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Продовольственная и
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COMMITTEE ON AGRICULTURE

SUB-COMMITTEE ON LIVESTOCK

Fourth Session

Rome, 3–5 June 2026

Draft Global Plan of Action for Sustainable Livestock Transformation

Executive Summary

At its Second Session on 16–18 July 2024, the FAO Committee on Agriculture (COAG) Sub-Committee on Livestock (the Sub-Committee) recommended that COAG recommend FAO to develop, in consultation with Members in a participatory manner, a negotiated Global Plan of Action for Sustainable Livestock Transformation (GPA). At its 29th Session (30 September – 4 October 2024), COAG endorsed the Report of the Second Session of the Sub-Committee and the recommendations therein. In response, FAO developed the draft GPA in a participatory manner through an extensive and inclusive consultation process involving Members and relevant stakeholders. At its Third Session on 3–5 March 2026, the Sub-Committee convened to negotiate the draft GPA. At the Session, agreement was reached on the text of the draft GPA.

This document provides an overview of the mandate, the process followed by FAO in developing the GPA, and the outcomes of the Third Session. The text of the draft GPA agreed at the Third Session is provided in the Appendix.

Suggested action by the Sub-Committee

The Sub-Committee is invited to recommend COAG to:

- adopt the Global Plan of Action for Sustainable Livestock Transformation (GPA);
- call on Members and other stakeholders in the livestock sector to support the promotion and implementation of the GPA; and
- recommend FAO, on request, to support Members to build on the GPA and to develop (or adapt) a national plan of action, or an equivalent policy instrument, that is tailor-made and specific to the Members' contexts, needs and priorities.

Queries on the substantive content of the document may be addressed to:

Secretariat of the COAG Sub-Committee on Livestock

Animal Production and Health Division (NSA)

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I. Mandate

1. At its Second Session on 16–18 July 2024,¹ the COAG Sub-Committee on Livestock (the Sub-Committee) recommended that COAG should: “Recommend FAO to develop, based on the comprehensive science- and evidence-based “Global assessment of the contribution of livestock to food security, sustainable agrifood systems, nutrition and healthy diets”, and in consultation with Members in a participatory manner, and in line with paragraph 21 of Document COAG:LI/2024/3,² a negotiated *Global Plan of Action for Sustainable Livestock Transformation* through a holistic approach, backed by science and evidence as relevant, covering all livestock production systems, taking into account the discussions of the Global Conference on Sustainable Livestock Transformation of September 2023 and the comments provided during the Sessions of the Sub-Committee on Livestock, that operationalizes the Sustainable Livestock Transformation Framework and is aligned with other existing FAO strategies, initiatives and instruments, contingent upon availability of the requisite financial resources”.
2. At its 29th Session (30 September – 4 October 2024),³ COAG endorsed the Report of the Second Session of the Sub-Committee and the recommendations therein.

II. Process followed in the development of the GPA

3. Following the 29th Session of COAG, FAO began developing the GPA in a participatory manner, consulting with Members throughout the whole process. This included four rounds of consultations with Members on the GPA outline/document through the Sub-Committee Bureau, followed by subsequent consultation with Members through the Members Gateway at the end of 2025. From this process, a total of 56 sets of comments were submitted by 26 different Members. Consultations were also held with partner organizations throughout the process, resulting in 41 sets of comments from 29 different partner organizations. The GPA was also presented for information and feedback at several international events in 2024–2025. Full details about the process followed by FAO in the development of the GPA are provided in COAG:LI/3/2026/2.⁴

III. The Third Session of the Sub-Committee, 3–5 March 2026

4. The Sub-Committee held its Third Session in hybrid modality on 3–5 March 2026.⁵ Of the 138 COAG Members, 95 registered their delegations for the Session. Eight non-COAG Members, two UN agencies, four intergovernmental organizations and 18 non-governmental organizations participated as Observers.⁶ The draft GPA was the only substantive item on the Session’s agenda. The debate on the draft GPA was conducted in a structured manner, section by section, over the three days.⁷

At the end of the Third Session, the Sub-Committee:⁸

- welcomed the work undertaken by FAO in consultation with Members and other stakeholders, in preparing the draft GPA;
- commended the substantial progress achieved by the Sub-Committee on negotiations of the draft GPA, noting that agreement was reached on the text;

¹ <https://www.fao.org/coag-livestock/sessions/second-session/en>

² COAG:LI/2024/3, <https://openknowledge.fao.org/handle/20.500.14283/np186en>

³ <https://www.fao.org/coag/coag-29/en>

⁴ COAG:LI/3/2026/2, paras 4–8 <https://openknowledge.fao.org/handle/20.500.14283/cd8317en>

⁵ <https://www.fao.org/coag-livestock/sessions/third-session/>

⁶ COAG:LI/4/2026/INF/4, <https://www.fao.org/coag-livestock/sessions/fourth-session/en>

⁷ COAG:LI/3/2026/INF/1, <https://openknowledge.fao.org/handle/20.500.14283/cd8316en>

⁸ COAG:LI/4/2026/INF/4, <https://www.fao.org/coag-livestock/sessions/fourth-session/en>

- noted that the agreed text of the draft GPA is reflected in Appendix D to the Report of the Third Session; and
- decided that the agreed text of the draft GPA be presented, as an item on the agenda, at the Fourth Session of the Sub-Committee, with a view to recommending its adoption by COAG.

The text of the draft GPA that was agreed at the Third Session of the Sub-Committee is set out in the Appendix to this document. The text is the same as that included in Appendix D to the Report of the Third Session.⁹

⁹ COAG:LI/4/2026/INF/4, <https://www.fao.org/coag-livestock/sessions/fourth-session/en>

APPENDIX – Draft Global Plan of Action for Sustainable Livestock Transformation

Section 1. Introduction

Section 2. Priorities and Actions

Section 3. Implementation

Abbreviations and Acronyms

COAG	FAO Committee on Agriculture
FAO	Food and Agriculture Organization of the United Nations
FLW	Food loss and waste
GPA	Global Plan of Action for Sustainable Livestock Transformation
NPA	National Plan of Action for Sustainable Livestock Transformation
PA	Priority Area
SP	Strategic Priority
TASF	Terrestrial animal source food
UN	United Nations
WHO	World Health Organization
WOAH	World Organisation for Animal Health
WTO	World Trade Organization

Section 1. Introduction

1. The Global Plan of Action for Sustainable Livestock Transformation (GPA) has been developed in alignment with the FAO Strategic Framework 2022–31,¹ which aims to support the transformation² to more efficient, inclusive, resilient and sustainable agrifood systems, guided by the four betters: better production, better nutrition, a better environment and a better life, leaving no one behind. The GPA builds on the FAO Sustainable Livestock Transformation Framework³ and represents a voluntary internationally negotiated framework to help guide the livestock⁴ sector towards greater sustainability. It supports global efforts to achieve the 2030 Agenda for Sustainable Development and its Sustainable Development Goals.

1.1 Rationale

2. The world faces a number of major challenges to current and future human well-being and to economic, environmental and social sustainability. Among the most critical is the combination of global hunger, food insecurity and malnutrition. Malnutrition includes undernutrition (child stunting and wasting, and vitamin and mineral deficiencies) as well as overweight and obesity. Compounding this challenge is the fact that the world continues to be in a phase of rapid human population growth, where the global population is expected to reach 10 billion people by 2050 and to peak soon thereafter. The demand for food will therefore increase substantially while, at the same time, the natural resources upon which agriculture depends, face several environmental challenges, including biodiversity loss, water scarcity, pollution and climate change. A key question is: how are we going to meet the future increased demand for food in a sustainable manner?

3. Terrestrial animal source food (TASF) includes all food products derived from livestock production systems. It is nutrient-dense and provides energy, proteins, essential fatty acids and micronutrients, important for meeting recommended nutrient requirements as a part of healthy diets at different life stages. TASF is a key source of protein and calories in many diets, though its contribution varies depending on region, sex, cultural factors, food availability and income levels.

4. Global dynamics, particularly population growth, rising incomes and rapid urbanization, have contributed to an increased demand for animal protein, making the livestock sector one of the fastest growing agricultural sectors over the past years. This means that the livestock sector is one of the key contributors to agrifood systems. It also means that, beyond food security and improved nutrition, it plays a key role in rural development through economic growth, poverty reduction and its contribution to better livelihoods.

5. A rules-based multilateral trading system⁵ is also key to a sustainable livestock sector transformation, as trade facilitates the supply of sufficient, safe and diverse TASF and other livestock products and inputs globally and generates income for farmers and stakeholders across the agrifood value chain.

6. Livestock provides food, fibre, raw materials for other industries and a wide range of animal products, as well as draught power, transport, fertilizer and energy. In most developing countries, livestock provides smallholder farmers with a substantial proportion of their income. By serving as productive assets and sources of household nutrition, livestock can offer a pathway to poverty reduction and economic well-being. Livestock often provides a regular income flow throughout the year, while crops are seasonal.

