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COMMITTEE ON AGRICULTURE

Twenty-eighth Session

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Multi-Year Programme of Work of the Committee on Agriculture's Sub-Committee on Livestock (2022–25)

Executive Summary

At its 27th Session, the Committee on Agriculture (COAG) established the Sub-Committee on Livestock, which was endorsed by Conference at its 42nd Session.¹ The Sub-Committee, according to its Terms of Reference, shall *inter alia* “prepare a multi-year programme for its work for consideration and approval by the Committee [on Agriculture]”.¹

The draft Multi-Year Programme of Work (MYPOW) of the Sub-Committee was discussed at the First Session of the Sub-Committee, which made recommendations for its revision in view of its submission to the 28th Session of COAG.

This document contains, for consideration by COAG, the revised draft MYPOW developed under the guidance of the Sub-Committee's Bureau. The MYPOW outlines proposed major areas of work for the Sub-Committee during the period 2022–25.

Suggested action by the Committee

The Committee is invited to approve the revised draft MYPOW 2022–25 of the Sub-Committee on Livestock.

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

Mr Badi Besbes
Senior Animal Production Officer / Secretary of the COAG Sub-Committee on Livestock
Animal Production and Health Division (NSA)
Tel. +39 06 570 53406

¹ <https://www.fao.org/3/cb3902en/cb3902en.pdf>

I. Introduction

1. At its 27th Session, the Committee on Agriculture (COAG) established the Sub-Committee on Livestock (Sub-Committee) as an intergovernmental forum with a mandate to discuss and build consensus on livestock issues and priorities, and advise COAG, and through it, the FAO Council and the FAO Conference, on technical and policy programmes and activities needed to optimize the contribution of livestock to poverty alleviation, food security and nutrition, sustainable livelihoods, and the realization of the 2030 Agenda.² The Sub-Committee, according to its Terms of Reference, shall, *inter alia*, “prepare a multi-year programme for its work for consideration and approval by the Committee [on Agriculture]”.ⁱⁱ

2. This Multi-Year Programme of Work (MYPOW) presents the major livestock issues and priorities that the Sub-Committee will consider during the period 2022–25. The MYPOW is a key tool for planning future work and sessions of the Sub-Committee.

II. Major challenges and opportunities for the livestock sector

3. Globally, more than 800 million people are chronically hungry and billions more face all forms of malnutrition. Countries are off track to achieve Sustainable Development Goal (SDG) 2 (Zero Hunger).³ Terrestrial animal source food is nutrient-dense and provides energy and many essential nutrients such as proteins, fatty acids and micronutrients.⁴ Livestock-derived food products contribute 33 percent of protein and 17 percent of calorie intake of diets globally, but this contribution is not equitably distributed among regions. By 2050, with a predicted world population of 10 billion people, demand for livestock products is expected to increase by 39 percent for eggs, 40 percent for dairy products and 52 percent for meat.⁵ Livestock species and breeds are adapted to a wide range of environments, so the livestock sector can contribute significantly to the eradication of hunger and malnutrition, even in areas that are unsuitable for crop production.

4. One-tenth of the global population lives in extreme poverty. While this proportion has been decreasing in recent years,⁶ poverty has since increased due to the COVID-19 pandemic.⁷ Livestock contribute to poverty alleviation and employment creation: globally, more than a billion people depend on livestock for their livelihoods. Small-scale livestock keepers, including pastoralists, represent a large share of livestock producers. They have little bargaining power in both input and output markets and limited access to social protection schemes. Many small-scale livestock producers are women, who often have less access to productive and natural resources, credit, information, and markets. The involvement of youth in farming is also decreasing.

5. The human health burden of zoonoses is high, with an estimated 2.7 million human deaths per year. Diseases also disrupt the participation of countries in international trade. Inappropriate use and overuse of antimicrobials in livestock production contribute to an increase in antimicrobial resistance (AMR). Veterinary drug and other residues are eliminated into the environment, contaminating soil and water. Practices to increase the short-term profitability of livestock production may degrade animal welfare, affecting the immunity and productivity of animals. Collaboration among animal production and health specialists, public health officials, and the private sector through a One Health approach is key to addressing these issues.

