



GASL scoping exercise on sustainable livestock
guidelines and principles: Part 1 – situation synthesis

Peter Ballantyne
31 March 2021; updated 6 August 2021

Contents

Preamble 1

Guidelines and principles - introduction..... 3

Livestock guidelines and tools 4

Livestock sustainability principles and goals 7

Livestock sustainability commitments 9

 Illustration 1: Sustainable beef principles, criteria and goals 10

 Illustration 2: Dairy sustainability criteria, strategic intent and indicators 11

 Illustration 3: Veterinary profession goal setting and practice checklist..... 12

Initial insights from this assessment 14

Annex 1: List of livestock technical guides and tools..... 15

Preamble

The Global Agenda for Sustainable Livestock (GASL) is a multi-stakeholder partnership committed to sustainable development of the livestock sector from a social, economic, health and environmental perspective. To achieve its [2019-2021 Action Plan](#) output 3.2, GASL aims to develop general livestock sustainability principles, guidelines and tools and makes them available as a voluntary reference for livestock stakeholders.

This is the first of two short reports prepared as part of a scoping exercise to inform GASL future activities in this area¹.

The scoping exercise aimed to identify and take stock of principles, guidelines or other tools and approaches used by livestock stakeholders to reinforce and promote a sustainable livestock sector. It focused on 3 questions:

- 1) what principles and basic guidelines or other voluntary mechanisms are being used, and by whom, to promote desired behaviours and practices around livestock sustainability?
- 2) what might be the goals and outcomes of such mechanisms for livestock stakeholders, GASL and its membership?
- 3) how might such mechanisms be operationalized for GASL and its members?

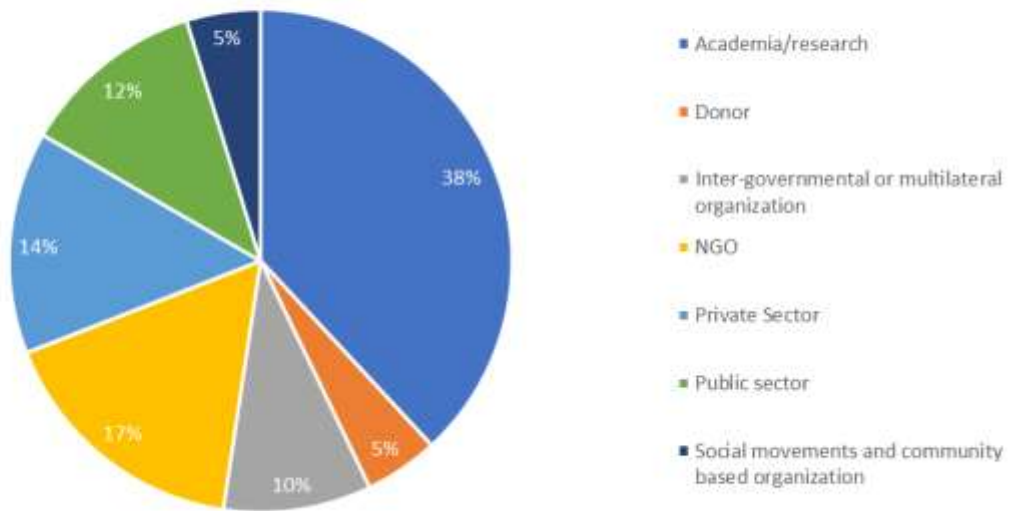
This report stock-takes ways that GASL members, mainly, are producing or working with guidelines, tools and principles as mechanisms to move the livestock sector towards more sustainable goals. The second report suggests options and opportunities for GASL arising from this scoping exercise.

The reports draw on responses to a short survey that was sent by the GASL Secretariat to 120 or so member representatives. Forty-two people responded to the survey. It was expanded and complemented by interviews with 11 people from member organizations to solicit their views and experiences. It benefits from feedback and comments from GASL members provided during a webinar on 29 July 2021.

The breakdown of respondents to the survey by GASL cluster category is provided in Figure 1 below. While all clusters were represented in the survey, the numbers from some groups were lower than for others. In the interviews, the emphasis was on private sector network actors likely themselves to produce guidelines or work with sector principles.

¹ This assignment took place between January and March 2021. It draws on conversations and interactions with GASL members as well as a short online survey. Initial insights were shared at a GASL Guiding Group meeting on 9 March 2021. A webinar to discuss the initial conclusions was held on 29 July 2021.

Figure 1: Respondents to the survey by GASL cluster
(42 responses)



Guidelines and principles - introduction

At a **network level**, many sector and business associations and groups (and several GASL members) develop and adopt voluntary guidelines, statements of value and principles, ambitions and actions – often in the form of charter² or similar – to encourage and drive certain desired values and behaviours in the ways they operate and what they deliver.

These ‘sustainability charters’ typically outline aspirations, ambitions, journeys and individual/collective actions that members can adopt, helping them contribute to, for example, SDGs or other societal goals. Signing up signals an organization’s commitment to the shared values and practices and may be the basis for monitoring and reporting and adoption of changes to operations and practices. These are important politically as well as operationally, often expressing commitments to wider societal goals.

At a **practice level**, many organizations and networks identify, recommend and disseminate standards, approaches and practices ‘that work’ to deliver intended results and outcomes, typically on a farm, in a value chain or sector or through a project.

These guidelines may be more methodological (environmental performance of value chains³ for example), practical (farmer videos⁴ for example), or be packaged as manuals covering many recommended activities⁵. There is a vast knowledge base providing such technical guidance across livestock sectors and in all countries.

There is also an important class of **normative guidance and standards** specifying, usually at sector or sub-sector level, industry requirements and, around issues like food safety, public health, processing and phytosanitary protection where there is a vast legislative base.

At a **policy level**, there is also a growing set of advice, evidence and resources intended for projects, programs, organizations and decision makers to prioritise and choose livestock-related investments, interventions or practices that will make an outcome more sustainable. These include decision tools⁶ for investment projects, tools to support specific intervention choices such as animal feeding⁷, evidence summaries⁸, or global assessments and models⁹ exploring policy options.

The next section looks at what GASL members and others are doing in two areas: 1) livestock guidelines and tools, and 2) livestock sustainability principles.

² Examples include: <https://www.europeanoutdoorgroup.com/knowledgehub/sustainability-charter>; <https://www.britishprecast.org/sustainability/sustainability-charter.aspx>; <https://www.ima-europe.eu/content/ima-sustainable-development-charter>; <https://fefac.eu/wp-content/uploads/2020/09/FEFAC-Feed-Sustainability-Charter-2030-Two-Pager-1.pdf>; [https://grsbeef.org/resources/Pictures/2017%20Template%20Graphics/grsb_principles_and_criteria_for_global_sustainable_beef_2016_logo%20\(6\).pdf](https://grsbeef.org/resources/Pictures/2017%20Template%20Graphics/grsb_principles_and_criteria_for_global_sustainable_beef_2016_logo%20(6).pdf)

³ <http://www.fao.org/partnerships/leap/publications>

⁴ <https://www.accessagriculture.org/category/132/livestock>; <http://makingmorefromsheep.com.au/module-index.html>; <https://solutions.digitalgreen.org/videos/library/?searchString=livestock>

⁵ <https://cgspace.cgiar.org/explorer//shared/w-P99XYBnXdK69bR-z64>

⁶ <https://www.sustainablelivestockguide.org>; <http://www.fao.org/policy-support/tools-and-publications/en>

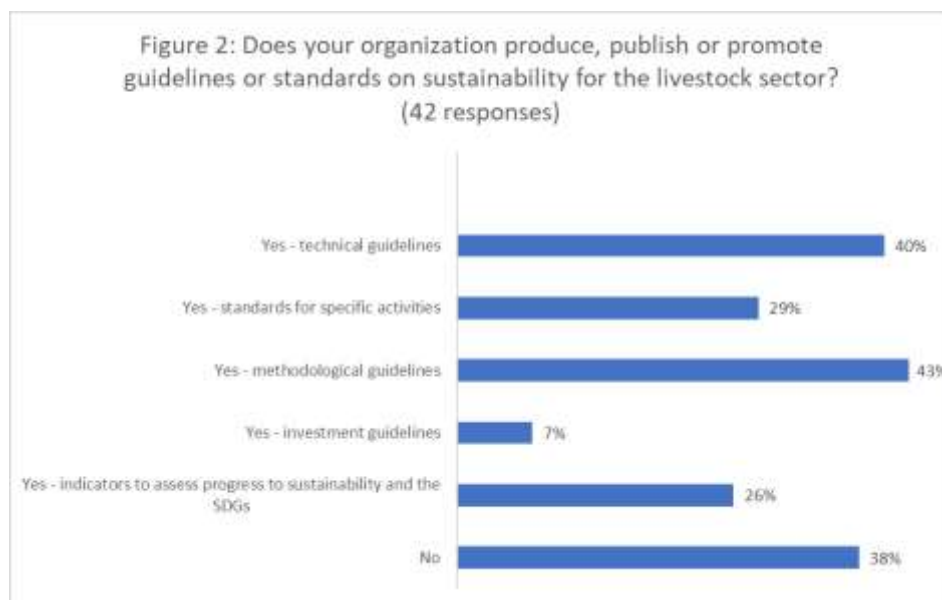
⁷ <https://www.ilri.org/feast>; <https://www.tropicalforages.info>; <https://globalfeedca.org/>

⁸ <https://whylivestockmatter.org>; <https://hdl.handle.net/10568/107015>

⁹ <https://hdl.handle.net/10568/110818>;

Livestock guidelines and tools

Figure 2 below shows the responses to the survey question asking what type of guidelines their organizations produce. Sixty-two percent of respondents indicated they do produce guidelines, mostly methodological and technical. There seems to be no obvious correlation between types of guidelines cited and GASL cluster membership. Similarly, those respondents answering no to this question were spread across the organization types.



The widespread involvement of members and others in **guideline production** comes very clear when following up with individual respondents and with the web links provided by survey respondents. Even a cursory visit to GASL members and other actors reveals a vast knowledge base spread across the world (Annex 1 provides a selection of what exists).

As illustrations, the International Dairy Federation¹⁰ publishes 500+ standards, manuals and guidance on dairy sector development; the FAO Animal Production and Health Division¹¹ lists 150+ guidelines and manuals on its website; the repository of the ILRI¹² has 300+ manuals and guides; Meat & Livestock Australia¹³ lists 500+ technical guidelines; the FAO-LEAP¹⁴ action network has published a set of guidelines on livestock and the environment; the Livestock Research Group of the Global Research Alliance (GRA) on Agricultural Greenhouse Gases¹⁵ publishes best practice guidelines and technical manuals on livestock greenhouse gas mitigation methodologies, techniques and practices; many countries like Australia or Canada publish guidelines on animal welfare¹⁶. More generally the CABI Animal Science database¹⁷ has 1500+ results for a search on 'guidelines'.