¹ FAO. 2021. *Strategic Framework 2022–31*. <https://openknowledge.fao.org/handle/20.500.14283/cb7099en>

² In accordance with national priorities, circumstances, contexts and capacities

³ COAG:LI/2024/3, <https://openknowledge.fao.org/handle/20.500.14283/np186en>

⁴ “Livestock” refers to all terrestrial animals used for food and agriculture. From: C/2021/21, Appendix E, <https://www.fao.org/about/meetings/coag/coag-27/report-coag-27/en/>

⁵ Several Members underlined the importance of a rule-based, non-discriminatory, open, fair, inclusive, equitable and transparent multilateral trading system, with the WTO at its core.

Globally, several hundred million people, including some of the world's most vulnerable, depend on livestock for their livelihoods. Livestock can also enhance the resilience and adaptability of rural communities by acting as a buffer against climate variability and economic shocks. Furthermore, livestock may provide an opportunity to promote equality among communities, particularly between men and women given the substantial role that women play in this sector.

7. Although the livestock sector presents numerous opportunities, it also faces significant challenges. About three-quarters of the pathogens that affect humans are of animal origin, and zoonoses (diseases and infections naturally transmitted between people and vertebrate animals) are responsible for millions of deaths each year. Most of the emerging zoonoses originate in wildlife. Bringing livestock and humans in closer contact with wildlife may increase the risk of potentially zoonotic pathogens spilling over from wildlife to livestock and humans. Simultaneously, close and frequent contact between people and farm animals may facilitate the transmission of pathogens between humans and livestock. In addition, many non-zoonotic diseases, such as foot-and-mouth disease in endemic areas, cause considerable economic losses, pushing people in vulnerable situations deeper into poverty and threatening food security for entire communities. Furthermore, there is growing concern about the global rise of antimicrobial resistance, which is rapidly becoming one of the greatest threats to lives, livelihoods and economies. Addressing these challenges requires good animal management practices and animal health and welfare as part of intersectoral and interdisciplinary action based on a One Health approach, which recognizes the interdependence between human, animal, plant and environmental health.

8. If not properly managed, the rapid growth in the livestock sector can have an impact on natural resources, such as water, land and soil. Most of the water used in the livestock sector is associated with the production of (irrigated) feed crops and pastures. In terms of water quality, livestock production can impair freshwater resources through the direct discharge of manure and effluents into water bodies, as well as through nutrient leaching and surface runoff. Globally, approximately one-third of available arable land is used for animal feed production. However, specific livestock systems rely heavily on forages, crop residues and by-products that are not suitable for human consumption. This converts human-inedible biomass into products that have high nutritional value, thus playing a key role in nutrient recycling and the bioeconomy. Well-managed manure enables efficient transfer of nutrients across different crop cultivations, enhancing soil fertility and supporting more sustainable agricultural systems. Increasing the use of agricultural by-products as animal feed offers an opportunity to reduce competition between human food and animal feed production, including through integrated farming systems that enhance the productive use of agricultural lands, amongst other approaches.

9. The livestock sector is also under scrutiny for the greenhouse gas emissions it generates, contributing to climate change. The most significant emissions from the livestock sector are methane, carbon dioxide and nitrous oxide, although in different proportions. Cattle account for the largest proportion of these emissions through enteric fermentation, resulting in methane emissions, while monogastric species such as pigs and poultry mainly contribute carbon dioxide and nitrous oxide. At the same time, the livestock sector is also affected by climate change, through extreme weather and uncertainty such as heatwaves or droughts, with negative impacts on productivity, animal health and welfare.

10. In the face of global climate challenges, sustainable livestock systems are increasingly recognized as crucial to climate change adaptation and resilience, particularly in challenging environments such as arid and semi-arid lands. Context-specific production methods and sustainable management practices allow livestock production to mitigate environmental impacts while strengthening resilient food systems, facilitating sustainable livelihoods, and enhancing global food security. Pasture-based systems, particularly when managed with adaptive rotations, can offset part of the greenhouse gas emissions by sequestering carbon in soils and perennial root systems, while preserving biodiversity in grasslands. Additionally, integrating livestock with feed-based systems can support positive environmental outcomes

by integrating livestock with regenerative crop-production practices. So, livestock could be a solution rather than a driver of land degradation and climate change.

11. Livestock production can also impact biodiversity. If not properly managed, expansion of livestock activity involving changes in land use have the potential to contribute to the loss of natural habitats and the degradation and fragmentation of ecosystems. However, well-managed grazing and feed-based livestock systems, regulated and responsible hunting and integrated production systems can support ecosystem health and biodiverse landscapes, preserving and recovering grasslands, forests and natural habitats, as well as providing other benefits such as carbon sequestration, improved water retention and enhanced soil health, taking into consideration, *inter alia*, relevant commitments to halting and reversing deforestation.⁶

12. As outlined, the livestock sector presents numerous opportunities as well as a range of challenges that need to be addressed. It is therefore essential to optimize outcomes, foster synergies and address trade-offs taking into consideration local realities and different production systems. This will be even more important in the future due to the projected increased demand for animal products. The livestock sector should therefore be transformed so that it meets the global needs for TASF and other animal products in a sustainable manner.

1.2 Mandate

13. At its Second Session on 16–18 July 2024,⁷ the FAO Committee on Agriculture (COAG) Sub-Committee on Livestock recommended that COAG should:

“Recommend FAO to develop, based on the comprehensive science- and evidence-based “Global assessment of the contribution of livestock to food security, sustainable agrifood systems, nutrition and healthy diets”, and in consultation with Members in a participatory manner, and in line with paragraph 21 of Document COAG:LI/2024/3,⁸ a negotiated *Global Plan of Action for Sustainable Livestock Transformation* through a holistic approach, backed by science and evidence as relevant, covering all livestock production systems, taking into account the discussions of the Global Conference on Sustainable Livestock Transformation of September 2023 and the comments provided during the Sessions of the Sub-Committee on Livestock, that operationalizes the Sustainable Livestock Transformation Framework and is aligned with other existing FAO strategies, initiatives and instruments, contingent upon availability of the requisite financial resources”. At its 29th Session (30 September–4 October 2024),⁹ COAG endorsed the Report of the Second Session of the Sub-Committee and the recommendations therein.

1.3 Process followed in the development of the GPA

14. Following the 29th Session of COAG, FAO began developing the GPA in a participatory manner, consulting with Members throughout the whole process. This included four rounds of consultations with Members on the GPA outline/document through the Sub-Committee Bureau and subsequent consultation with Members through the Members Gateway at the end of 2025. From this process, a total of 56 sets of comments were submitted by 26 different Members. There were also consultations with partner organizations throughout the process, resulting in 41 sets of comments from 29 different partner organizations. The GPA was also presented for information and feedback at several international events in 2024–2025.

⁶ In accordance with national priorities and relevant international commitments.

⁷ <https://www.fao.org/coag-livestock/sessions/second-session/en>

⁸ COAG:LI/2024/3 <https://openknowledge.fao.org/handle/20.500.14283/np186en>

⁹ <https://www.fao.org/coag/coag-29/en>

1.4 Nature and scope

15. The GPA is intended to guide the livestock sector towards greater sustainability, recognizing that different levels of sustainability already exist within and between countries. It is a voluntary, non-binding and country-driven framework. It may be periodically reviewed and revised, when necessary, in consultation with Members to reflect the evolving needs and priorities of the sector, as appropriate, taking into account any reports submitted to the Sub-Committee regarding its implementation and impact.

16. The GPA is relevant to all stakeholders in the livestock sector, including FAO Members and non-Members, producers, Indigenous Peoples, local communities, pastoralists, civil society, academic and research institutions, producer organizations, the private sector as well as relevant intergovernmental organizations and international non-governmental organizations. In this sense, it is also applicable to all levels of governance – local, national, regional and global – and to different contexts with different consumption challenges. Its implementation will vary according to the needs and priorities, as well as the capacities and competencies of the different actors within their regional and national contexts and frameworks.

17. The GPA can be implemented in a wide range of geographic and environmental contexts, including rural, peri-urban and urban areas, as well as in different agroecological zones. It can be applicable to different societal and economic realities, production systems and scales, from small- to large-scale operations. It encompasses livestock systems that produce food as well as non-food products, such as wool, hides and leather. It also covers all aspects of the livestock value chain, from the upstream provision of feed, inputs and services; to on-farm practices in areas like animal management and health; and downstream aspects such as processing, marketing and trade, use of animal products as well as consumption of TASF, nutritional aspects and food loss and waste (FLW).

18. Multiple livestock production systems may contribute to sustainable livestock production. In this context, the GPA recognizes that there is no “one-size-fits-all” approach to achieving greater sustainability in the livestock sector. In the implementation of the GPA, stakeholders should pursue context-based, locally adapted solutions that leverage the resources available to them, which may include technological innovations as well as traditional knowledge and practices.

1.5 Relationship with existing frameworks, strategies and initiatives

19. The GPA should be interpreted as taking into account each country's national frameworks and international commitments, including both legally binding and voluntary relevant international commitments. As a voluntary, non-binding framework, the GPA does not create new obligations or derogations from commitments undertaken under binding international agreements. Accordingly, measures aimed at implementing the GPA must be fully consistent with the obligations of countries under applicable international agreements, as appropriate.

