- **Articulation of subcategory properties:** Each subcategory is now broken down into specific properties. This makes clear which aspect of the system the indicator is measuring. For example, the soil pollutants subcategory is broken down into properties of nutrient surplus, heavy metals, synthetic chemicals, physical contaminants and pathogens. Indicators are included for each property.
- **Updated mapping:** Existing frameworks, assessments and initiatives have been reviewed to support alignment and identify areas for further development. This supports the GFM's role as a common framework for comparing and connecting different sustainability approaches.
- **Contextual considerations:** Key contextual factors have been identified to support interpretation of indicator results. These include farm context (situational and environmental factors that may shape results but are often slow or difficult to change); management choices (actions and decisions made on the farm that may influence results) and measurement approach (how data is collected, including timing, method and data quality, which may

affect the result or how it should be interpreted). This helps ensure that indicator results are understood in context, rather than treated as isolated or absolute measures of performance.



# The framework structure

The framework breaks the key parts of a farming system down into measurable areas to provide a holistic picture across social, economic and environmental dimensions. It starts with high-level categories and outcomes, then breaks these down into subcategories and properties. Shared indicators are used to measure progress towards the desired outcomes. It recognises that all outcomes are shaped by contextual factors.

## Context

The framework identifies contextual factors that influence a farm's ability to deliver sustainability outcomes. These are factors that may sit partly or wholly beyond the farmer's control, such as climate, geography, soil type, market access, policy conditions, infrastructure, labour availability or historic land use.

Recognising context is essential because farms do not operate on a level playing field. It helps ensure that assessments are fair, meaningful and useful, and that responsibility for change is not placed on farmers alone

## 1. Categories

The framework is structured around 12 categories, which represent the key parts of the farm system where sustainability impacts occur. Together, these categories provide a holistic view of farm sustainability, covering the environmental, social and economic dimensions of the farm. They are interconnected and interdependent, meaning no category should be considered in isolation.

## 2. Outcomes

Each category defines the shared outcomes that need to be achieved in a truly sustainable farm system. These outcomes are designed to be relevant across different farming systems, geographies and contexts. They sit alongside the unique goals of individual farms and the wider food and farming system. The outcomes do not prescribe specific practices. Instead, they provide a clear direction of travel for what needs to be protected, restored or strengthened in order to support nature, climate, people and long-term farm viability.

## 3. Subcategories

Subcategories break each category down into the key areas that influence whether the shared outcomes can be achieved. They help make each category more specific and practical by showing where attention is needed when assessing performance, identifying risks, tracking progress or planning improvement.

## 4. Properties

Properties describe the specific features, functions, capacities or pressures within each subcategory that need to be understood in order to assess sustainability. They act as the bridge between broad categories and measurable indicators.

## 5. Indicators

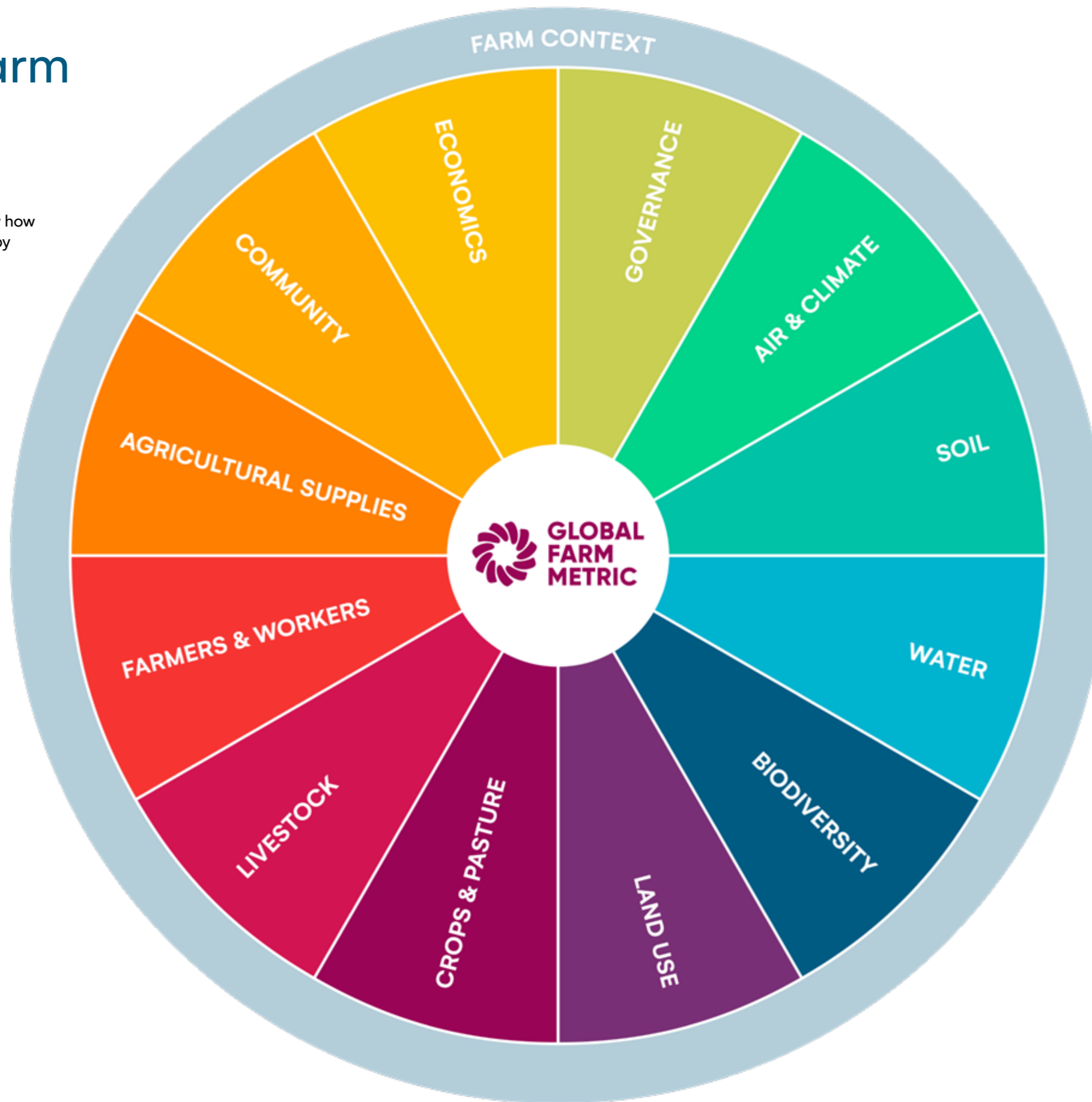
Indicators translate sustainability outcomes and properties into measurable signals of progress. They provide the evidence needed to understand how a farm is performing against each outcome, helping to turn the GFM framework from a shared vision into a practical tool for monitoring, learning and improvement.

Indicators should not be seen as a rigid checklist. Their purpose is to support better understanding, decision-making and accountability, while recognising that the most appropriate indicator or method may vary depending on the farm context, data availability and intended use.



# The Global Farm Metric Wheel

The wheel summarises the categories of the Global Farm Metric and is designed to show how all parts of the farming system are shaped by context and are deeply interconnected.



**The categories tell the story of the farm system.**

Governance captures the decisions, values and management approaches that shape how the farm operates.

The framework then considers the natural systems that underpin farming, including Air and Climate, Soil, Water and Biodiversity.

It then looks at what the farm produces, through Livestock, Crops and Pasture, and how land is used.

Finally, it considers the people, inputs, relationships and financial conditions that enable farming to happen, through Farmers and Workers, Agricultural Supplies, Community and Economics.

# Understanding indicators

The indicator level of the framework has been refined in 2026.

Each subcategory now has a full list of indicators to understand and monitor whole-farm sustainability.

Indicator choices were guided by several criteria:

- **Practical and proportionate:** feasible for farmers, advisors and assessors to collect and apply without creating unnecessary burden.
- **Scientifically credible:** robust enough to underpin meaningful sustainability assessment and support trustworthy decision-making.
- **Relevant across contexts:** applicable across different farming systems, geographies and production contexts, while remaining specific enough to inform farm-level understanding and action.
- **Useful for farm understanding and management:** helping farmers better understand their system, identify risks and opportunities, track change over time and support informed decision-making.
- **Valuable across the wider system:** enabling policymakers, supply chain actors, investors and other stakeholders to understand and interpret farm-level outcomes in a more consistent and holistic way.
- **Beneficial to farmers when used by others:** ensuring data collection and assessment approaches create value back to farms through improved understanding, reduced duplication, stronger support and better access to investment and reward mechanisms.

To meet these criteria, some careful trade-offs were made. In some cases, the most scientifically precise measure may be too costly, complex or time-consuming to collect at scale. In other cases, a highly practical measure may not capture the full complexity of the outcome being assessed. The framework therefore uses a combination of outcome indicators, result indicators, practice indicators and carefully selected proxies where direct outcome measurement is not currently feasible. It is not intended to be used as a rigid checklist in every assessment, as this would create a high data burden. Instead, it provides a structured reference point to guide assessment design, spark useful questions, and highlight gaps in existing approaches. The aim is not to create a perfect or exhaustive measurement system, but to provide a practical, globally relevant and improvement-oriented set of indicators that can support better decisions on farms and more transparent sustainability data across the food and farming system.

The indicators can be classified by type and their ability to capture different dynamics of the farming system (see Appendix A). Understanding indicators is important when using and applying the framework for learning, evaluation and assessment (see page 24).

## Indicator type

Indicators have been classified according to the type of information they provide and how directly they reflect sustainability outcomes (Schreefel et al., 2024<sup>1</sup>). Different indicator types provide different kinds of insight and each has strengths and limitations. Outcome indicators are prioritised where possible, and result and practice-based ones used where necessary. Target-based are not used.

