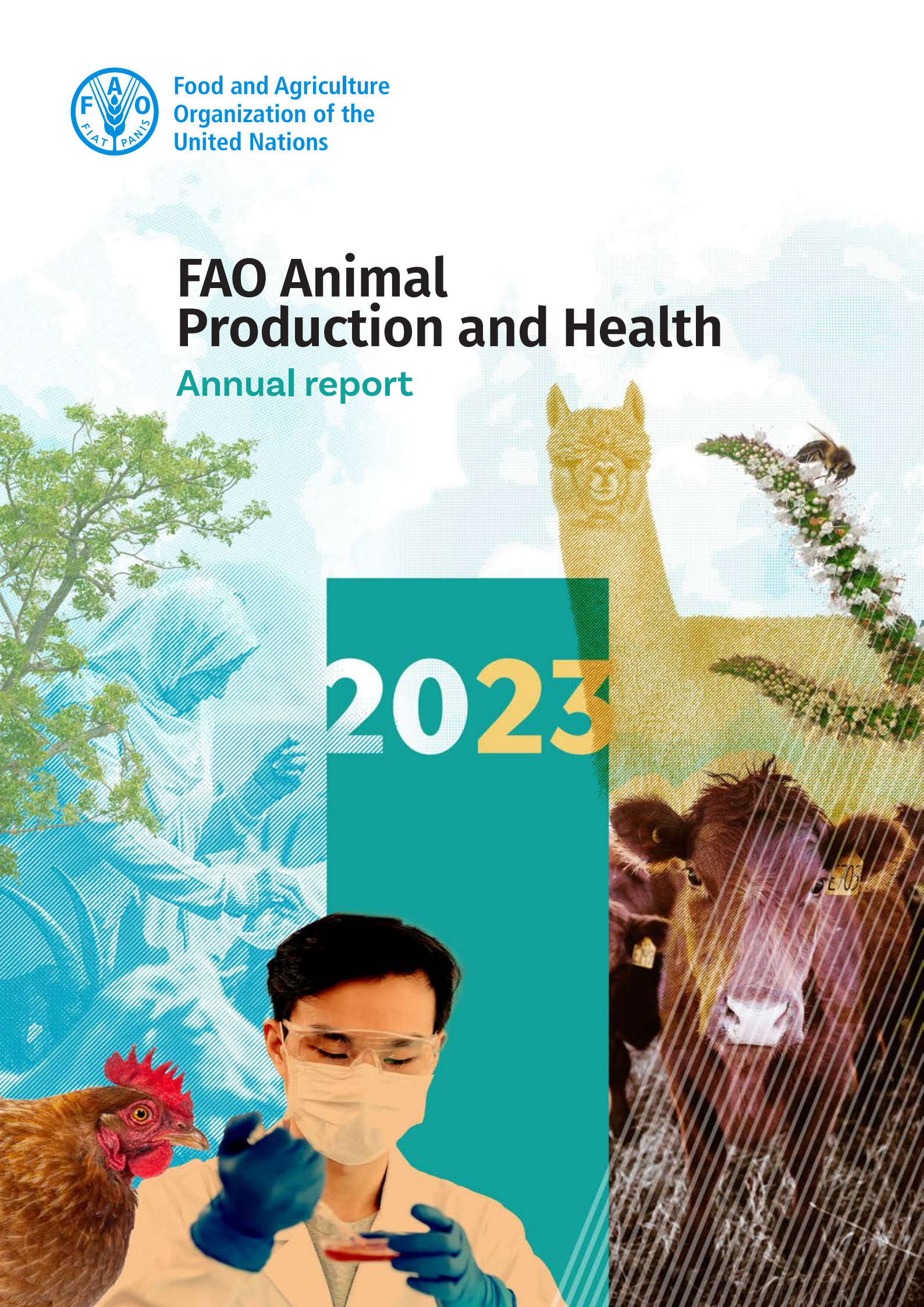
Food and Agriculture Organization of the United Nations

FAO Animal Production and Health

Annual report

2023



Required citation: FAO. 2024. *FAO animal production and health – Annual report 2023*. Rome.

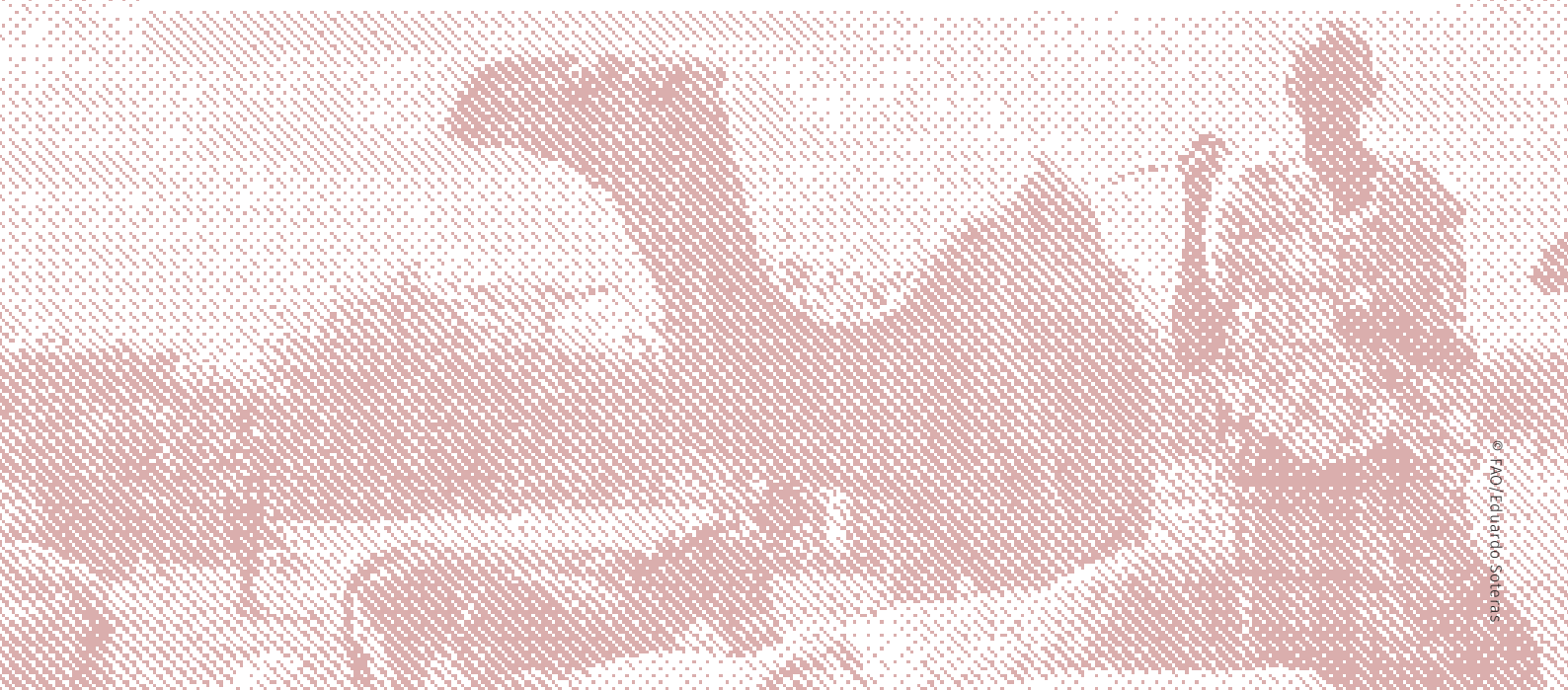
Front cover photos
Woman: © FAO/Alessandra Benedetti
Camel, chicken, bee, cow, tree, man: ©Adobe Stock

Back cover photos
Woman with flock: © ©FAO/IFAD/WFP/Michael Tewelde
Duck, pig and yack: © Adobe Stock

Contents

Abbreviations and acronyms

AMR	antimicrobial resistance
ASF	African swine fever
ECTAD	Emergency Centre for Transboundary Animal Diseases
EuFMD	European Commission for the Control of Foot-and-Mouth Disease
FAO	Food and Agriculture Organization of the United Nations
GASL	Global Agenda for Sustainable Livestock
HPAI	Highly Pathogenic Avian Influenza
LEAP	ivestock and Environmental Assessment Performance Partnership
MERS-CoV	Middle East Respiratory Syndrome Coronavirus
PPR	Peste des Petits Ruminants
UNEP	United Nations Environment Programme
WHO	World Health Organization
WOAH	World Organization for Animal Health



FAO/Eran Raizman

FOREWORD

The year 2023 presented a unique landscape for animal production and health. The global demand for nutritious animal-derived foods continues to rise, critical need to ensure sustainable and resilient livestock systems. This year, the Food and Agriculture Organization of the United Nations (FAO)'s Animal Production and Health Division rose to this challenge, fostering innovation while safeguarding animal and environmental wellbeing.

This report highlights the key achievements and ongoing efforts of our activities and contributions to animal production, animal health, and One Health. We've championed strategies to tackle animal diseases that threaten food security and livelihoods. We've placed emphasis on reducing antimicrobial resistance, a growing public health concern. Additionally, we've actively supported the development of robust veterinary services – the backbone of animal health management.