20. Although the GPA focuses on livestock, its connections with other areas, such as crops, forestry, natural resources management and biodiversity, are recognized. The GPA recognizes the interdependence between different sectors, namely through a One Health approach,¹⁰ which is embedded throughout the GPA, underpinning all of its Priorities and Actions and promoting intersectoral and interdisciplinary

¹⁰ One Health is an integrated, unifying approach that aims to sustainably balance and optimize the health of people, animals and ecosystems. It recognizes the health of humans, domestic and wild animals, plants, and the wider environment (including ecosystems) are closely linked and interdependent. The approach mobilizes multiple sectors, disciplines and communities at varying levels of society to work together to foster well-being and tackle threats to health and ecosystems, while addressing the collective need for clean water, energy and air, safe and nutritious food, taking action on climate change, and contributing to sustainable development. From: One Health High Level Expert Panel (OHHLEP). 2023. *One Health definitions and principles*. <https://www.who.int/publications/m/item/one-health-definitions-and-principles>

approaches to sustainable livestock systems. This underscores the importance of ensuring cross-cutting coherence with these sectors so that outcomes are optimized towards agrifood systems transformation.

21. At the intergovernmental level, the Quadripartite¹¹ works to mitigate the impact of health challenges at the human–animal–plant–environment interface at the global, regional and country levels. The Quadripartite has developed a One Health Joint Plan of Action¹² which provides a framework for collaboration across sectors for key priorities. Science- and evidence-based animal health measures are important in facilitating safe international trade of animals and animal products while avoiding unnecessary trade barriers. The WOA standards, as set out in the Terrestrial Animal Health Code¹³ and the Manual of Diagnostic Tests and Vaccines for Terrestrial Animals (as well as in a corresponding Code and Manual for aquatic animals), are recognized by the World Trade Organization (WTO) Agreement on the Application of Sanitary and Phytosanitary Measures as international reference standards for animal health and zoonoses.

22. To build on and coordinate existing efforts, the Actions in Section 2 acknowledge various international instruments dealing with relevant and complementary issues for improving sustainability in the livestock sector. Specific references are included to other action plans, codes of conduct and voluntary guidelines developed by FAO and other intergovernmental organizations and negotiated and endorsed by Members. The GPA is also aligned with relevant FAO strategies and initiatives, including the FAO Strategic Framework 2022–31.

23. The GPA incorporates the four cross-cutting/cross-sectional “accelerators” and the three cross-cutting themes of the FAO Strategic Framework 2022–31. The accelerators, namely technology, innovation, data and complements (governance, human capital and institutions), are intended to be leveraged to support the impact, efficiency, resilience and inclusiveness of livestock systems, while minimizing trade-offs. Additionally, the cross-cutting themes of gender, youth and inclusion are considered essential to ensure that the transformation leaves no one behind. Alongside these themes, critical areas such as climate change, nutrition and biodiversity are also integrated throughout the GPA, to promote long-term sustainability, in its three dimensions, and resilience of the livestock sector.

1.6 Objectives

24. FAO Members and all other stakeholders are encouraged to build on the GPA and to develop (or adapt) a national plan of action, or an equivalent policy instrument, that is tailor-made and specific to the context, needs and priorities of their country.

25. The objectives of the GPA are to guide the sustainable transformation of the livestock sector globally through the four Priorities Areas of the GPA, namely:

1. enhancing the contribution of the livestock sector to food security, nutrition and healthy diets;
2. enhancing the role of the livestock sector in supporting better livelihoods and inclusive economic growth;
3. improving animal health through a One Health approach; and
4. promoting sustainable natural resource use, climate action and biodiversity.

¹¹ FAO, United Nations Environment Programme (UNEP), World Health Organization (WHO) and World Organisation for Animal Health (WOAH)

¹² FAO, UNEP, WHO & WOA. 2022. *One Health Joint Plan of Action (2022-2026). Working together for the health of humans, animals, plants and the environment.* <https://doi.org/10.4060/cc2289en>

¹³ WOA. 2024. *Terrestrial Animal Health Code.*

<https://www.woah.org/en/what-we-do/standards/codes-and-manuals/terrestrial-code-online-access/>

Section 2. Priorities and Actions

This is the main section of the GPA. It is organized in three levels: Priority Areas (PAs), Strategic Priorities (SPs) and Actions. Each PA consists of a set of SPs, which in turn includes a number of Actions. Thematically, the PAs and the SPs are closely interlinked. For this reason, some of the Actions relate, and are relevant, to more than one PA or SP. The GPA comprises 4 PAs, 17 SPs and 85 Actions. The order of SPs within a PA does not imply any respective importance. Similarly, the order of Actions within an SP does not indicate any respective importance.

Priority Area 1. Food security, nutrition and healthy diets

This Priority Area, through its four Strategic Priorities, aims to enhance the contribution of the livestock sector to food security, nutrition and healthy diets by ensuring the safety of TASF and the availability of, and accessibility to, safe and nutritious TASF; promoting the consumption of safe and nutritious TASF as part of healthy diets; and reducing food loss and waste along livestock supply chains, and emphasizing the importance of rules-based trade in facilitating the supply of livestock products.

SP 1.1 Ensure the safety of terrestrial animal source food

Rationale

Food safety is the assurance that food will not cause undue harm to the consumer when it is produced, prepared and/or eaten according to its intended use. On a global basis, unsafe food from the livestock sector and other sources causes hundreds of millions of cases of food-borne diseases each year, many of which are not officially reported. Illness, disability and premature deaths induced by the consumption of unsafe food also lead to productivity losses worldwide with substantial economic and social implications. Unsafe food impinges on the progressive realization of the right to food and undermines efforts to guarantee health and well-being. Safe food along with its nutritional value is a prerequisite for achieving healthy diets, enhancing market access and economic development, ensuring overall food security.

Actions

1.1.1 Promote implementation of the Codex Alimentarius risk analysis framework¹⁴ for food safety to aid in the identification, prioritization, prevention, mitigation and communication of all food safety risks in TASF, ensuring risk assessment, risk management and risk communication are clearly delineated.

1.1.2 Strengthen prevention, detection and response capacities to food-borne pathogens and other hazards in TASF, including by enhancing risk-based national food control systems based on the Codex Alimentarius texts and standards, optimal use of inspections, laboratory testing and cross-sectoral communication.

1.1.3 Develop and implement capacity development programmes and provide technical assistance to regulatory authorities and other relevant stakeholders to ensure the safety of TASF.

SP 1.2 Ensure the availability of, and enable access to, safe and nutritious terrestrial animal source food

Rationale

Food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy

¹⁴ FAO & WHO. 2025. *Codex Alimentarius Commission Procedural Manual – Thirtieth edition*. <https://doi.org/10.4060/cd4216en>

life.¹⁵ Food availability and economic and physical access to food represent two essential dimensions of food security. The issue of availability addresses whether food is actually or potentially physically present, including aspects of production, food reserves, transportation, cold chain, markets and trade, and wild foods. Food access relates to whether households and individuals have sufficient physical and economic access to that food. In other words, food security requires that sufficient safe and nutritious food is available to all populations, through production or trade, and that all people can physically and economically access adequate quantities of safe and nutritious food. Likewise, the imbalance in empowerment and opportunity of women and girls compared to men and boys is an underlying determinant increasing risk of malnutrition in women, adolescent girls and the children under their care. In this context, the focus is placed on ensuring the availability of, and access to, safe and nutritious TASF, as part of healthy diets.

Actions

1.2.1 Conduct research to address data gaps in dietary intake, including TASF intake, across life stages, particularly for nutritionally vulnerable populations, using data disaggregation by age, sex, geographic location, income or wealth, disability status and other relevant characteristics in accordance with international standards.

1.2.2 Conduct assessments to better estimate future trends in availability and accessibility of TASF by analysing food production, storage (including cold chain) and transportation, trade and consumption patterns.

1.2.3 Develop and implement policies and strategies to ensure stable production and availability of safe and nutritious TASF and facilitate trade and access to local, national and international markets in line with established multilateral trade rules, in line with the Voluntary Guidelines to Support the Progressive Realization of the Right to Adequate Food in the Context of National Food Security.¹⁶

1.2.4 Develop and implement policies and strategies to improve the economic, social and physical access to, and distribution of, safe and nutritious TASF, in particular for individuals with the highest nutritional needs and populations who face issues accessing safe and nutritious food.

1.2.5 Promote and facilitate the production of safe and nutritious TASF by smallholders and family farmers, recognizing their essential role in food security and nutrition, especially at a local level.