² C/2021/21, paragraph 19

³ FAO. 2021. *Tracking progress on food and agriculture-related SDG indicators 2021: A report on the indicators under FAO custodianship*. Rome. <http://www.fao.org/sdg-progress-report/en/#chapeau>

⁴ FAO. 2018. *World Livestock: Transforming the livestock sector through the Sustainable Development Goals*. Rome. <https://doi.org/10.4060/ca1201en>

⁵ FAO. 2018. *The future of food and agriculture – Alternative pathways to 2050*. Rome. <https://www.fao.org/publications/fofa/en>

⁶ United Nations. 2021. *The Sustainable Development Goals Report 2021*. New York. <https://unstats.un.org/sdgs/report/2021/The-Sustainable-Development-Goals-Report-2021.pdf>

⁷ <https://blogs.worldbank.org/developmenttalk/covid-19-leaves-legacy-rising-poverty-and-widening-inequality>

6. Livestock are the biggest user of agricultural land and consume approximately one-third of global cereal production. In some areas, the expansion of arable land at the expense of forest is driven by feed demand. Livestock value chains contribute to greenhouse gas (GHG) emissions (about 14.5 percent of total anthropogenic GHG emissions)⁸ and use significant amounts of the world's fresh water. The genetic diversity of livestock is in a continual state of decline.⁹ The negative environmental impacts of livestock can be reduced, and the delivery of ecosystem services enhanced by adopting good practices and innovations. Livestock are particularly key to climate solutions in agriculture, and can contribute to the conservation of biodiversity and to important ecosystem functions.

7. The goal of the Sub-Committee is to address the complex issues associated with the livestock sector in a comprehensive, open and participatory manner. The major topics presented in section IV are designed on this basis. They offer a balanced and holistic approach that takes into account the three dimensions of sustainability on an equal footing.

III. The role of the MYPOW as a planning tool for the Sub-Committee

8. The MYPOW will help the Sub-Committee to plan and monitor the delivery of agreed outputs, meet its objectives and fulfil its mandate. The MYPOW will guide the Secretariat's priorities, identify opportunities for cooperation with partners, and support resource mobilization for the operation of the Sub-Committee and its activities.

9. In line with its Terms of Reference, the Sub-Committee will advise COAG on technical and policy matters related to livestock and on the work to be performed by FAO in the field of livestock. The term "livestock" in this document refers to all terrestrial animals used for food and agriculture.¹⁰

10. Following the advice of the COAG 28 Bureau, the proposed MYPOW has a four-year horizon, and is presented as a rolling plan that will be reviewed at each session of the Sub-Committee.

IV. Major topics and deliverables of the Sub-Committee's MYPOW

11. FAO aims to optimize the contribution of the livestock sector to the Sustainable Development Goals (SDGs). The MYPOW contributes to the FAO Strategic Framework 2022–31, supporting the transformation to MORE efficient, inclusive, resilient and sustainable agrifood systems, and proposes to focus the Sub-Committee's work on three main thematic areas:

- sustainable livestock systems for food security, nutrition and inclusive economic growth;
- animal, public and environmental health through the One Health approach; and
- natural resource use, climate change and biodiversity.

12. These thematic areas, which are mutually supportive and have a common goal, were introduced at the 27th Session of COAG¹¹ and framed the agenda of the First Session of the Sub-Committee. Work dedicated to these three thematic areas was initiated in 2021 and will be further developed over the period 2022–25, as outlined below and in the appendix to this document.

⁸ Gerber, P.J., Steinfeld, H., Henderson, B., Mottet, A., Opio, C., Dijkman, J., Faluccci, A. *et al.* 2013. *Tackling climate change through livestock: a global assessment of emissions and mitigation opportunities*. Rome. <http://www.fao.org/3/a-i3437e.pdf>

⁹ FAO. 2015. *The second report on the state of the world's animal genetic resources for food and agriculture*. Rome. 606 pp.; <https://www.fao.org/3/i4787e/i4787e.pdf>

¹⁰ C/2021/21, paragraph 21 and Appendix E

¹¹ <https://www.fao.org/3/nd382en/nd382en.pdf>

A. *Sustainable livestock systems for food and nutrition security and inclusive economic growth*

13. This thematic area aims to enhance the contribution of the livestock sector to the eradication of hunger and all forms of malnutrition, poverty reduction, and economic development, with a particular focus on small-scale producers.