Throughout the year, we recognized the intricate link between animal health, human health, plant health and the environment. We have promoted the concept of One Health, advocating for integrated approaches that address these interconnected challenges. By fostering collaboration between animal health professionals, human health workers, and environmental experts, we strive to create a future where all can thrive.

This report presents impactful case studies, demonstrating the tangible results of our work. FAO has empowered communities to implement sustainable livestock practices, improved animal welfare standards, and strengthened national capacities for disease prevention and control.

Looking ahead, we remain committed to innovation. We're harnessing the power of digital technologies to improve animal disease surveillance, diagnostic tools, and information sharing. We are also exploring the potential of novel approaches, such as alternative feeds and breeding techniques, to enhance food security while minimizing environmental impact.

We extend our deepest gratitude to our partners and stakeholders for their unwavering support and collaboration. It is through our collective efforts that we have been able to address the multifaceted challenges facing the livestock sector.

In 2023, our pivotal milestones included the introduction of the Sustainable Livestock Transformation Framework and hosting the first-ever FAO Global Conference on Sustainable Livestock Transformation. These initiatives marked significant strides towards fostering sustainability in livestock production, aligning with our commitment to shaping resilient agrifood-livestock systems. Together, let's continue to champion sustainable practices for the benefit of animals, people, and the planet.

We invite you to delve into this report and discover the stories behind our accomplishments. As we work towards a future where animals and our planet flourish, your continued collaboration is essential. Together, we can build a more sustainable and equitable world for all.

Thanawat Tiensin
Director of the FAO Animal Production and Health Division and Chief Veterinarian


© Anis Mili


© FAO/Saeed Khan

© Giorgio Napolitano


© Scott Nelson/WPN for FAO

© FAO/Alessandra Benedetti


© FAO/K.Purevtaqchaa

FAO's work on animal production and health

Within the framework of the United Nations 2030 Agenda for Sustainable Development, FAO assists Member Nations to improve sound policies, increase investments and develop good practices. The primary objectives are as follows:

Support the transition to sustainable livestock production, aiming to reduce poverty and enhance human well-being.

Promote access to natural and productive resources for livestock producers, particularly in low- and middle-income countries.

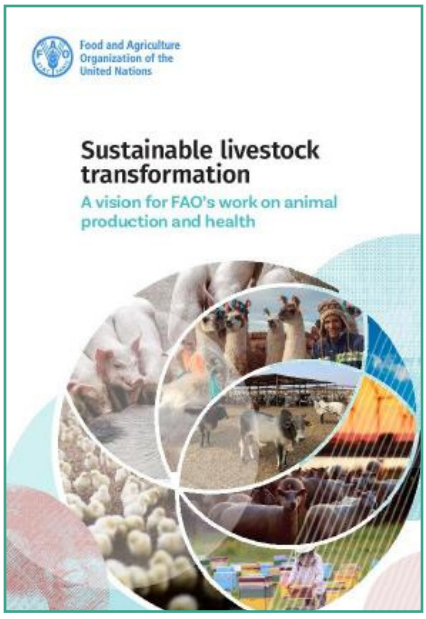
Safeguard animal and public health.

Increase market access opportunities for livestock producers and ensure safe trade.

Support the sustainable use and conservation of animal genetic diversity.

Minimize the environmental impact of livestock production.

Enhance the resilience of livestock production systems to climatic shocks.



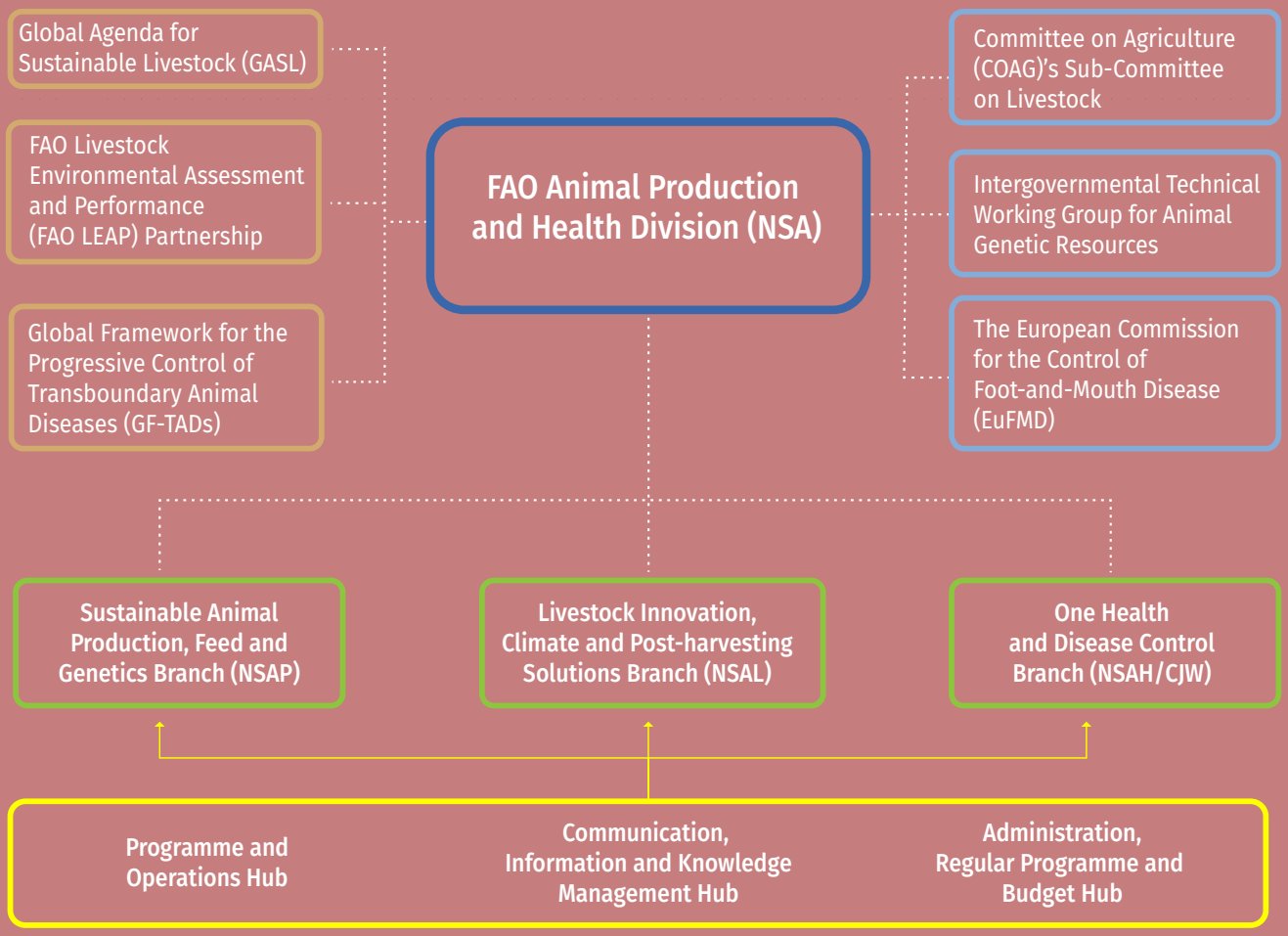
A vision for FAO's work on animal production and health

FAO is committed to promoting environmentally sustainable, socially responsible, and economically viable best practices in livestock production. Our goal is to contribute to a balanced and evidence-based global narrative for the livestock sector.