SP 1.3 Promote better understanding of the role of safe and nutritious terrestrial animal source food as part of healthy diets

Rationale

Healthy diets¹⁷ are adequate in nutrients to prevent deficiencies and promote health as well as balanced in energy intake and its sources to support healthy weight and prevent non-communicable diseases. They are also diverse in nutritious foods to support nutrient adequacy and promote health as well as moderate in consumption of foods and dietary compounds linked to detrimental health effects. Humans have specific nutrient demands at different life stages. For example, infants, children and adolescents as well as pregnant and lactating women have higher demands for some essential nutrients, such as essential amino acids, fatty acids, vitamin B12, calcium, iron and zinc, that are important for growth and cognitive

¹⁵ FAO, IFAD, UNICEF, WFP & WHO. 2025. *The State of Food Security and Nutrition in the World 2025*. <https://doi.org/10.4060/cd6008en>

¹⁶ FAO. 2024. *Voluntary Guidelines to Support the Progressive Realization of the Right to Adequate Food in the Context of National Food Security*. <https://doi.org/10.4060/y7937e>

¹⁷ FAO & WHO. 2024. *What are healthy diets? Joint statement by the Food and Agriculture Organization of the United Nations and the World Health Organization*. <https://doi.org/10.4060/cd2223en>

development. Within healthy dietary patterns, TASF can make vital contributions to nutrition in meeting the Global Nutrition Targets¹⁸ related to reducing stunting, wasting and overweight among children under five years of age, low birthweight, anaemia in women of reproductive age, and obesity and non-communicable diseases in adults.¹⁹ Consumption of TASF as part of healthy diets can play a key role in advancing nutrition and health goals across populations and its promotion aligned with national dietary guidelines, and where appropriate, should be accompanied by efforts to minimize intake of TASF products proven to be associated with adverse health outcomes.

Actions

1.3.1 Conduct research to address the gaps in evidence regarding the short- and long-term nutrition health effects of TASF consumption across life stages, in particular in groups with the highest nutritional needs and people living in low-income countries, and the nutrient composition and health effects of different types of TASF, including from different animal species.

1.3.2 Develop or update science- and evidence-based national food-based dietary guidelines to specify optimal ranges for daily intake of nutritious TASF by life stages as part of affordable, nutritious, safe and healthy diets, considering cultural preferences and the local context while highlighting that healthy diets should be adequate, moderate, diverse and balanced.

1.3.3 Promote the use of science- and evidence-based national food-based dietary guidelines to better inform livestock policies and programmes, where relevant, as well as those that impact the affordability and accessibility and distribution of TASF.

1.3.4 Organize science- and evidence-based communication campaigns to educate and promote the role of TASF as part of healthy diets aligned with locally appropriate dietary patterns and traditions.

SP 1.4 Reduce food loss and waste along livestock supply chains

Rationale

Food loss and waste (FLW) is the decrease in quantity or quality of food along the food supply chain. It affects the sustainability of agrifood systems, with negative impacts on the economy and people's livelihoods, food security and nutrition, and the environment. It can have an impact on food security, nutrition and healthy diets through reducing the global and local availability of food; reducing food access for those food supply chain actors who face FLW-related economic and income losses; and through unsustainable use of natural resources, essential for future food production. FLW can also have an impact on food security and nutrition through quality and nutrient losses along food supply chains and on the stability of food supplies. FLW contributes to greenhouse gases. For example, when disposed of in landfills it can contribute to methane production. Producing food consumes resources, such as water, land and energy, and once food is wasted, the resources embedded in it are wasted too. Reducing FLW is, therefore, an important way to reduce production costs and increase the efficiency of the agrifood systems, improve food security and nutrition and contribute to economic, social and environmental sustainability.

Actions

¹⁸ As agreed at the 78th World Health Assembly 2025. <https://www.who.int/teams/nutrition-and-food-safety/global-targets-2030>

¹⁹ FAO. 2023. *Contribution of terrestrial animal source food to healthy diets for improved nutrition and health outcomes – An evidence and policy overview on the state of knowledge and gaps*. <https://doi.org/10.4060/cc3912en>

1.4.1 Develop or strengthen systems for collecting data and conduct assessments of the magnitude of FLW in livestock supply chains, identifying the direct causes and underlying drivers, as well as potential interventions to reduce FLW.

1.4.2 Support Members, upon their request, to develop and implement strategies and action plans to address the causes of FLW, in line with the Voluntary Code of Conduct for Food Loss and Waste Reduction,²⁰ with a particular focus on tackling key drivers specific to livestock supply chains.

1.4.3 Develop, implement and strengthen policies, institutional and legal frameworks to support FLW reduction in livestock supply chains, in line with national contexts.

1.4.4 Develop and implement science-based technical solutions and innovations to reduce FLW, taking into consideration food safety aspects, as well as identify the optimal form of related systems.

1.4.5 Document and share good practices in FLW prevention and reduction in livestock supply chains.

²⁰ FAO. 2022. *Voluntary Code of Conduct for Food Loss and Waste Reduction*. <https://doi.org/10.4060/cb9433en>

Priority Area 2. Better livelihoods and inclusive economic growth

This Priority Area, through its five Strategic Priorities, aims to enhance the role of the livestock sector in supporting better livelihoods and inclusive economic growth. It focuses on ensuring livestock producers' equitable access to resources and services; supporting the resilience and improving the efficiency and productivity of livestock systems; promoting employment opportunities and decent working conditions in the livestock sector; promoting market access opportunities; and ensuring that the livestock sector is equitable and inclusive.

SP 2.1 Ensure that livestock producers have equitable access to resources and services

Rationale

Livestock producers across the globe are crucial contributors to food production, human health and well-being, rural development and maintenance of healthy local environments. However, most of them face challenges which negatively affect their livelihoods and economic growth. These include unequal access to: infrastructure, markets and unequal prices, and credit; natural resources, access to land and secure tenure as per the national context and legal frameworks; services, such as animal health and financial services as well as extension and advisory services; information, including education and capacity development; appropriate technologies and innovations; social protection schemes; and rural community services. Addressing these issues using appropriate approaches and technologies is essential to empower the livestock producers and promote an inclusive and sustainable growth of the livestock sector.

Actions

2.1.1 Promote implementation of the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security²¹ and associated technical guides related to livestock producers, as appropriate to the subnational and national context.

2.1.2 Develop and implement policies to ensure that livestock producers, women and men, have equitable access to resources and services (including water, land, technologies and innovation, education, financial services, credit and information).

2.1.3 Develop and implement capacity development programmes and provide technical assistance to livestock producers on good production and processing practices that are science- and evidence-based and context-specific.

2.1.4 Strengthen the infrastructure, including transport, cold chain, slaughter and animal product preservation and processing facilities, to increase the efficiency of livestock value chains and enhance food safety, and facilitate access to trade and local, national and international markets through the rules-based trading system while considering animal health and welfare as appropriate.

2.1.5 Strengthen cooperatives and producer organizations to support livestock producers in adopting context-specific good production and processing practices, accessing inputs and technologies and improving marketing opportunities.

2.1.6 Strengthen extension and advisory services, including digitalization, to develop the knowledge and skills of all livestock value chain actors whilst taking into account equal opportunities.

²¹ FAO. 2022. *Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security*. First revision. <https://doi.org/10.4060/i2801e>

2.1.7 Promote regulatory environments that are agile to reflect the realities and scale of producers by aligning requirements with their size, capacity and risk profile, as appropriate, making objectives proportionate and achievable, according to national legal frameworks.

SP 2.2 Improve the resilience of livestock production systems

Rationale

Dealing with climatic shocks and other types of exogenous income-reducing crises can be extremely hard for households in vulnerable situations. This is especially true for farmers in rural areas lacking adequate financial support or formal and informal safety nets. Rural populations have different degrees of access to resources and services. Women, Indigenous Peoples, local communities, and the rural poor are often among the most affected as they have less access to resources and services and depend more on livestock for their livelihoods. These differences are magnified when shocks hit all members of the same community simultaneously, as can happen in the case of natural disasters (such as fires, floods or droughts), outbreaks of animal diseases, conflicts or economic shocks. Working animals, such as horses and donkeys, can play a key role in disaster response by evacuating people, bringing in emergency supplies and helping to rebuild infrastructure. Livestock plays an important role in building resilience against external shocks. It is often viewed as a precautionary form of savings, representing an asset that can be sold whenever needed. This is especially relevant in periods with low rainfall leading to crop failures and is even more important in the absence of credit facilities. Numerous interventions can be made to increase the resilience of livestock producers to external shocks.

Actions

2.2.1 Develop and implement national contingency plans and strengthen prevention and preparedness, including anticipatory actions, to support livestock producers in mitigating losses during shocks. This can be done by, *inter alia*, integrating early warning systems for extreme weather events, providing access to emergency feed and safe water reserves, veterinary services, supporting restocking efforts with appropriate breed types, fostering community-based risk management and promoting diversified livelihoods.

2.2.2 Strengthen risk management mechanisms for livestock producers to build financial resilience, including through insurance plans.

2.2.3 Develop and implement, as appropriate, context-specific comprehensive strategies for resilient livestock production and its supply chains.

2.2.4 Build capacity and conduct periodic assessments of local risks to inform risk mitigation strategies and thus improve the resilience of livestock production systems.