¹⁰ <https://store.fil-idf.org>

¹¹ http://www.fao.org/ag/againfo/resources/en/pubs_aprod.html

¹² <https://cgspace.cgiar.org/handle/10568/65>

¹³ <https://www.mla.com.au/Search/?q=guidelines>

¹⁴ <http://www.fao.org/partnerships/leap/resources/guidelines>

¹⁵ <https://globalresearchalliance.org/research/livestock/about-us/manuals-and-good-practice>

¹⁶ <http://www.animalwelfarestandards.net.au> ; <https://www.nfacc.ca/codes-of-practice>

¹⁷ [https://www.cabi.org/animalscience/search/?q=title:\(guideline\)](https://www.cabi.org/animalscience/search/?q=title:(guideline))

Among this plethora of technical manuals and guidelines dedicated to enhancing specific aspects of livestock production, health, welfare and productivity, there is a smaller set of guidance with a more explicit self-assigned ‘sustainability’ focus informed by notions like inter-generational equity or planetary boundaries. The LEAP methodologies and GRA technical manuals stand out here, not just for their environmental impact and sustainability focus, but also due to the multi-stakeholder and collaborative processes they employ to integrate multiple perspectives on the challenges. The work of Vet Sustain¹⁸ stands out as an initiative targeting a specific target group – veterinary professionals and practices. It produces both checklists for individual vets as well as aspirational goals for the profession a whole.

Given the complex and multi-faceted challenges facing the sector and inspired by the LEAP model, GASL and its members could combine and integrate expertise of different livestock subsectors and regions to produce guidelines on a set of high-priority, specific and cross-cutting sustainability challenges that are not currently addressed. These could be led and delivered by GASL members and others working together through GASL action networks or other mechanisms.

Alongside these guidelines and manuals, we also see the emergence of **digital and planning tools** to help decision makers and investors make sustainable livestock sector choices. Ten examples listed below have specific sustainability outcomes and goals and they seek to guide better and better-informed decisions.

1. Global Farm Metric¹⁹: GFM is a harmonised measure of on-farm sustainability that can be used by land-managers to monitor their impacts on the environment and inform sustainable decision making.
2. Global Feed LCA Institute²⁰: GFLI is developing a publicly available Animal Nutrition Life Cycle Analysis (LCA) database and tool to support meaningful environmental assessment of animal nutrition products and stimulate continuous improvement of the environmental performance in the animal nutrition and food industry.
3. Global Livestock Environmental Assessment Model²¹: A tool to assess interactions between livestock and the environment. GLEAM supports stakeholders to adopt more sustainable practices that ensure higher efficiency, improved livelihoods for farmers and mitigation of environmental impacts. An ‘interactive’ version is designed to support governments, project planners, producers, industry and civil society organizations to calculate emissions using Tier 2 methods. It can be used in the preparation of national inventories and in ex-ante project evaluation for the assessment of intervention scenarios in animal husbandry, feed and manure management.
4. Investing in Sustainable Livestock Guide²²: Targeting livestock sector project designers, it provides guidance to ensure projects are sustainable according to environmental and animal health dimensions. It includes principles for environment and animal health in the livestock sector, as well as explanations of the production contexts the guidance is built around.

¹⁸ <https://vetsustain.org>

¹⁹ <https://sustainablefoodtrust.org/key-issues/sustainability-metrics/the-global-farm-metric>

²⁰ <https://globalfeedlca.org>

²¹ <http://www.fao.org/policy-support/tools-and-publications/resources-details/en/c/1070763> and <https://gleami.apps.fao.org>

²² <https://www.sustainablelivestockguide.org>

5. Livestock Data for Decisions²³: A platform enhance livestock data and analysis and supporting collaboration on new and innovative data solutions.
6. Livestock Investment Master Plan²⁴: LIVEMAP seek to map priority investments and initiatives for African Development Bank Member Countries so they can scale proven, cutting-edge, context-specific technologies, advocate for business-enabling policies and leverage investments into the African agriculture sector.
7. Livestock Sector Investment and Policy Toolkit²⁵: A tool to help decision-makers increase and improve sustainable livestock sector policies and investments and develop livestock master plans. It guides government and development partners to evaluate and estimate the potential contributions of the livestock sector to economic growth, poverty reduction, food security and nutrition, and reducing GHG emissions; conduct prospective analysis to optimize synergies and manage trade-offs; and improve policy setting and investment decisions.
8. Livestock Yield Gaps²⁶: LiveGAPS looks for pathways to maximise yield of livestock systems to address global food security. This project provides a set of tools to help donors and development agencies target investments in the livestock sector that maximize their impacts for broad numbers of producers and consumers. Productivity and yield gap analyses help define the most appropriate technology entry points for different livestock species in terms of health, nutrition, genetics, or policy levers.
9. Sustainability Intelligently Applied²⁷: Sustell™ is an intelligent sustainability service for enhancing the environmental sustainability of animal protein production. It combines an advanced, powerful sustainability calculation tool that utilizes real farm data, with expert knowledge and tailor-made, practical solutions and business development projects to unlock the value of sustainability. It delivers accurate, simple and actionable farm-level solutions that enhance the environmental sustainability and profitability of animal protein production.
10. Why Livestock Matter²⁸: This website brings together evidence, evaluation and analysis showing how the livestock sector contributes to the sustainable development goals and where investors and decision makers can confidently invest.

Like the guidelines mentioned above, there may be opportunities for GASL and its members to identify and catalyse development of additional or improved tools like these to tackle high-priority sustainability challenges.

These are not the only tools. There are many other tools and applications developed to help producers²⁹ improve the performance of their livestock businesses or researchers and practitioners deliver better interventions³⁰. Like most of the technical guidelines, these may not have any specific sustainability focus, but they contribute to a more productive and ultimately sustainable sector.

²³ <https://www.livestockdata.org>

²⁴ <https://livestockinvestmentmasterplan.info>

²⁵ <http://www.fao.org/policy-support/tools-and-publications/resources-details/en/c/1263968>

²⁶ <https://research.csiro.au/livegaps/tools>

²⁷ https://www.sustell.com/en_US/home.html

²⁸ <https://whylivestockmatter.org>

²⁹ Such as: <https://ahdb.org.uk/tools>

³⁰ Such as: <https://www.ilri.org/feast>; <https://www.tropicalforages.info>

Livestock sustainability principles and goals

The second focus of the exercise was on the notion of sustainability ‘principles’ and how GASL members or others are using these. To operationalize this, interviews explored the use of charters, commitments, or other mechanisms used by collaborating organizations to set collective goals and indicators, either for sector/societal outcomes or to enhance engagement in an initiative.

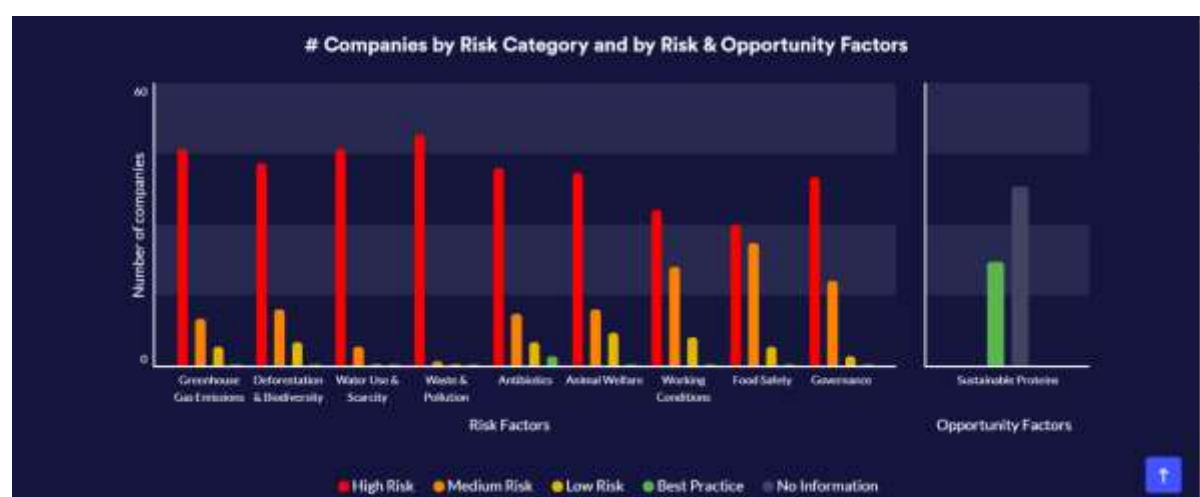
For GASL, the aim is to better understand opportunities and approaches that could help bring its members’ actions together 1) around common sustainable livestock goals and 2) around some collaborative efforts of GASL itself. This was driven in part by recent work on a GASL Theory of Change and the extent that the current GASL consensus document³¹ might need to be updated. Several people interviewed said it would be useful if GASL membership is more clearly seen to ‘stand’ for something.

Figure 3 below shows the responses to the survey question asking whether organizations have or produce specific indicators or other tools to guide, measure or assess progress towards sustainability goals. Fifty-seven percent of respondents indicated they do have such resources, using them mainly for reporting, evaluation and learning. Again, there seems to be no obvious correlation between the responses and GASL cluster. Similarly, those respondents answering no to this question were spread across the organization types.



³¹ <https://bit.ly/3r4uW3s>

On the question of goals and indicators for sustainability in the sector and the potential usefulness for sector actors to work together to set and monitor these, one person interviewed referenced the 'FAIRR Initiative'³² that raises awareness among investors of the environmental, social and governance risks brought about by intensive livestock production. The image below from the FAIRR website shows the perceived high risk of investing in the animal business along several sustainability factors.



While only focused on some parts of livestock value chains, mainly large companies, the index suggests there are multiple and major investment risks in the sector due to issues like GHG emissions, deforestation, biodiversity, water use, waste and pollution, antibiotic use, welfare and food safety. It is a signal to livestock sector actors that reducing these types of risks has significant economic as well as social and environmental benefits. In the absence of global indicators from other sources, tools like this are likely to strongly influence future investment decisions and choices. Hence the stakeholders represented through GASL may want to more proactively set out the key 'global' indicators around the sustainability of activities in the sector, reducing the risks that potentially incomplete or misleading information is used in policy decisions.

One way that GASL members and others are addressing these challenges is by setting livestock sustainability goals and targets, 'measuring' and showing progress, learning and exchanging experiences, and communicating results and solutions more widely. In some cases, goal setting goes further into areas like certification that verify to customers, investors and regulators that sustainable practices and outcomes are being followed and achieved.

The next section illustrates how this is happening in some GASL members and the wider community.

³² <https://www.fairr.org>

Livestock sustainability commitments

The most common representation of commitments to sustainability among GASL members is through **strategy and policy statements** – often posted on websites.