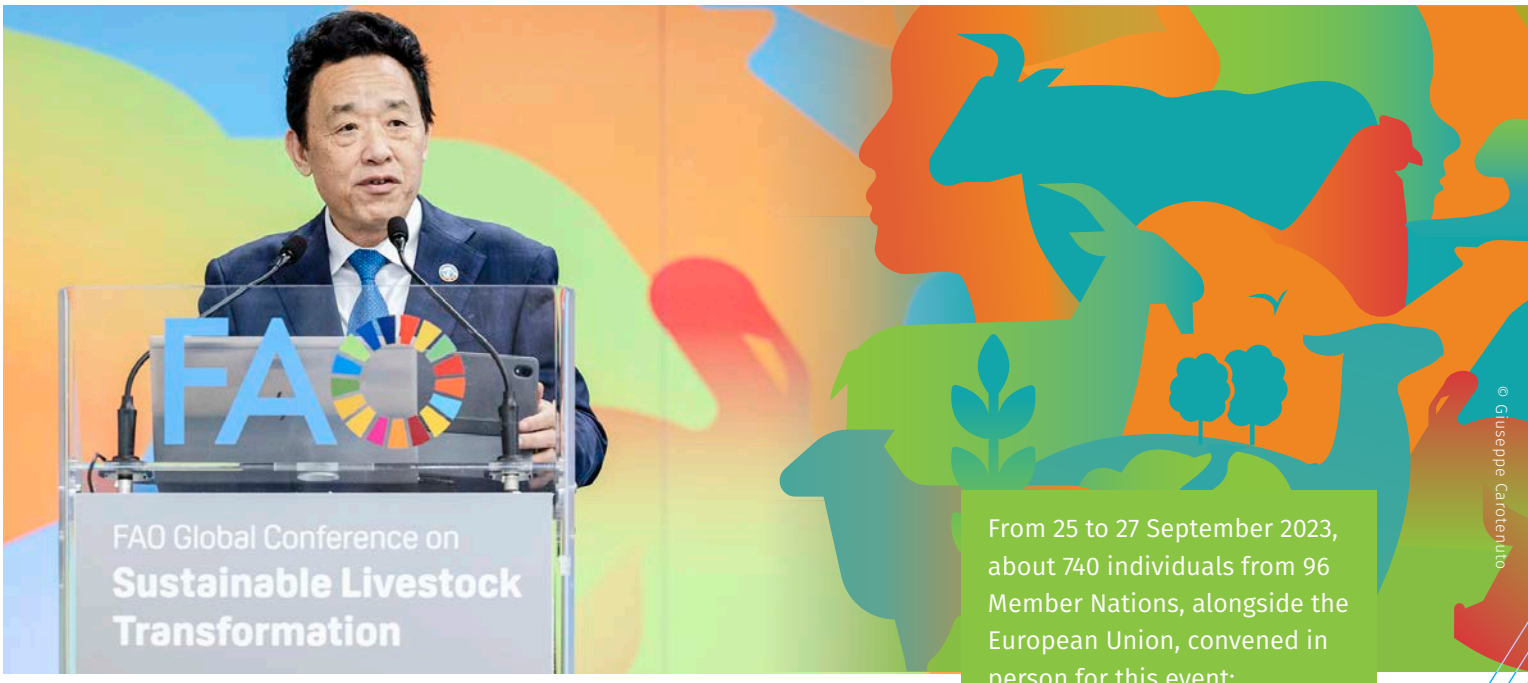
Read "Sustainable livestock transformation – A vision for FAO's work on animal production and health"

HOW WE WORK

The Office of the Director oversees the operations of the FAO Animal Production and Health Division, working closely with three technical units and three hubs. Collaborative efforts with joint centers, FAO regional and country offices, Member Nations, multi-stakeholder partnerships, and other groups facilitate the implementation of FAO activities and programs related to animal production and health.



A sustainable livestock transformation



© Giuseppe Carotenuto

From 25 to 27 September 2023, about 740 individuals from 96 Member Nations, alongside the European Union, convened in person for this event:

- Around 20 ministers and other high-level government representatives.
- Over 100 representatives of non-state actors.
- Nearly 100 young people from over 40 countries who attended the Global Youth Dialogue on Sustainable Livestock Transformation.

The first FAO Global Conference on Sustainable Livestock Transformation

In 2023, FAO organized and hosted the first-ever Global Conference on Sustainable Livestock Transformation at its headquarters in Rome, Italy. With the theme "Better Production, Better Nutrition, a Better Environment, and a Better Life", this groundbreaking event served as a neutral platform for livestock stakeholders, including Member Nations, producer organizations, research and academic institutions, development agencies, civil society organizations, and private sector entities. Together, they engaged in dialogues about innovations and strategies to enhance the efficient production of animal source foods, while reducing the environmental impacts of livestock systems. The conference covered four main themes:

- **Better livestock production systems:** Encompassing management and use of feed and animal genetic resources, animal health and welfare, digitalization, and precision livestock farming.
- **Animal source food for better nutrition:** Presenting the state-of-the-art knowledge on the contribution of animal source foods to food security and nutrition, and healthy diets.
- **Livestock solutions for better environment:** Sharing information about good practices and initiatives to make optimal use of natural resources, and reduce livestock-induced greenhouse gas emissions.
- **Better life:** Supporting small-scale livestock producers to improve their livelihoods and income through inclusive services and policies, fostering more efficient and resilient livestock production.

740
individuals from
96
Member Nations

over
100
representatives of
non-state

© Giorgio Napolitano

Empowering tomorrow's leaders: The Global Youth Dialogue on Sustainable Livestock Transformation

Co-created and attended by youth leaders worldwide, the Global Youth Dialogue on Sustainable Livestock Transformation ran parallel to the Global Conference on Sustainable Livestock Transformation. Empowering young voices, the Youth Dialogue provided an interactive platform for addressing critical priorities and challenges in sustainable livestock practices and identifying innovative solutions to drive positive change in the sector. Participants urged global leaders to prioritize innovations and youth involvement as driving forces for a sustainable transformation of livestock and a healthier future for all.


© Giuseppe Carotenuto

NEARLY
100
young people from over 40 countries

© Giuseppe Carotenuto

Success stories

AUSTRALIA

Restoring ecological balance with grazing management

GHANA

Beekeeping initiative boosts livelihoods and conservation efforts

CHINA

From a household initiative to a cooperative model: Empowering Tibetan families

INDIA

The all women-led cooperative championing manure management

BRAZIL

Closing producers' income gap in Brazilian livestock

ITALY

Safeguarding honey producers and consumers from counterfeit honey

ETHIOPIA, NIGERIA AND THE UNITED REPUBLIC OF TANZANIA

Transforming lives through poultry genetics

KENYA

Walking the last mile through dairy technical innovation

PERU

Improving farmer livelihoods through Alpaca fiber certification

SPAIN

Young goat producers at the centre of ecosystem restoration

TUNISIA

Sbaihia site sets a model for agrosilvopastoral practices

VIET NAM

Enhancing sustainable biosecurity in Viet Nam's poultry production

FAO Employee Recognition Awards

In December 2023, the FAO Director-General QU Dongyu awarded the organizing team of the FAO Global Conference on Sustainable Livestock Transformation with the One FAO Team Award for their "commitment and passion towards FAO's mandate and the people we serve".

Media coverage

The Global Conference on Sustainable Livestock Transformation garnered significant media attention, with the African Press Organization leading the way. The news was syndicated by various regional outlets, including Nigeria's The Guardian, CNBC Africa, Mena FN, Zawya, and Australia's National Tribune. The event also received coverage from IPS News, El Pais Rurales, Brazil's Embrapa, Ireland's Agriland, Morocco's news agency MAP, Maroc Diplomatique, and Prensa Latina.

National ministers' interventions at the conference were reported by outlets such as Honduras' La Tribuna, Indonesia's state news agency Antara News, Ireland's Agriland, and Uruguay's El Observador.

The event received attention during the weekly press briefing at the United Nations (UN) where Thanawat Tiensin was hosted. In an interview with Euronews (also in PT, DE, ITA), Tiensin emphasized the importance of enhancing livestock system efficiency to address the climate crisis.

The Q&A session with Director Tiensin on the potential of sustainable livestock production was featured in specialized outlets such as Farming UK, Impakter.com, and Italia Informa.

Furthermore, the FAO-produced interview with Thanawat Tiensin gained substantial exposure. The video was run by UniFeed and broadcasted more than 140 times by international media outlets, including Euronews, Habari za UN, GBS TV Africa, TPA Notícias, TVP Info, and RAI Uno.

As of October 2023, nearly 15 500 views of the webcasts for the six plenary sessions and the six side events have been recorded.

FAO press releases:

- FAO hosts first-ever global conference on sustainable livestock transformation
- Global call for concrete actions towards sustainable livestock transformation
- Unlocking the potential of sustainable livestock production
- Mapping ways to reduce methane emissions from livestock and rice

Success stories across regions

AFRICA

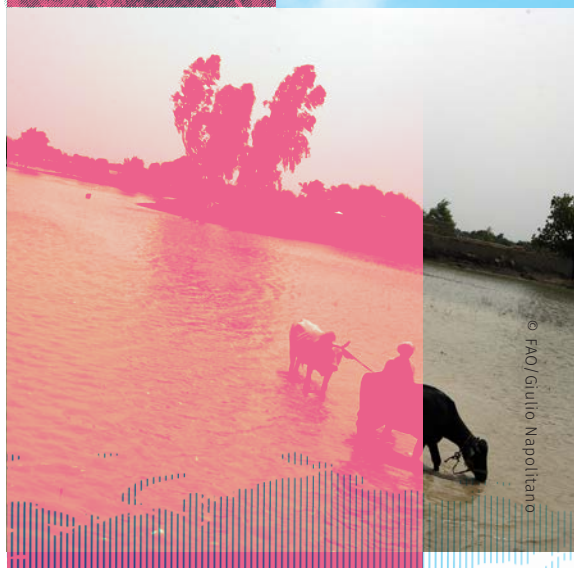
FAO's transhumance initiatives for cross-border stability in Mauritania and the Niger

In 2023, FAO facilitated the establishment of Transhumance Committees across the Sahelian region, notably in Mauritania and the Niger, fostering multi-stakeholder collaboration to address conflicts over pastoral resources. These committees, comprising government, traditional, and community representatives, developed contextualized guides to mitigate conflicts. FAO's support extended to participatory data collection, informing policy decisions and promoting pastoral-friendly investments. The Niger and Nigeria signed bilateral agreements to enhance security and livelihood protection for transhumant pastoralists. Additionally, transboundary meetings facilitated cross-border cooperation, culminating in a framework agreement in Mauritania. Economic studies highlighted pastoralism's substantial contributions to gross domestic product (GDP), emphasizing its significance in both countries. FAO's comprehensive approach underscores its commitment to sustainable pastoralism and regional cooperation.