14. At its 27th Session, COAG requested FAO to produce a comprehensive, science- and evidence-based global assessment of the contribution of livestock to food security, sustainable food systems, nutrition and healthy diets (referred to as the Assessment).¹² This Assessment is relevant for the other thematic areas.

15. The Assessment will cover all major sources of animal food from terrestrial species (mammalian, avian, insect) of regional or global importance, and from all livestock systems. It will apply an agrifood systems approach, to provide a balanced, holistic and locally relevant guidance to policy, and support the sustainable transformation of the livestock sector to best contribute to the 2030 Agenda.

16. The Assessment is planned to be developed between 2021 and 2024 based on four component documents with the following working titles: 1) 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; 2) Factors determining supply, demand and consumption of terrestrial animal source food – historical analysis and foresight; 3) Contribution of the livestock sector to food security and sustainable agrifood systems – benefits, synergies and trade-offs; and 4) Options to sustainably improve the livestock sector to better contribute to food security, sustainable agrifood systems, healthy diets and nutrition. Draft Component document 1¹³ has been presented at the First Session of the Sub-Committee. Component documents 2, 3 and 4 are planned for following sessions, subject to availability of necessary resources. Subsequently, a synthesis document will be prepared.

17. Small-scale livestock production systems and associated value chains serve as an economic and social engine, providing food security and nutrition, employment, and other multiplier effects to local economies. However, small-scale producers face a number of challenges, including inadequate access to productive and natural resources, services, information, technologies, and innovations, which hinder their productivity.

18. The COAG, at its 27th session, requested FAO to develop a technical document of good practices, based on sound scientific evidence, including consideration of the relevant policy recommendations adopted by the Forty-third session of the Committee on World Food Security¹⁴. The document will constitute the basis to consider initiating negotiations by Members on voluntary guidelines to enhance the productivity of small-scale livestock keepers.¹⁵

19. The document *Good practices to sustainably enhance the productivity of small-scale livestock producers*¹⁶ has been discussed at the First Session of the Sub-Committee, which requested FAO to organize further consultations on the need, scope, nature, and process for the development of a dedicated voluntary guidance tool for the sustainable enhancement of small-scale livestock productivity. A report of such consultations will be presented at the Second Session of the Sub-Committee.

¹² C/2021/21, paragraph 14

¹³ <https://www.fao.org/3/cb8424en/cb8424en.pdf>

¹⁴ Committee on World Food Security. 2016. *Sustainable agricultural development for food security and nutrition: what roles for livestock? Policy Recommendations*. FAO. www.fao.org/3/bq854e/bq854e.pdf

¹⁵ C 2021/21, paragraph 14

¹⁶ <https://www.fao.org/3/ni039en/ni039en.pdf>

20. The Sub-Committee also requested FAO to identify and inform Members on major trends, shocks, and crises that may impact on the global livestock sector. The first study would focus on the impact of the COVID-19 pandemic on the livestock sector. It would use several case studies from different regions showing the impact of the COVID-19 pandemic and the response of the sector.

B. Animal, public and environmental health through the One Health approach

21. FAO works closely with the World Health Organization (WHO), the World Organisation for Animal Health (OIE) and the United Nations Environment Programme (UNEP) to jointly pursue the One Health approach and action plan, which seeks to comprehensively address disease threats at the animal-human-environment interface.

22. The Sub-Committee will monitor the mainstreaming of One Health and biosecurity approaches in the livestock sector. This will include regular reporting on FAO support to Members in developing capacities and implementing the Progressive Management Pathway for Biosecurity and enhancing national One Health early warning frameworks. For more information, see document *Strengthening national coordinated capacities to manage the risks of animal diseases and emerging zoonoses through the One Health approach*.¹⁷

23. At its 27th Session, COAG underlined the importance of FAO's shared responsibility in promoting prudent and responsible use of antimicrobials in the food and agriculture sectors. COAG further encouraged FAO to explore alternative ingredients to replace antimicrobials as growth promoters.¹⁸