- **Outcome-based** indicators show actual impacts or conditions within the system. These are often the most meaningful indicators of sustainability performance, but can be slow to change, variable across contexts and more difficult or resource-intensive to measure directly.
- **Result-based** indicators show medium-term effects or direction of travel. They can help demonstrate whether actions are contributing towards desired outcomes, but may not fully capture final change or wider system interactions.
- **Practice-based** indicators capture actions or management approaches being implemented on the farm. These are often easier and more practical to collect at scale, but usually act as proxies and cannot demonstrate on their own whether the intended outcomes are being achieved.
- **Target-based** indicators show intent, preparedness or the existence of strategies and policies. While useful for understanding governance and readiness, they do not demonstrate implementation or real-world change on their own and are not used here.

## System dynamics

Indicators have also been classified according to the part of the system they describe. This highlights how different indicators capture different dimensions of how the farm system functions, changes over time and impacts the wider world.

- **State:** Captures the current stock, condition, status or capacity of something in the farm system. These are usually measured at a point in time and often change gradually.
- **Process:** Captures something happening in, to, from or because of the farm system over time. This includes flows, activities, functions, pressures, losses, gains, rates of change and impacts.
- **Time horizon:** shows how quickly the property being assessed is likely to change. This is important because different indicators respond to management change at different speeds, and some fluctuate naturally over time.
- **Impact beyond farm gate:** indicates whether impacts are primarily experienced within the farm system or extend beyond the farm gate into wider environmental, social or economic systems. This can help make visible how farm activities can contribute to broader public outcomes, supply chain impacts and externalities that may not be immediately apparent at farm scale alone. NOTE: This is indicative only, and further data and modelling is needed to prove causality.

1. Schreefel, L., Creamer, R.E., van Zanten, H.H.E., de Olde, E.M., Koppelmäki, K., Debernardini, M., de Boer, I.J.M. and Schulte, R.P.O. (2024) 'How to monitor the "success" of agricultural sustainability: A perspective', *Global Food Security*, 43, p. 100810

# Applying the framework in practice

The GFM can be used **directly** for learning, discussion and evaluating existing tools and frameworks. It supports more holistic, outcomes-based approaches by identifying gaps and providing a common structure for alignment. It can also be **applied** to support farm data collection and assessment. This requires additional metrics, methods and data interpretation.

## Direct uses

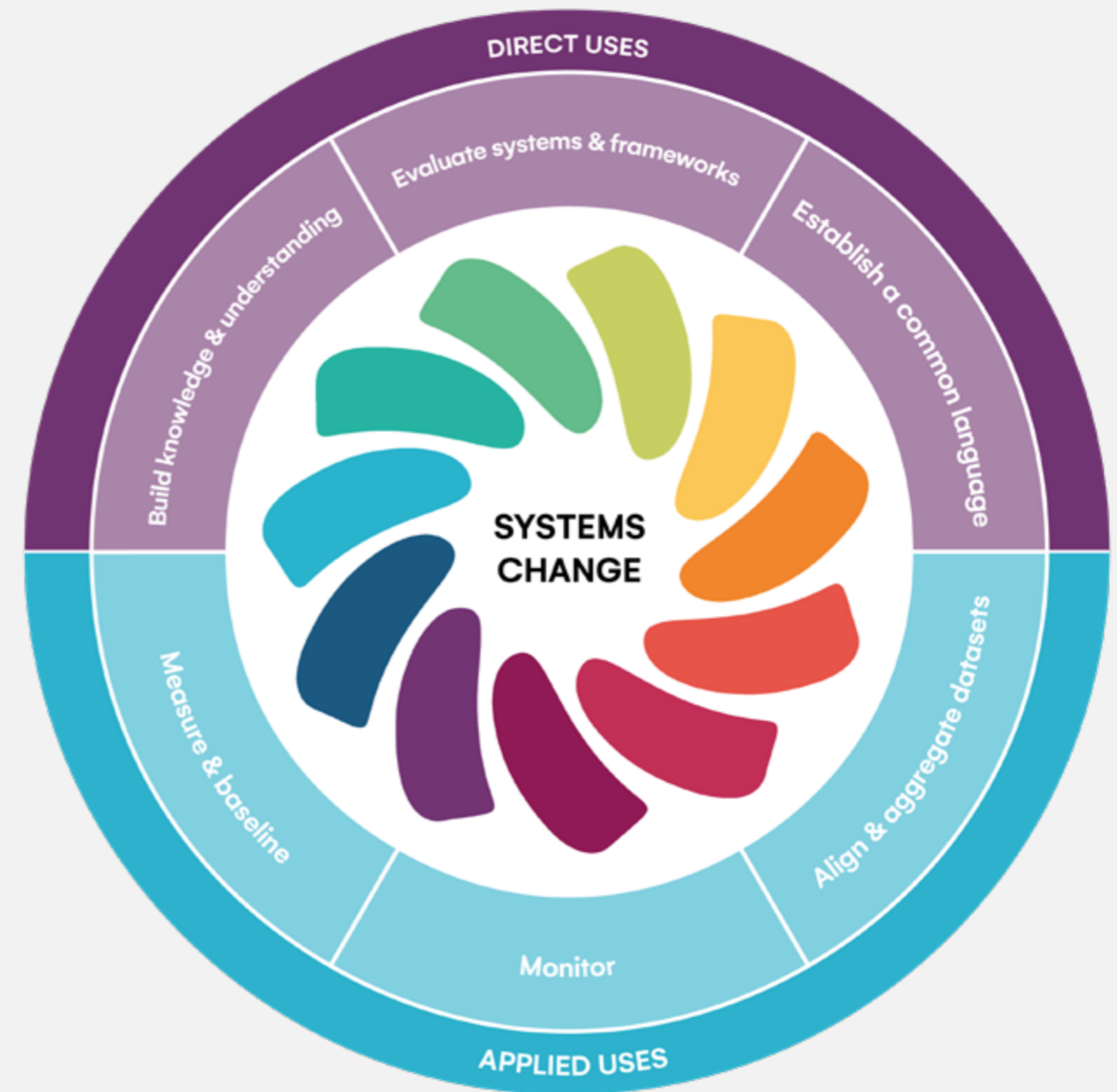
These uses can be applied immediately, using the framework as it stands.

- **Education:** The framework can be used to build shared understanding of what whole-farm sustainability means. It provides a clear structure for explaining the environmental, social and economic dimensions of farming, and how these dimensions are connected. It can support training, workshops, farmer learning groups, teaching materials and communication with supply chains, policymakers and the public.
- **Mapping:** The framework can be used to map existing initiatives, datasets, tools, standards, policies or research against a shared structure. This helps users understand what is already being measured or addressed, where there is strong coverage, where there are gaps, and where different approaches overlap. It can also be used to compare the scope of different frameworks, showing whether they take a holistic view of farm sustainability or focus more narrowly on selected issues, such as carbon, biodiversity or productivity.
- **Alignment:** The framework can be used to align different organisations, tools, programmes or stakeholders around a shared understanding of farm sustainability, while allowing for diversity and differences. Because it provides a common structure and language, it can help compare approaches, support collaboration and reduce fragmentation. It can also be used to check whether existing initiatives are taking a holistic approach or focusing too narrowly on selected issues, such as carbon alone.

## Indirect uses

These uses require additional detail, interpretation or technical development to apply in practice.

- **Data collection:** The framework guides what data can be collected to understand whole-farm sustainability. However, it does not prescribe a single data collection protocol. Users need to select appropriate indicators, metrics and methods depending on their context, purpose and available resources. This may include using farm records, field surveys, laboratory testing, remote sensing or third-party tools.
- **Assessment:** The framework can support the design of whole-farm sustainability assessments, but it is not an assessment tool in itself. To apply it in practice, users need to select relevant indicators and define suitable metrics, methods, scoring approaches and interpretation processes for their context. This includes deciding how performance is assessed and how results are communicated in a fair, useful and context-sensitive way.
- **Alignment and interoperability:** The GFM can support alignment, aggregation and greater interoperability of datasets by providing a shared structure for all farm systems and stakeholders. This includes alignment in outcomes, categories, definitions and indicators (and excludes metrics, scoring and methods). This can help reduce duplication, improve consistency and support more joined-up use of farm-level data across supply chains, policy, research and finance.



**There are many ways to use the framework. It can be used directly for learning, evaluation and alignment. It can also be applied to measure, monitor and assess sustainability.**

## Who can use the framework?

The framework can support different users across the food and farming system to achieve positive outcomes for climate, nature and people. Collaboration and cross-sector action is essential if we are to drive lasting and meaningful change from the ground-up.

**Farmers and farm advisors** can better understand their whole farm system, identify strengths and risks, and make more informed decisions. It can support practical planning, long-term monitoring and transition towards more resilient, productive and sustainable farming systems.

**Farm advisors** can provide more holistic guidance, support peer-to-peer learning and help farmers interpret sustainability data in a way that is relevant to their context and goals.

**Supply chains**, including processors, wholesalers, retailers and food businesses, can use the framework to underpin collection of more holistic, outcomes-based, farm-relevant data from their suppliers. This can be used to improve transparency and support resilient sourcing strategies, stronger relationships with farmers and more credible sustainability claims.

**Governments and policymakers** can design more outcome-based policy that moves beyond narrow metrics, like carbon, and includes the outcomes that need to be achieved across climate, nature, people and farm viability. It can also support better monitoring of policy interventions and track progress towards local, national and international goals.

**Financial institutions** can assess long-term farm resilience and sustainability-related risk. By taking a whole-system view, the framework can support better lending, investment and insurance decisions. It can help identify farms and supply chains that are managing risk, building resilience and contributing to positive environmental, social and economic outcomes.

**Researchers and educators** can use the framework as a common language for collaboration, comparison and knowledge exchange. It can support interdisciplinary research, mapping, data aggregation, modelling and education by providing a consistent structure for understanding farm sustainability across different systems and contexts.

**Data experts and tool developers** can create more aligned, outcomes-based datasets and digital tools. By structuring data around shared categories, outcomes, subcategories, properties and indicators, the framework can support better data transferability, reduce duplication and make farm sustainability data more useful across different platforms and applications.

**Assurance and reporting bodies**, including certifiers, auditors, labelling schemes and reporting bodies, can use the framework to strengthen transparency and improve the credibility of sustainability claims. The framework can support a shift towards outcomes-based evidence, helping assurance systems move beyond narrow compliance checks and towards a more holistic understanding of farm performance.