ASIA AND THE PACIFIC

Bangladesh's first ever consultation on livestock, environment, and climate policy

The year 2023 marked a historical moment for Bangladesh as the country pledged to improve its livestock sector's climate resilience with FAO's technical assistance. Hosting the country's first-ever multi-stakeholder consultation on livestock, environment, and climate policy, Bangladesh moved first crucial steps to reduce livestock-induced greenhouse gas emissions and bridge policy gaps in methane reduction for climate action. FAO's collaboration is instrumental to help Bangladesh conduct greenhouse gas inventories, enhance productivity, and facilitate market access. In 2023, FAO engaged national stakeholders to formulate Bangladesh's national methane framework and supported the establishment of a new Climate Resilience Livestock Production Research Centre within the Bangladesh Livestock Research Centre. With FAO's continued support, Bangladesh moves closer to its climate resilience and sustainable development objectives.



EUROPE AND CENTRAL ASIA

Tracing livestock's impacts on biodiversity across Central Asia

Livestock systems profoundly affect biodiversity, both positively and negatively. Sustainable livestock practices and appropriate grazing management can help conserve native species, underlining the need for more eco-friendly methods. In 2023, the FAO Livestock Environmental Assessment and Performance (LEAP) Partnership conducted training sessions in Azerbaijan, Kazakhstan, Kyrgyzstan, Tajikistan, Turkey, Turkmenistan, and Uzbekistan to assess and demonstrate the impact of livestock activities on wildlife biodiversity. Through a series of trainings organized in collaboration with the FAO Subregional Office for Central Asia, the FAO LEAP Partnership enabled the countries involved to adopt eco-friendly practices within their livestock supply chains, actively contributing to regional conservation efforts.


© FAO/Cengiz Yar

LATIN AMERICA AND THE CARIBBEAN

Building capacity for animal disease surveillance in Guatemala

Veterinary epidemiologists and laboratory specialists in Guatemala learned the principles of running an effective animal disease surveillance system through the FAO's Surveillance Evaluation Tool in 2023. Designed to help countries address the risk of priority animal diseases, the tool was instrumental to improve Guatemala's strategic planning and periodic assessment of the current surveillance system. Through practical exercises and field assessments, animal health specialists in Guatemala learned to evaluate and improve surveillance systems, addressing priority animal diseases effectively. The training emphasized strategic planning and the use of analytical tools to review institutional, technical, and operational aspects of surveillance. With the engagement of key stakeholders, including academia and industry associations, FAO's initiative fortified Guatemala's capacity to monitor and respond to animal health threats efficiently.


© FAO/Cesar Dexieh

FAO's initiative fortified Guatemala's capacity to monitor and respond to animal health threats efficiently


© A. Webb/Magnum Photos for FAO

NEAR EAST AND NORTH AFRICA

Emergency agriculture and livestock to restore food security in the Sudan

In the Sudan's Darfur region, where food security challenges persist, FAO's efforts have yielded impactful results in bolstering livestock communities. Amidst recurring conflicts between herders and farmers driven by disputes over resources like water and grazing land, FAO's intervention has been instrumental in addressing key challenges. Through targeted measures, FAO facilitated access to land and water sources for both farming and pastoral communities, mitigating tensions and displacement. Over 50 000 hectares of land were made accessible, benefiting around 10 000 farming and pastoral households. Vital vaccination services were provided, administering over 7.9 million doses to livestock, enhancing community resilience against diseases. Additionally, FAO's seed distribution and agronomic training supported 267 000 vulnerable farmer households, safeguarding against further harvest failures. By prioritizing these interventions, FAO has significantly enhanced the capacity and resilience of the Sudan's livestock communities in Darfur, contributing to sustainable agricultural practices and food security.


© FAO/Eduardo Soteras

Over 50 000 hectares of land were made accessible


© Adobe stock

Our multi-stakeholder partnerships

AMR Multi-stakeholder Partnership Platform

In a significant development in the fight against antimicrobial resistance, the AMR Multi-Stakeholder Partnership Platform launched its operational phase in 2023. The platform has established a robust governing structure. With over 300 membership applications received from across the One Health spectrum, the platform has fostered collaboration by forming five constituency clusters and launching 13 Action Groups based on identified needs and priorities. A Steering Committee, representing constituency clusters and the Quadripartite, has been formed to oversee operations. The platform's inaugural Plenary Assembly saw active participation from over 130 member delegations, marking a significant step towards increased cross-sectoral coordination and trust-based collaboration among governments, private sector entities, research institutions, civil society, and financial institutions working on AMR.

© FAO/Alessia Pierdomenico


©Fotolia

Global Agenda for Sustainable Livestock (GASL)

The Global Agenda for Sustainable Livestock (GASL) is a multi-stakeholder partnership committed to the sustainable development of the livestock sector. During the Multi-Stakeholder Partnership (MSP) meeting in 2023, GASL focused on identifying the unexpected and sudden drivers of change impacting livestock systems and how its unique strength as a multi-stakeholder partnership could contribute to systems that are better able to respond to the unexpected, towards greater resilience and sustainability. Throughout the year, GASL demonstrated effective collaboration with various institutions and organizations and, together with its partners and stakeholders, participated in various events to highlight sustainable livestock solutions, including the Global Forum for Food and Agriculture, World Farmers Organization General Assembly, and the Africa Food System Forum 2023.

©FAO/IFAD/WFP/Michael Tewelde

The FAO Livestock Environmental Assessment and Performance (LEAP) Partnership

The FAO Livestock Environmental Assessment and Performance (FAO LEAP) Partnership is is a global initiative that aims to establish consensus on science-based methodologies and indicators for assessing the environmental impacts of livestock supply chains. This partnership works through voluntary collaboration among FAO and three main stakeholder groups: Member Nations, the private sector, and civil societies and non-governmental organizations. In 2023, the FAO LEAP Partnership launched the first global report on soil carbon assessment in grasslands and held related training sessions in Latin American countries, including Argentina, Brazil, Colombia, and Uruguay. In Europe and Central Asia, the FAO LEAP Partnership has conducted numerous training sessions to enhance the expertise of local specialists in evaluating the impacts of livestock on wildlife biodiversity. Additionally, during the first Global Conference on Sustainable Livestock Transformation, the partnership launched the FAO report "Methane emissions in livestock and rice systems", which provides strategies for creating environmentally friendly and sustainable agrifood systems.

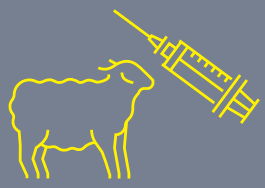
The Quadripartite

In 2023, FAO, the United Nations Environment Programme (UNEP), the World Health Organization (WHO), and the World Organization for Animal Health (WOAH) – collectively known as the Quadripartite – intensified efforts to strengthen One Health initiatives globally through strategic partnerships, investments, advocacy, and knowledge generation. Leveraging key partnerships, including bilateral partners and philanthropic organizations, FAO initiated One Health national investment planning pilots, informing prioritization and investment strategies. The Quadripartite launched guides and plans for national-level One Health actions and led advocacy efforts in political forums like G7, G20, and the United Nations General Assembly, which resulted in the inclusion of an article on One Health in the WHO's Pandemic Agreement.

© FAO/Giulio Napolitano

© FAO/Mark Milstein

Global animal health: The year in numbers



80
million animals vaccinated
against Peste des Petits Ruminants (PPR)

More than
300
trainings
conducted in 26 countries to enhance global health security and One Health application, training
7 300
individuals

Almost
40 000
disease events
reported by over 4 000 users through the FAO's Event Mobile Application (EMA-i+) in
15 countries

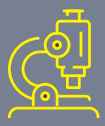
15
African countries
implemented the Programme against African Trypanosomosis (PAAT)

22
FAO Reference Centers
renewed, bolstering the global disease control and

WOAH recognized
59
countries and 1 zone
as PPR-free

The FAO Emergency Centre for Transboundary Animal Diseases (ECTAD) expanded to
49
countries,

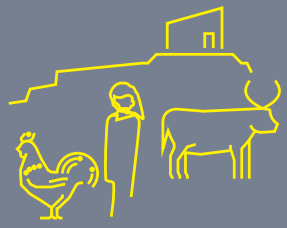
establishing new teams in Africa, Asia, the Pacific, and the Near East, and supported over
100
laboratories



in biosafety and biosecurity globally

Around
2 000
veterinarians

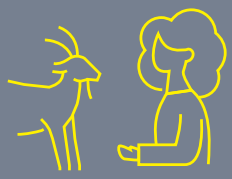
trained with European Commission for the Control of Foot-and-Mouth Disease (EuFMD) courses, with 32 courses delivered