24. The document *Alternative feeding practices to promote responsible use of antimicrobials in livestock production*¹⁹ was discussed at the First Session of the Sub-Committee. The Sub-Committee recommended to collect scientific evidence on alternative feeding practices to replace the use of medically important antimicrobials used as growth promoters (AGPs), their effectiveness and safety, to conduct, in collaboration with OIE, research and academic institutions, an inventory of these alternative feeding practices, and to disseminate related knowledge. An inventory of such practices and their impact on the use of medically important AGPs, livestock health, welfare and productivity, will be developed by FAO in collaboration with OIE and Codex Alimentarius.

C. Natural resource use, climate change and biodiversity

25. FAO is custodian of several SDG indicators related to climate change and natural resources. It develops tools, methodologies and protocols to assess the state of biodiversity, in particular that of animal genetic resources for food and agriculture,²⁰ the environmental impacts of livestock systems, and identify good practices²¹ at the country level. FAO builds the capacities of Members to use the Global Livestock Environmental Assessment Model (GLEAM) and its interactive version (GLEAM-i) for national GHG inventories and access to climate finance and investment plans.

26. Enteric fermentation is a major source of methane, a short-lived climate pollutant. Reducing methane offers the opportunity to reach climate benefits faster, particularly in the livestock sector. For this reason, at the Conference of Parties (COP26) of the United Nations Framework Convention on Climate Change (UNFCCC), more than 110 countries joined the Global Methane Pledge led by the European Union and the United States of America, aiming to cut methane emissions by 30 percent by

¹⁷ <https://www.fao.org/3/ni007en/ni007en.pdf>

¹⁸ C 2021/21, paragraphs 23–26

¹⁹ <https://www.fao.org/3/ni009en/ni009en.pdf>

²⁰ <https://www.fao.org/dad-is/en/>

²¹ See FAO. 2021. *Tool for Agroecology Performance Evaluation (TAPE)*. In: FAO [online]. Rome. [Cited 13 December 2021]. <http://www.fao.org/agroecology/tools-tape/en/> and FAO. 2021. *Global Livestock Environmental Assessment Model (GLEAM)*. In: FAO [online]. Rome. [Cited 13 December 2021]. <http://www.fao.org/gleam/resources/en/>

2030 compared to 2020 levels.²² FAO has shown that adopting existing good practices and technologies in feeding, health and husbandry, and manure management could help cut GHG emissions by as much as 30 percent.²³

27. Promoting regenerative grazing practices and restoring degraded rangelands can help with soil carbon sequestration and put carbon back in the ground, while also improving biodiversity and water quality, especially in extensive grazing systems. Improving manure management can avoid nutrient losses, contribute to healthy soils and produce renewable energy.

28. The document "Integrating the livestock sector into national climate actions by considering its adaptation and resilience to climate change, and contribution to biodiversity and ecosystem services"²⁴ was discussed at the First Session of the Sub-Committee. The Sub-Committee recommended FAO to strengthen its support to Members, as appropriate, on GHG emissions assessment, especially to provide training to livestock managers and practitioners, and to share good practices.

29. The Sub-Committee will monitor the development of methods for mitigation and adaptation to climate change, and FAO's support to Members to integrate livestock-related mitigation and adaptation targets into national climate policies. In particular, it will report on regional consultations to develop regional strategies on mitigation and adaptation in the livestock sector, the development of national livestock climate change policies, and national feasibility studies to reduce enteric methane, as per the Sub-Committee recommendation.

30. In collaboration with relevant partners and FAO governing bodies, the FAO will produce assessments and technical and policy documents on sustainable rangeland management, diversity of animal genetic resources for food and agriculture, and ecosystem services produced by livestock. It will also monitor the implementation of the request of COAG 27 to FAO to mainstream its work on rangelands and pastoralism to ensure their systematic consideration in its technical and policy programmes.²⁵

V. Planning of activities within the MYPOW

31. The MYPOW has been drafted to allow the Sub-Committee to focus on the priorities identified by COAG. It will allow thorough preparation of agreed deliverables over a period of four years, giving adequate time for informed debates and deliberations at the sessions. A focus on three to four deliverables per session is suggested.