Most GASL members, especially those working in the public, NGO and development sector, reference sustainable outcomes or the SDGs in their vision and mission statements and project activities. Some members, especially from the private sector, have more explicit public statements outlining their work towards sustainability, as illustrated below:

- One of the key parts of IFIF's mission is to continue to support and encourage the sustainable development of animal production - <https://ifif.org/our-work/sustainability/>
- We believe sustainability should be fully integrated through every element of the egg industry and aspire to a global egg value chain that is environmentally sound, socially responsible, and economically viable - <https://www.internationalegg.com/our-work/sustainability/>
- The Sustainable Dairy Partnership provides a consistent global approach to dairy sustainability in commercial relationships between dairy buyers and processors - <https://saipatform.org/sdp/>
- IDF pro-actively supports a vibrant dairy sector committed to continuously improve its ability to provide safe and nutritious milk and dairy products from healthy animals to close the nutritional gap whilst preserving natural resources and ensuring decent livelihoods across the whole dairy value chain - <https://www.fil-idf.org/working-areas-strategic/sustainability/>
- Dairy is invested in sustainability, efficient food production and the reduction of environmental impacts - <https://www.globaldairyplatform.com/sustainability>
- The Global Roundtable for Sustainable Beef mission is to advance, support, and communicate continuous improvement in sustainability of the global beef value chain through leadership, science, and multi-stakeholder engagement and collaboration - <https://grsbeef.org>
- Elanco's approach to sustainability ... is a framework of commitments and actions that is focused on advancing the well-being of animals, people and the planet - <https://www.elanco.com/responsibility/our-commitment>
- Meat and Livestock Australia's environmental sustainability research and development investments aim to improve the short and long-term sustainability of the natural environmental, while simultaneously maintain and support a productive red meat industry that meets community expectations - <https://www.mla.com.au/research-and-development/Environment-sustainability>
- The World Veterinary Association and its members recently endorsed a statement on combating the global climate change emergency, calling for veterinarians, in their role as advocates for animal health and welfare and public health to "protect ecosystem health and demand action to minimize climate change" - <https://www.worldvet.org/library.php?item=3529&view=item>
- The dairy community is dedicated to addressing climate change and water quality while providing nutritious and affordable foods that promote public wellness - <https://www.usdairy.com/sustainability>
- DSM Animal Nutrition and Health aims to contribute to a robust and achievable transformation worldwide in sustainable animal protein production. Its sustainability platform is a commitment from DSM to reducing emissions from livestock in direct support

of the UN Sustainable Development Goal 13, Climate Action.

https://www.dsm.com/anh/en_US/sustainability.html

Very often these organizations also publish more extended statements and reports³³ setting out the key elements of their agendas, or they set up working groups and committees³⁴ or special initiatives, complementing them with stories and case studies that show progress and efforts to engage global policy processes.

A more intense form of commitment appears in the ‘sustainable’ beef and dairy communities where several initiatives are proactively working together to define and agree **collective goals and indicators** that can advance practice and outcomes.

Initiatives here are characterized by the emphasis on sustainability in their names and include the Sustainable Dairy Partnership, U.S. Dairy Sustainability Alliance, Dairy Sustainability Framework, Global Roundtable for Sustainable Beef (GRSB), Australian Beef Sustainability Framework, Canadian Roundtable for Sustainable Beef, New Zealand Roundtable for Sustainable Beef, Grupo de Trabalho da Pecuária Sustentável (Brazil), European Roundtable for Beef Sustainability, Mesa Argentina de Carne Sustentable (Argentina), Southern Africa Region Roundtable for Sustainable Beef, Mesa Paraguaya de Carne Sostenible, and the U.S. Roundtable for Sustainable Beef.

While all communicate the value of dairy or beef, convene stakeholders, recognize outstanding stewardship, the most notable activity in terms of this study is their work to **identify sustainability goals, outcomes, principles or criteria by which progress can be assessed and communicated**. The approaches are different but result in similar processes of goal setting and actions taken to enhance results in priority areas.

Illustration 1: Sustainable beef principles, criteria and goals

For the past 10 years or so, the GRSB has developed a set of global ‘principles’ and ‘criteria’ that beef value chain actors can use to achieve optimum balances between social responsibility, environmental sustainability and economic viability³⁵. Members subscribe to these principles and criteria and through national/regional roundtables they devise their own specific objectives and, if desired, ways to monitor or verify progress.

Its principles are “broad statements of objectives”, covering 5 essential elements of sustainable beef value chains - natural resources, people and the community, animal health and welfare, food, and efficiency and innovation. Each principle has a set of associated criteria – conditions to be met in order to adhere to a principle.

To accelerate progress, GRSB is launching a set of overarching goals, the first three covering: 1) Climate Change and Greenhouse Gas Emissions, 2) Natural Ecosystems, including deforestation, conversion, and management, and 3) Animal Welfare. These are intended to communicate realistic

³³ <https://www.healthforanimals.org/192-achieving-the-sdgs-value-of-healthier-animals.html> ; <https://www.globaldairyplatform.com/sustainable-development-goals-sdgs> ; <https://www.globaldairyplatform.com/media-centre> ; <https://www.cattle.ca/sustainability/> ;

³⁴ <https://www.internationalegg.com/our-work/sustainability/egg-industry-commitment-to-un-sdgs> ; <https://www.internationalegg.com/our-work/sustainability/environmental-sustainability-expert-group> ; <https://www.meat-ims.org/about-the-ims> ; <https://internationalpoultrycouncil.org/areas-work>

³⁵ <https://grsbeef.org/WhatIsSustainableBeef>

ambitions of the beef industry, motivate enhanced collaboration and inspire innovation and investment to seek and deliver solutions.

These translate nationally into a set of strategies, goals and indicators, progress reports and outcome stories including:

- In Canada, ten-year goals are being developed that build upon the five-year goals outlined in the 2020-24 National Beef Strategy. This aims to be a single set of goals that all organizations can achieve together. The goals explain how the industry will improve to achieve its goals, it positions beef farming as a solution rather than a problem, it helps communicate impacts, and it will guide investment in research and extension. The first three goals cover (1) Greenhouse Gas and Carbon Sequestration; (2) Animal Health and Welfare; and (3) Land Use and Biodiversity - <https://crsb.ca/sustainability-benchmark>
- The Australian Beef Sustainability Framework commits the Australian beef industry to a sustainably pathway of best practice and tracks performance through evidence against a series of critical indicators aligned to the four themes of Animal Welfare, Economic Resilience, Environmental Stewardship and People and the Community. The framework produces annual updates, case studies and videos – it aims to encourage investment and provide evidence for continuous improvement, foster constructive relationships to work collaboratively and promote industry transparency and progress - <https://www.sustainableaustralianbeef.com.au>

Illustration 2: Dairy sustainability criteria, strategic intent and indicators

Since 2009, dairy industry leaders have worked together through a Global Dairy Agenda for Action to reduce GHG emissions and tackle other sustainability challenges. Today, these and other actors have created the Dairy Sustainability Framework (DSF) as a sustainability monitoring and reporting model for the global dairy sector³⁶.

The DSF is focused on eleven globally relevant sustainability criteria (Global Criteria): Greenhouse Gas Emissions, Soil Nutrients, Soil Quality and Retention, Water availability and quality, Biodiversity, Working Conditions, Animal Care, Waste, Market Development, Rural Economies, and Product Safety and Quality.

For each, it also outlines a high-level objective (strategic Intent) that the dairy sector commits to working towards and a high-level indicator on which the DSF will report on an aggregated basis.

Members typically endorse the criteria and strategic intents, identify and prioritize the elements of the framework that best suit their local situation, associate some specific initiatives with the DSF, and commit to tracking and reporting on their prioritized criteria each year. The DSF supports its members by providing tools and hosting pre-competitive, collaborative forums that encourage sharing of best practices and knowledge³⁷.

The DSF provides overarching goals that members can work towards, it helps generate a common sustainability commitment, it helps members demonstrate progress with robust indicators, it facilitates target-setting, continuous learning and alignment of the sector's actions globally,

³⁶ <https://dairysustainabilityframework.org>

³⁷ <https://dairysustainabilitysupport.com>

regionally, nationally and within organizations. Through alignment and collaboration, the speed of progress and activity will be accelerated.

Both these illustrations show that working together globally can produce useful frameworks and principles that members and others can draw from to improve their own efforts while learning and showing results.

Neither seems to impose reporting or monitoring burdens. Both aim to add value by helping members identify their specific aims within a global framework, using that framework and the energy around it to better engage and communicate with their own constituents while driving tangible and measurable improvements.

In both cases, the actual metrics seem less important than the sense of direction, the momentum, and the value derived from trying to measure often complex activities.

Besides sectoral initiatives sketched above, the third illustration below shows how veterinarians are mobilizing to set goals and change practices.

Illustration 3: Veterinary profession goal setting and practice checklist

The first example is from the **World Veterinary Association** whose recent statement on a global climate change emergency sets out six pledges endorsed by veterinary organisations (including the Royal College of Veterinary Surgeons³⁸, the British Veterinary Association and the Federation of Veterinarians of Europe):

1. Acknowledging climate change as a global emergency and encouraging research, surveillance, and education to increase knowledge and understanding of the drivers and impacts of climate change on animal, human, and ecosystem health.
2. Supporting One Health approach to address climate change and calls for coordination and collaboration among stakeholders to mitigate its detrimental consequences on animal, human, and ecosystem health.
3. Urging members of the veterinary profession to research, review and adopt practices that minimize greenhouse gas emissions.
4. Supporting continued research into and adoption of modern, efficient, and sustainable food and animal production techniques that will improve animal health and welfare, reduce the effects of climate change, and improve food security globally.
5. Urging its Member Associations to build and enhance veterinary capacity within their country and region to prevent and address consequences associated with climate change, including treatment of domestic animals and wildlife affected by extreme weather events, prevention of emerging and re-emerging diseases, and potential alterations in animal production systems with priority on animal welfare and the lowest possible environmental impact.
6. Supporting the strengthening of agricultural surveillance and other mitigating measures in agriculture, with emphasis on the role of the veterinary profession in improving animal and public health.

³⁸ <https://www.rcvs.org.uk/news-and-views/news/rcvs-joins-veterinary-organisations-endorsing-pledge-on-climate>

The second example is a set of six **Veterinary Sustainability Goals**³⁹ compiled by Vet Sustain to highlight the roles of veterinary professionals in driving sustainability, and to unite the profession around the goals and actions required to address multiple challenges facing society. These wider goals are complemented by a 'Greener Veterinary Practice Checklist'⁴⁰ that outlines the points a veterinary practice may consider to become more sustainable.



The question on whether GASL should set out principles and goals – for livestock sector sustainability or for more specific areas to collaborate – is addressed in the second report from this exercise.