Over
1 400
farmers
participated in RENOFARM awareness events in Africa

Approximately
800
training sessions
reached 40 countries through Farmer Field Schools

Over
700



veterinary paraprofessionals (VPPs) from West Africa,
600
from Eastern Africa,
and more than
250
from the Pacific region
trained in biosecurity management,
while 140 successfully completed an 8-month blended training program (45 percent women, 55 percent men)

Over
10 000
stakeholders
engaged in communication and awareness events across
12 countries and two regions

Major animal health events

Global consultation on African swine fever control
Hybrid Event, 12/12/2023 - 14/12/2023

Global technical consultation on the strategic framework for early warning of animal health threats
Hybrid Event, 06/11/2023 - 08/11/2023
Related news

Global consultation on Highly Pathogenic Avian Influenza (HPAI)
Hybrid Event, 02/05/2023 - 04/05/2023
Related news

How science can support evidence-based disease management and control – (Lumpy Skin Disease symposium)
Hybrid Event, 14/03/2023 - 16/03/2023
Conclusions and recommendations


© FAO/Luis Tato


© FAO/Hoang Dinh Nam

Enhancing information systems and digital tools for better animal health surveillance

In 2023, FAO released EMA-i+, an upgraded version of EMA-i, now available as a free Android mobile application within the FAO Early Warning System tools package. This multilingual tool improves the quantity and quality of reporting from the field by collecting standardized data for suspected disease threats. Implemented in 16 countries over Africa and currently available in 5 languages, the flexibility and user friendliness of the tool has been increased to further enhance cross-sectoral diseases management at multiple scales (national, regional, global) and support the various objectives of existing surveillance system implementation. Empowering national animal diseases surveillance by leveraging scalable multi-level community-based One Health approach is at the core of this release of EMA-i+.


© FAO/Hashim Aziz

FAO IN ACTION

Highlights 2023

A Global Eradication Programme for Peste des petits ruminants

Peste des petits ruminants (PPR) is a devastating viral disease that threatens 80 percent of global small ruminants' population and impacts livestock-dependent communities in Africa, Asia, Europe, and the Middle East. In 2023, FAO bolstered advocacy for PPR eradication and strengthened support for 68 endemic countries through its PPR Global Eradication Programme. Notably, 59 countries and one zone attained recognition from WOAH as PPR-free territories, marking global progress in eradication efforts. Regional activities, laboratory training for 39 countries, and inter-laboratory PPR proficiency testing in 37 countries underscored collaborative efforts. Diagnostic kits supported 14 countries in mapping PPR distribution, with 80 million animals receiving vaccination.

© FAO/IFAD/WFP/Michael Tewelde

The World Food Forum's PPR Special Prize

As part of the Transformative Research Challenge (TRC) of the 2023 World Food Forum, six exceptional young researchers received the PPR special prize for their outstanding contributions in the battle against this sheep and goat plague.

The European Commission for the Control of Foot-and-Mouth Disease

Established in 1954 within FAO, the **European Commission for the Control of Foot-and-Mouth Disease (EuFMD)** works with 39 Member Nations to improve preparedness for managing Foot-and-Mouth and Similar Transboundary animal disease crises across Europe. In 2023, EuFMD celebrated a significant achievement with the successful completion of its phase V work program (2019 – 2023), funded by the European Union. Throughout the four-year program, Europe remained free from FMD outbreaks, showcasing enhanced emergency preparedness and capacity. The program's impact extended beyond Europe, with substantial support provided to neighboring countries for the control of similar transboundary animal diseases. Over 2 000 veterinarians received training through EuFMD courses with 32 courses delivered and 18 agreements signed and implemented in 2023.

© FAO/Liana Miuccio

Empowering veterinary paraprofessionals

Between 2022 and 2023, FAO launched a pioneering effort in Nigeria, South Africa, and Uganda aiming to enhance smallholder farmers' access to preventive animal healthcare. Throughout the initiative, over 140 veterinary paraprofessionals (VPPs) completed an intensive 8 month blended training program, with a gender distribution of 45 percent women and 55 percent men. Additionally, 83 mentors underwent training and were paired with VPPs to facilitate their development. The initiative also led to the establishment of three national public-private multistakeholder platforms, further supported by the development of three national animal health veterinary paraprofessional competency frameworks. Funded by the Bill and Melinda Gates Foundation and supported by key partners such as the World Veterinary Association, this initiative represents a significant step towards fostering resilient and productive livelihoods for smallholder farmers.

Over
140
veterinary paraprofessionals trained,
45%
women

FAO concludes seven-year efforts in camel health research

Between October 2016 and December 2023, FAO concluded a global initiative spanning Egypt, Ethiopia, Jordan, and Kenya, aimed at enhancing understanding and surveillance of Middle East Respiratory Syndrome Coronavirus (MERS-CoV) in camels. Implemented through the FAO Emergency Center for Transboundary Animal Diseases (ECTAD), the project focused on strengthening veterinary services and conducting applied research to inform MERS-CoV epidemiology, safeguarding public health, animal welfare, and the livelihoods of camel producers. Notable achievements include enhanced diagnostic capabilities for MERS-CoV in the four countries, the publication of 17 scientific articles in peer-reviewed journals, the execution of over 20 surveillance and camel value chain studies, and the establishment of three partnerships with international reference laboratories.

Over
20
surveillance and camel value chain studies

The new One Health Knowledge Nexus supported by Quadripartite partners

Unveiled during the Annual Executive Meeting of the Quadripartite in March 2023, the One Health Knowledge Nexus emerged as a digital hub for knowledge sharing and learning, featuring Communities of Practice (CoPs) and a dedicated landing page. This innovative space, integrated into FAO's Virtual Learning Centre (VLC), facilitates collaboration among international Communities of Practice, fostering exchange on pertinent One Health topics and making resources widely accessible. With active Communities of Practices addressing diverse themes and membership on the rise, the One Health Knowledge Nexus meets the growing demand for evidence-based knowledge, aiding countries in strategic planning and investment decisions.

Countries pledge to integrate livestock in climate actions

In a significant step towards climate resilience, multiple Member Nations have pledged to integrate livestock-related initiatives into their nationally determined contributions (NDCs), with a scheduled revision in 2025. This commitment aims to bolster climate ambition and prioritize efforts to reduce enteric methane emissions and adapt to climate change. In 2023, Bangladesh, Burkina Faso, Kenya, Rwanda, Senegal, the United Republic of Tanzania, Zambia, and Zimbabwe made notable progress under the FAO Flexible Voluntary Contributions Subprogramme "Scaling-up climate actions to enhance nationally determined contributions (NDC), climate and livestock". Through multistakeholder consultations facilitated by FAO, these Member Nations identified opportunities to enhance livestock climate actions and integrate them into national strategies, with a focus on attracting climate finance. Multistakeholder workshops convened in each country, engaging almost 500 participants to discuss climate-smart livestock practices and providing recommendations for policymakers.


© FAO/Luis Tato


© FAO/Fahad Kaizer

almost
500
participants to discuss climate-smart livestock practices


© FAO/Abdul Mustafazade

Advancing global response to avian influenza

In 2023, FAO supported global efforts to prevent and control avian influenza in collaboration with WHO, and through the joint WOAH/FAO Network of Expertise on Animal Influenza (OFFLU), along with other partners, by providing data on animal influenza viruses for the WHO biannual influenza vaccine preparedness. A global consultation held at FAO headquarters in May gathered almost 300 experts, providing a platform to discuss the disease situation, potential risks, advancements, and control strategies. FAO conducted a qualitative risk assessment on HPAI spread in Latin America and the Caribbean to prepare at-risk countries and territories by identifying introduction pathways and supported countries in the region tacking HPAI outbreaks for the first time. FAO also partnered with the United Nations Convention on the Conservation of Migratory Species of Wild Animals (CMS) to convene a Scientific Task Force on unprecedented wild bird mortality due to HPAI. The resulting statement served as a crucial resource for preserving biodiversity, environmental health, and mitigating human exposure to the virus. The first avian influenza matching report was released to support the selection of appropriate vaccines for poultry.

© FAO/FAO/WFP/Michael Tewelde

The Livestock Investment Coordination System

From 2022, FAO implemented the Livestock Investment Coordination System (LICS), with over 200 focal points based in Country Offices. Developed by the FAO Animal Production and Health Division and the FAO Office of Emergencies and Resilience, LICS tracks global livestock initiatives, standardized monitoring through the Project Activity Information database (PAID), and impact assessment with the Livestock Investment Rapid Appraisal (LIRA). This system revolutionized global livestock intervention management, bolstering monitoring and planning efforts. FAO's impactful livestock investments in 2023 spanned 108 countries, comprising 382 projects, and benefiting over 25.2 million individuals. These investments included vaccination campaigns using 35.1 million vaccine doses, with an additional 53.6 million vaccine doses distributed to government, and over 6 million animals treated against various diseases.