32. A detailed activity plan will be prepared for each of the proposed deliverables, and progress made will be presented at the meetings of the Sub-Committee Bureau, which are held regularly, as well as at the meetings of the COAG Bureau, as appropriate. Table 1 of the appendix to this document provides a plan to be followed over the Sub-Committee's next three sessions. This forms the foundation of the MYPOW, which is presented as a rolling plan. The Sub-Committee may, at every session, review the MYPOW and provide guidance on the priorities for its next session, and on relevant modalities.

33. As per its Rules of Procedure and Terms of Reference, and under the supervision of its Bureau, the Sub-Committee will, among other activities, plan and implement its programme of work in collaboration with relevant bodies and partners, in particular, the Global Agenda for Sustainable Livestock (GASL), the Global Research Alliance on Agricultural Greenhouse Gases (GRA) and the Livestock Environmental Assessment and Performance (LEAP) Partnership, OIE and Codex

²² See <https://www.globalmethanepledge.org/>

²³ Gerber, P.J., Steinfeld, H., Henderson, B., Mottet, A., Opio, C., Dijkman, J., Falcucci, A. and Tempio, G. 2013. *Tackling climate change through livestock: a global assessment of emissions and mitigation opportunities*. FAO. <http://www.fao.org/3/a-i3437e.pdf>

²⁴ COAG:LI/2022/4

²⁵ C 2021/21 paras 102-103

Alimentarius, monitor the progress made, and report to COAG on its work. The modalities of collaboration and engagement will be defined with each partner, in line with already established partnerships, areas of synergies and collaboration identified and FAO's policy on partnerships.

VI. Funding the Sub-Committee programme of work

34. FAO established a multidonor project to support the implementation of the Sub-Committee's programme of work. The financial contributions by Ireland and Switzerland supported the operational costs of the First Session. Additional resources are needed to implement the planned activities and organize future sessions. At its 165th Session, the FAO Council agreed with the COAG recommendation to consider revisiting the funding arrangement at subsequent COAG sessions to explore other funding options.

ⁱ FAO. 2021. *Report of the 27th Session of the Committee on Agriculture (28 September – 2 October 2020)*. Paragraph 21 and Appendix E. Rome. <https://www.fao.org/3/cb3902en/cb3902en.pdf>

ⁱⁱ C/2021/21 paragraph 21 and Appendix E.

Appendix

Table 1: Major outputs and milestones in the Committee on Agriculture's Sub-Committee on Livestock's Multi-Year Programme of Work (2022–25)

	First Session (16–18 March 2022)	Intersession	Second Session (2024, to be determined)	Intersession	Third Session (2026, to be determined)
Sustainable livestock systems for food and nutrition security and inclusive economic growth	Assessment ²⁶ : Component document 1 ²⁷ on contribution of terrestrial animal source food to healthy diet		Assessment: other planned documents	Global/regional workshop to present and consult Members on the results of the Assessment	Assessment: Synthesis report for complete overview
	Good practices for enhancing the productivity of small-scale livestock producers	Consultations on the need, scope, nature and process for development of voluntary guidance tool	Report of the consultations		
	Major trends, shocks, and crises that may impact on the global livestock sector		Analysis of impact of the COVID-19 pandemic on the livestock sector		
Animal, public and environmental health through the One Health approach	Mainstreaming One Health and biosecurity in the livestock sector		Review of progress on mainstreaming One Health and biosecurity		Review of progress on mainstreaming One Health and biosecurity
	Alternative feeding practices to promote responsible use of antimicrobials in the livestock sector		Review of progress on the development of inventory of alternative feeding practices, in collaboration with OIE and Codex Alimentarius		Inventory of alternative feeding practices
Natural resource use, climate change and biodiversity	Integration of livestock in national climate policies		Advances in applied methods for mitigation and adaptation to climate change		Review of progress on integrating livestock in national climate change policies
Multi-Year Programme of Work (MYPOW)	Review of the draft MYPOW 2022-25		Review of the MYPOW 2024–27		Review of the MYPOW 2026–29

²⁶ Global assessment of the contribution of livestock to food security, sustainable food systems, nutrition and healthy diets.

²⁷ 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.