**Consumers and citizens** can benefit from clearer, more consistent and more transparent information about the sustainability of food and farming. When used by assurance and reporting bodies, it can help underpin better communication, labelling and reporting, enabling more informed choices and greater trust in sustainability claims.

The framework can be used by different people in a diversity of ways. By using a shared framework, each application is a step towards harmonisation and the creation of a common language.

# Considerations and limitations

The GFM provides a structured and holistic approach to understanding and advancing sustainability on farms. It is designed to support better decisions, clearer conversations and more consistent measurement. However, no framework can provide a perfect or complete picture of a complex, living farm system. The following considerations should be kept in mind when

- A decision-support framework, not perfect truth:** The GFM helps organise sustainability into shared categories, outcomes, subcategories, properties and indicators. It provides a clearer basis for understanding progress, identifying risks and guiding improvement. However, it is not an absolute or perfect representation of sustainability. Measurement always involves choices about what is included, what is prioritised and how evidence is interpreted. The framework supports better judgement, but it does not remove the need for judgement.
- A full view, but never the full picture:** The GFM takes a whole-farm approach, covering environmental, social and economic dimensions of sustainability. This helps avoid narrow assessments that focus on a single issue, such as carbon, productivity or biodiversity alone. Even so, there will always be more that could be measured. Farming systems are complex and dynamic, and not every relationship, externality or long-term impact can be captured within one framework. The GFM provides a broad and structured view, but it should be used alongside local knowledge, farmer experience and, where needed, additional specialist assessment.
- Context dependency:** Farm sustainability is highly context-specific. Factors like soil type, climate, topography, water availability, market access, infrastructure and policy conditions all affect what is possible and what good performance looks like. This means the same indicator may have different implications in different contexts. A farm's performance should therefore be interpreted in relation to its operating conditions, including factors that sit partly or wholly outside the farmer's control. Without context, there is a risk of drawing unfair conclusions or placing too much responsibility on farmers for systemic barriers.
- Limits of comparability:** The GFM can support more consistent and comparable sustainability data, but comparability has limits. Farms vary significantly by geography, system type, scale, production purpose and available resources. Some indicators may be comparable across many farms, while others require careful interpretation. Direct comparison is most meaningful where farms share similar contexts, methods, data quality and assessment boundaries. The framework should therefore support learning and improvement, not simplistic ranking. Comparisons should be used carefully, with transparency about methods, assumptions and contextual factors.
- A starting point for collaboration:** The GFM outcomes can help build shared understanding and high-level agreement around what sustainable farming should achieve. It provides a common language for farmers, researchers, supply chains, policymakers and other stakeholders. However, translating shared outcomes into consistent metrics, methods, priorities and actions often requires further discussion, negotiation and testing. The framework creates a foundation for collaboration, but practical application depends on the purpose, context and users involved.

- Value-based judgements:** Although the GFM is grounded in science, evidence and global sustainability goals, sustainability is not purely technical. It also involves values, priorities and decisions about what matters most. Choices about outcomes, indicators, thresholds and scoring can shape how sustainability is understood. These choices should be made transparently, with clear explanation of the assumptions, trade-offs and limitations involved.
- Scope and externalities:** The GFM focuses on farm-level sustainability. This is a strength because it keeps the framework grounded in the realities of farm management and farm-level outcomes. However, it does not capture every upstream, downstream or wider system impact. For example, full product life-cycle impacts, consumer behaviour, processing, transport, retail and waste may require additional modelling or complementary frameworks. Where the GFM is used beyond the farm gate, users should be clear about what is included and what is outside scope.
- Data burden and usability:** Applying the GFM in assessment or data collection can require time, resources and technical support. Comprehensive sustainability measurement can be costly and complex, particularly where data is not already being collected. The framework should therefore be applied in ways that are proportionate and useful. Data collection should create value for farmers, not simply extract information from them. Support from advisors, assessment providers, supply chains and technology providers may be needed to reduce burden and ensure the results are practical, understandable and actionable.
- Ongoing testing and evolution:** The GFM should continue to evolve as it is tested across different regions, farming systems and stakeholder groups. Further testing is particularly important in under-represented geographies and production systems, and with diverse farmer and community voices. Ongoing research, feedback and knowledge-sharing will help strengthen the framework's relevance, inclusivity and practical value over time.

## Driving change

The need for change and collaboration is urgent. The GFM will be working towards creating a minimum set of metrics to align a broader section of the farming system, as well as the use of these to understand and value their impact on the wider world.

### The need for change

Farming is being asked to respond to multiple challenges at once, from climate change and biodiversity loss to food security, farmer livelihoods and rural resilience. Yet decision-making across the food and farming system is still often shaped by narrow, fragmented or proxy-based data. The GFM offers a different starting point. By providing a shared, holistic framework for understanding farm sustainability, it helps make visible the full range of environmental, social and economic outcomes that farms both affect and deliver. If adopted more widely, the GFM could support an important shift in how sustainability is understood, measured and rewarded.

Decision-making could move beyond isolated metrics towards a more balanced understanding of whole-farm performance. Incentives could become better aligned with real-world outcomes, helping farmers delivering public value to be recognised and supported. Accountability could also improve through clearer evidence of what is happening on farms and how different actors across the system contribute to change.

This is not only about improving farm assessment. It is about creating the conditions for better policy, sourcing, finance, research and communication. A shared framework can help reduce fragmentation, strengthen trust and support more coordinated action across the food and farming system.

### Next steps

Achieving this change will require continued development, testing and collaboration. The next phase of framework development will focus on the use of indicators to measure the impact of the farm on the wider world. Farm activities influence broader environmental, social and economic outcomes, from nutritional quality to climate impacts. Equally, farm sustainability is shaped by markets, policy, finance and consumer demand. While the framework is currently farm-focused, indicators relating to these wider impacts have been identified (see Appendix).

This work will also support the development of a 'minimum viable' indicator set: a shared, interoperable subset of indicators that balances scientific credibility, practical measurability, global relevance and value across different stakeholder needs. The aim is not to capture everything, but to identify the most useful indicators for understanding core sustainability outcomes and strengthening alignment across tools, schemes and initiatives. This includes understanding the role different indicator types play and how they can be combined to support better assessment.

Alongside this, we will continue to explore how positive outcomes can be recognised and rewarded in practice. The use of the GFM to identify where farms are delivering environmental, social and economic value leads to questions as to how that value can be supported through finance and policy incentives, like supply chain premiums, preferred sourcing and other reward mechanisms. The opportunity is to move beyond measurement for reporting alone towards measurement that makes sustainable outcomes more visible, more valued and more achievable.



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# The GFM 2.0 framework

The following pages show the full GFM framework.

It starts with high-level categories and outcomes (at the top of the page), then breaks these down into subcategories and properties (in columns one and two of the tables). Indicators are included with a short description of what is being measured and why this matters (columns three and four of the tables).

# Context

Context considers the barriers and enablers that are beyond the control of the farmer and affect the farm's ability to deliver sustainability outcomes. Context indicators are not specified as they are better developed for each unique use-case of the GFM. The subcategories below highlight key areas to consider in the development of your own contextual indicators.

Subcategory	Description
Geology and topography	The land's physical characteristics, including soil type, elevation and natural and built features. These characteristics influence aspects like water drainage, erosion and potential uses of the land.
Environment and ecology	The condition of the ecosystems surrounding the farm, including off-farm biodiversity, air pollution and water quality. The health of the environment outside the farm influences on-farm ecosystems and can impact productivity, soil fertility, pest control and water resources.
Climate and weather	The weather patterns, conditions and climate, including temperature, rainfall and wind, as well as the occurrence of irregular and extreme weather events. These aspects affect water availability, crop yields and ecosystem stability and can disrupt and damage farming operations.
Agricultural supplies	Inputs (e.g. fertilisers and seed), materials (e.g. for packaging, construction, protection and maintenance), equipment (e.g. tractors, irrigation, milking machine, plough), infrastructure (e.g. energy, technology and transport networks) and services (e.g. vets, suppliers and advisors). The accessibility, condition and availability of these supplies can impact the adoption of sustainable farming practices, as well as efficiency and productivity.
Society and culture	Local traditions, values, societal structures and the degree of community support that a farm receives. This shapes land use, approaches to sustainability and knowledge and resource sharing.
Regulation, law and policy	Local, national and global legislation, from agricultural subsidy systems to trade laws. These and their underpinning ideology govern land use, environmental protection, labour rights and farming practices.
Economics and finance	Market demand, cost structures and financial allocation. Access to affordable capital and fair pricing can support sustainable production, while market pressures may encourage short-term practices that undermine long-term sustainability.

# Governance

**Outcome:** Farm governance is equitable, inclusive and respects traditional knowledge. Decision-making — whether formal or informal, hierarchical or cooperative — prioritises transparency, fairness and shared responsibility, empowering all stakeholders. Social, economic and environmental risks and conflicts are monitored and resolved meaningfully, with long-term strategic thinking embedded to build resilience for the future of the farm and future generations.

