

GFM 2.0

Outcomes, categories and subcategories



GLOBAL
FARM
METRIC

The GFM2.0 framework

The framework is comprised of categories, outcomes, subcategories, context and indicators. It is designed to capture elements that are key to social, economic and environmental sustainability. The following tables describe the outcomes, categories and subcategories of GFM2.0. Find defintions on the website: globalfarmmetric.org

CONTEXT

Contextual factors consider the barriers and enablers that are beyond the control of the farmer and affect the farm’s ability to deliver sustainability outcomes.

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 seeds), 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 to contribute to social, environmental and economic outcomes.

Subcategory	Description
Decision making	The way decisions are made on the farm, including who is involved and how. Inclusive decision-making improves outcomes, builds trust and empowers farmers and workers; it strengthens rural communities, encourages fair working environments and helps decisions account for wider social and environmental impacts.
Farm priorities and values	The underlying principles and beliefs that shape priorities, goals and how resources are used. This influences the farm’s approach to land use, animal welfare, environmental care, the food production systems that a farm adopts and the extent to which it seeks to align with public expectations around fairness, ethics and environmental responsibility.
Management structure	The organisation of people on the farm, including the distribution of roles, responsibilities and power. Effective organisation supports efficiency and fair working conditions and livelihoods, this reduces conflict, improves wellbeing and can help to address issues like worker exploitation and inequality in global food supply chains.

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.

Subcategory	Description
Greenhouse gas emissions	Gases released by agricultural activities that trap heat in the atmosphere and contribute to climate change. Emissions impact weather patterns and ecosystem stability, affecting food security, water supply and the stability of natural and human systems worldwide.
Carbon sequestration and storage	The capacity of agricultural land, including soils, forests and wetlands, to capture and store carbon from the atmosphere. Increased soil carbon levels enhance soil health and productivity and buffer farms against climate impacts, supporting efforts to reduce atmospheric carbon levels and helping limit rising temperatures and their effects on people, nature and economies globally.
Pollutants	Particulates, chemicals and odours released into the air during farming. Pollutants harm workers, livestock and surrounding ecosystems and can reduce crop yields. They contribute to respiratory illnesses in nearby communities and reduce air quality at regional scales, impacting public health and environmental quality.

SOIL

Outcome: Soils are healthy, fertile and store water and carbon. They support biodiversity and the production of high-quality food, fuel and fibre and contribute to flood prevention and water quality. Soils are free from pollution and resilient to erosion.

Subcategory	Description
Structure	The physical structure of the soil (size, shape and stability of particles). Soil structure impacts water storage, root growth and air flow. Good structure supports plant health and reduces risks like erosion and flooding. It protects rivers and habitats from sediment and chemical run-off, helping preserve aquatic life and reducing damage from extreme weather events.
Chemistry	The composition and balance of the soil, including nutrients, minerals and pH levels. This affects crop health, nutrient availability and the activity of soil organisms, thereby impacting the nutritional quality of food and supporting long-term productivity. Good nutrient balance can reduce dependency on fertilisers and the subsequent risk of land degradation.
Pollutants	Harmful substances in the soil, such as pesticide residues, excess nutrients and micro-plastics. Can reduce crop health, kill beneficial organisms and leach into water supplies. Polluted soils can threaten drinking water, damage ecosystems and expose people and animals to toxins beyond the farm.

WATER

Outcome: Water is clean and abundant in natural and agricultural systems, supporting wildlife and a diversity of aquatic species. Water is sustainably sourced and used efficiently, with no wastage.

Subcategory	Description
Source	The type and origin of water used on the farm, including rainfall, rivers and groundwater. This determines the long-term availability and reliability of water supply, especially in dry periods. Overuse of scarce or contested water sources can worsen drought impacts, reduce water access for others and affect regional food production.
Usage	How water is applied and managed in farming activities. Efficient use supports crop growth and reduces waste, especially during shortages. Poor water management can drain natural reserves, disrupt ecosystems and reduce availability for other farms, communities and wildlife.
Pollutants	Harmful substances, including fertilisers, pesticides, waste and micro-plastics that enter farm water supplies. Polluted water harms animals, crops and soil life, reducing productivity. Contamination can spread through floods or drainage, affecting human health, ecosystems and clean water access beyond the farm.

BIODIVERSITY

Outcome: Biodiversity is rich in both abundance and genetic diversity. From micro- to macro-organisms, across wild, domesticated and cultivated species, life thrives in healthy and resilient habitats and ecosystems.