2.2.5 Support the economic resilience of livestock producers by increasing their access to different markets, in line with established multilaterally agreed trade rules, improving market transparency so farmers can capture a fairer share of market value through normal mechanisms.

2.2.6 Develop and implement capacity development and extension and advisory services for livestock producers to enhance their resilience to shocks.

SP 2.3 Improve the efficiency and productivity of livestock systems

Rationale

Production efficiency can be improved in many livestock systems so that TASF and other animal products are produced using less resources. According to projections, the global demand for TASF and animal products is expected to continue to rise significantly in the coming years. Increasing the efficiency and productivity of livestock systems, through harnessing technologies and innovations in animal health, feeding, breeding, husbandry and other related areas, can help ensure this occurs in a sustainable manner. This requires, *inter alia*, efficient data collection systems being in place.

Actions

2.3.1 Facilitate the development and adoption of integrated multipurpose animal identification and traceability systems, including data-sharing arrangements where relevant.

2.3.2 Strengthen feed and feed resources management, ensuring feed safety, quality and accessibility throughout the livestock value chain.

2.3.3 Establish and strengthen livestock breeding programmes, using advanced reproductive technologies when appropriate, for genetic improvement of efficiency and productivity, taking into account local needs and contexts.

2.3.4 Document and share good practices regarding animal husbandry through, *inter alia*, peer-to-peer learning and on-farm demonstrations.

SP 2.4 Promote employment opportunities and ensure decent working conditions in the livestock sector

Rationale

1. Many of the rural poor rely on the livestock sector to earn a living. It provides substantial employment opportunities, and it is predicted to grow in the coming years. However, these employment opportunities can be precarious, informal, poorly remunerated and even hazardous. Decent work involves opportunities for work that is productive and delivers a fair income; provides security in the workplace and social protection for workers and their families; offers prospects for personal development and encourages social integration; gives people the freedom to express their concerns, to organize and to participate in decisions that affect their lives; and guarantees equal opportunities and equal treatment for all.²²

2. Promoting more and better jobs as well as workforce development in the livestock sector are essential to build sustainable and resilient livelihoods for vulnerable people, address the adverse drivers of rural migration and fight child labour (noting that not all work carried out by children is considered as child labour: safe and age-appropriate tasks that do not interfere with their education can help children acquire valuable skills and support family livelihoods). Ultimately, addressing the inadequacy of employment conditions and opportunities in rural areas, especially for women, youth and people in vulnerable situations, represents a key component of an inclusive and resilient approach to transforming the rural space. In the same vein, promoting green jobs, i.e. ones that contribute to preserve or restore the environment, in the livestock sector can help to generate decent employment opportunities and benefit the environment.

Actions

2.4.1 Ensure decent working conditions, including fair income, social protection, occupational safety and health measures and equal opportunities for all workers of the livestock sector, taking into account the

²² ILO. 2007. *Toolkit for mainstreaming employment and decent work*. International Labour Office. <https://www.ilo.org/media/271811/download>

diversified needs of women, men, youth, Indigenous Peoples, and local communities, in both formal and informal work settings.

2.4.2 Develop and implement integrated policies to eliminate child labour and eradicate forced labour, addressing each as a distinct challenge within the livestock sector.

2.4.3 Ensure access to adequate social protection benefits for workers in the livestock sector with schemes that are adapted, in particular, to their age, culture and sex.

2.4.4 Promote access to decent employment opportunities, including through inclusive business and rural socioeconomic policies that respond to the different needs of women, men, youth, Indigenous Peoples, and local communities; access to technical, vocational and specialized education services, and appropriate health services; and use of fair contract farming instruments, according to national legal frameworks.

SP 2.5 Ensure that the livestock sector is equitable and inclusive for women, youth, Indigenous Peoples, and local communities, and people in vulnerable situations

Rationale

1. Rural women, youth, Indigenous Peoples, and local communities, and people in vulnerable situations play a pivotal role in the livestock sector. Yet they still face structural constraints in accessing resources, access to land and secure tenure, extension and financial services, credit, knowledge and markets, due to discrimination and under-representation in decision-making processes. Overcoming these constraints and ensuring that everyone can benefit from the transformation of the livestock sector requires interventions tailored to the specific needs and contexts, which can include collective tenure. This can be done by strengthening the enabling environment for access to livestock-related resources and services, ensuring meaningful participation of those in vulnerable situations, including persons with disabilities.

2. Women, youth and pastoralist communities are often disproportionately affected by livestock-related emergencies, and therefore targeted support in preparedness and response is needed to reduce their vulnerability. The essential role that women play in agrifood systems has been recognized by the United Nations, which declared 2026 the International Year of the Woman Farmer. Generational renewal is also important as the involvement of young people in farming is declining and the average age of farmers is increasing. This has potential long-term consequences for both small- and large-scale livestock producers worldwide.

Actions

2.5.1 Develop the capacities and ensure the meaningful inclusion of women, youth, Indigenous Peoples, local communities, pastoralists and people in vulnerable situations in livestock-related policy and decision-making processes.

2.5.2 Support the development of accessible and affordable savings and financial services as well as policies, with a focus on women, youth, Indigenous Peoples, local communities, pastoralists and people in vulnerable situations in the livestock sector.

2.5.3 Recognize and promote best available knowledge related to long-term sustainability and resilience in livestock systems and knowledge-sharing practices.

2.5.4 Support generational renewal in the livestock sector through policies to promote youth integration in value chains and relevant training for young people, as well as access to finances and land.

Priority Area 3. Animal health through a One Health approach

This Priority Area, through its three Strategic Priorities, focuses on improving animal health by preventing and controlling animal diseases through a One Health approach, recognizing the important role of the Quadripartite organizations, particularly FAO and WOAH, ensuring that antimicrobials are used in a prudent and responsible manner; and promoting animal welfare in the livestock sector.

SP 3.1 Prevent and control animal diseases

Rationale

Prevention and control of animal diseases are essential to reduce the devastating impact of animal diseases on food security, people's livelihoods, public health and the animals themselves, including wildlife. Most animal diseases with high impacts are transboundary, meaning they can spread rapidly across borders. Development of the livestock sector is constantly threatened by the burden of transboundary, zoonotic and production-limiting diseases. Optimal animal management, including feeding and husbandry, good biosecurity measures, animal welfare, and sound vaccination programmes, is central for disease prevention and control. This helps to enhance productivity, reduce the need for and use of antimicrobials and limit the risks of disease outbreaks and economic losses. Prevention of animal diseases is often more cost-effective than their control. Robust surveillance, laboratory and early warning systems, preparedness and response capabilities and strong veterinary services are all crucial for the prevention and progressive control of animal diseases.

Actions

3.1.1 Develop or strengthen risk-based and integrated surveillance, laboratory and early warning systems for animal diseases, using a One Health and science-based approach for disease prevention and control.

3.1.2 Strengthen biosecurity measures on the farm and in animal value chains (including wildlife), and at borders to reduce and manage the risk of introduction, emergence and transmission of animal diseases, and measures adapted to smallholder production systems, while scaling them as appropriate.

3.1.3 Improve livestock producers' awareness and promote the implementation of good practices for prevention of animal diseases and improve livestock producers' access to, and use of, preventive care, including quality vaccines and regular frontline animal health services.

3.1.4 Strengthen research and development of new and improved diagnostics, drugs, vaccines and ethnoveterinary medicine for livestock diseases.

3.1.5 Develop and implement strategies to prevent, control, eliminate and/or eradicate national or regional priority animal diseases, prioritize progressive control pathways for transboundary and production-limiting diseases, including leverage of investments to maximize impacts.

3.1.6 Develop, implement and strengthen regional and national policies and relevant frameworks for animal health to promote knowledge exchange and collaboration across the plant, animal (including wildlife), public and environmental health domains, where relevant.

3.1.7 Strengthen multisectoral collaboration among relevant sectors and partners, including the Quadripartite, to ensure coordination of support and guidance to all animal health stakeholders through the operationalization of a One Health approach, in line with the Quadripartite One Health Joint Plan of Action.

3.1.8 Improve the skills and optimize the numbers of the veterinary workforce (veterinarians, veterinary paraprofessionals and community animal health workers).

3.1.9 Establish, strengthen and improve livestock breeding programmes for healthier animals, taking into account local needs and contexts.

SP 3.2 Ensure that antimicrobials are used in a prudent and responsible manner in the livestock sector

Rationale

Antimicrobial resistance occurs when bacteria, viruses, fungi and parasites develop specific mutations or acquire resistance genes and no longer respond to medicines such as antibiotics, antivirals, fungicides and antiparasitics. As a result, infections can be harder to treat and the risks of disease spread, severe illness and death may increase. Antimicrobial resistance is one of the biggest threats to public health and food security and safety. Lack of prudent and responsible use of antimicrobials in humans, animals and plants contributes to accelerating the development of antimicrobial resistance. In some countries, antimicrobials are also used as growth promoters, administered to animals to increase their rate of weight gain or efficiency of feed utilization. Building awareness and sharing knowledge with food and agriculture stakeholders about antimicrobial resistance is essential. Adoption of good animal management practices at the farm level also helps to reduce the need for and the use of antimicrobials. Antimicrobial resistance affects not only animal, human, plants/crops and ecosystem health but also the economic sustainability of the livestock sector, due to economic losses and missed market and trade opportunities.