Sub category	Property	Indicator	Description
Roles and responsibilities	Representation and equity in roles	Distribution of all roles and responsibilities, paid and unpaid, disaggregated by social groups*	How work and responsibilities are shared across people, affecting fairness and recognition of contributions.
	Role clarity and organisational structure	Proportion of farm decision-makers and workers with a shared understanding of roles, responsibilities and organisational structure	Clarity over responsibilities and decision-making, reducing confusion, conflict and duplicated effort.
	Distribution of responsibilities	Distribution of responsibilities across individuals, disaggregated by social groups*	Balance of responsibilities can indicate equity of opportunity and avoid stress and over-reliance on individuals.
Decision making processes	Decision accountability	Proportion of decisions for which decision-makers are clearly identified and accountable	Transparency over who makes decisions and is responsible for their outcomes, supporting trust and learning.
	Participation and inclusion in decision making	Proportion of relevant workers, community members and affected stakeholders involved in decision making, disaggregated by social groups*	Extent to which affected people contribute to decisions, improving fairness, trust and relevance.
	Decision transparency	Proportion of key decisions communicated to all relevant people on farm	How effectively important decisions are shared, supporting coordination, transparency and trust.
	Decision making autonomy	Proportion of organisational decisions where farmer intent is overridden by external influences and constraints	Degree to which outside pressures constrain farmers' ability to shape the farm's direction.
	Access to conflict resolution	Proportion of people on farm confident in their ability to raise and access conflict resolution processes, disaggregated by social groups*	Whether people feel able to raise concerns safely and access fair resolution processes.
	Responsiveness to risks and conflicts	Proportion of identified risks, conflicts and grievances (from both internal and external stakeholders) with a successfully implemented response or adaptation within an appropriate timeframe	Ability to address problems promptly, reducing harm and strengthening resilience.
Monitoring and planning	System monitoring coverage	Number of distinct parts of the farming system actively monitored	Breadth of monitoring across social, environmental and economic areas, supporting whole-farm understanding and management.
	Knowledge quality and diversity	Proportion of decisions informed by diverse, evidence-based and context-relevant knowledge sources	Extent to which decisions combine experience, local knowledge, advice and evidence to support informed, balanced decisions.
	Planning horizon and stewardship	Length of time horizon used in farm planning and decision making	Extent to which decisions balance immediate needs with long-term resilience, investment and stewardship.

\*Social groups = broken down by relevant social groups, such as age, gender, ethnicity, disability, farming background, role type or employment status, where appropriate and safe to collect. This should recognise intersectionality, as people may experience different outcomes depending on more than one aspect of identity or circumstance.

# Air and climate

**Outcome:** Greenhouse gas emissions are minimal and carbon removal is maximised, contributing towards climate change mitigation efforts. Air is of good quality and free of pollutants, supporting the health of people, livestock and the environment.

Sub category	Property	Indicator	Description
Greenhouse gas emissions	Total greenhouse gas emissions	Total farm greenhouse gas emissions, disaggregated by greenhouse gases*	Tracks whether overall emissions are rising or falling, indicating the farm's contribution to climate change.
	Greenhouse gas emissions intensity per product	Greenhouse gas emissions per unit output, disaggregated by greenhouse gases*	Shows the emissions efficiency of production, enabling fair comparisons across outputs, systems or years.
	Greenhouse gas emission sources	Greenhouse gas emissions by source, disaggregated by greenhouse gases*	Identifies the main causes of emissions and where management changes could have greatest impact.
Carbon stocks	Soil carbon storage	Level of carbon stocks in soil	Supports soil health, water retention and nutrient cycling while contributing to long-term carbon storage.
	Biomass carbon storage	Level of carbon stocks in biomass	Vegetation stores carbon, provides habitat and strengthens ecosystem function and farm resilience.
Pollutants	Particulate emissions	Level of particulate matter recorded on farm	Dust and fine particles affect air quality, health and the wellbeing of nearby communities.
	Reactive gas emissions	Level of reactive gases emitted	The amount released from sources like fertilisers, combustion or chemical use can damage ecosystem health through acidification and nutrient deposition.
	Local disturbance	Number of complaints received regarding farm-generated noise, light and odour	Reflects the local impacts of farm activities on ecosystems, wellbeing and community relationships.

\*Greenhouse gases = broken down by greenhouse gas type, including carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O).

# Soil

**Outcome:** Soils have healthy structure, fertility and biological function, supporting water storage, nutrient cycling, resilient plant growth and productive agriculture. They are protected from pollution and erosion, contributing to biodiversity, carbon storage, flood regulation, clean water and the long-term production of food, fuel and fibre.

Sub category	Property	Indicator	Description
Structure	Soil aggregate structure	Level of aggregate stability	Soil aggregates support water infiltration, root growth and biological activity, indicating resilient soil structure.
	Soil packing	Level of soil compaction	Compaction limits root growth and restricts the movement of air and water through soil.
	Air and water movement pathways	Presence of visible macropores and biopores	Large pores enable drainage, aeration and root development, supporting healthy soil life.
	Soil water storage capacity	Water retention capacity of soil	Small pores store plant-available water, improving drought resilience and consistent crop growth.
	Soil surface	Condition of soil surface	Surface condition affects water entry, erosion risk and successful seedling establishment.
Chemistry	Soil acidity vs alkalinity	Soil pH	Soil pH controls nutrient availability and can increase the risk of harmful elements becoming toxic.
	Available nutrients	Level of available nutrients	Readily available nutrients determine whether crops can access nutrients for short-term growth.
	Nutrient retention capacity	Cation exchange capacity	Nutrient retention influences fertiliser efficiency and the risk of nutrients being lost from soil.
	Nutrient reserves	Level of soil organic matter	Organic matter provides long-term nutrient supply while supporting structure, water retention and biological activity.
Pollutants	Nutrient surplus	Level of nutrients exceeding safe thresholds in soil	Excess nutrients increase the risk of losses to water and air, wasting inputs and causing pollution.
	Heavy metal and metalloid contamination	Level of heavy metals in soil	Heavy metals can accumulate in soils and affect crops, livestock, soil organisms and human health.
	Synthetic chemical contamination	Level of synthetic chemical residues in soil	Persistent chemicals can damage soil biology and wider ecosystems and may enter food chains.
	Physical contamination	Level of physical contaminants in soil	Foreign materials degrade soil quality and indicate wider pollution issues.
	Biological contamination	Level of pathogens in soil	Harmful microorganisms can threaten crop safety, livestock health and worker wellbeing.

# Water

**Outcome:** Water is sourced sustainably and used efficiently to support productive, resilient farming while protecting local water resources. Water on and around the farm is abundant and free from harmful pollution, supporting biodiversity, healthy aquatic ecosystems and downstream water quality.

Sub category	Property	Indicator	Description
Usage	Water withdrawal	Total amount of water withdrawn or supplied to the farm, disaggregated by water source*	Water withdrawn from different sources affects resource availability, reliability and environmental pressures.
	Water use efficiency	Amount of water used to produce a unit of product, disaggregated by water source*	Water used per unit of output shows how efficiently water supports production.
	Water losses	Amount of water lost from storage, distribution or application systems before reaching its intended productive use	Losses from storage and distribution reduce efficiency and increase pressure on water resources.
Availability	Water supply reliability	Number of days where farm has consistent water supply in regional drought periods	Reliable supplies during drought support production, livestock welfare and business resilience.
Pollutants	Nutrient pollution	Level of nutrients exceeding safe thresholds in water courses	Excess nutrients in water can trigger algal blooms and damage aquatic ecosystems.
	Heavy metal and metalloid contamination	Level of heavy metals in water courses	Heavy metals in water can accumulate and threaten wildlife, livestock and human health.
	Synthetic chemical contamination	Level of synthetic chemical residue in water courses	Chemical residues can contaminate water and harm aquatic ecosystems and food systems.
	Physical contamination	Level of physical contaminants in water courses	Plastics, debris and sediment degrade water quality and damage freshwater habitats.
	Biological contamination	Level of pathogens in water courses	Pathogens in water can affect food safety and pose significant risks to people, livestock and wildlife.

\* Water source = broken down by origin of water, such as mains water, abstracted water, rainwater harvesting, collected water or recycled water.

# Biodiversity

**Outcome:** Biodiversity is rich, healthy and resilient across the farm. A diversity of habitats, species and genetics support ecosystem function, productive agriculture and adaptation to environmental change.

Sub category	Property	Indicator	Description
Species composition	Species richness	Number of different species on farm, disaggregated by farm ecosystem component*	The variety of plants, animals and other organisms supports ecological stability and resilience to change.
	Species rarity	Presence of rare or priority species, disaggregated by farm ecosystem component*	Presence of uncommon, protected or declining species, reflecting the conservation value of the farm and the importance of particular habitats.
	Genetic diversity	Number of crop varieties and livestock breeds	Diversity of crop varieties and livestock breeds, improving resilience to pests, disease and changing conditions.
Distribution and abundance	Species abundance	Abundance of indicator species, disaggregated by farm ecosystem component*	Numbers of key plants and animals, showing whether populations are thriving or declining over time.
	Species spatial distribution	Distribution of species and vegetation cover across land-use areas, disaggregated by farm ecosystem component*	The spread of species and vegetation across the farm supports ecosystem function.
Species condition	Wildlife health	Incidence of disease or stress in selected wildlife indicator species	The health of wildlife populations can signal wider pressures such as pollution, disease or habitat degradation.
Eco-system function	Ecosystem roles	Presence of organisms that fill key ecosystem roles	Presence of pollinators, decomposers and natural pest controllers that keep ecosystems functioning.

\* Farm ecosystem component = broken down by the main living and ecological parts of the farm system, including wildlife flora and fauna, soil, aquatic areas, crops, pasture and livestock

# Land use

**Outcome:** Land is used and connected in ways that support productive agriculture, healthy habitats and resilient ecosystems. Infrastructure is reliable, efficient and designed to meet current and future needs while minimising resource use and waste.

Sub category	Property	Indicator	Description
Composition	Land use and feature diversity	Number of distinct land use types and features	Variety of land uses and features can spread risk, support production and improve ecosystem resilience.
	Land use area distribution	Proportion of total farm area under each land use type	The balance of land allocated to each land-use type influences production, habitats, carbon storage and environmental pressures.
Configuration	Connectivity of natural features	Arrangement of land use areas and habitats and their level of connectivity	Connected habitats and landscape features allow wildlife, water and ecological processes to function and move across the farm and landscapes.
Condition	Infrastructure condition	Amount of labour downtime cause by poor infrastructure condition	Reliability of buildings, tracks and other infrastructure, affecting efficiency, safety and operating costs.
	Sustainability of infrastructure	Proportion of infrastructure designed according to principles of sustainability and circularity	Extent to which infrastructure conserves resources, reduces waste and supports long-term resilience.

# Crops and Pasture

**Outcome:** Crops and pasture are healthy, productive and resilient, producing consistent yields of safe, nutritious and high-quality products with minimal losses and waste.