© FAO/Hoang Dinh Nam

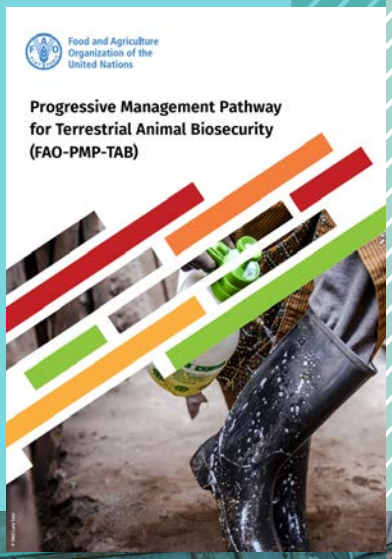
108 countries

25.5 million of individuals

382 projects

The FAO Progressive Management Pathway for Terrestrial Animal Biosecurity

Enhanced progressive biosecurity management in animal value chains was supported through the implementation of the FAO Progressive Management Pathway for Terrestrial Animal Biosecurity (FAO-PMP-TAB). This framework, developed globally and implemented locally, provides an approach to improving terrestrial animal biosecurity sustainably by co-creating solutions with public and private stakeholders that are implemented and evaluated through pilot interventions. Supported by a Community of Practice, FAO-PMP-TAB offers stakeholders access to knowledge, tools, and resources for biosecurity enhancement, fostering experience sharing among a wide range of experts and stakeholders worldwide. A brochure introducing the FAO-PMP-TAB and the review on existing biosecurity initiatives that was instrumental in developing the FAO-PMP-TAB have been published. FAO-PMP-TAB pilots commenced in two countries, and at least six more countries are in the planning phase, marking a milestone in global biosecurity management efforts.

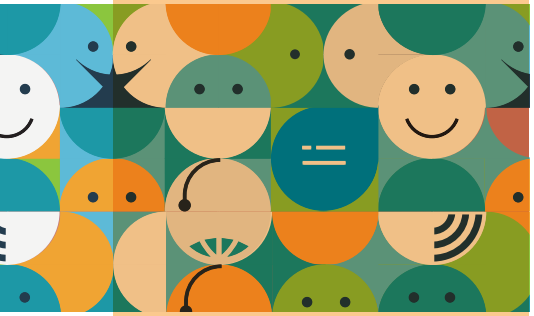


© FAO/Giulio Napolitano

Tackling priority transboundary animal diseases

In 2023, FAO continued its efforts to combat priority transboundary animal diseases (TADs) in coordination with WOAH, through the Global Framework for the Progressive Control of TADs (GF-TADs), and with WHO under the Quadripartite. Specific achievements involved developing global strategies for high impact animal diseases prevention and control, such as foot-and-mouth disease, PPR, ASF, HPAI and rinderpest post-eradication. This entailed establishing disease-specific committees as well as standing groups of experts for ASF and HPAI. Additionally, initiatives were undertaken to update regional priority diseases, develop regional and sub-regional disease control strategies, hold simulation exercises, organize regional coordination meetings, revise internal consultations, and reduce the number of countries storing rinderpest virus from 36 to six. In 2023 FAO's priority areas focused on reinforcement of veterinary services' surveillance and early warning; vaccination evaluation and access to quality vaccines; biosecurity, business continuity and safe-trade; and resource mobilization and public-private partnerships.

© Brent Stirton/Getty Images for FAO



Virtual learning courses

In 2023, FAO Virtual Learning Centers (VLCs) delivered 36 new courses that reached participants from over 150 countries. The impact of VLCs endeavors saw over 9 800 individuals engaged on the VLC platform, with more than 4 800 learners completing at least one course. Notably, VLCs commitment to fostering female leadership was evident, with over 44 percent of course completers being women. In 2023, through VLCs 2 473 people were trained on ASF, 1 068 on avian influenza and 509 on Lumpy Skin Disease.

Female Leadership in One Health

FAO launched a three-week virtual learning course for animal and human health professionals to guide farming communities on One Health risks and improve nutritional security in Western Africa following a gender responsive approach. The course addresses gender-specific challenges in farming communities on the prevention of infectious diseases and other One Health risks, as well as how to improve nutritional security. The initiative engaged nearly 500 frontline animal and human health service providers from ten West African countries and has been accredited for continuous professional development by the relevant statutory bodies to further incentivize upskilling for veterinary paraprofessionals.

Climate Change Adaptation in the Livestock Sector

The course aims to provide learners with an understanding of the concept of climate-related risks, key global climate trends and potential impacts on the land-based livestock supply-chain. It includes information on strategies to facilitate livestock adaptation, tools and models to monitor and assess adaptation – in alignment with the United Nations Agenda 2030 on Sustainable Development Goals.

African Swine Fever Introductory Course

The course aims to raise awareness of African swine fever (ASF) and to develop capacity on its detection and prevention. This is an introductory course, designed for a range of stakeholders with an interest in ASF. It is intended to be useful for veterinarians, veterinary paraprofessionals and others working in the pig industries. There are five short modules, each of approximately fifteen minutes duration. You can study these at a time and place to suit you, and use them as a ready-reference resource as needed. The course supports multiple platforms and can be studied on a smartphone, as well as on a computer or a tablet device.

Communications in action

Top releases from 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.

Lunched during the 172nd FAO Council meeting and endorsed by the Committee on Agriculture (COAG)'s Sub-Committee on Livestock, this report outlines the vital role of animal source foods in nutrition and health. It provides evidence-based insights and policy recommendations to guide stakeholders in enhancing dietary quality. Key highlights from the report were disseminated through six infographics distributed on significant occasions such as the World Milk Day and the World Egg Day. The report gathered widespread media coverage and significant attention, with an altmetric count of almost 1 500, underscoring its global impact and relevance.

Read now | News

Global assessment of soil carbon in grasslands – From current stock estimates to sequestration potential.

Soils contribute to the achievement of the Sustainable Development Goals through carbon sequestration. By enhancing soil health and fertility, soils can play a crucial role in climate action, land degradation neutrality, and alleviating hunger. Launched in 2023, this study provides a spatially explicit report on the state of grassland soils and can be used as a baseline for future work to explore the impacts of livestock management on soil carbon at regional, country and farm levels. Assessing the current state of grassland systems and their potential to sequester carbon in the soil is of key importance to understand the trade-offs between grassland services on food security, biodiversity conservation, and climate mitigation.

Read now | News

Animal production and health EDITORIAL COMMITTEE

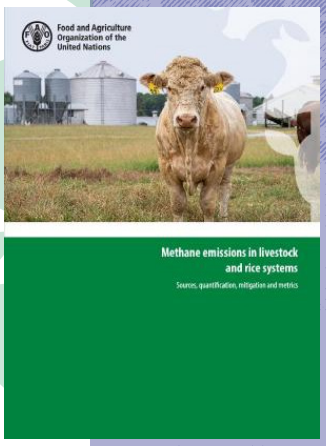
6 double blind peer review processes managed and closed

Over **80** concept notes discussed and reviewed

3 new members added

Methane emissions in livestock and rice systems – Sources, quantification, mitigation and metrics.

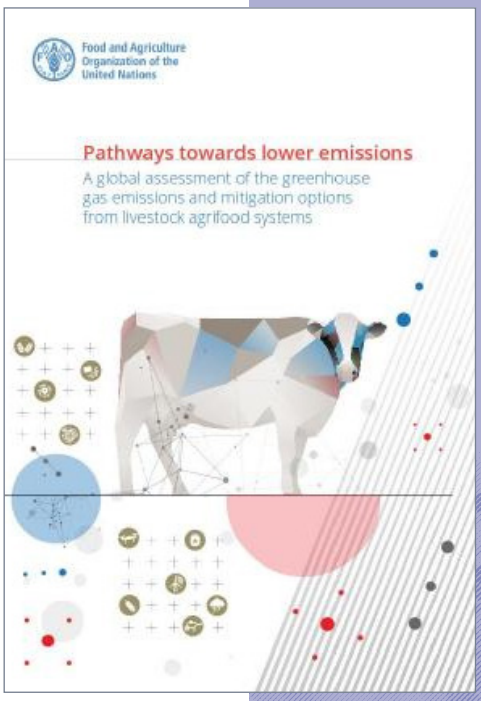
Addressing methane emissions from livestock and rice systems is vital for promoting sustainable agriculture and mitigating climate change. Launched during a side event of the FAO Global Conference on Sustainable Livestock Transformation, this report comprehensively addresses methane emissions in agriculture and their impact on global greenhouse gas levels. By analysing sources, quantification methods, and mitigation strategies, this publication highlights challenges and opportunities to reduce methane emissions from livestock and rice production systems.



Read now | News

Pathways towards lower emissions – A global assessment of the greenhouse gas emissions and mitigation options from livestock agrifood systems.

This groundbreaking report, launched during FAO's side event at the United Nations Climate Change Conference (COP28) in Dubai on 8 December 2023, updates global emission estimates for livestock, shedding light on pathways to reduce livestock emissions. Utilizing the FAO's Global Livestock Environmental Assessment Model (GLEAM), the report offers detailed insights into greenhouse gas emissions from livestock systems. It emphasizes strategies to lower emissions while meeting the anticipated rise in demand for animal products by 2050. The report garnered extensive media coverage, driving a surge in visitors to its underlying data dashboard. With almost 500 mentions on Altmetrics, its impact has been notable. The report highlights significant steps towards understanding and addressing the environmental impact of livestock production on a global scale.