Actions

3.2.1 Enhance integrated surveillance, using a One Health approach, including collection of data, on antimicrobial use and antimicrobial resistance to monitor and inform relevant policies and legislation.

3.2.2 Promote and implement good, context-specific, on-farm animal management practices in the livestock sector to reduce the need for antimicrobials.

3.2.3 Gather and share knowledge on, and support the uptake of, feeding practices that are based on scientific evidence and that are effective and safe to enhance animal health and welfare, and to reduce the overall need to use antimicrobials in accordance with relevant Codex Alimentarius and WOA standards and related texts and acknowledge the particular need to phase out the use of medically important antimicrobials as growth promoters.

3.2.4 Develop and implement national action plans on antimicrobial resistance aligned with the Global Action Plan on Antimicrobial Resistance,²³ as appropriate.

3.2.5 Promote research and innovation and gather scientific evidence on alternatives to antimicrobial use as part of sustainable animal health strategies.

SP 3.3 Promote animal welfare in the livestock sector

Rationale

1. Animal health and animal welfare are closely linked. Poor animal health negatively impacts animal welfare. Low standards of animal welfare often affect the immunity and productivity of animals and render them more susceptible to diseases. Good animal welfare practices need to be context-specific and include prevention and treatment of disease and injury; prevention and mitigation of pain, distress and

²³ WHO. 2015. *Global Action Plan on Antimicrobial Resistance*. www.who.int/publications/i/item/9789241509763

other negative states; and providing access to adequate and safe water and feed as well as living conditions that are suited to the needs and nature of animals.

2. Many good animal welfare practices have multiple benefits for animals as well as people. For example, due care for the welfare of animals during transport and pre-slaughter handling can reduce stress levels in animals as well as bruising and injury, thereby reducing financial losses from damage to carcasses and poor meat quality and producing potential benefits for food safety. Improving welfare may also expand commercial and trade opportunities, allowing access to markets demanding higher welfare products. Improved welfare can reduce the risk of animal diseases and injuries and therefore the need to use antimicrobials. Furthermore, some farm management practices can enhance both productivity and animal welfare, such as improved distribution of water points for livestock, the establishment of live fences and silvopastoral systems combining trees, shrubs and pastures. These practices may increase forage quality and availability, provide shade and microclimate regulation, and contribute to better animal health and welfare, while also delivering soil and biodiversity benefits.

Actions

3.3.1 Raise awareness about the multiple benefits of animal welfare practices for the sustainability of livestock production.

3.3.2 Develop and implement policy frameworks to promote animal welfare practices that are in line with the WOAHP Terrestrial Animal Health Code when specific provisions exist.

3.3.3 Document and share information and promote the implementation of context-specific good animal welfare practices during production, transport, work, slaughter and killing for purposes other than slaughter.

3.3.4 Conduct research on the externalities related to the implementation of context-specific animal welfare measures.

3.3.5 Promote the use of farm-level animal welfare certification systems, taking into account local needs and contexts.

Priority Area 4. Natural resource use, climate change and biodiversity

This Priority Area, through its five Strategic Priorities, focuses on promoting sustainable natural resource use, climate action and biodiversity. It aims to improve the sustainable management of rangelands, pasturelands, soil, land and water resources; enhance adaptation to, and mitigation of, climate change in the livestock sector; support the integration of the livestock sector in circular approaches and sustainable intensification and bioeconomy, agroecology and other innovative approaches; and promote the value of sustainable livestock systems for ecosystem services and biodiversity.

SP 4.1 Promote the conservation, restoration and sustainable management of rangelands and pasturelands

Rationale

1. Rangelands cover more than half of the Earth's land surface. They include grasses, grass-like plants, forbs, shrubs and sometimes trees that support livestock and wildlife grazing, as well as critical ecosystem services such as carbon storage and water regulation. They are highly diverse ecosystems, influenced by rainfall, temperature and climate variability, and provide habitats for a wide range of wildlife species. They also hold significant soil organic carbon stocks. Adoption of improved grazing management practices offers the opportunity to sequester significant amounts of carbon. Poor grazing management and overgrazing can cause land degradation, loss of natural habitats including forests and rangelands, soil compaction and erosion, thus affecting soil function, plant growth, water quality and water retention.
2. Most rangelands are classified as drylands and are primarily used for livestock production, often in areas unsuitable for crop cultivation. Unlike rangelands, pastures are lands that are primarily used for the production of adapted, domesticated forage plants for livestock. The increasing global recognition of rangelands and pasturelands, exemplified by the UN General Assembly's declaration of 2026 as the International Year of Rangelands and Pastoralists, underscores their critical value for sustainable agriculture, biodiversity and resilient ecosystems.

Actions

- 4.1.1 Promote improved rangeland and pasture management and conservation to avoid, reduce and reverse land and soil degradation, while increasing carbon sequestration.
- 4.1.2 Develop and implement policies for responsible and inclusive management of rangelands, including participatory integrated land-use planning, and identification, recognition and promotion of customary governance systems, traditional knowledge, and sustainable wildlife management, according to national legal frameworks.
- 4.1.3 Promote positive interactions between livestock grazing, feed production and sustainable management of ecosystems, considering the positive role of silvopastoral and agrosilvopastoral systems, to optimize the sustainable use and restoration of natural resources to avoid, reduce and reverse loss of natural habitats, including forests.²⁴
- 4.1.4 Support Members to access financial mechanisms that enable the adoption of innovative and improved practices for the conservation, restoration and sustainable management of rangelands and pasturelands.

²⁴ In accordance with relevant international commitments and national legal frameworks, in the context of sustainable forest management.

4.1.5 Develop legal and policy frameworks to facilitate pastoral mobility, including cross-border pastoralism, where relevant, and to prevent and reduce conflicts over natural resources.

SP 4.2 Enhance adaptation to, and mitigation of, climate change in the livestock sector

Rationale

1. The nexus between climate change and livestock is multidimensional. On the one hand, climate variability could pose a challenge for the future of the livestock sector as it could impact animal productivity, health and welfare. It can affect disease patterns, making outbreaks more frequent and harder to control. On the other hand, if not properly managed, the livestock sector could have an impact on greenhouse gas emissions primarily in the form of methane and nitrous oxide, although in different proportions, as well as carbon dioxide from energy use and land use change.
2. Livestock emissions are mostly associated with beef and dairy cattle production, with smaller contributions from other species such as pigs, chickens, buffaloes, goats and sheep. Enteric fermentation in the digestive tract of ruminants is a major source of methane, which is a potent but short-lived climate pollutant. Reducing methane would increase the possibility of reaching climate goals. Other sources of greenhouse gas emissions from the livestock sector include the production and processing of feed, the production and application of fertilizers to the soil, the transportation of animals and processing of animal products.
3. Mitigation strategies aimed at reducing emissions and improving production efficiency while decreasing environmental impacts, such as lower-emission livestock production and processing systems, should be accompanied by adaptation measures to ensure a balanced approach that strengthens the resilience of livestock systems and considers farmer livelihoods. For example, adoption of improved feeding and management practices can directly decrease methane emissions. In this context, land management practices, genetic improvements focused on resilience and efficiency, risk reduction strategies and other adaptation actions play a fundamental role in enabling the livestock sector to respond effectively to climate change.

Actions

- 4.2.1 Conduct research and promote the documentation, inventory, sharing and adoption, and global dissemination of good practices and innovative solutions and technologies for the adaptation to, and mitigation of, climate change in the livestock sector, as appropriate.
- 4.2.2 Strengthen research on genetics, breeding, nutrition and metabolism to develop low-emitting and climate-resilient livestock with appropriate feeding and management methods, as well as forage varieties with increased climate resilience and carbon storage capacities.
- 4.2.3 Strengthen extension and advisory services, including digital tools, to enhance productivity and natural resource use efficiency to support reduction of greenhouse gas emissions from the livestock sector.
- 4.2.4 Support Members and other stakeholders, upon their request, to integrate livestock-related mitigation and adaptation measures and targets into national climate actions, policies and strategies, in accordance with the local context.
- 4.2.5 Conduct assessments of the potential of carbon markets to generate income for livestock producers, and their associated risks.

4.2.6 Develop and implement capacity development programmes and provide technical assistance on the methodologies and data needed to improve assessment of greenhouse gas emissions from the livestock sector.

SP 4.3 Support the sustainable management of soil, land and water resources in the livestock sector

Rationale

Livestock is the biggest user of agricultural land, mainly in the form of grasslands, rangelands and marginal lands that are unsuitable for crop production. Although poorly managed grazing systems can lead to soil degradation, good management practices and land restoration efforts in line with the United Nations Decade on Ecosystem Restoration 2021–2030 and the United Nations Convention to Combat Desertification²⁵ can enhance soil fertility, carbon sequestration and ecosystem services. Livestock production can also impact water resources, with a substantial portion of irrigation water attributed to feed production. When animal manure is not managed properly, pollution from livestock production, particularly nitrogen and phosphorus, can threaten water quality, highlighting the need for efficient management strategies of these and other pollutants. When well-managed, manure in integrated systems can substitute for energy-intensive synthetic fertilizers and reduce farmer costs. Integrated approaches to soil, land and water management are crucial for sustainable livestock production and ecosystem preservation while supporting livelihoods.