³⁹ <https://vetsustain.org/assets/downloads/VetSustain-VeterinarySustainabilityGoals.pdf>

⁴⁰ <https://vetsustain.org/resources/vet-practice-checklist>

Initial insights from this assessment

The second report of this exercise discusses possible directions and outline some actions for GASL in this area. The points below capture points arising from the information presented earlier.

1. There are huge numbers of technical guidelines and manuals on all aspects of livestock production and husbandry, ranging from farm to business and sector level. *The most appropriate forum to develop such guidelines is in the many organizations that comprise the sector, and not with GASL.*
2. Similarly, there is a growing number of decision and other digital tools that help producers, extensionists, entrepreneurs, practitioners and researchers make good technical or business decisions. *The most appropriate forum to develop such tools is in the many organizations that comprise the sector, and not with GASL.*
3. For technical guidelines and tools above, there may be an opportunity for *GASL to foster wider accessibility and exchange of these resources among members and beyond*, but, given the large numbers, it will need a focused approach to be feasible.
4. There are few guidelines, manuals and digital decision tools with a specific sustainability focus. *GASL could identify opportunities to create additional or improved guidelines and tools, but only where these would tackle the key sustainability challenges identified by GASL and its members and when it would require multi-stakeholder insights and expertise that GASL can mobilize.* A member-led approach to identify critical gaps and lead integrated development efforts is preferred by interviewees.
5. *GASL members could each make their specific livestock sustainability challenges and outcomes more visible and explicit on each of their websites*, as is done by some private sector GASL members mentioned here. On many websites, the leap from an organization's mission to a set of sector sustainability goals is often implied or requires deeper searching. The consistent, but locally adapted, presentation of beef sector sustainability goals across multiple organizations shows, for example, how a global consensus can be communicated while retaining local diversity.
6. The dairy and beef sustainability frameworks may be difficult for GASL to operationalise globally. But these, also inspired by the veterinary sector examples, could *inspire a set of high-level sustainable livestock principles or goals that members could associate with their own work and voluntarily showcase and 'report' on from a continuous learning perspective.*

Annex 1: List of livestock technical guides and tools

The list below was quickly compiled from readily available sources to illustrate the number and diversity of existing guides, guidelines tools and manuals. This is a just a small selection.

Title	Publisher
A Cow-calf Producer's Guide to Custom Feeding	NDSU
A field guide for the diagnosis, treatment and prevention of African animal trypanosomosis	FAO
A manual for the primary animal health care worker	FAO
A training manual on artificial insemination in goats	ILRI
Access to the Outdoors for Livestock	USDA
Accounting for livestock water productivity: How and why?	FAO
African swine fever: detection and diagnosis – A manual for veterinarians	FAO
African swine fever: Uganda smallholder pig value chain capacity development training manual	ILRI
Animal Carcass Disposal Options Rendering • Incineration • Burial • Composting	NDSU
Animal Handling and Audit Guidelines	AnimalHandling.org
Animal Husbandry Guidelines for U.S. Egg Laying Flocks	United Egg Producers
Animal Welfare Approved Standards	Animal Welfare Institute
Animal welfare management — General requirements and guidance for organizations in the food supply chain	IDF
Aquatic Animal Health Code 2021	OIE
Asia Diagnostic Guide to Aquatic Animal Diseases	FAO
Avoiding Milk Antibiotic Residues	RUMA Alliance
Balanced feeding for improving livestock productivity - Increase in milk production and nutrient use efficiency and decrease in methane emission	FAO
Barley Grain and Forage for Beef Cattle	NDSU
Basic guidance for meat inspection in small-scale pig slaughtering in Vietnam	ILRI
Beef Quality Assurance Guidelines and National Manual	National Cattlemen's Beef Association
Best practice guide to socially and gender-inclusive development in the Kenyan intensive dairy sector	ILRI
Best practice manual on Nitrous Oxide Chamber Methodologies	GRA
Best practices for selective breeding for improved livestock productivity	ILRI
Better manure for healthy crops	Smallholder Dairy Project
Better utilization of crop residues and by-products in animal feeding: research guidelines - a practical manual for research workers	FAO
Biodiversity and the livestock sector - Guidelines for quantitative assessment.	FAO-LEAP
Biofuel co-products as livestock feed – Opportunities and challenges	FAO
Biosafety manual for milk and meat testing laboratory	ILRI and Government of Assam
Biosecure Nutrient Management Practices	NDSU
Biosecurity for Highly Pathogenic Avian Influenza - Issues and options	FAO
Biosecurity guide for live poultry markets	FAO
Bonnes pratiques pour l'industrie de l'alimentation animale – Mise en oeuvre du Code d'usages pour une bonne alimentation animale du Codex Alimentarius	FAO

Bonnes pratiques pour l'industrie de la viande	FAO
Buenas manufactura prácticas de en la elaboración de productos lácteos	FAO
Buenas prácticas de ordeño	FAO
Buenas prácticas para la industria de la carne	FAO
Buenas prácticas para la industria de piensos – Implementación del Código de Prácticas Sobre Buena Alimentación Animal	FAO
Calving Book	NDSU
Caractérisation phénotypique des ressources génétiques animales	FAO
Characterization and conservation of indigenous sheep genetic resources: A practical framework for developing countries	ILRI
Cheese making	FAO
Closing the gender gap in agriculture: A trainer's manual	ILRI
Code of Practice for the care and handling of Beef Cattle	Canada National Farm Animal Care Council
Code of Practice for the care and handling of Bison	Canada National Farm Animal Care Council
Code of Practice for the care and handling of Chickens, Turkeys and Breeders	Canada National Farm Animal Care Council
Code of Practice for the care and handling of Dairy Cattle	Canada National Farm Animal Care Council
Code of Practice for the care and handling of Equine	Canada National Farm Animal Care Council
Code of Practice for the care and handling of Farmed Deer	Canada National Farm Animal Care Council
Code of Practice for the care and handling of Farmed Fox	Canada National Farm Animal Care Council
Code of Practice for the care and handling of Farmed Mink	Canada National Farm Animal Care Council
Code of Practice for the care and handling of Goats	Canada National Farm Animal Care Council
Code of Practice for the care and handling of Pigs	Canada National Farm Animal Care Council
Code of Practice for the care and handling of Pullets and Laying Hens	Canada National Farm Animal Care Council
Code of Practice for the care and handling of Rabbits	Canada National Farm Animal Care Council
Code of Practice for the care and handling of Sheep	Canada National Farm Animal Care Council
Code of Practice for the care and handling of Veal Cattle	Canada National Farm Animal Care Council
Commercialized supply of training and certification in milk quality assurance in eastern Africa: A guide for practitioners	East Africa Dairy Development Project
Community conversation on animal welfare: A guide to facilitators	ILRI
Comparing Value of Feedstuffs	NDSU
Compensation programs for the sanitary emergence of HPAI-H5N1 in Latin America and the Caribbean	FAO
Composting Animal Manures: A guide to the process and management of animal manure compost	NDSU
Conducting national feed assessments	FAO
Controlling Newcastle disease in village chickens	FAO
Cryoconservation of animal genetic resources	FAO
CSA Practice Brief on climate-smart agriculture	GRA
Dairy equipment maintenance	FAO
Decision Tools for family poultry development	FAO
Deer farming: guidelines on practical aspects	FAO
Desarrollo del marco institucional para la gestión de los recursos zoogenéticos	FAO
Designing and implementing livestock value chain studies – A practical aid for Highly Pathogenic and Emerging Disease (HPED) control	FAO
Development of integrated multipurpose animal recording systems	FAO

Diagnosis of heat and pregnancy in cows	ILRI
Diagnostic Techniques for Transmissible Spongiform Encephalopathies	FAO
Directives d'application volontaire à l'appui de l'intégration de la diversité génétique dans les plans nationaux d'adaptation au changement climatique	FAO
Directives pour le renforcement des services de santé animale dans les pays en développement	FAO
Directives pour l'Établissement des Rapports Nationaux	FAO
Directrices para la Elaboración de los Informes de los Países	FAO
Directrices para reforzar los servicios de sanidad animal en los países en desarrollo	FAO
Directrices voluntarias en apoyo de la integración de la diversidad genética en la planificación nacional de la adaptación al cambio climático	FAO
EcoHealth manual	Chiang Mai University
Economic analysis of animal diseases	FAO
Emergency preparedness planning: Rift Valley fever	FAO
Environmental Implications of Excess Fertilizer and Manure on Water Quality	NDSU
Environmental performance of animal feeds supply chains	FAO-LEAP
Environmental performance of feed additives in livestock supply chains: Guidelines for assessment.	FAO-LEAP
Environmental performance of large ruminant supply chains	FAO-LEAP
Environmental performance of pig supply chains	FAO-LEAP
Epidemiología Participativa - Métodos para la recolección de acciones y datos orientados a la inteligencia epidemiológica	FAO
Epidemiology, diagnosis and control of helminth parasites of swine	FAO
Epidemiology, diagnosis and control of poultry parasites	FAO
Epidemiology, Surveillance and Risk Assessment For Transmissible Spongiform Encephalopathies	FAO
Evaluation of the GreenFeed methane measurement system for use in New Zealand conditions	GRA
Feed from animal waste: feeding manual	FAO
Feeding Corn to Beef Cattle	NDSU
Feeding dairy cattle in East Africa	East Africa Dairy Development Project
Feeding Value of Sprouted Grains	NDSU
Feeding Wheat to Beef Cattle	NDSU
Foot and mouth disease vaccination and post-vaccination monitoring, FAO/OIE Guidelines	OIE
Fundamentals of marketing and dairy business management: a training guide for small-scale dairy farmers, milk traders, transporters and processors in Eastern Africa	ILRI
Gender and HIV/AIDS mainstreaming in a market-oriented agricultural development context: a training manual for frontline staff	ILRI
Gender mainstreaming in livestock and irrigation value chain development: Interactive training manual	ILRI
Global Livestock Environmental Assessment Model (GLEAM)	FAO
Goat production and commercialization: Paravet manual	ILRI and CARE
Good emergency management practice: the essentials	FAO
Good practices for the feed industry – Implementing the Codex Alimentarius Code of Practice on Good Animal Feeding	FAO and IFIF
Good Practices for the Meat Industry	FAO
Governance dimensions of climate change adaptation: Methodology for landscape-level institutional assessments	ILRI
Greener Veterinary Practice Checklist	Vet Sustain
GreenFeed Standard Operating Procedure for pasture systems	GRA