Subcategory	Description
Wildlife	The wild animals, plants, fungi and microorganisms living on the farm. Diversity supports pollination, pest control and ecological balance, boosting productivity. This helps protect food systems from shocks like disease outbreaks and pollinator loss, supporting food security and nature conservation.
Aquatic life	The organisms living in farm water bodies, including plants, animals, fungi and microorganisms. Diversity maintains water quality, reduces pests and supports natural nutrient cycles. Healthy aquatic life protects freshwater sources and supports ecosystems.
Soil	The microorganisms, fungi and underground flora and fauna living in the farm's soil. Diversity boosts soil fertility, supports plant growth and regulates pests and disease. Declines in diversity can lead to poor crop yields and erosion, reducing the land's ability to grow food and store carbon.
Crops and pasture	The plant species grown for food and livestock. Diversity enhances resilience to disease, pests and extreme weather and reduces dependence on pesticides and fertilisers, protecting food supplies and lowering the farm's environmental footprint.
Livestock	The animal species and breeds raised on the farm. Diversity improves herd resilience to disease and extreme weather, reducing loss and the need for veterinary intervention. A diversity of breeds supports global food security and protects genetic resources vital for adapting to future climate and disease threats.

LAND USE

Outcome: The natural and built features established and maintained by the farm are well-suited, well-configured and adapted to meet changing conditions and the needs of the landscape. Habitats are healthy, interconnected and support thriving ecosystems, while infrastructure is well-functioning and fit for purpose.

Subcategory	Description
Type and size of features	The type and size of natural and built elements on the farm, including hedgerows, forests, barns and infrastructure. A balanced layout supports wildlife, provides shelter, improves drainage and aids productive land use. This influences biodiversity, flood risk, ecosystem health and land connectivity across landscapes.
Configuration of features	How farm features are positioned and linked across the landscape. Good connectivity improves wildlife movement, water flow and efficient working practices. Connected features support species survival and improve land use at catchment or regional level, contributing to healthier environments.
Condition of features	The quality and working state of built and natural features, including fences, wetlands and roads. Well-maintained features enable farm operations to run smoothly and can meet sustainability goals. Healthy features reduce hazards, maintain productivity and support wider landscape ecological functions like pollination and flood control.

CROPS AND PASTURE

Outcome: Crops and pasture are healthy, robust and resilient to disease and climate shocks and stresses. There are secure yields of high quality and nutritious products, with no waste.

Subcategory	Description
Plant health	The condition of plants grown for food and feed. Healthy crops resist pests and diseases, reducing the need for chemical treatments. Strong plant health supports food quality and supply, lowers chemical use and helps protect water, air and soil beyond the farm.
Yield	The amount of crops and pasture produced on the farm. Directly supports income, livestock feed and planning for future seasons. Higher, stable yields improve food availability and reduce reliance on imports, strengthening national and global food security.
Loss and waste	The reduction in yield due to waste, damage, spoilage or inefficiency. Reduces farm profits and indicates flaws in production or storage. Wasted products create unnecessary pressure on resources and higher emissions, representing lost nutrition and contributing to global food loss and climate pressures.
Product quality	The nutritional value, safety and condition of plant products. High-quality crops are more marketable and better for animal and human health. Safe, nutritious food products support public health outcomes and increase consumer trust in food and farming systems.

LIVESTOCK

Outcome: Farmed and working animals on the farm are healthy, enjoy a high quality of life and are resilient to disease and climate shocks and stresses. This supports secure yields of high quality and nutritious products while eliminating waste.

Subcategory	Description
Health	The condition of animals’ bodies and the occurrence of disease and injury. Healthy animals have higher wellbeing, grow better, need fewer veterinary interventions and improve farm efficiency. Good animal health reduces antibiotic use and ensures safer, more reliable meat, dairy products and eggs for consumers.
Wellbeing	Animals’ mental state, expressed through their behaviour and affected by their environment, nutrition and treatment. Stress-free animals eat, grow and reproduce more effectively, improving productivity. High animal welfare is important for many consumers and can reduce harmful emissions linked to stress and poor animal management.
Yield	The amount of livestock products produced, such as meat, milk, and eggs. Essential for farm income and supply planning. Stable production levels support food availability and help meet dietary needs globally.
Loss and waste	The reduction in yield due to waste, damage, spoilage or inefficiency. Reduces farm profits and indicates flaws in production or storage. Wasted resources mean higher emissions and lost nutrition, contributing to global food loss and climate pressures.
Product quality	The safety, nutrition and condition of animal-based products. High-quality food products have higher market value and support animal and consumer health. Safe, nutritious food products support public health outcomes and increase consumer trust in food and farming systems.

FARMERS AND WORKERS

Outcome: People on the farm enjoy a high quality of life, equitable treatment and opportunities to learn and develop new skills. All workers are respected, receive fair remuneration, have good wellbeing and receive positive recognition for their role on the farm.