Sub category	Property	Indicator	Description
Plant health	Plant pests and disease	Proportion and severity of crop or pasture affected by pests and disease	Extent and severity of damage, indicating crop health and resilience to biological pressures.
	Plant growth	Growth rate, disaggregated by crop and pasture type*	Rate of development, reflecting how well growing conditions support productive plants.
	Root function	Root depth, disaggregated by crop and pasture type*	Development of root systems that improve access to water, nutrients and resilience to stress.
Productivity	Crop and pasture output	Total amount of crop and pasture produced, disaggregated by crop and pasture type*, per unit area	Quantity of forage or crops produced relative to land area, reflecting productive performance in a comparable way.
Loss and waste	Pre-harvest losses	Proportion of yield lost pre-harvest, disaggregated by crop and pasture type*	Share of potential production lost before harvest through factors like weather, pests, disease or management for example.
	Post-harvest losses	Proportion of product lost post-harvest, disaggregated by crop and pasture type*	Share of harvested production lost during handling, storage or processing.
Product quality	Food safety	Level of contaminants in products, disaggregated by contaminant type**	Presence of harmful substances that affect food safety and market suitability.
	Nutritional quality	Nutritional density of products, disaggregated by product* and nutrient*** type	Concentration of beneficial nutrients contributing to food quality and public health.
	Physical quality	Proportion of products with visual defects, disaggregated by product type*	Share of production meeting visual standards for sale, influencing marketability, price and the risk of waste.

\*Crop and pasture type = broken down by the type of crop, pasture or forage being assessed, where relevant.  
 \*\*Contaminant type = Product contaminant indicators should be broken down by contaminant type, including biological contaminants, synthetic chemical residues, heavy metals and physical contaminants.  
 \*\*\*Nutrient type = relevant macro and micro nutrients within a food or feed product (including fatty acids, proteins, vitamins and minerals), as well as levels of phytochemicals (like carotenoids and polyphenols).

# Livestock

**Outcome:** Farmed and working animals are healthy, resilient, have high welfare and able to express natural behaviours. There is consistent production of safe, nutritious and high-quality products with minimal loss and waste.

Sub category	Property	Indicator	Description
Health	Livestock disease	Rate and severity of livestock disease, disaggregated by livestock type*	Extent and seriousness of disease affecting different livestock groups affects welfare, productivity and resilience.
	Livestock injury	Rate and severity of livestock injury, disaggregated by livestock type*	Frequency and severity of injuries across different livestock groups can reveal problems with housing, handling or management.
	Physiological condition	Body condition, disaggregated by livestock type*	Overall physical condition according to amount of fat and muscle. Indicates nutrition, health and productive performance.
Mortality	Livestock mortality	Unplanned mortality rate, disaggregated by livestock type*	Proportion of animals dying unexpectedly before their planned productive lifespan.
Wellbeing	Behavioural expression	Proportion of time showing natural behaviours, disaggregated by livestock type*	Extent to which animals can express species-specific behaviours in their environment.
	Stress levels	Proportion of time showing stress behaviours, disaggregated by livestock type*	Frequency of behaviours associated with fear, discomfort or poor welfare.
	Resting behaviour	Proportion of time spent resting, disaggregated by livestock type*	Time available for rest and recovery to support health and normal behaviour.
Productivity	Livestock output	Total amount of livestock product produced, disaggregated by livestock product type*, per unit area	Quantity of livestock products produced relative to the land used. Provides food and helps interpret resource use and efficiency.
Loss and waste	Livestock on-farm product loss	Proportion of livestock product lost before sale or use, disaggregated by livestock product type**	Share of animal products lost before they can be sold or used. Avoidable losses reduce profitability and indicate inefficiencies after production.
Product quality	Food safety	Level of contaminants in livestock products, disaggregated by contaminant type***	Presence of harmful substances affecting product safety and market suitability.
	Nutritional quality	Nutritional density of livestock products, disaggregated by livestock product** and nutrient**** type	Concentration of beneficial nutrients contributing to food quality and human health.
	Physical quality	Proportion of livestock products with visual defects, disaggregated by livestock product type**	Share of products meeting physical quality standards for sale and use.

\* Livestock type = broken down by the type of crop, pasture or forage being assessed, where relevant.  
 \*\*Livestock product type = broken down by type of livestock product produced, such as honey, milk, eggs, leather  
 \*\*\*Contaminant type = Product contaminant indicators should be broken down by contaminant type, including biological contaminants, synthetic chemical residues, heavy metals and physical contaminants.  
 \*\*\*\*Nutrient type = relevant macro and micro nutrients within a food or feed product (including fatty acids, proteins, vitamins and minerals), as well as levels of phytochemicals (like carotenoids and phenolic compounds).

# Farmers and workers

**Outcome:** Farmers and workers are healthy, safe and treated fairly, with good wellbeing, rewarding work and opportunities to learn, contribute and develop. They are valued, fairly rewarded and supported to thrive as part of a resilient farm system.

Sub category	Property	Indicator	Description
Health	Worker safety	Rate and severity of farm work-related injuries, disaggregated by social groups*	Frequency and seriousness of work-related injuries, affecting safety and productivity.
	Worker physical illness	Rate and severity of work-related physical illness, disaggregated by social groups*	Frequency and seriousness of work-related illness, affecting health and quality of life.
Wellbeing	Mental wellbeing	Rate and severity of farm-related negative mental wellbeing, disaggregated by social groups*	Extent of poor mental wellbeing, influencing resilience, relationships and decision making.
	Social support	Proportion of people on the farm experiencing supportive working relationships, disaggregated by social groups*	Amount of people experiencing supportive working relationships strengthen wellbeing and teamwork.
Working conditions	Recognition and voice	Proportion of people on the farm who feel valued, heard and recognised within the organisation, disaggregated by social groups*	Extent to which people feel respected, listened to and able to contribute.
	Work role satisfaction	Level of satisfaction with farm role, disaggregated by social groups*	Satisfaction with day-to-day work, influences motivation and long-term commitment.
	Worker enablement	Proportion of people on the farm with the capacity, resources, training and support needed to perform effectively, disaggregated by social groups*	Access to the tools, knowledge and support needed to work effectively.
	Worker capability development	Proportion of workers acquiring new knowledge and skills over a defined period, disaggregated by social groups*	Development of new skills and knowledge, supporting confidence and adaptability
	Application of knowledge	Proportion of farmers and workers applying or sharing knowledge and skills in practice	Use and sharing of learning to improve farming practices and performance.
	Purpose alignment	Proportion of people on the farm with high level of alignment with organisational purpose and values	Shared understanding of the farm's purpose and values, encouraging motivation and belonging.
	Remuneration	Level of remuneration relative to a living wage, including monetary and non-monetary benefits, disaggregated by social groups*	Fair financial and non-financial rewards that support wellbeing and retention.
	Employment stability	Rate of worker retention on the farm, adjusted for seasonality, disaggregated by social groups*	Continuity of employment, helping retain skills, experience and trust.
	Autonomy and belonging	Proportion of people on farm experiencing a sense of belonging, disaggregated by social groups*	Feeling included, respected and able to contribute with confidence.

\* Social groups = broken down by relevant social groups, such as age, gender, ethnicity, disability, farming background, role type or employment status, where appropriate and safe to collect. This should recognise intersectionality, as people may experience different outcomes depending on more than one aspect of identity or circumstance.

# Community

**Outcome:** Farms build strong, mutually beneficial relationships for resilient, thriving communities. Fair employment, knowledge exchange, cultural stewardship, resource sharing and production supports local needs and economies.

Sub category	Property	Indicator	Description
Employment	Employment opportunities	Number of full time equivalent workers per unit area, both paid and unpaid, disaggregated by social groups*	Employment created by the farm, supporting local livelihoods and rural economies.
	Equality of opportunities	Diversity of the farm workforce relative to the local population, disaggregated by social groups*	Representation of different groups within the workforce, promoting fair access to opportunities.
Knowledge and skills exchange	Farm knowledge sharing to community	Number of knowledge-sharing activities delivered by the farm, disaggregated by activity type**	Knowledge and skills shared with others, supporting learning and collaboration.
	Community participation in knowledge sharing	Number of people from the community participating in knowledge sharing activities, disaggregated by social groups*	Community engagement in learning opportunities, reflecting accessibility and relevance.
	Knowledge gained by the community	Proportion of community members reporting increased knowledge or skills, disaggregated by social groups*	Learning and skills gained through participation, strengthening community capacity.
	Farm participation in community knowledge sharing	Number of external knowledge-sharing activities participated in by the farm, disaggregated by activity type**	Engagement with external learning networks, encouraging innovation and adaptation.
Cultural assets and activities	Preservation of cultural assets and activities	Proportion of cultural assets and activities preserved by the farm (if present)	Protection of local traditions, heritage and culturally important features.
	Engagement with cultural assets and activities	Number of people engaging with cultural assets and activities, disaggregated by social groups*	Community participation in cultural activities that strengthen identity and connection.
Resource sharing	Farm resources shared with the community	Proportion of available farm resources shared with the community, disaggregated by resource type***	Farm facilities, equipment or services made available for wider community benefit.
	Equity of access to shared resources	Perceived fairness of access to shared resources	Fairness of access to shared resources, supporting trust and inclusion.
	Community resources used by the farm	Proportion of available community resources used by farm, disaggregated by resource type***	Use of local facilities, services or assets that encourage cooperation and efficiency.
	Farm benefit from resource sharing	Farmer-reported benefits from sharing resources	Value gained by the farm through collaborative use of resources.
	Community benefit from resource sharing	Perceived benefits to others from access to farm resources	Value created for the wider community through shared resources and collaboration.
Place-based farming production	Contribution to local markets	Proportion of output supplied to local markets	Share of production sold locally, supporting local food systems and economies.
	Use of locally adapted breeds and varieties	Proportion of production made up of local or heritage breeds and varieties	Use of locally adapted genetics that support resilience, biodiversity and cultural heritage.
	Alignment with local demand	Extent to which farm production reflects local market demand and needs	Match between farm production and local food needs, strengthening community resilience.
	Local value addition and processing	Local value addition and processing	Share of production processed locally, retaining value, jobs and infrastructure within the region.