Greenhouse gas emissions and fossil energy demand from poultry supply chains	FAO-LEAP
Greenhouse gas emissions and fossil energy demand from small ruminant supply chains	FAO-LEAP
Grupos productores de leche - Manual didáctico	FAO
Guia de boas práticas na pecuária de leite	FAO
Guía de buenas prácticas en explotaciones lecheras	FAO
Guía para la prevención y el control de la gripe aviar en la avicultura de pequeña escala en América Latina y el Caribe (Avian Influenza)	FAO
Guia práctico de produção intensiva de leite	Embrapa
Guide de biosécurité pour les marchés de volailles vivantes	FAO
Guide de bonnes pratiques en élevage laitier	FAO-IDF
Guide de bonnes pratiques en production laitière	FAO
Guide for Aquatic Animal Health Surveillance	OIE
Guide to Good Animal Welfare in Dairy Production	IDF
Guide to good dairy farming practices	FAO-IDF
Guide to good farming practices for animal production food safety	FAO
Guide to Prudent Use of Antimicrobial Agents in Dairy Production	IDF
Guideline for chemical risk assessment in food safety	Medical Publishing House
Guideline for microbial risk assessment in food safety	Medical Publishing House
Guideline for participatory training on African swine fever control for smallholder pig farmers in Uganda	ILRI
Guideline on Data Collection and Estimation of GHG Emission from Livestock and Manure Management	GHG Protocol
Guidelines for assessing environmental and socio-economic impacts of tsetse and trypanosomiasis interventions	ILRI
Guidelines for coordinated human and animal brucellosis surveillance	FAO
Guidelines for humane handling, transport and slaughter of livestock	FAO
Guidelines for setting up community-based small ruminants breeding programs	International Center for Agricultural Research in the Dry Areas
Guidelines for slaughtering, meat cutting and further processing	FAO
Guidelines for strengthening animal health services in developing countries	FAO
Guidelines for the development of country reports	FAO
Guidelines for use of sulphur hexafluoride (SF6) tracer technique to measure enteric methane emissions from ruminants	GRA
Guidelines on integrating gender in livestock projects	ILRI
Handbook on Import Risk Analysis for Animals and Animal Products	OIE
Handling Liquid Feed Commodities	NDSU
Hygienic milk handling and processing	FAO
ICAR recording guidelines	International Committee for Animal Recording
ICCF Guidance on Homogeneity Testing of Feed Ingredients	International Cooperation for Convergence of Technical Requirements for the Assessment of Feed Ingredients
ICCF Guidance on Stability Testing of Feed Ingredients	International Cooperation for Convergence of Technical Requirements for the Assessment of Feed Ingredients
ICCF Guidance on Sub-chronic Oral Toxicity Testing in Laboratory Animals	International Cooperation for Convergence of Technical Requirements for the Assessment of Feed Ingredients
IDF Guide on Biodiversity for the Dairy Sector	IDF
IDF Guide to Good Animal Welfare in Dairy Production 2.0	IDF

IDF Guide to Water Footprint Methodology for the Dairy Sector	IDF
Improving cattle for milk, meat and traction	ILRI
In vivo conservation of Animal Genetic Resources	FAO
Insecticides for tsetse and trypanosomiasis control using attractive bait techniques	FAO
Introduction to participatory epidemiology and its application to highly pathogenic avian influenza participatory disease surveillance: A manual for participatory disease surveillance practitioners	ILRI
Investigating the role of bats in emerging zoonoses - Balancing ecology, conservation and public health interest	FAO
Johne's Disease in Beef and Dairy Herds	NDSU
La biosécurité au service de la lutte contre l'influenza aviaire hautement pathogène - Contraintes et solutions possibles	FAO
La conduite d'évaluations nationales des aliments pour animaux	FAO
La maladie de Newcastle dans les élevages avicoles villageois	FAO
Least-cost rations for sheep fattening: A manual for livestock farmers and extension workers in the West African Sahel	ILRI
LEGS Handbook	Livestock Emergency Guidelines and Standards
Les bonnes pratiques d'hygiène dans la préparation et la vente des aliments de rue en Afrique	FAO
Lignes directrices: Gestion des petites populations à risque	FAO
Livestock development and climate change: the benefits of advanced greenhouse gas inventories	GRA
Livestock farmer field schools: Guidelines for facilitation and technical manual	ILRI
Livestock Guide Planning with a Gender and HIV/AIDS Lens	FAO
Livestock Water Quality	NDSU
Livestock-related interventions during emergencies	FAO
Low-stress Cattle Working Facilities	NDSU
LSIPT Livestock Sector Investment and Policy Toolkit	FAO
Lumpy skin disease – A field manual for veterinarians	FAO
Maintaining quality of food and feed grain through trade and processing	FAO
Management of Transmissible Spongiform Encephalopathies in Livestock Feeds and Feeding	FAO
Management of Transmissible Spongiform Encephalopathies in Meat Production	FAO
Manual de prácticas de manejo de alpacas y llamas	FAO
Manual for laboratory diagnosis of infectious abortions in small ruminants	FAO
Manual for the production of anthrax and blackleg vaccines	FAO
Manual for the slaughter of small ruminants in developing countries	FAO
Manual of Diagnostic Tests and Vaccines for Terrestrial Animals	OIE
Manual of Diagnostic Tests for Aquatic Animals 2021	OIE
Manual of smallholder milk production in the South Pacific	FAO
Manual of the diagnosis of rinderpest	FAO
Manual on African swine fever for pig producers	FAO
Manual on bovine spongiform encephalopathy	FAO
Manual on livestock disease surveillance and information systems	FAO
Manual on meat cold store operation and management	FAO
Manual on meat inspection for developing countries	FAO
Manual on participatory epidemiology - method for the collection of action-oriented epidemiological intelligence	FAO

Manual on procedures for disease eradication by stamping out	FAO
Manual on simple methods of meat preservation	FAO
Manual on the diagnosis of Nipah Virus infection in animals	FAO
Manual on the preparation of african swine fever contingency plans	FAO
Manual on the preparation of national animal disease emergency preparedness plans	FAO
Manual on the preparation of rinderpest contingency plans	FAO
Manual on the use of the LP-System in Milk handling and preservation	FAO
Manual para el personal auxiliar de sanidad animal primaria	FAO
Manual sobre el uso de la lactoperoxidasa en la manipulación y la conservación de la leche	FAO
Manuel didactique pour l'appui aux groupements laitiers	FAO
Manuel pour les agents vétérinaires communautaires	FAO
Manuel sur la lactoperoxydase pour la manutention et la conservation du lait	FAO
Manure Spills: What You Need to Know and Environmental Consequences	NDSU
Mapping guidelines for participatory rangeland management in pastoral and agro-pastoral areas	CARE
Measuring and modelling soil carbon stocks and stock changes in livestock production systems.	FAO-LEAP
Méthode de bonne gestion des urgences: les fondamentaux	FAO
Metodología y Buena Gestión de Emergencias: elementos fundamentales	FAO
Milk and milk products marketing	FAO
Milk Producer Group Resource Book	FAO
Milk testing and quality control	FAO
Mise en place de cadres institutionnels pour la gestion des ressources zoogénétiques	FAO
Monitoring, Reporting and Verification report for developing countries in the UNFCCC 2018	GRA
National Chicken Council Animal Welfare Guidelines and Audit Checklist	National Chicken Council.
National Dairy Farm Program Animal Care Manual	National Milk Producers Federation.
National Range and Pasture Handbook	USDA
Nitrate Poisoning of Livestock	NDSU
Nitrogen Behavior in the Environment	NDSU
Nutrient Flows and associated environmental impacts in livestock supply chains.	FAO-LEAP
OIE Standards, Guidelines and Resolution on antimicrobial resistance and the use of antimicrobial agents	OIE
OIE Technical standards for manufacturing and quality control of veterinary vaccines	OIE
Oiseaux sauvages et l'influenza aviaire – Une introduction à la recherche appliquée sur le terrain et les techniques d'échantillonnage épidémiologique	FAO
On-farm mycotoxin control in food and feed grain	FAO
Open yard housing for young cattle	FAO
Parasite control in pigs: Uganda smallholder pig value chain capacity development training manual	ILRI
Participatory epidemiology: A toolkit for trainers	ILRI
Participatory rangeland management toolkit for Kenya, Tool 1-1: Guiding principles for community rangeland governance. .	ILRI
Participatory rangeland management toolkit for Kenya, Tool 1-2: Annual work planning for the rangeland management institution.	ILRI
Participatory rangeland management toolkit for Kenya, Tool G-1: The Four Legs of Participatory Rangeland Management.	ILRI
Participatory rangeland management toolkit for Kenya, Tool G-2: Steps in participatory rangeland management.	ILRI

Phenotypic characterization of animal genetic resources	FAO
Phosphorus Behavior In the Environment	NDSU
Physical Well-Being of Chickens	National Chicken Council.
Pinkeye (Infectious Bovine Keratoconjunctivitis)	NDSU
Plan continental para la erradicación de la peste porcina clásica de las américas	FAO
Preparación de planes de contingencia contra la peste porcina africana	FAO
Preparándose para la influenza aviar altamente patógena	FAO
Préparation des plans d'intervention contre la fièvre de la Vallée du Rift	FAO
Préparation des plans d'intervention contre la peste porcine africaine	FAO
Preparation of African swine fever contingency plans	FAO
Preparation of contagious bovine pleuropneumonia contingency plans	FAO
Preparation of foot-and-mouth contingency plans	FAO
Preparation of Rift Valley fever contingency plans	FAO
Preparing for a Successful Calving Season: Nutrition, Management and Health Programs	NDSU
Preparing for Highly Pathogenic Avian Influenza	FAO
Primary guidelines for development of national farm animal genetic resources management plans	FAO
Principles for the assessment of livestock impacts on biodiversity	FAO-LEAP
Procesos para la elaboración de productos lácteos	FAO
Production and commercialization of goats: Manual for community level service providers (in Hindi)	ILRI and BAIF
Production en aviculture familiale	FAO
Production of cultured milk	FAO
Programas de compensación para una emergencia sanitaria de IAAP-H5N1 en América Latina y el Caribe	FAO
Quality assurance for animal feed analysis laboratories	FAO
Quality assurance for microbiology in feed analysis laboratories	FAO
Quality Forage series: Forage Nutrition for Ruminants	NDSU
Quality Forage Series: Interpreting Composition and Determining Market Value	NDSU
Réalisation d'enquêtes et de suivi pour les ressources zoogénétiques	FAO
Realización de encuestas y seguimiento de los recursos zoogenéticos	FAO
Rearing young ruminants on milk replacers and starter feeds	FAO
Recognising CBPP: a field manual for recognition	FAO
Recognizing african swine fever: a field manual	FAO
Recognizing contagious bovine pleuropneumonia (revised Edition)	FAO
Recognizing peste des petits Ruminants: a field manual	FAO
Recognizing Rift Valley fever	FAO
Recommended Animal Handling Guidelines & Audit Guide	American Meat Institute.
Reconnaître la péripneumonie contagieuse bovine	FAO
Reconnaître la peste des petits ruminants: manuel de terrain	FAO
Reducing greenhouse gas emissions from livestock: best practice and emerging options	GRA
Regulatory frameworks for control of HPAI and other TADs - A guide to reviewing and developing the necessary policy, institutional and legal frameworks	FAO