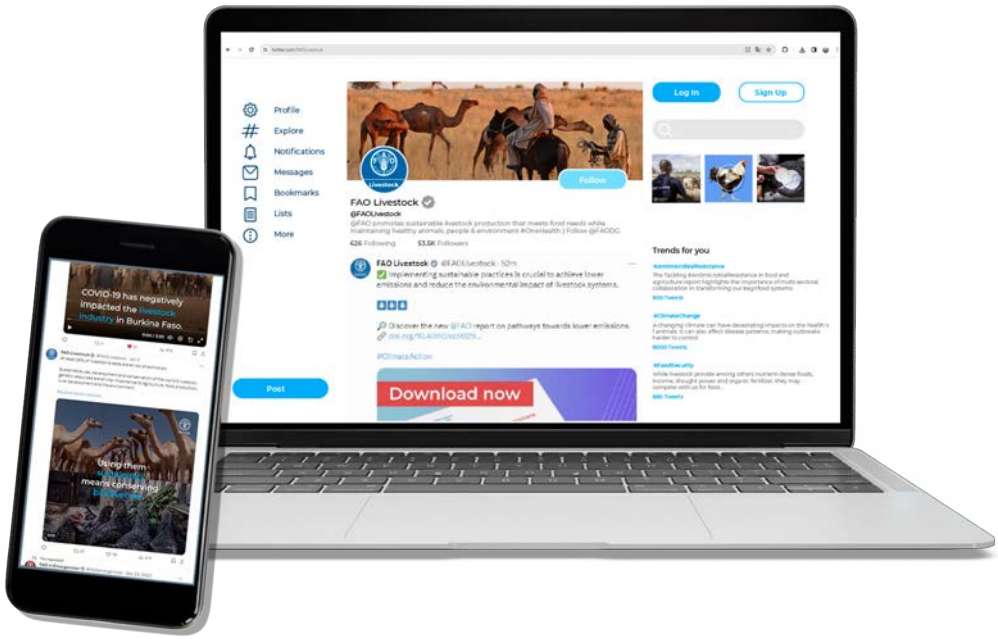
Read now | News

A One Health priority research agenda for antimicrobial resistance

This priority research agenda, developed collaboratively by the Quadripartite, focuses on key areas at the intersection of sectors. Through extensive stakeholder engagement and a mixed-methods approach, including literature reviews, surveys, and expert consensus, research priorities were identified across five pillars: transmission, surveillance, interventions, behavior change, and economics/policy. This agenda aims to guide countries, research institutes, and funding bodies in supporting One Health and AMR research. By fostering collaboration among policymakers, researchers, and the scientific community, it seeks to develop effective solutions to prevent and mitigate AMR at national, regional, and global levels. Further research is crucial to understanding effective strategies, interventions, and policies across different contexts.

Read now

Social media highlights



Followers

52K +12K*

The number of individuals who follow the account

New followers

+12K +23%*

The number of new followers gathered during the year

Impressions

2 957K +556*

The number of times content associated with our account is displayed to a viewer

Engagement

45K + 5K*

The sum of interactions received (retweets, replies and likes)

*compared to 2022

TOP 10 tweets

Impressions

1 63K

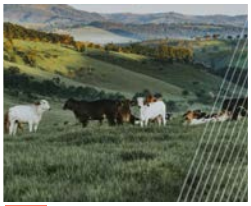
2 30K

3 18.3K

10 16.4K

4 14K

5 12.3K



6 11K

7 11K

8 10K

9 8K

Media toolkit

Sustainable livestock transformation

- Podcast
- Video: Thanawat Tiensin's interview on sustainable livestock production
- Video: Sustainable livestock transformation:
- Video: Sustainable livestock transformation for Better Production
- Video: Sustainable livestock transformation for Better Nutrition
- Video: Sustainable livestock transformation for a Better Environment
- Video: Sustainable livestock transformation for a Better Life

Livestock and climate change

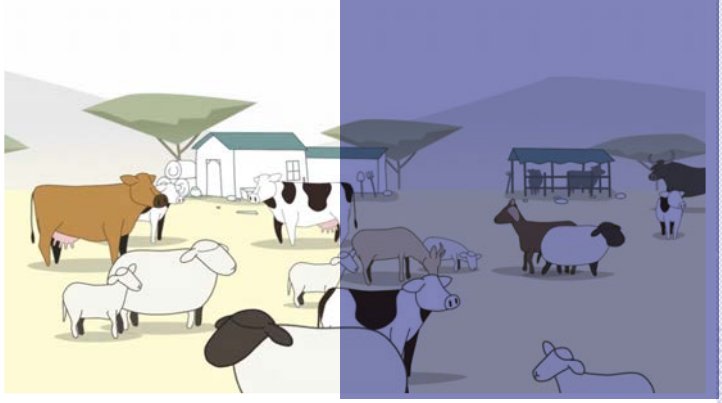
- Thanawat Tiensin's interview for COP 28:_
- How can sustainable livestock systems contribute to climate action?
- Livestock and enteric methane
- Voices of livestock and climate change stakeholders in Asia and the Pacific

AMR

- Ensuring responsible and sustainable shrimp production by implementing good aquaculture practices
- Tackling antimicrobial resistance in livestock: the Impact of good husbandry practices in Indonesia
- Reducing the need for antimicrobials by improving animal husbandry practices
- AMR Multi-Stakeholder Partnership Platform - global movement for action against AMR

EuFMD

- The wall
- What you need to know about Rift Valley Fever
- Use of drones for early detection, surveillance, and outbreak management of animal diseases



Website highlights

TOP websites in 2023

Gateway to dairy production and products

340 830
total users
690 857 page views

Gateway to poultry production and products

129 920
total users average
247 119 page views

Revamped

Animal Health

The European Commission for the Control of Foot-and-Mouth Disease (EuFMD)

New!

International Year of Camelids

©FAO/Carlos Pallacán

Field visits

The Communications, Information, and Knowledge Management Hub organized two enlightening field visits in 2023. In July, the team organized an immersive induction visit to an active apiary located in Castel Portziano, Italy, in collaboration with Apimondia, the International Federation of Beekeepers' Associations. Participants engaged in hands-on activities and gained invaluable insights into beekeeping practices. In November, the team visited Capra Libera Tutti, an animal sanctuary and rescue center housing over 500 livestock animals. These field visits not only provided participants with firsthand experiences but also significantly enhanced their capacity and understanding in animal production and health, fostering a deeper comprehension of sustainable livestock practices.

©FAO/Tofik Babayev

Our international observances

© FAO/Maxim Zmeyev

World Veterinary Day | 29 April 2023

World Veterinary Day, observed annually on 29 April, celebrates veterinarians for their contribution to sustainable livestock production worldwide. The 2023 theme of promoting diversity, equity and inclusiveness in the veterinary profession celebrated field veterinarians for their key role in early disease detection and response. Within FAO, major highlight was on the In-Service Applied Veterinary Epidemiology Training (ISAVET) program that equips frontline health workers (both veterinarians and paraprofessionals) with applied epidemiology skills to enhance their community engagement capabilities for effective management of emerging and re-emerging zoonotic diseases.
By reducing livestock mortality, increasing milk production, and addressing antimicrobial resistance, the veterinarian's efforts lead to improved livelihoods, and food security thereby advancing FAO's mandate and Sustainable Development Goals.

© FAO/K. Purevdorj chao

World Milk Day | 1 June 2023

The world first "raised a glass" to World Milk Day in 2001. Since then, World Milk Day has blossomed into a worldwide celebration spanning over 40 countries. This annual event, dedicated to honoring all aspects of milk, highlights its significance as one of the most valuable agricultural commodities globally. Recognized for its potent mix of essential nutrients, milk plays a pivotal role in fueling food security, nutrition, and economic development. In acknowledgment of its importance, FAO recently published an online story emphasizing the critical role of milk, especially for vulnerable populations and marked the occasion with engaging Instagram posts and other social media platforms while highlighting the importance of Milk safety. World Milk Day serves as a platform for diverse celebrations; through various activities like TV commercials and social media campaigns, stakeholders across the sector come together to underscore the vital impact of milk on our lives

© Anup Asha Mankar, India

World Rabies Day | 28 September 2023

In recognition of World Rabies Day 2023, FAO reaffirmed its commitment to rabies prevention. FAO collaborated with global partners and national governments to promote public awareness campaigns and the critical role of vaccination in achieving the global target of zero human rabies deaths by 2030. FAO's efforts included supporting member countries in developing and implementing sustainable rabies control programmes under a One Health approach. United Against Rabies held a photo competition on the theme of 'Rabies: All for 1, One Health for all'. Winners did a fantastic job of showcasing the positive impact of rabies control and prevention.