\*Social groups = broken down by relevant social groups, such as age, gender, ethnicity, disability, farming background, role type or employment status, where appropriate and safe to collect. This should recognise intersectionality, as people may experience different outcomes depending on more than one aspect of identity or circumstance.

\*\* Activity type = Community knowledge exchange indicators should be broken down by type of activity, such as farm walks, workshops, training sessions, school visits, demonstrations, peer learning or public events.

\*\*\* Resource type = Community resource sharing indicators should be broken down by the type of resource shared, such as land, buildings, machinery, equipment, labour, storage space, processing facilities or services.

# Agricultural supplies

**Outcome:** Agricultural supplies, including agricultural inputs, materials and equipment, are sustainably sourced and used efficiently. Inputs pose no risk and cause no harm to environmental, animal or human health. Equipment is well maintained for long-term use, with waste repurposed within a circular system.

Sub category	Property	Indicator	Description
Sourcing and characteristics	Reliance on external services	Proportion of activities supported by external services, disaggregated by service type*	Extent to which specialist services support farm activities, influencing expertise, costs and dependency.
	Total input use	Total quantity of inputs used, disaggregated by input type**	Quantity of purchased resources used to support production, influencing costs and environmental impacts
	Upstream impact of inputs	Proportion of current inputs from renewable, sustainable or lower-impact sources, disaggregated by input type**	Sustainability of purchased inputs, influencing upstream environmental and social impacts.
	Input hazard profile	Proportion of inputs classified as hazardous, disaggregated by input type**	Hazardous inputs pose risks to people, ecosystems and animal health.
	Local sourcing of inputs	Average distance travelled by inputs, disaggregated by input type**	Distance inputs travel to the farm, influencing transport impacts and supply chain resilience
Usage and dependency	Input use efficiency	Total inputs per unit output, disaggregated by input type**	Quantity of inputs needed to produce output, influencing efficiency, costs and waste.
	Input use intensity	Total inputs used per unit land area, disaggregated by input type**	Quantity of inputs applied across the farm, influencing pressure on land and ecosystems.
Lifespan and maintenance	Lifespan of equipment and materials	Average lifespan, disaggregated by equipment and material type***	Length of time equipment and materials remain in productive use before replacement.
Waste and circularity	Waste generation	Total waste exported off the farm, disaggregated by material type*** and destination	Materials leaving the farm system, influencing resource efficiency, costs and environmental impacts.
	Material circularity	Proportion of materials and outputs reused or recycled	Extent to which resources remain in productive use through reuse and recycling.

\* Service type = External service indicators should be broken down by service type, such as veterinary services, agronomy advice, contracting, transport, accounting, certification, consultancy, maintenance or technical support.  
 \*\* Input type = Input indicators should be broken down by input type, such as fertiliser, feed, seed, bedding, medicines, pesticides, fuel, energy, packaging, water or other.  
 \*\*\* Equipment and material type = Lifespan, waste and circularity indicators can be broken down by material or equipment type, such as machinery, tools, irrigation equipment, fencing, plastic, packaging, building materials, tyres, pipes or protective equipment.

# Economics

**Outcome:** Farms are economically viable, generating sufficient returns to support productive, resilient businesses. They are financially secure, able to withstand change, invest in continual improvement and build strong market relationships that create long-term value.

Sub category	Property	Indicator	Description
Financial performance	Financial profitability	Net profit	Financial return after costs, supporting long-term business viability.
	Sales and exports	Proportion of output produced that is sold or leaves the farm	Share of production generating value through markets, supply chains or other uses.
	Cost efficiency	Cost of production per unit output	Cost of producing each unit of output, influencing profitability and competitiveness.
	Value realisation	Perceived fairness of price received for product	Extent to which prices received reflect the value of farm products.
Financial resilience	Income stability	Level of variability in farm income (revenue) across and within years	Consistency of earnings over time, supporting resilience and business planning.
	Financial buffer capacity	Months of current operating costs covered by financial reserves	Financial reserves available to manage disruption and unexpected costs.
	Short-term solvency	Ability to cover short-term liabilities	Capacity to meet short-term financial obligations and maintain operations.
	Market channel diversity	Number of market channels	Diversity of sales routes, reducing dependence on individual buyers or markets.
	Income security	Proportion of output pre-agreed under contract	Proportion of future sales secured through contracts or agreements.
	Income diversification	Proportion of income from each enterprise	Distribution of income across different enterprises, reducing financial risk.
Financial independence	Financial autonomy	Proportion of costs covered independently, without subsidy or external support	Extent to which farm income covers costs without reliance on external support.
Investment and adaptive capacity	Reinvestment capacity	Proportion of income reinvested, disaggregated by investment type*	Income reinvested into maintenance, improvement, adaptation and future growth.
	Access to capital	Ability to access capital when needed	Availability of finance for investment, innovation and responding to opportunities.
	Return on investment	Proportion of major investments that achieve their intended outcomes (financial or non-financial)	Success of investments in delivering expected financial or wider benefits.

\* Investment type = Key areas where resources can be re-invested can be broken down into categories like maintenance, growth, sustainability, skills or infrastructure.

# Appendix A: indicator classification

Tables classifying indicator types – see page 20 for more information.

**Type** refers to whether the indicator is plan, practice, result or outcome based. **Dynamic** refers to whether it is a state or process being captured. **Time** refers to whether the indicator is likely to respond quickly or slowly change. **Impact** highlights the indicators that are *likely* to have an impact off-farm, and those where an impact on the wider world is *possible*. These latter two classifications are approximations only,

## Governance

Sub category	Property	Indicator	Type	Dynamic	Time	Impact
Roles and responsibilities	Representation and equity in roles	Distribution of all roles and responsibilities, paid and unpaid, disaggregated by social groups*	Outcome	State	Medium term	
	Role clarity and organisational structure	Proportion of farm decision-makers and workers with a shared understanding of roles, responsibilities and organisational structure	Outcome	State	Short-medium term	
	Distribution of responsibilities	Distribution of responsibilities across individuals, disaggregated by social groups*	Outcome	State	Short-medium term	
Decision making processes	Decision accountability	Proportion of decisions for which decision-makers are clearly identified and accountable	Outcome	Process	Short term	
	Participation and inclusion in decision making	Proportion of relevant workers, community members and affected stakeholders involved in decision making, disaggregated by social groups*	Outcome	Process	Short-medium term	off-farm impacts likely
	Decision transparency	Proportion of key decisions communicated to all relevant people on farm	Outcome	Process	Short term	
	Decision making autonomy	Proportion of organisational decisions where farmer intent is overridden by external influences and constraints	Outcome	Process	Medium term	
	Access to conflict resolution	Proportion of people on farm confident in their ability to raise and access conflict resolution processes, disaggregated by social groups*	Outcome	Process	Short-medium term	
	Responsiveness to risks and conflicts	Proportion of identified risks, conflicts and grievances (from both internal and external stakeholders) with a successfully implemented response or adaptation within an appropriate timeframe	Outcome	Process	Short-medium term	off-farm impacts likely
Monitoring and planning	System monitoring coverage	Number of distinct parts of the farming system actively monitored	Practice	State	Medium term	
	Knowledge quality and diversity	Proportion of decisions informed by diverse, evidence-based and context-relevant knowledge sources	Outcome	Process	Short-medium term	Possible off-farm impacts
	Planning horizon and stewardship	Length of time horizon used in farm planning and decision making	Outcome	State	Long term	Possible off-farm impacts

## Air and climate

\*Greenhouse gases = broken down by greenhouse gas type, including carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O).

Sub category	Property	Indicator	Type	Dynamic	Time	Impact
Greenhouse gas emissions	Total greenhouse gas emissions	Total farm greenhouse gas emissions, disaggregated by greenhouse gases*	Outcome	Process	Short-medium term	off-farm impacts likely
	Greenhouse gas emissions intensity per product	Greenhouse gas emissions per unit output, disaggregated by greenhouse gases*	Outcome	Process	Short-medium term	off-farm impacts likely
	Greenhouse gas emission sources	Greenhouse gas emissions by source, disaggregated by greenhouse gases*	Result	Process	Short-medium term	off-farm impacts likely
Carbon stocks	Soil carbon storage	Level of carbon stocks in soil	Outcome	State	Long term	off-farm impacts likely
	Biomass carbon storage	Level of carbon stocks in biomass	Outcome	State	Medium-long term	off-farm impacts likely
Pollutants	Particulate emissions	Level of particulate matter recorded on farm	Result	State	Short term	off-farm impacts likely
	Reactive gas emissions	Level of reactive gases emitted	Result	Process	Short term	off-farm impacts likely
	Local disturbance	Number of complaints received regarding farm-generated noise, light and odour	Result	Process	Short-medium term	off-farm impacts likely

# Soil

Sub category	Property	Indicator	Type	Dynamic	Time	Impact
Structure	Soil aggregate structure	Level of aggregate stability	Outcome	State	Short-medium term	off-farm impacts likely
	Soil packing	Level of soil compaction	Outcome	State	Medium-long term	off-farm impacts likely
	Air and water movement pathways	Presence of visible macropores and biopores	Outcome	State	Short term	off-farm impacts likely
	Soil water storage capacity	Water retention capacity of soil	Outcome	State	Medium term	off-farm impacts likely
	Soil surface	Condition of soil surface	Outcome	State	Short-medium term	off-farm impacts likely
Chemistry	Soil acidity vs alkalinity	Soil pH	Outcome	State	Medium term	
	Available nutrients	Level of available nutrients	Outcome	State	Short term	Possible off-farm impacts
	Nutrient retention capacity	Cation exchange capacity	Outcome	State	Long term	
	Nutrient reserves	Level of soil organic matter	Outcome	State	Long term	off-farm impacts likely
Pollutants	Nutrient surplus	Level of nutrients exceeding safe thresholds in soil	Outcome	State	Short-medium term	off-farm impacts likely
	Heavy metal and metalloid contamination	Level of heavy metals in soil	Outcome	State	Long term	off-farm impacts likely
	Synthetic chemical contamination	Level of synthetic chemical residues in soil	Result	State	Short-medium term	off-farm impacts likely
	Physical contamination	Level of physical contaminants in soil	Outcome	State	Long term	off-farm impacts likely
	Biological contamination	Level of pathogens in soil	Result	State	Short term	off-farm impacts likely