Resource Guide for Livestock Manure Management	NDSU
Responsible Use of Antibiotics in Farm Animals – general guidance	RUMA Alliance
Responsible Use of Antimicrobials in Cattle Production	RUMA Alliance
Responsible Use of Antimicrobials in Dry Cow Management	RUMA Alliance
Responsible Use of Antimicrobials in Fish Production	RUMA Alliance
Responsible Use of Antimicrobials in Pig Production	RUMA Alliance
Responsible Use of Antimicrobials in Poultry and Game Production	RUMA Alliance
Responsible Use of Antimicrobials in Sheep Production	RUMA Alliance
Revue des filières bétail/viande & lait et des politiques qui les influencent au Sénégal	FAO
Risk-based decision-support tool for prevention and control of Rift Valley fever epizootics in the Greater Horn of Africa	ILRI
Sampling Feed for Analysis	NDSU
Se préparer à l'influenza aviaire hautement pathogène	FAO
Secondary guidelines: Animal recording for medium input production environments	FAO
Secondary guidelines: Management of small populations at risk	FAO
Sector Environmental Guidelines: Livestock	USAID
Segundo documento: Gestión de pequeñas poblaciones en peligro	FAO
Setting up sustainable dairy business hubs: A resource book for facilitators	ILRI
Sheep Care Guide	American Sheep Industry Association
Smallholder dairy farmer training manual	ILRI
Small-scale dairy farming manual	FAO
Small-scale poultry production	FAO
Solid Manure Sampling for Nutrient Management Planning	NDSU
Standard laboratory protocol for conducting pork safety tests	ILRI
Standard laboratory protocol on testing milk samples for quality and safety	ILRI
Standard operating procedures for managing pig breeding farms	ILRI
Standards of Conduct - Production of Turkeys	National Turkey Federation.
Successes and failures with animal nutrition practices and technologies in developing countries	FAO
Sunflower Meal in Beef Cattle Diets	NDSU
Surveillance de la grippe aviaire hautement pathogène chez les oiseaux sauvages	FAO
Sustainable breeding programmes for tropical farming systems	ILRI
Sustainable rangeland management in sub-Saharan Africa - Guidelines to good practice	TerrAfrica
Sustaining Communities, Livestock and Wildlife – A guide to participatory land-use planning	FAO
Sweetpotato silage manual for smallholder farmers	CIP
Taeniosis - cysticercosis: WHO-FAO-OIE Guidelines	OIE
Technical guidelines on rapid risk assessment for animal health threats	FAO
Technical manual on respiration chamber design	GRA
Terrestrial Animal Health Code 2021	OIE
The epidemiology, diagnosis and control of helminth parasites of ruminants: A handbook	International Laboratory for Research on Animal Diseases
The feed analysis laboratory: Establishment and quality control	FAO

The training of smallholder pork producers and butchers to enhance hygiene, carcass handling and biosecurity practices: A pilot intervention	ILRI
Toolkit for gender analysis of crop and livestock production, technologies and service provision	ILRI
Trichinellosis: WHO/FAO/OIE Guidelines	OIE
Tropical animal feeding - a manual for research workers	FAO
Understanding and integrating gender issues into livestock projects and programmes: A checklist for practitioners	FAO
Unilever Livestock and Transport: Implementation Guide	Unilever
Unilever Sustainable livestock: Implementation Guide	Unilever
Using Flax in Beef and Dairy Cattle Diets	NDSU
Utilizing Corn Residue in Beef Cattle Diets	NDSU
Vaccine Manual - The production and quality control of veterinary vaccines for use in developing countries	FAO
Veterinary epidemiology and economics in Africa - a manual for use in the design and appraisal of livestock health policy	FAO
Vigilancia de la influenza aviar altamente patógena en las aves silvestres	FAO
Voluntary guidelines to support the integration of genetic diversity into national climate change adaptation planning	FAO
Water use in livestock production systems and supply chains.	FAO-LEAP
Wild bird highly pathogenic avian influenza surveillance	FAO
Wildlife Disease Risk Analysis	OIE
Worm control for small ruminants in tropical Asia	Australian Centre for International Agricultural Research



GASL scoping exercise on sustainable livestock
guidelines and principles: Part 2 – options and
opportunities

Peter Ballantyne
16 April 2021; updated 6 August 2021

Contents

Preamble 1

Livestock guidelines and tools 3

Global livestock sustainability goals and indicators..... 4

GASL goals, principles and commitments..... 4

Frameworks to prioritize follow-up actions..... 7

Summary insights and recommendations from the scoping exercise 11

Annex 1: Agenda consensus 13

Preamble

The Global Agenda for Sustainable Livestock (GASL) is a multi-stakeholder partnership committed to sustainable development of the livestock sector from a social, economic, health and environmental perspective. To achieve its [2019-2021 Action Plan](#) output 3.2, GASL aims to develop general livestock sustainability principles, guidelines and tools and makes them available as a voluntary reference for livestock stakeholders.

This is the second of two short reports prepared as part of a scoping exercise to inform GASL future activities in this area¹.

The scoping exercise aimed to identify and take stock of principles, guidelines or other tools and approaches used by livestock stakeholders to reinforce and promote a sustainable livestock sector. It focused on 3 questions:

- 1) what principles and basic guidelines or other voluntary mechanisms are being used, and by whom, to promote desired behaviours and practices around livestock sustainability?
- 2) what might be the goals and outcomes of such mechanisms for livestock stakeholders, GASL and its membership?
- 3) how might such mechanisms be operationalized for GASL and its members?

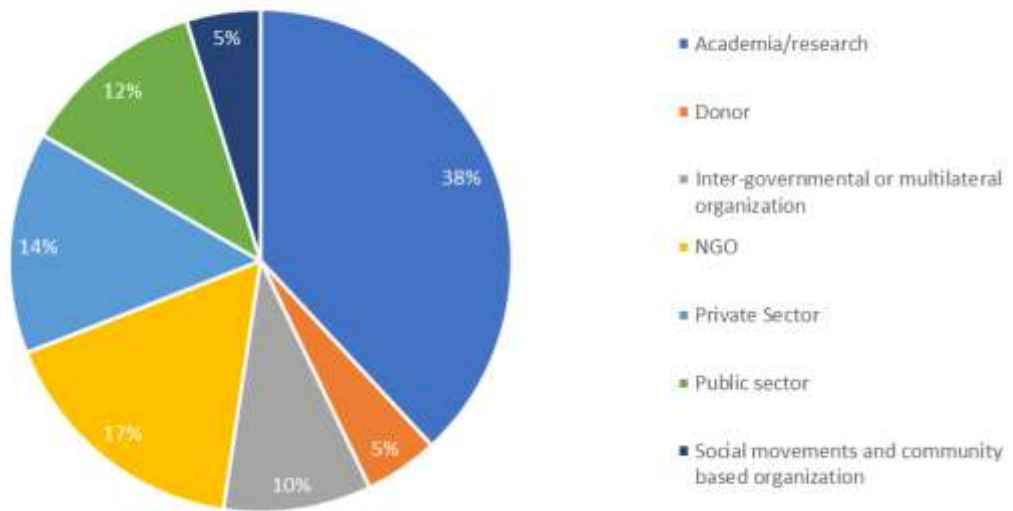
Drawing on information compiled in the first report, this report suggests options and opportunities for GASL to further work on guidelines and tools and develop principles as mechanisms to move the livestock sector and GASL members towards more explicit sustainable goals and commitments to GASL.

The reports draw on responses to a short survey that was sent by the GASL Secretariat to 120 or so member representatives. Forty-two people responded to the survey. It was expanded and complemented by interviews with 11 people from member organizations to solicit their views and experiences. It benefits from feedback and comments from GASL members provided during a webinar on 29 July 2021

The breakdown of respondents to the survey by GASL cluster category is provided in Figure 1 below. While all clusters were represented in the survey, the numbers from some groups were lower than for others. In the interviews, the emphasis was on private sector network actors likely themselves to produce guidelines or work with sector principles.

¹ This assignment took place between January and March 2021. It draws on conversations and interactions with GASL members as well as a short online survey. Initial insights were shared at a GASL Guiding Group meeting on 9 March 2021. A webinar to discuss the initial conclusions was held on 29 July 2021.

Figure 1: Respondents to the survey by GASL cluster
(42 responses)



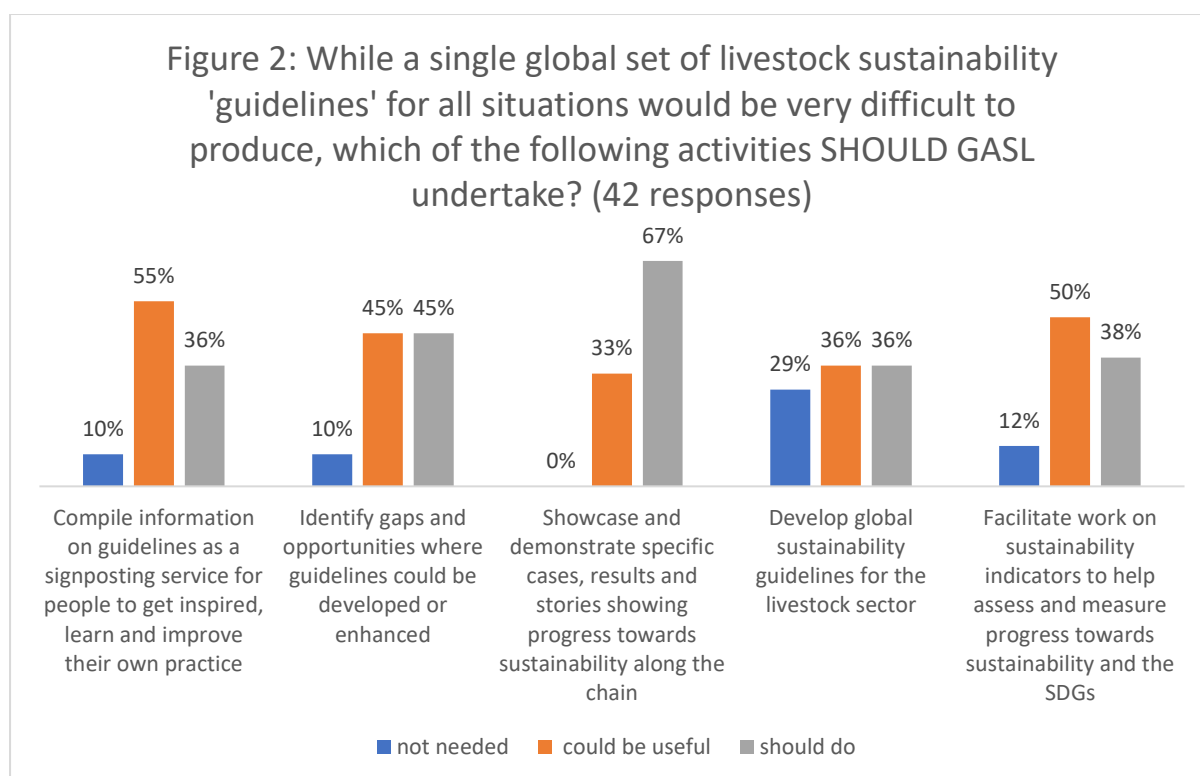
Livestock guidelines and tools

As indicated in part 1 of this scoping exercise, there are many technical guidelines, manuals, standards, advisory and guidance materials, and tools dealing with all aspects of livestock production. While there may be useful to compile and make these more accessible, this would be a large task that would also be difficult to maintain and keep updated.