Actions

4.3.1 Promote integrated soil, land and water resources management in the livestock sector.

4.3.2 Develop and implement policies and adopt good management practices to increase nitrogen-use efficiency and phosphorus-use efficiency in the livestock sector to enhance productivity and reduce negative impacts on soil, land and water.

4.3.3 Promote improved manure management and application, including by enhancing the integration of livestock and crop production and redistributing manure at appropriate scales to increase crop and forage production.

4.3.4 Develop and implement policies and adopt good management practices to avoid runoff from livestock farms of heavy metals and residues of veterinary pharmaceuticals, including antimicrobials, into soil, land and water.

SP 4.4 Support the integration of the livestock sector in circular, agroecology, sustainable intensification and other innovative approaches, and sustainable bioeconomy

Rationale

1. Bioeconomy, which is the production, utilization, conservation, and regeneration of biological resources, including related knowledge, science, technology, and innovation, to provide sustainable solutions (information, products, processes and services) within and across all economic sectors and enable a transformation to a sustainable economy,²⁶ can bring many opportunities to the livestock sector.

2. These opportunities encompass improving waste management, applying circularity and upcycling principles, and improving the sustainability of feed production, including from sustainable management and restoration of pastoral and agrosilvopastoral systems. Implementation of a reduced feed-food competition scenario can transform the food production system so that a greater share of livestock can be

²⁵ UN, 1994. *United Nations Convention to Combat Desertification* <https://www.unccd.int/resource/convention-text>

²⁶ C 2021/LIM/4, <https://openknowledge.fao.org/handle/20.500.14283/nf765en>

fed on crop residues, by-products and marginal lands, and a greater share of cropland is used to produce crops for direct human consumption. Additionally, alternative feed sources and feed supplements can reduce the reliance on traditional crops, while biotechnology can enhance the nutritional quality and safety of feed. Livestock waste, such as manure, can be converted into valuable resources, like bioenergy and fertilizers, using anaerobic digestion, composting and various bioconversion methods, decreasing emissions, but also creating new sources of income. Valuable biobased materials can also be derived from animal by-products, such as collagen proteins that are used for biomedical applications and biobased polymers.

Actions

4.4.1 Increase the use of cover crops and crop rotation species, alternative feed sources, including forage from forest ecosystems, as well as crop residues, by-products, losses and waste produced along the agrifood system (from primary production in all sectors, to agro-industry and consumption level), as animal feed, where appropriate.

4.4.2 Promote the inclusion of sustainable bioeconomy in the livestock sector, including the conversion of livestock products and by-products not foreseen for direct human consumption, such as manure, hides and skins, fibres, offal, fats and whey, into innovative products, bioenergy and fertilizers.

4.4.3 Promote the inclusion of the livestock sector when developing and implementing sustainable bioeconomy policies and strategies with meaningful consultation with producers.

4.4.4 Conduct research on the benefits and trade-offs of bioeconomy approaches according to different livestock production systems and local contexts.

SP 4.5 Promote the value of sustainable livestock systems for ecosystem services and biodiversity

Rationale

1. Humankind benefits in a multitude of ways from ecosystems, from providing for its most basic needs, such as safe food, safe water and shelter, to the realization of its higher personal and collective aspirations and resilience. Together, these benefits are known as ecosystem services. Livestock species and breeds can be key components of agroecosystems and therefore can play an essential role in the provision of ecosystem services.

2. There are three characteristics of livestock that shape its specific role in ecosystems: its unique ability to convert non-human edible feed and organic waste into useful products; the direct nature of its interaction with ecosystems (e.g. land, water, vegetation and soil) through trampling, grazing and browsing, as well as the production of urine and faeces; and its mobility and resulting ability to respond to temporal and spatial fluctuations of ecosystems in resource availability. Viewed through a One Health approach, these characteristics highlight how the management of livestock-ecosystem interactions is not only central to animal production but also to human health and nutrition, and the integrity of the environment.

3. The livestock sector is identified among the sectors with the highest impact on biodiversity, resulting in habitat modification and biodiversity change. However, an important specificity of the livestock sector is that its impacts on biodiversity can also be positive. The adoption of good practices, technologies and innovations can reduce the negative environmental impacts of livestock and enhance the delivery of ecosystem services. For instance, extensive livestock grazing can be an effective way to maintain semi-natural habitats hosting a unique pool of wild species and providing key ecosystem services in semi-arid, tropical, temperate grasslands and mountain areas. At the same time, domestic animal genetic resources

are a key part of agricultural biodiversity and are essential for the delivery of food from the wide range of production environments found throughout the world.

Actions

4.5.1 Promote implementation of the Global Plan of Action for Animal Genetic Resources²⁷ to ensure proper management of livestock genetic diversity, including the sustainable use and conservation of local breeds and locally adapted livestock breeds.

4.5.2 Conduct research to develop methodologies as well as identify, characterize and improve understanding of the economic, social, cultural and environmental values of ecosystem services and biodiversity in the livestock sector.

4.5.3 Identify and promote good practices for sustainable livestock management that have positive impacts on ecosystem services and biodiversity.

4.5.4 Develop and implement policies and strategies to foster the contribution of the livestock sector to ecosystem services and biodiversity, considering the Kunming-Montreal Global Biodiversity Framework²⁸ and other global frameworks, where relevant.

4.5.5 Develop and implement regulatory frameworks and policies, as appropriate, to reduce and eliminate negative impacts from livestock production activities in national protected areas, as applicable.

²⁷ FAO. 2007. *Global Plan of Action for Animal Genetic Resources and the Interlaken Declaration*. <https://openknowledge.fao.org/handle/20.500.14283/a1404e>

²⁸ CBD. 2022. *The Kunming-Montreal Global Biodiversity Framework*. <https://www.cbd.int/gbf>

Section 3. Implementation

1. The GPA provides a comprehensive international framework to address all dimensions of sustainability of the livestock sector and, ultimately, contributes to the sustainability of agrifood systems. This section of the GPA focuses on its practical implementation. It provides general guidance on how to operationalize the GPA and, based on characterization of the different types of Actions, identifies key considerations for addressing them across the four Priority Areas.
2. Implementation of the GPA should be carried out at all levels; both governance (local, national, regional and global) and institutionally (governments, producer organizations, civil society, research and academic institutions and the private sector). Promoting implementation at all levels and by all relevant stakeholders as a common endeavour, through coordinated and inclusive efforts, is recommended to achieve sustainable and lasting progress.
3. Actions are formulated in such a way that, even without explicit allocation of responsibilities, it is possible to identify which actors should implement them and at what level. This flexibility is sought because in many cases the same Action can be implemented by several actors in a complementary way and at different levels.
4. The GPA is a voluntary international framework and its implementation will be driven by countries' specific needs and demands. While the primary responsibility for implementing the GPA lies with governments, other actors, including those at the international level, will have a key role to play in supporting and facilitating its implementation. Accordingly, this section is divided into two parts: the first part focuses on the role of international cooperation and supporting mechanisms to streamline international efforts, and the second part focuses on creating an enabling environment to advance implementation at the national level.

3.1 International cooperation and supporting mechanisms

5. International cooperation for the sustainable transformation of the livestock sector should be coordinated and strengthened to ensure the effective and efficient implementation of the GPA at all levels.

3.1.1 Institutional cooperation

6. International cooperation is important, *inter alia*, for institutional support, research, facilitation of knowledge sharing, technology transfer and technical assistance, financing and capacity development with a focus on good practices in the implementation of the GPA. Knowledge sharing may be facilitated through mechanisms such as FAO's Agrifood Systems Technologies and Innovations Outlook (ATIO). Stakeholders are encouraged to document and share research results, whether promising or not. International support will also be crucial in assisting countries to develop evidence-based policies that allow for informed and effective decision-making.
7. Efforts should focus on strengthening existing regional and international bodies and partnerships related to the livestock sector. Cooperation should build on existing institutional frameworks and ensure alignment and coherence with existing international commitments and instruments, as appropriate. In this regard, the active engagement of all relevant stakeholders, through a One Health approach, is essential to ensure inclusive and effective cooperation. The promotion and institutionalization of multistakeholder processes will be key to enhancing legitimacy, ensuring broad ownership and supporting the long-term sustainability of cooperation initiatives under the GPA.

8. To ensure adequate awareness and foster collaboration with FAO and other intergovernmental organizations, as well as international non-governmental organizations, information about the GPA is expected to be widely disseminated and actively promoted through relevant networks, partnerships and communication channels. FAO Members and partner organizations are invited to join this communication effort and to widely disseminate information about the GPA across their respective national institutions and constituencies.