# Water

Sub category	Property	Indicator	Type	Dynamic	Time	Impact
Usage	Water withdrawal	Total amount of water withdrawn or supplied to the farm, disaggregated by water source*	Result	Process	Short-medium term	off-farm impacts likely
	Water use efficiency	Amount of water used to produce a unit of product, disaggregated by water source*	Outcome	Process	Short-medium term	off-farm impacts likely
	Water losses	Amount of water lost from storage, distribution or application systems before reaching its intended productive use	Result	Process	Short-medium term	off-farm impacts likely
Availability	Water supply reliability	Number of days where farm has consistent water supply in regional drought periods	Outcome	Process	Medium-long term	Possible off-farm impacts
Pollutants	Nutrient pollution	Level of nutrients exceeding safe thresholds in water courses	Result	State	Short term	off-farm impacts likely
	Heavy metal and metalloid contamination	Level of heavy metals in water courses	Result	State	Long term	off-farm impacts likely
	Synthetic chemical contamination	Level of synthetic chemical residue in water courses	Result	State	Short-medium term	off-farm impacts likely
	Physical contamination	Level of physical contaminants in water courses	Result	State	Short term	off-farm impacts likely
	Biological contamination	Level of pathogens in water courses	Result	State	Short term	off-farm impacts likely

\* Water source = broken down by origin of water, such as mains water, abstracted water, rainwater harvesting, collected water or recycled water.

# Biodiversity

Sub category	Property	Indicator	Type	Dynamic	Time	Impact
Species composition	Species richness	Number of different species on farm, disaggregated by farm ecosystem component*	Outcome	State	Medium—long term	off-farm impacts likely
	Species rarity	Presence of rare or priority species, disaggregated by farm ecosystem component*	Outcome	State	Long term	off-farm impacts likely
	Genetic diversity	Number of crop varieties and livestock breeds	Outcome	State	Long term	off-farm impacts likely
Distribution and abundance	Species abundance	Abundance of indicator species, disaggregated by farm ecosystem component*	Outcome	State	Short-medium term	off-farm impacts likely
	Species spatial distribution	Distribution of species and vegetation cover across land-use areas, disaggregated by farm ecosystem component*	Outcome	State	Medium term	off-farm impacts likely
Species condition	Wildlife health	Incidence of disease or stress in selected wildlife indicator species	Result	State	Short term	off-farm impacts likely
Eco-system function	Ecosystem roles	Presence of organisms that fill key ecosystem roles	Outcome	State	Medium—long term	off-farm impacts likely

\* Farm ecosystem component = broken down by the main living and ecological parts of the farm system, including wildlife flora and fauna, soil, aquatic areas, crops, pasture and livestock

# Land use

Sub category	Property	Indicator	Type	Dynamic	Time	Impact
Composition	Land use and feature diversity	Number of distinct land use types and features	Outcome	State	Medium—long term	off-farm impacts likely
	Land use area distribution	Proportion of total farm area under each land use type	Outcome	State	Medium—long term	off-farm impacts likely
Configuration	Connectivity of natural features	Arrangement of land use areas and habitats and their level of connectivity	Outcome	State	Medium—long term	off-farm impacts likely
Condition	Infrastructure condition	Amount of labour downtime cause by poor infrastructure condition	Result	Process	Short-medium term	
	Sustainability of infrastructure	Proportion of infrastructure designed according to principles of sustainability and circularity				

# Crops and Pasture

Sub category	Property	Indicator	Type	Dynamic	Time	Impact
Plant health	Plant pests and disease	Proportion and severity of crop or pasture affected by pests and disease	Result	State	Short term	off-farm impacts likely
	Plant growth	Growth rate, disaggregated by crop and pasture type*	Result	Process	Short-medium term	off-farm impacts likely
	Root function	Root depth, disaggregated by crop and pasture type*	Outcome	State	Medium term	off-farm impacts likely
Productivity	Crop and pasture output	Total amount of crop and pasture produced, disaggregated by crop and pasture type*, per unit area	Result	Process	Short-medium term	
Loss and waste	Pre-harvest losses	Proportion of yield lost pre-harvest, disaggregated by crop and pasture type*	Result	Process	Short term	Possible off-farm impacts
	Post-harvest losses	Proportion of product lost post-harvest, disaggregated by crop and pasture type*	Result	Process	Short term	Possible off-farm impacts
Product quality	Food safety	Level of contaminants in products, disaggregated by contaminant type**	Result	State	Short term	off-farm impacts likely
	Nutritional quality	Nutritional density of products, disaggregated by product* and nutrient*** type	Outcome	State	Medium term	off-farm impacts likely
	Physical quality	Proportion of products with visual defects, disaggregated by product type*	Result	State	Short term	Possible off-farm impacts

\*Crop and pasture type = broken down by the type of crop, pasture or forage being assessed, where relevant.  
 \*\*Contaminant type = Product contaminant indicators should be broken down by contaminant type, including biological contaminants, synthetic chemical residues, heavy metals and physical contaminants.  
 \*\*\*Nutrient type = relevant macro and micro nutrients within a food or feed product (including fatty acids, proteins, vitamins and minerals), as well as levels of phytochemicals (like carotenoids and polyphenols).

# Livestock

Sub category	Property	Indicator	Type	Dynamic	Time	Impact
Health	Livestock disease	Rate and severity of livestock disease, disaggregated by livestock type*	Result	State	Short term	off-farm impacts likely
	Livestock injury	Rate and severity of livestock injury, disaggregated by livestock type*	Result	State	Short term	off-farm impacts likely
	Physiological condition	Body condition, disaggregated by livestock type*	Outcome	State	Short-medium term	off-farm impacts likely
Mortality	Livestock mortality	Unplanned mortality rate, disaggregated by livestock type*	Result	Process	Short term	Possible off-farm impacts
Wellbeing	Behavioural expression	Proportion of time showing natural behaviours, disaggregated by livestock type*	Outcome	Process	Short-medium term	off-farm impacts likely
	Stress levels	Proportion of time showing stress behaviours, disaggregated by livestock type*	Result	Process	Short term	off-farm impacts likely
	Resting behaviour	Proportion of time spent resting, disaggregated by livestock type*	Outcome	Process	Short-medium term	off-farm impacts likely
Productivity	Livestock output	Total amount of livestock product produced, disaggregated by livestock product type*, per unit area	Result	Process	Short-medium term	off-farm impacts likely
Loss and waste	Livestock on-farm product loss	Proportion of livestock product lost before sale or use, disaggregated by livestock product type**	Result	Process	Short term	Possible off-farm impacts
Product quality	Food safety	Level of contaminants in livestock products, disaggregated by contaminant type***	Result	State	Short term	off-farm impacts likely
	Nutritional quality	Nutritional density of livestock products, disaggregated by livestock product** and nutrient**** type	Outcome	State	Medium term	off-farm impacts likely
	Physical quality	Proportion of livestock products with visual defects, disaggregated by livestock product type**	Result	State	Short term	Possible off-farm impacts

\* Livestock type = broken down by the type of crop, pasture or forage being assessed, where relevant.  
 \*\*Livestock product type = broken down by type of livestock product produced, such as honey, milk, eggs, leather  
 \*\*\*Contaminant type = Product contaminant indicators should be broken down by contaminant type, including biological contaminants, synthetic chemical residues, heavy metals and physical contaminants.  
 \*\*\*\*Nutrient type = relevant macro and micro nutrients within a food or feed product (including fatty acids, proteins, vitamins and minerals), as well as levels of phytochemicals (like carotenoids and phenolic compounds).

# Farmers and workers

Sub category	Property	Indicator	Type	Dynamic	Time	Impact
Health	Worker safety	Rate and severity of farm work-related injuries, disaggregated by social groups*	Result	Process	Short term	off-farm impacts likely
	Worker physical illness	Rate and severity of work-related physical illness, disaggregated by social groups*	Result	Process	Medium-long term	off-farm impacts likely
Wellbeing	Mental wellbeing	Rate and severity of farm-related negative mental wellbeing, disaggregated by social groups*	Outcome	Process	Short-medium term	off-farm impacts likely
	Social support	Proportion of people on the farm experiencing supportive working relationships, disaggregated by social groups*	Outcome	State	Medium term	off-farm impacts likely
Working conditions	Recognition and voice	Proportion of people on the farm who feel valued, heard and recognised within the organisation, disaggregated by social groups*	Outcome	State	Short-medium term	off-farm impacts likely
	Work role satisfaction	Level of satisfaction with farm role, disaggregated by social groups*	Outcome	State	Short-medium term	off-farm impacts likely
	Worker enablement	Proportion of people on the farm with the capacity, resources, training and support needed to perform effectively, disaggregated by social groups*	Outcome	State	Short-medium term	off-farm impacts likely
	Worker capability development	Proportion of workers acquiring new knowledge and skills over a defined period, disaggregated by social groups*	Outcome	Process	Medium term	off-farm impacts likely
	Application of knowledge	Proportion of farmers and workers applying or sharing knowledge and skills in practice	Outcome	Process	Medium term	off-farm impacts likely
	Purpose alignment	Proportion of people on the farm with high level of alignment with organisational purpose and values	Outcome	State	Medium term	off-farm impacts likely
	Remuneration	Level of remuneration relative to a living wage, including monetary and non-monetary benefits, disaggregated by social groups*	Outcome	State	Short-medium term	off-farm impacts likely
	Employment stability	Rate of worker retention on the farm, adjusted for seasonality, disaggregated by social groups*	Result	Process	Medium term	off-farm impacts likely
	Autonomy and belonging	Proportion of people on farm experiencing a sense of belonging, disaggregated by social groups*	Outcome	State	Medium term	off-farm impacts likely

\* Social groups = broken down by relevant social groups, such as age, gender, ethnicity, disability, farming background, role type or employment status, where appropriate and safe to collect. This should recognise intersectionality, as people may experience different outcomes depending on more than one aspect of identity or circumstance.