Feedback from the survey (figure 2) shows some, but not strong, interest in compiling information of this kind. There is little support to develop global guidelines. There is some interest in work on sustainability indicators that could guide members. Most support was expressed for actions to actively show and promote progress towards sustainability outcomes.

Survey responses indicate greater interest in identifying opportunities to develop or improve guidelines and tools for priority sustainability areas where they do not already exist. The most promising areas to examine further are those that tackle more multi-factor and inter-connected sustainability challenges, trade-offs and complex decisions that face GASL members in the coming decade. Except for environment and climate change issues – covered by LEAP and GRA – there seem to be very few such guideline and tools. This effort to work on indicators and guidelines where gaps exist should be through a multistakeholder co-construction approach. Comments in the July webinar suggested that a ‘validation’ or peer review facility for tools and guidelines could be a useful role for GASL to offer it members.

Comments in the survey suggest there is also a need for information or guidelines that can be used to increase attention to livestock interventions and investments in projects, countering negative perceptions about livestock and even offering benchmarks and guidelines on what such interventions could achieve.



Global livestock sustainability goals and indicators

Part 1 of this scoping exercise shows that different organizations, especially those in the private sector, often set out sustainability principles and goals, often committing themselves individually and collectively to work towards various sustainability targets. This should perhaps be seen as part of a wider trend for governments and society to sign up to goals – such as the SDGs, the UNFCCC Paris goals or the CAADP Malabo commitments. There are many examples.

Survey responses (figure 2) and interviews suggest there is low interest by members for GASL to develop global livestock sustainability goals and associated indicators. The feedback suggested that this was too ambitious, not least to get agreement on goals and indicators that fit all members, regions and livestock systems.

Initial conclusion: GASL should not establish a global framework or set of sustainable livestock indicators that members and other stakeholders use.

Participants in the July webinar however commented that while indeed the processes to develop truly global indicators and measures is complex and time-consuming, given the external pressure the sector is under, such goals and indicators are desirable. So perhaps GASL should re-examine this to determine what indicators might possibly be developed and how validated and used.

Alongside guidelines on some high priority livestock sustainability challenges and gaps, respondents are positive about GASL supporting work on sustainability indicators and methodologies that its members and other stakeholders may exploit to assess and measure the progress of their own activities. A participant in the July webinar suggested that GASL could also here offer some sort of ‘validation’ and peer review service or facility in this area.

GASL could support and catalyse collaboration and information exchange on methods, tools and indicators that help members devise and assess the progress of their activities towards their sustainability goals.

GASL can showcase and communicate the progress and results of its members as they implement actions towards their own or wider sustainability goals and targets.

GASL goals, principles and commitments

Inspired by the ways that other member-led associations and networks identify shared goals and commitments as mechanisms that guide and motivate efforts towards a common agenda, this scoping exercise also explored whether a set of sustainable livestock principles could benefit GASL.

Alongside the survey, interviewees were asked whether and how GASL might follow the lead of some of its members to identify a single set of livestock sustainability principles that its members and other could unite around.

Such principles could set out a set of high-level **livestock sustainability aims or goals** that all members aspire to and commit to work towards. These could at a minimum show what GASL members stand for and work towards.

They could also serve other roles and purposes:

- They could be publicized, promoted across the membership, elaborated in more detail through clusters and action networks or, for example at specific levels such as projects, used to frame evidence and messaging, used to encourage knowledge exchange and learning, and potentially provide a framework for members to individually and collectively showcase and disseminate results and outcomes and advocate for more and better investment in the most important issues facing the livestock sector.
- This ‘charter’ of principles could sit alongside and mutually-reinforce existing initiatives; it would need to be sufficiently broad to apply widely across countries and sub-sectors. It could help to establish and communicate to non-livestock audiences what sustainability and livestock really looks like and means in practice.
- A big step further, following the DSF approach, would be to draft a similar framework that identifies and measures what ‘good’ looks like for different livestock sustainability goals, agreeing a few progress markers or indicators and encouraging voluntary progress reports or updates from members. These would aim to encourage and motivate members and others to set out their aspirations and goals and take appropriate actions.

In this approach, such a set of principles or a ‘charter’ aims mainly to advance the practice of livestock sustainability, communicating shared commitments and progress to the wider world and motivating members to act and learn together. Such an approach would be new but could benefit for example from the recent theory of change work that is setting out medium and long-term outcomes for GASL.

A different interpretation or approach could see GASL and its members adopting a set of **guiding values aligned more to GASL’s operations** and motivating members to buy-in to certain principles that distinguish GASL from other initiatives and help deliver its mission. These could reinforce core GASL values like diversity, inclusion and balance and commit and hold members accountable for certain levels of activity and behaviour.

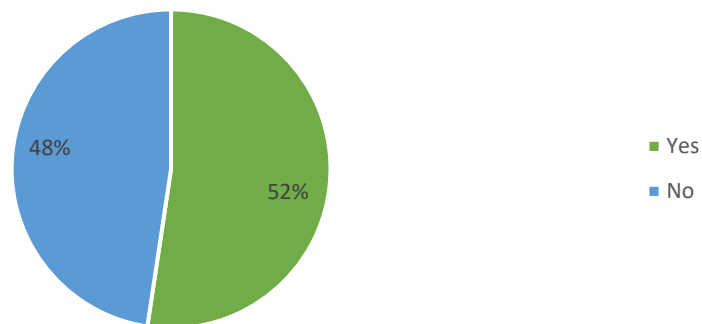
In this approach, such guiding values could establish a stronger shared internal value proposition, motivating and encouraging a more effective organization and promoting desired behaviours that benefit the Agenda. Here, the current ‘agenda consensus’ (see annex 1) may need to be updated. Figure 3 below shows responses to the survey question on this issue. There was a small majority in favour of some set of additional principles or commitments.

Survey respondents provided many additional comments on this question. One thread suggests that greater commitments are needed of members to help GASL be more effective and therefore the existing charter should be extended or improved. Others pointed to developments such as identifying the 4 livestock sustainability domains and the theory of change as positive steps in the direction of a clearer agenda. In the word of one respondent: “it would be more cohesive and tangible for GASL to feature commitments from its members and set a powerful example to others.” Another: “principles and values could be a nice way to generate a shared vision for sustainability.”

A competing thread suggests that the general principles in the consensus are good enough, but some specific actions and commitments by members could improve the impact of GASL. Others cautioned on the need to not become too precise as this may exclude some voices or actors or limit GASL in a fast-changing world. A respondent: “the consensus document should be high level and not too specific. I believe it is fine the way it is, unless gaps are identified and GASL can fulfil a role that

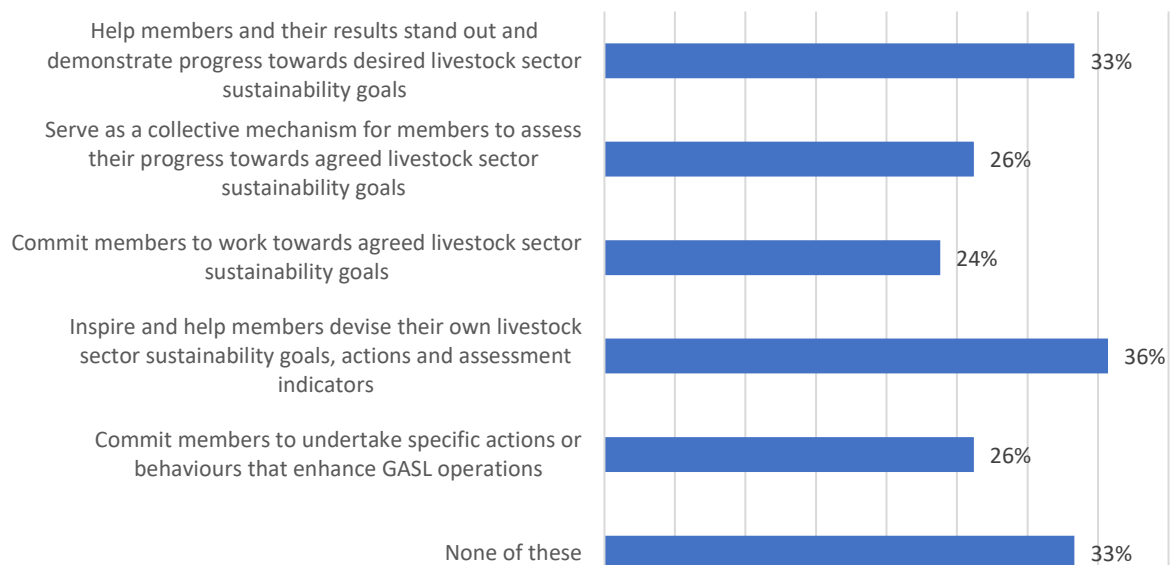
requires commitments to be signed. GASL's strength is to identify and share solutions for these to be applied in the regions. This does not in my view require a commitment from membership."

Figure 3: Do you think GASL needs a set of additional or enhanced principles and values for its members? (42 responses)



Respondents were asked to identify what any GASL principles and values might have as objectives. Figure 4 shows the responses – people could select multiple options. Aside from those selecting 'none of these', the two most popular options favour principles that support the efforts of members to showcase and demonstrate progress and results or to devise their own specific goals and approaches. The options proposing more commitment by members were less popular.

Figure 4: Which of the following should a set of GASL principles and values aim to do? (42 responses)



Frameworks to prioritize follow-up actions

This scoping exercise highlights three main opportunities for GASL:

1. *Identify specific sustainability issues and challenges where guidelines and tools could usefully be developed to address high-priority needs.* These should not cover any number of technical topics where guidelines and tools already exist.
2. *Formulate a GASL ‘charter’ with a set of high-level sustainable livestock principles or goals to show what the members and the sector stand for, inspire action by members, and possibly facilitate progress and results reporting and communication for learning purposes.*
3. *Extend and update the Agenda ‘consensus’ to reinforce the core values of GASL and guide and motivate contributions by members.*

Each of these can build on work already undertaken in GASL or by its members. This section suggests some frameworks that could be used as starting points to identify the focus for these.