9. Mobilizing financial resources, where applicable, will be critical to support a wide range of international cooperation efforts, leveraging voluntary contributions from a variety of sources, including FAO Members, international organizations, international financial institutions and the private sector. The use of these contributions in conjunction with other relevant funding initiatives related to the livestock sector will be actively promoted. This includes advocating for new and ongoing initiatives that fund and de-risk investment in livestock sector projects to consider and support the priorities and approaches set out in the GPA, including those embedded in the broader transformation of agrifood systems.

3.1.2 FAO support

10. FAO may carry out a range of functions to promote and support implementation of the GPA. Upon request, and depending on the availability of funding, FAO may provide assistance to governments in the development of a National Plan of Action for Sustainable Livestock Transformation (NPA) or in the revision of existing national livestock-related policies. Furthermore, FAO may develop practical tools such as technical guidelines to assist governments in this task. The development process of such tools should be transparent and consider inputs from relevant stakeholders of different regions.

11. Upon request, and depending on the availability of funding, FAO may also provide assistance to Members in the development of regional plans of action to address shared challenges and opportunities in the livestock sector.

12. Collaboration may be foreseen between FAO and secretariats or implementing agencies of international instruments referred to in the Actions, in order to identify areas for joint work specifically related to the livestock sector and avoid duplication.

13. Periodic reports can be important to monitor the implementation of the GPA, including progress in the development and implementation of NPAs. In order to achieve this objective, FAO may carry out assessments to analyse the latest situation and identify challenges, opportunities and trends at the national, regional and global levels.

14. The status and trends of GPA implementation may be periodically presented and reviewed during the sessions of the Sub-Committee. The Sub-Committee is expected to make recommendations regarding the modalities and criteria whereby the Members report on implementation of the GPA.

3.2 Enabling environment to support implementation of the GPA at the national level

15. At the national level, the primary responsibility for implementing the GPA lies with national governments. However, successful implementation will depend on the active participation of all relevant stakeholders. In implementing the GPA at the national level, governments may choose to prioritize certain aspects over others to better reflect their specific needs and circumstances. Effective and sustainable transformation of the livestock sector should follow the three dimensions of sustainability (i.e. economic, environmental and social).

16. Governments are also encouraged to cooperate at the regional and international levels to support the implementation of the GPA, in particular with regard to information sharing and technical cooperation.

3.2.1 Policy framework

17. To implement the GPA, Members are encouraged to develop a NPA, and/or update their equivalent policy instrument, as part of their efforts to improve agrifood systems, tailored to the national context, priorities and needs.

18. Science- and evidence-based policymaking is fundamental for improving sustainability in the livestock sector. Integrating information systems into the design of decision-making processes, and ensuring that these systems are developed or strengthened, is recommended to support evidence-based policies and legislation.

19. Policy formulation should be carried out through participatory, multistakeholder processes, building on existing local governance structures. Resources may need to be mobilized to support the effective and meaningful participation of all relevant stakeholders. National monitoring mechanisms for the implementation of the NPA should be established, ensuring the participation of a wide range of stakeholders.

20. Achieving policy coherence and harmonization is essential for the effective transformation of the livestock sector. This includes taking a food systems approach and establishing mechanisms that enable coordination and collaboration at the sectoral, institutional and subnational levels, as appropriate. A competent authority should be designated to coordinate policy implementation across these levels to ensure coherence and effective alignment of efforts across the food system.

21. Policy coherence is particularly important in relation to the international instruments referred to in the various Actions in the document, such as existing commitments, many of which require participating countries to develop national policies – such as National Adaptation Plans, Nationally Determined Contributions and National Biodiversity Strategies and Action Plans.

3.2.1.1 Institutional framework

22. Effective implementation of the GPA requires a well-defined institutional framework. This involves assigning clear mandates and responsibilities to relevant government institutions, ensuring effective coordination between different sectors and levels of governance, and establishing accountability and oversight mechanisms. Coordination with livestock producers and other stakeholders should also be institutionalized to support coherent and inclusive implementation.

23. While the GPA is a voluntary framework, to facilitate its implementation, governments are encouraged to review and, if needed, revise their relevant legal frameworks. This revision should be carried out through inclusive and participatory processes, involving all relevant stakeholders.

3.2.2 Financing mechanisms and investment strategies

24. Governments should aim to ensure adequate and coordinated resource allocations for the implementation of their NPAs or equivalent policy instruments, ensuring that equal access to financial resources is provided for all. This applies to all government institutions with assigned responsibilities under the policy framework, to ensure consistency and coherence in the implementation of Actions at the national level.

25. Additionally, governments are encouraged to develop investment strategies that enable the implementation of the GPA and its related Actions by a wide and inclusive range of stakeholders. These could include blended financing approaches, combining public and private resources, and value chain risk analysis, to promote de-risking investments in the livestock sector.

26. Governments are also encouraged to promote investments in the livestock sector that are economically, socially and environmentally sustainable, and to explore and promote innovative financing mechanisms to mobilize new sources of finance and enhance the long-term sustainability of investments. These efforts should complement and reinforce broader investment efforts across the agrifood system.

3.2.3 Research

27. Adequate funding for research and innovation is important as it underpins the development of sustainable solutions and supports informed decision-making in the livestock sector. A strong research and innovation agenda is essential to address existing gaps and persistent challenges, and harness emerging opportunities. This can be supported through the promotion of public–private partnerships, research networks and broader collaborative mechanisms at national and international levels. Promotion of multistakeholder engagement, innovation hubs and strengthening of national agricultural innovation systems can effectively contribute to participatory research for development and co-creation of technologies and innovations.

28. Efforts should focus on the development and deployment of innovative and environmentally sound technologies that enhance productivity, efficiency, resilience and sustainability. Research results should be effectively integrated into policy- and decision-making processes to ensure that actions across the sector are evidence-based and context-specific.

29. Research priorities should be defined through participatory and consultative processes involving all relevant stakeholders, including those in vulnerable situations. This inclusive approach will ensure that research efforts are focused on areas of greatest urgency and practical relevance. At the same time, research initiatives should recognize and incorporate traditional knowledge as a valuable resource, particularly in diverse national contexts.

3.2.4 Extension and advisory services

30. Extension and advisory services play a critical role in facilitating livestock producers' access to information and can thereby help to reduce the gap between potential and actual yields and improve their management skills. They contribute to the dissemination of good practices in, *inter alia*, animal production, animal health and natural resource management.

31. Extension and advisory services also facilitate the dissemination of information and scaling up of innovation and technologies, which can significantly accelerate the implementation of policies at the national level. Demand-driven pluralistic extension and advisory system models with effective institutional coordination are needed. Extension and advisory services can be delivered through both formal and informal education modalities, including training, workshops and digital tools adapted to local languages and cultural contexts.

32. Effective extension and advisory services require strong partnerships across the livestock sector, particularly with national research systems, civil society organizations, the private sector and other relevant stakeholders. Fostering such collaboration will improve outreach, promote inclusive participation and increase the impact of knowledge-sharing initiatives among diverse communities.

3.2.5 Developing capacities at the individual and organizational dimensions

33. Capacity development is essential to enable the effective transformation of the livestock sector. This includes both individual and organizational dimensions, ensuring that all actors are equipped with the necessary knowledge, skills and institutional conditions to actively engage in, and contribute to, the implementation of the GPA.

34. Training, both in formal and informal contexts, is a key component of these efforts. It should target all actors along the livestock value chain, including public servants and small-scale producers, and focus on areas such as improved access to markets and the effective use of digital technologies that can accelerate transformation processes. Capacity development should also enable stakeholders, especially those in vulnerable situations, to access and use information services that support and ensure meaningful participation in multistakeholder and decision-making processes.

35. Training young professionals and other relevant stakeholders to provide community-level technical support can strengthen community-wide implementation capacities, accelerate the uptake of good production practices and contribute to improved productivity, enhanced environmental outcomes and generational renewal across the sector.

36. Capacity development should also address structural and institutional aspects. These include strengthening infrastructure and institutions such as laboratories, research facilities and extension services; improving logistics and transport; facilitating market access; and providing adequate resources, both human and financial, and equipment to support technical services and field operations.

3.2.6 Communication

37. Access to relevant and comprehensive information is essential for the effective implementation of the GPA. Raising public awareness about the importance of the livestock sector, including its contribution to food security and nutrition, inclusive economic growth and sustainable agrifood systems, is essential for the transformation of the sector. At the same time, communication efforts should acknowledge the challenges and trade-offs that the sector faces and thus the need for continued transformation towards greater sustainability.

38. Consumer education programmes can help raise awareness of the role of sustainable livestock systems and promote consumption of safe and nutritious TASF as part of healthy diets. To this end, the use of innovative, transparent, culturally appropriate and context-specific communication tools should be promoted to reach a wide range of audiences.

39. Communication and awareness-raising efforts can leverage youth networks and their outreach capacities to deliver accessible, evidence-based information on the livestock sector. Through digital tools, social media and community platforms, youth-led initiatives can translate technical knowledge into locally appropriate guidance for producers and consumers.