For community (opposite)

\*Social groups = broken down by relevant social groups, such as age, gender, ethnicity, disability, farming background, role type or employment status, where appropriate and safe to collect. This should recognise intersectionality, as people may experience different outcomes depending on more than one aspect of identity or circumstance.

\*\* Activity type = Community knowledge exchange indicators should be broken down by type of activity, such as farm walks, workshops, training sessions, school visits, demonstrations, peer learning or public events.

\*\*\* Resource type = Community resource sharing indicators should be broken down by the type of resource shared, such as land, buildings, machinery, equipment, labour, storage space, processing facilities or services.

# Community

Sub category	Property	Indicator	Type	Dynamic	Time	Impact
Employment	Employment opportunities	Number of full time equivalent workers per unit area, both paid and unpaid, disaggregated by social groups*	Outcome	State	Short-medium term	off-farm impacts likely
	Equality of opportunities	Diversity of the farm workforce relative to the local population, disaggregated by social groups*	Outcome	State	Medium term	Possible off-farm impacts
Knowledge and skills exchange	Farm knowledge sharing to community	Number of knowledge-sharing activities delivered by the farm, disaggregated by activity type**	Practice	Process	Short term	off-farm impacts likely
	Community participation in knowledge sharing	Number of people from the community participating in knowledge sharing activities, disaggregated by social groups*	Result	Process	Short term	off-farm impacts likely
	Knowledge gained by the community	Proportion of community members reporting increased knowledge or skills, disaggregated by social groups*	Outcome	Process	Short-medium term	off-farm impacts likely
	Farm participation in community knowledge sharing	Number of external knowledge-sharing activities participated in by the farm, disaggregated by activity type**	Practice	Process	Short term	off-farm impacts likely
Cultural assets and activities	Preservation of cultural assets and activities	Proportion of cultural assets and activities preserved by the farm (if present)	Practice	State	Short-medium term	off-farm impacts likely
	Engagement with cultural assets and activities	Number of people engaging with cultural assets and activities, disaggregated by social groups*	Result	Process	Short term	off-farm impacts likely
Resource sharing	Farm resources shared with the community	Proportion of available farm resources shared with the community, disaggregated by resource type***	Practice	Process	Short-medium term	off-farm impacts likely
	Equity of access to shared resources	Perceived fairness of access to shared resources	Outcome	State	Medium term	off-farm impacts likely
	Community resources used by the farm	Proportion of available community resources used by farm, disaggregated by resource type***	Practice	Process	Short-medium term	off-farm impacts likely
	Farm benefit from resource sharing	Farmer-reported benefits from sharing resources	Outcome	State	Short-medium term	off-farm impacts likely
	Community benefit from resource sharing	Perceived benefits to others from access to farm resources	Outcome	State	Medium term	off-farm impacts likely
	Place-based farming production	Contribution to local markets	Proportion of output supplied to local markets	Outcome	Process	Short-medium term
Use of locally adapted breeds and varieties		Proportion of production made up of local or heritage breeds and varieties	Outcome	State	Medium-long term	off-farm impacts likely
Alignment with local demand		Extent to which farm production reflects local market demand and needs	Outcome	State	Medium term	off-farm impacts likely
Local value addition and processing		Local value addition and processing	Outcome	Process	Short-medium term	off-farm impacts likely

# Agricultural supplies

Sub category	Property	Indicator	Type	Dynamic	Time	Impact
Sourcing and characteristics	Reliance on external services	Proportion of activities supported by external services, disaggregated by service type*	Outcome	Process	Short-medium term	off-farm impacts likely
	Total input use	Total quantity of inputs used, disaggregated by input type**	Outcome	Process	Short-medium term	off-farm impacts likely
	Upstream impact of inputs	Proportion of current inputs from renewable, sustainable or lower-impact sources, disaggregated by input type**	Outcome	State	Medium term	off-farm impacts likely
	Input hazard profile	Proportion of inputs classified as hazardous, disaggregated by input type**	Outcome	State	Short-medium term	off-farm impacts likely
	Local sourcing of inputs	Average distance travelled by inputs, disaggregated by input type**	Outcome	Process	Short-medium term	off-farm impacts likely
Usage and dependency	Input use efficiency	Total inputs per unit output, disaggregated by input type**	Outcome	Process	Short-medium term	off-farm impacts likely
	Input use intensity	Total inputs used per unit land area, disaggregated by input type**	Outcome	Process	Short-medium term	off-farm impacts likely
Lifespan and maintenance	Lifespan of equipment and materials	Average lifespan, disaggregated by equipment and material type***	Outcome	State	Medium-long term	off-farm impacts likely
Waste and circularity	Waste generation	Total waste exported off the farm, disaggregated by material type*** and destination	Outcome	Process	Short-medium term	off-farm impacts likely
	Material circularity	Proportion of materials and outputs reused or recycled	Outcome	Process	Medium term	off-farm impacts likely

\* Service type = External service indicators should be broken down by service type, such as veterinary services, agronomy advice, contracting, transport, accounting, certification, consultancy, maintenance or technical support.

\*\* Input type = Input indicators should be broken down by input type, such as fertiliser, feed, seed, bedding, medicines, pesticides, fuel, energy, packaging, water or other.

\*\*\* Equipment and material type = Lifespan, waste and circularity indicators can be broken down by material or equipment type, such as machinery, tools, irrigation equipment, fencing, plastic, packaging, building materials, tyres, pipes or protective equipment.

# Economics

Sub category	Property	Indicator	Type	Dynamic	Time	Impact
Financial performance	Financial profitability	Net profit	Outcome	State	Medium term	off-farm impacts likely
	Sales and exports	Proportion of output produced that is sold or leaves the farm	Result	Process	Short-medium term	off-farm impacts likely
	Cost efficiency	Cost of production per unit output	Outcome	Process	Short-medium term	
	Value realisation	Perceived fairness of price received for product	Outcome	State	Short-medium term	off-farm impacts likely
Financial resilience	Income stability	Level of variability in farm income (revenue) across and within years	Outcome	Process	Medium term	off-farm impacts likely
	Financial buffer capacity	Months of current operating costs covered by financial reserves	Outcome	State	Medium term	
	Short-term solvency	Ability to cover short-term liabilities	Outcome	State	Short term	Possible off-farm impacts
	Market channel diversity	Number of market channels	Outcome	State	Medium term	off-farm impacts likely
	Income security	Proportion of output pre-agreed under contract	Outcome	State	Medium term	Possible off-farm impacts
	Income diversification	Proportion of income from each enterprise	Outcome	State	Medium-long term	
Financial independence	Financial autonomy	Proportion of costs covered independently, without subsidy or external support	Outcome	State	Medium-long term	
Investment and adaptive capacity	Reinvestment capacity	Proportion of income reinvested, disaggregated by investment type*	Outcome	Process	Medium-long term	Possible off-farm impacts
	Access to capital	Ability to access capital when needed	Outcome	State	Medium term	Possible off-farm impacts
	Return on investment	Proportion of major investments that achieve their intended outcomes (financial or non-financial)	Outcome	Process	Medium-long term	Possible off-farm impacts

\* Investment type = Key areas where resources can be re-invested can be broken down into categories like maintenance, growth, sustainability, skills or infrastructure.

# Appendix B: changes since 2025

Below are the 2026 changes made to the GFM 2.0 framework since the release of the categories, outcomes and subcategories in 2025. Properties and indicators are new to all categories.

## Context

No changes and no indicators added as these are to be defined for each unique use-case of the GFM.

## Governance

Outcome updated. Subcategory changes:

- Decision making > decision making processes
- Management structure > roles and responsibilities
- Farm priorities and values > monitoring and planning

Changes were made to place greater emphasis on the processes, responsibilities and management practices that influence decision-making and long-term farm resilience.

## Air and climate

No outcome change. Subcategory changes:

- Carbon sequestration and storage > carbon stocks

“Carbon sequestration and storage” was simplified to “carbon stocks” to focus on measurable outcomes rather than specific processes.

## Soil

Outcome updated. No subcategory changes. The outcome was updated to better reflect the multiple functions of soil in supporting productivity, resilience and environmental outcomes.

## Water

Outcome updated. Subcategory changes:

- Source and usage combined
- Availability has been added
- Pollutants no change

Changes were made to better capture the key dimensions of water sustainability: availability, use and quality, while reducing overlap between subcategories.

## Biodiversity

Outcome updated. Subcategory changed from a breakdown of species types (wildlife, aquatic, soil, crops and pasture, livestock) to a breakdown of how you would understand the health of those species (species composition, distribution and abundance, condition and ecosystem function)

## Land use

Outcome updated. Subcategory changes:

- Type and size of features > composition
- Configuration of features > configuration
- Condition of features > configuration

Subcategories were simplified for clearer terminology and to be inclusive of infrastructure as well as natural land features.

## Crops and pasture

Outcome updated. Subcategory changes:

- Yield > productivity

“Productivity” was adopted in place of “yield” to better capture multiple dimensions of performance beyond production volume alone.

## Livestock

Outcome updated. Subcategory changes:

- Mortality added
- Yield > productivity

“Productivity” was adopted in place of “yield” to better capture multiple dimensions of performance beyond production volume alone. Changes were made to broaden assessment beyond output measures, including animal survival and wider aspects of livestock system performance.

## Farmers and workers

Outcome updated. Subcategory changes:

- Work environment and knowledge and skills combined to working conditions

Subcategories were streamlined to better reflect the interconnected nature of working conditions, wellbeing, skills and workplace quality.

## Community

Outcome updated. Subcategory changes:

- Employment opportunities > employment
- Place-based farming and production added

Changes were made to strengthen the role of farming in supporting local economies, employment and place-based relationships.

## Agricultural supplies

Outcome updated. Subcategory changes:

- Type and source > sourcing and characteristics
- Usage > usage and dependency
- End of life > waste and circularity
- Lifespan and maintenance added

The category was expanded to better reflect the full life cycle of inputs, including sourcing, dependency, durability, maintenance and circularity.

## Get involved

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