Feedback on **guidelines and tools** suggests that GASL could work with members to develop new resources for high-priority sustainability issues or challenges. These issues should be selected to benefit from the multiple perspectives that GASL members can bring, focusing on multi-factor challenges.

This scoping exercise did not examine which specific issues require new tools and guidelines – except to note that there seem to be more guidelines in the environment/climate change domain. Instead, an expert multi-stakeholder process could draw from the following typologies or others to map critical gaps and opportunities.

FAIRR critical risk factors	DSF sustainability criteria	GASL sustainability domains	Sustainable Development Goals
Greenhouse Gas Emissions	Greenhouse Gas Emissions	Food and nutrition security	No Poverty
Deforestation & Biodiversity	Soil Nutrients	Livelihoods and economic growth	Zero Hunger
Water Use & Scarcity	Soil Quality and Retention	Animal health and animal welfare	Good Health and Well-being
Waste & Pollution	Water availability and quality	Climate and natural resource use	Gender Equality
Antibiotics	Biodiversity		Decent Work and Economic Growth
Animal Welfare	Working Conditions		Responsible Consumption and Production
Working Conditions	Animal Care		Climate Action
Food Safety	Waste		Life on Land
Governance	Market Development		Partnerships to achieve the Goal
	Rural Economies		
	Product Safety and Quality		

The first set from FAIRR² contains the ‘key sustainability risks’ currently perceived to face the animal farming industry – as identified by a global investor network external to the livestock sector. It could be a useful exercise to develop resources in each of the risk areas that will help sector stakeholders prepare and be able to respond to external scrutiny.

The second set from the Dairy Sustainability Framework³ emerged from a robust process within the livestock sector and may be applicable more widely. The third set is used by GASL, derived from work by FAO and others for the 2019 Global Forum for Food and Agriculture. The fourth set comprises the SDGs identified by GASL members as most relevant to the livestock sector.

Such a mapping of gaps and opportunities could be further refined by using a matrix combining these areas with the long-term outcomes identified in the GASL theory of change.

GASL long-term outcomes (from theory of change)	FAIRR factors	DSF criteria	GASL domains	SDGs
Natural resource use efficiency				
Animal products demand covered in protected ecosystems				
Optimize the use of livestock waste				
Contribute to biodiversity restoration and co-conservation				
Maximised potential of livestock to mitigate GHG				
Sustainable and healthy food systems				
Optimized animal sourced food in healthy diets				
Sustainable livestock numbers				
Enhanced animal health and welfare				
Responsible and prudent use of veterinary medicines				
Foodborne and zoonotic diseases controlled				
Prevent and build resilience to pandemics				
Create attractive employment opportunities				
Equitable and economically viable livestock systems				
Contribute to poverty alleviation				
Development of circular economy				
Mobilized multifunctionality				
Increased capacity to innovate				

² <https://www.fairr.org/index/risk-opportunity-factors>

³ <https://dairysustainabilityframework.org/dsf-membership/global-criteria>

Feedback on higher-level **sustainable livestock principles** suggest that GASL could usefully work with its members to identify a sustainable livestock charter or set of principles that members endorse. Inspiration for such goal setting or charter is provided by the veterinary sector, see below, or by other frameworks (see table).



SDGs	GRSB principles	DSF criteria	FAIRR risk factors	GASL domains
No Poverty	Natural Resources	Greenhouse Gas Emissions	Greenhouse Gas Emissions	Food and nutrition security
Zero Hunger	People & The Community	Soil Nutrients	Deforestation & Biodiversity	Livelihoods and economic growth
Good Health and Well-being	Animal Health & Welfare	Soil Quality and Retention	Water Use & Scarcity	Animal health and animal welfare
Gender Equality	Food	Water availability and quality	Waste & Pollution	Climate and natural resource use
Decent Work and Economic Growth	Efficiency & Innovation	Biodiversity	Antibiotics	
Responsible Consumption and Production		Working Conditions	Animal Welfare	
Climate Action		Animal Care	Working Conditions	
Life on Land		Waste	Food Safety	
Partnerships to achieve the Goal		Market Development	Governance	
		Rural Economies		
		Product Safety and Quality		

The third potential opportunity is for GASL to **extend the Agenda Consensus** to help renew members' commitment to follow and act on the core values of GASL. The current consensus document (annex 1) sets out three agreements to 1) participate and engage actively in the Global Agenda for Sustainable Livestock ... 2) contribute to the capacity of the Global Agenda for Sustainable Livestock ..., and 3) contribute to achieving local practice and policy change.

These could be extended by more explicitly referencing member commitments to elements from the new GASL theory of change, notably the ‘vital functions and results’ that capture GASL core values, the ‘short and medium-term results’ that express how GASL delivers, and perhaps the medium-term outcomes that set out priority changes that GASL seeks to influence.

Vital GASL functions and results	GASL short and medium-term results
Inclusion and diversity	Facilitating equitable dialogue and discourse
Leave no one behind – all voices in GASL count	Assembling evidence, tools, and guidelines
Balance influence	Promoting contextualised good practices
Communicate internally and externally	
Share and exchange knowledge	
Transparency	
Monitor, continuously learn and adapt	

GASL medium-term outcomes
All stakeholders can consistently measure and communicate the value of livestock for the SDGs
Intergovernmental and multilateral institutions fully integrate livestock contributions to SDGs
A growing number of countries have policies that enable sustainable livestock systems
Growing investments support the development of sustainable livestock systems in the world
Farmers and practitioners commit to contextualized good practices
Livestock systems offer equal opportunities for women, men, and youth
A growing number of livestock multistakeholder partnerships add value
Public support for the role of livestock in sustainable food systems is strong and sustained
Consumers of animal source foods make responsible choices

Summary insights and recommendations from the scoping exercise

Eleven recommendations for GASL are listed below. The two main audiences for these are 1) the members of GASL for whom GASL can facilitate enhanced opportunities to learn and work together to co-create guidelines and tools and define shared goals and indicators; and 2) external audiences that GASL members want to reach and inform through robust and powerful data, evidence and messages that demonstrate the ways that livestock contribute to our sustainable development goals.

1. GASL should not create new technical livestock production or husbandry guidelines or tools.
2. Instead, it could set up mechanisms to **better share existing guidelines and tools** or perhaps create a 'catalogue' or similar resource. The actual mechanism to do this will need careful consideration to avoid setting up a costly or difficult-to-update white elephant.
3. GASL could **identify high-priority multi-factor sustainability challenges, gaps, and wicked questions** where there is an added value to develop new guidelines or tools for these specific issues. Some mapping of domains to identify demands, gaps and opportunities is necessary at the start. The principles of multi-stakeholder and active member involvement are important to follow. Various frameworks and the GASL Theory of Change may help identify the issues to address.
4. Associated to this work on guidelines, GASL could set up or convene a facility or mechanism from its members that could **review or validate guidelines and tools**, drawing on the multi-disciplinary and multi-stakeholder diversity of its members.
5. GASL should **not establish a global framework or set of sustainable livestock indicators** that members and other stakeholders work towards. [Contrary to the interviews and survey, the July webinar suggested that there is a case for global indicators, goals and metrics that can be used and communicated to key external audiences. GASL could **establish a task group** or similar to concretely examine the feasibility of such, draw insights from the ways that members already do this in their specific domains, assess data and evidence requirements and potential to create something meaningfully global across the stakeholders, regions and livestock systems].
6. GASL could usefully continue to **support and catalyse collaboration and information exchange on methods, tools and indicators** that members can use to devise and use to assess the progress of their activities towards their sustainability goals. GASL could also facilitate a mechanism to provide review and validation support to emerging methods, tools and indicators.
7. GASL could **establish a 'sustainable livestock charter' or set of principles** that members endorse and promote externally to help communicate individual and joint commitments while also acting as a mechanism to continuously learn and improve.
8. Drawing from this charter of common principles, GASL can encourage its members to **publicize explicit 'sustainability statements', aspirations and actions** on their web sites or other communication channels, drawing attention to the challenges and actions being taken and results achieved. Such statements, perhaps alongside the charter, will make clear that sustainability is recognized as a challenge and is a priority for action.

9. GASL can further establish mechanisms to **proactively showcase and communicate the progress and results of its members** as they implement actions towards their own or wider livestock sustainability goals and targets. Directed to priority external audiences, it can highlight the many existing efforts and actions that demonstrate progress towards sustainable outcomes, amplifying their visibility and reach through GASL channels and networks.
10. GASL should consider extending its agenda 'consensus' document to **reinforce the core values expressed in the theory of change** and encourage members to actively contribute to initiatives that deliver on GASL's short and medium-term results and outcomes.
11. GASL members should be encouraged and facilitated to **communicate their actions, progress, and results – and lessons learned** – in these areas, using appropriate mechanisms established to promote knowledge exchange and continuous learning across the membership.

Annex 1: Agenda consensus

1. Recognizing that the UN Agenda 2030 for Sustainable Development, which builds on the Millennium Development Goals, provides a comprehensive framework for sustainable development, accepted by all countries and applicable to all;
2. Convinced that livestock development has a key role to play for the attainment of the UN Agenda 2030;
3. Conscious that each region faces specific challenges, and that there are different approaches, models and tools available in each region, in accordance with its circumstances and priorities, to achieve sustainable livestock in its economic, social and environmental dimensions;
4. Taking an integrated approach to sustainable livestock that includes consideration of livelihoods, social impacts, public health and animal welfare, environmental impacts, land use and tenure, and biodiversity;
5. Recognizing that the implementation of a Global Agenda for Sustainable Livestock depends on the active engagement of Governments, as well as civil society, the private sector, donors, academia and research institutions, NGOs, and Inter-governmental and Multi-lateral Organizations; and
6. Accepting that the Global Agenda for Sustainable Livestock is open, consensual, inclusive, based on knowledge and mutual respect, and built on voluntary stakeholder engagement, including through its Focus Area groups and Knowledge Networks.

The signatories to this consensus agree to:

- Participate and engage actively in the Global Agenda for Sustainable Livestock as a dynamic and inclusive platform for evidence-based policy dialogue, knowledge exchange, and joint action at global, regional, and national levels, supporting the achievement of the UN Agenda 2030 for Sustainable Development.
- Contribute to the capacity of the Global Agenda for Sustainable Livestock to build an improved understanding of livestock sustainability issues through existing evidence and/or generation of new knowledge, and to produce a diverse box of useful tools for practice and policy change.
- Commit with the other stakeholders of the Global Agenda for Sustainable Livestock to contribute to achieving local practice and policy change, focusing on continuous, context-specific improvement and innovation, and promoting livestock sector investments and project development.