Subcategory	Description
Demographic	The age, ethnicity, gender and background of the people who live and/or work on the farm. Inclusive teams bring broader knowledge, ideas and experience, widening perspectives and sources of knowledge on the farm. Equity and representation support stronger farm businesses and promote fairness and cohesion in rural communities.
Health	The bodily health, safety and protection of people on the farm. Safe working conditions are a human right and promote the health of workers, reducing injury, illness and medical costs, as well as boosting rural resilience.
Wellbeing	The emotional and social wellbeing of people on the farm, including their mental health, dignity and relationships. Wellbeing improves workforce satisfaction, motivation, retention and teamwork. Promoting fair treatment can reduce isolation and inequality, supporting healthier, more stable communities.
Work environment	Working conditions such as hours, workload, pay and labour rights. Fair working conditions support satisfaction, retention and performance. Good work environments uphold basic rights, reduce exploitation and strengthen the workforce behind our food systems.
Knowledge and skills	The learning opportunities and exchange of knowledge and skills on the farm. Strong skills and knowledge systems build worker confidence and improve problem-solving and adaptability, as well as supporting innovation, local employment and the resilience of farming communities.

AGRICULTURAL SUPPLIES

Outcome: Agricultural supplies, including agricultural inputs, materials and equipment, are sustainably sourced, pose no risk and cause no harm to environmental or human health. Equipment is well-maintained

Subcategory	Description
Type and source of agricultural supplies	The type and source of inputs, materials and equipment used on the farm, such as organic or inorganic fertilisers. The choices made can affect carbon footprint, cost and reliability. Sourcing local or low-impact supplies reduces emissions, avoids exploitation and supports more responsible supply chains.
Usage	How agricultural supplies on the farm are used and maintained. Efficient use reduces waste, saves money and prolongs asset life. This reduces the demand for raw materials and manufacturing, easing pressure on global resources and cutting environmental damage.
End of life	What happens to agricultural supplies after use, including waste recycling or repurposing. Minimal waste and re-use limits pollution and disposal costs, reducing landfill pressure, water and air quality beyond the farm.

COMMUNITY

Outcome: Farms contribute to and foster a mutually supportive relationship with their local communities. They share knowledge and resources and actively contribute to local wellbeing.

Subcategory	Description
Employment opportunities	The work opportunities that a farm provides. Local employment can foster community connections and support the local economy if there is a workforce with the necessary skills available locally.
Knowledge and skills exchange	The sharing of skills and knowledge between the farm and local community. Builds capability and expertise both on and off the farm, supporting innovation. Fosters mutual growth, encourages youth engagement in farming and supports broader agricultural literacy and learning.
Resource sharing	The sharing of resources (inc. produce, land, tools and infrastructure) between the farm and local community. This improves efficiency and resources access during shortages or emergencies. It can strengthen social safety nets and build collective resilience beyond agriculture, especially in rural or isolated areas.
Cultural assets and activities	Farm involvement in cultural events, stewardship of community assets and preservation of local traditions. Increased social engagement and community ties, build goodwill, pride and sense of place, connecting food production to wider society and enhancing understanding, respect and rural vitality.

ECONOMICS

Outcome: Farms are economically viable. They have sufficient funds and diverse income streams to withstand shocks and stresses and are able to make investments to deliver farm sustainability outcomes. Farms actively

Subcategory	Description
Finances	The economic viability of the farm and its ability to continue operations reliant on money, trade, barter or cooperative systems. Resilient finances support long-term continuity, planning and investment, reducing reliance on external aid and subsidies. They support economies, livelihoods and food supplies.
Income sources	The diversity of income streams, from crops to tourism and grants. Diversified income spreads risk and increases resilience if primary production or demand is disrupted during price drops or poor harvests. It protects rural economies and enables innovation, even during market or climate shocks.
Investment	How the farm invests surplus resources — both financial and non-monetary — to achieve goals. Reinvestment can improve infrastructure, training, viability and sustainability. Responsible investment builds long-term resilience and benefits the wider economy and environment.
Business, markets and services	The profile of the farm’s efforts to exchange goods and services, such as organised trade, informal economies and barter systems. Fair and reliable relationships, based on both formal contracts and informal agreements, improve farm stability, forward planning and efficiency, supporting ethical trade, local economies and transparent food systems.

THE GLOBAL FARM METRIC WHEEL

The wheel shows the 12 categories which represent key parts of the farm system where sustainability impacts occur. They are interconnected, interdependent and holistic, covering the social, environmental and economic dimensions of the farm.