One Health Day | 3 November 2023

FAO championed the One Health approach on One Health Day 2023. Events like the October symposium in Berlin fostered collaboration between governments, scientists, and civil society. A key theme explored the connection between soil health, water quality, and food safety. A One Health Dialogue was also held to discuss how to translate the One Health approach into actions at all levels. FAO highlighted ongoing work on One Health and its collaboration with UNEP, WHO and the World Organisation for Animal Health (WOAH) through the Quadripartite collaboration.

World AMR Awareness Week | 18 – 24 November 2023

Every year FAO, UNEP, WHO and WOAH (collectively known as the Quadripartite) coordinate the World AMR Awareness Week, a global campaign that celebrates the importance of AMR and encourages best practices among the public, One Health stakeholders and policymakers. Under the theme "Preventing Antimicrobial Resistance Together", WAAW 2023 called on all sectors to encourage the prudent use of antimicrobials and to strengthen measures to prevent AMR. Through harmonized collaboration across FAO, together with the Quadripartite, the campaign was a success, with a range of activities at global, regional, subregional and national level.

©FAO/Carlos Pallacán

Launch of the International Year of Camelids | 4 December 2023

FAO officially launched the International Year of Camelids 2024 in December at its Rome headquarters, to recognize and celebrate the vital contributions these animals make to livelihoods, food security, and nutrition. Camelids play a pivotal role in diverse ecosystems, especially in desert and mountain regions, where they form an integral part of the livelihoods and traditional practices of indigenous communities. The opening ceremony brought together over 200 participants and involved high-level speakers and experts, including the Vice-President of the Plurinational State of Bolivia. "This international year is a great opportunity to highlight and value the economic, social and cultural importance of camelids around the globe," said the FAO Director-General QU Dongyu during the launch event.

FAO/Alessandra Benedetti

WAY FORWARD

Spearheading a sustainable future for animals, people, and the environment

The FAO's Animal Production and Health Division continues to envision a future where sustainable agrifood systems and animal health go hand-in-hand. As we move forward, our focus remains unwavering: accelerating the transformation of livestock production systems, fortifying the pillars of One Health, mitigating environmental impact, and restoring ecosystems. However, the coming year presents both significant challenges and opportunities.

Scaling sustainable livestock systems: We will prioritize knowledge sharing and capacity building, empowering stakeholders to embrace climate-smart practices, improve resource efficiency, and enhance animal welfare. We will actively promote innovative technologies like precision livestock farming and circular bioeconomy models to optimize resource use and minimize environmental footprint.

Elevating One Health: The critical role of the One Health approach in pandemic prevention will be a cornerstone of our efforts. We will champion multisectoral collaboration, fostering closer ties between veterinary and human health sectors. By strengthening national veterinary services and disease surveillance systems, we can anticipate and contain future zoonotic threats.

Lowering emissions and restoring ecosystems: We will prioritize research and development of low-emission feed technologies and sustainable grazing practices. Fostering collaboration with environmental experts, we will develop strategies to minimize the livestock sector's environmental footprint and contribute to restoration efforts.

Innovation at the forefront: We will continue to champion digital solutions for real-time disease surveillance, improved diagnostics, and targeted interventions. We will actively explore the possibilities of novel feed sources and breeding techniques to ensure food security while minimizing environmental impact.

Through strategic partnerships, knowledge sharing, we can navigate the complexities of the future and ensure a world where thriving animals, a healthy planet, and sustainable food security go hand-in-hand.

Thanawat Tiensin
Director of the FAO Animal Production and
Health Division and Chief Veterinarian

Released in 2023

Dondini, M., Martin, M., De Camillis, C., Uwizeye, A., Soussana, J.-F., Robinson, T. & Steinfeld, H. 2023. *Global assessment of soil carbon in grasslands – From current stock estimates to sequestration potential*. FAO Animal Production and Health Paper No. 187. Rome, FAO. https://doi.org/10.4060/cc3981en

FAO. 2023. *African swine fever prevention, detection and control in resource-limited settings*. FAO Animal Production and Health Guidelines No. 35. Rome. https://doi.org/10.4060/cc7491en

FAO. 2023. *Assessing agroecological transitions in Mali with TAPE*. Rome. https://openknowledge.fao.org/items/6b51a8a5-f8f5-4005-89ac-9eb39684de23

FAO. 2023. *Bringing agrifood emergency management support to countries in need*. Rome. https://openknowledge.fao.org/items/4aaf74c1-97be-4bd6-bb97-a12a0561de1a

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*. Rome. https://doi.org/10.4060/cc3912en

FAO. 2023. *Global consultation on highly pathogenic avian influenza (HPAI) – Rome, Italy, 2–4 May 2023*. FAO Animal Production and Health Reports, No. 20. Rome. https://doi.org/10.4060/cc7302en

FAO. 2023. *Global youth statement on sustainable livestock transformation*. Rome. https://openknowledge.fao.org/items/e670cfb4-65c8-404c-8072-cf509a496f30

FAO. 2023. *FAO Animal Production and Health – Annual report 2022*. Rome. https://openknowledge.fao.org/items/d7039fdf-3c25-4aff-8b26-e28737f57764

FAO. 2023. *FAO rapid qualitative risk assessment. Risk of H5 high pathogenicity avian influenza introduction in Central and South America and the Caribbean*. FAO Animal Health Risk Analysis – Assessment, Issue No. 9. Rome, FAO. https://doi.org/10.4060/cc4720en

FAO. 2023. *Improving broiler business and biosecurity – A win-win? Insights from producers in Menoufia and Qualiubia governorates in Egypt*. Rome. https://doi.org/10.4060/cc2947en

FAO. 2023. *Livestock and public health in Eastern Africa – The perfect storm?* Rome. https://doi.org/10.4060/cc3123en

FAO. 2023. *Lumpy skin diseases – Recognizing the diseases*. Rome. https://openknowledge.fao.org/items/dda71006-9bff-49b9-be94-9c6a2f18caad

FAO. 2023. *Methane emissions in livestock and rice systems – Sources, quantification, mitigation and metrics*. Rome. https://doi.org/10.4060/cc7607en

FAO. 2023. *Methane emissions in livestock and rice systems – Summary*. Rome. https://openknowledge.fao.org/items/c3b3f29b-9397-40bc-b5af-cec633a68745

FAO. 2023. *Pathways towards lower emissions – A global assessment of the greenhouse gas emissions and mitigation options from livestock agrifood systems*. Rome. https://doi.org/10.4060/cc9029en

FAO. 2023. *Progressive management pathway for terrestrial animal biosecurity*. Rome. https://openknowledge.fao.org/items/f1b248b5-0c60-400d-824c-e068b5cf1987

FAO. 2023. *Public–private engagement at local level to support One Health policy implementation – A stepwise approach based on experiences from the poultry value chain in Uganda*. Africa Sustainable Livestock 2050. Rome. https://doi.org/10.4060/cc3242en

FAO. 2023. *Reducing methane emissions in livestock systems in Asia and the Pacific – Enhancing national climate actions through the Global Methane Pledge*. FAO Animal Production and Health Reports, No. 19. Rome. https://doi.org/10.4060/cc6388en

FAO. 2023. *Sustainable livestock transformation – A vision for FAO's work on animal production and health.* Rome. https://doi.org/10.4060/cc7474en

FAO. 2023. *Veterinary laboratory testing protocols for priority zoonotic diseases in Africa*. FAO Animal Production and Health Guidelines No. 34. Rome. https://doi.org/10.4060/cc3956en

FAO and AGRILIFE. 2023. *Manual for Trainers: Frontline In-Service Applied Veterinary Epidemiology Training*. Rome. https://doi.org/10.4060/cc0339en

FAO and IGAD. 2023. *FAO and IGAD call for action to prevent the risk of Rift Valley fever in Eastern Africa*. Rome, FAO. https://openknowledge.fao.org/handle/20.500.14283/cc8610en

FAO, UNEP, WHO & WOAH. 2023. *One Health and the United Nations Sustainable Development Cooperation Framework – Guidance for UN Country Teams*. Rome. https://doi.org/10.4060/cc5067en

FAO, UNEP, WHO, and WOAH. 2023. *Quadripartite One Health Intelligence Scoping Study - Final report.* Rome. https://doi.org/10.4060/cc4480en

McLaws, M., Ahmadi, B.V., Condoleo, R., Limon, G., Kamata, A., Arshed, M., Rozstalnyy, A., Rosso, F. & Dhingra, M. 2023. *Risk of foot-and-mouth disease SAT2 introduction and spread in countries in the Near East and West Eurasia – FAO Qualitative Risk Assessment, October 2023.* Rome, FAO. https://doi.org/10.4060/cc8173en

Özkan, Ş., Doro, E. & Mottet, A. 2023. *Estimating the environmental impact of the Regeneration of Landscapes and Livelihoods (ROLL) project in Lesotho*. Rome, FAO. https://doi.org/10.4060/cc3396en

WHO, FAO & WOHA. 2023. *Competencies for One Health field epidemiology (COHFE) framework.* Geneva. https://openknowledge.fao.org/items/183612d6-2b4d-494a-a627-3a8796c66190