



Food and Agriculture Organization
of the United Nations

FAO's Work on Vaccination - Improving Vaccination Strategies for Priority Animal Diseases



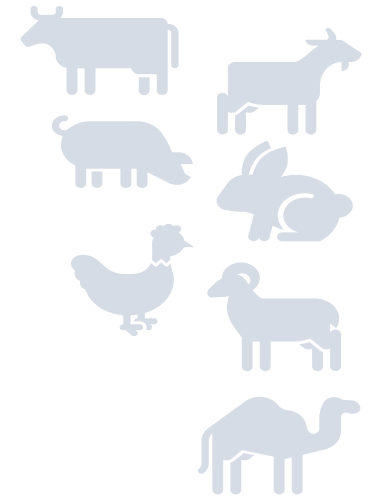
Presented by Bessong Willington Ojong

Animal Production and Health Country Team Leader

FAO Uganda, October 2025



Contribution of livestock sector to SDGs



1



Livestock for Inclusive and Sustainable Economic Growth

2



Animal-sourced foods for Basic Nutrition and Health

3



Livestock for Sustainable Ecosystems

4



Livestock for Equitable Livelihoods and a Better Life

Challenges: why do we need the livestock sector to transform?



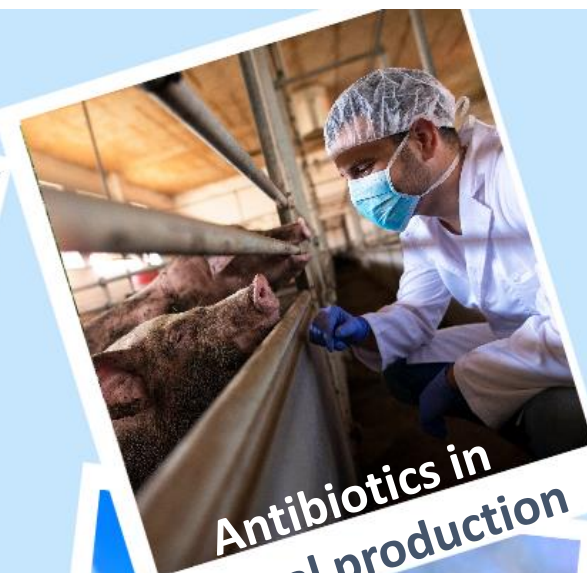
Animal welfare



**Animal diseases
Pandemic**



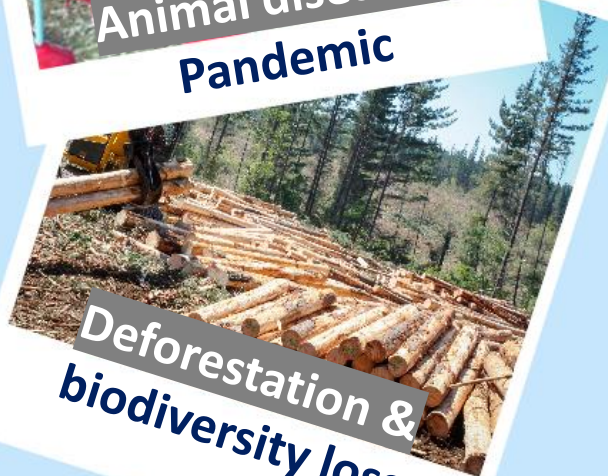
**Hunger &
malnutrition**



**Antibiotics in
Animal production**



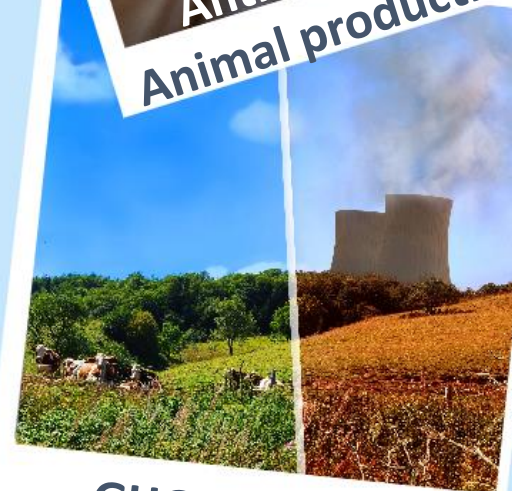
**Foodborne
Diseases**



**Deforestation &
biodiversity loss**



**Soil & water
pollution**



GHG emissions

Vision: what do we want to achieve?

“Sustainable Livestock Transformation Framework”



Sustainable livestock sector that satisfies global demand for animal source foods and other animal products, distributes and benefits equitably, and contributes positively to the environment while using natural resources efficiently

How? A roadmap for success



Building a more sustainable, efficient, inclusive,
and resilient livestock sector for all



Sustainable Livestock Transformation Framework

1.

Building science and
evidence-based narratives
to advocate for
Sustainable Livestock

2.

Taking a holistic
approach that considers
the multiple
sustainability dimensions
of livestock systems at all
nodes of the value chain.

3.

Promoting the adoption
of tailored, context-
specific good practices.

4.

Promoting policy
development/reform and
responsible investment
for impact at scale

5.

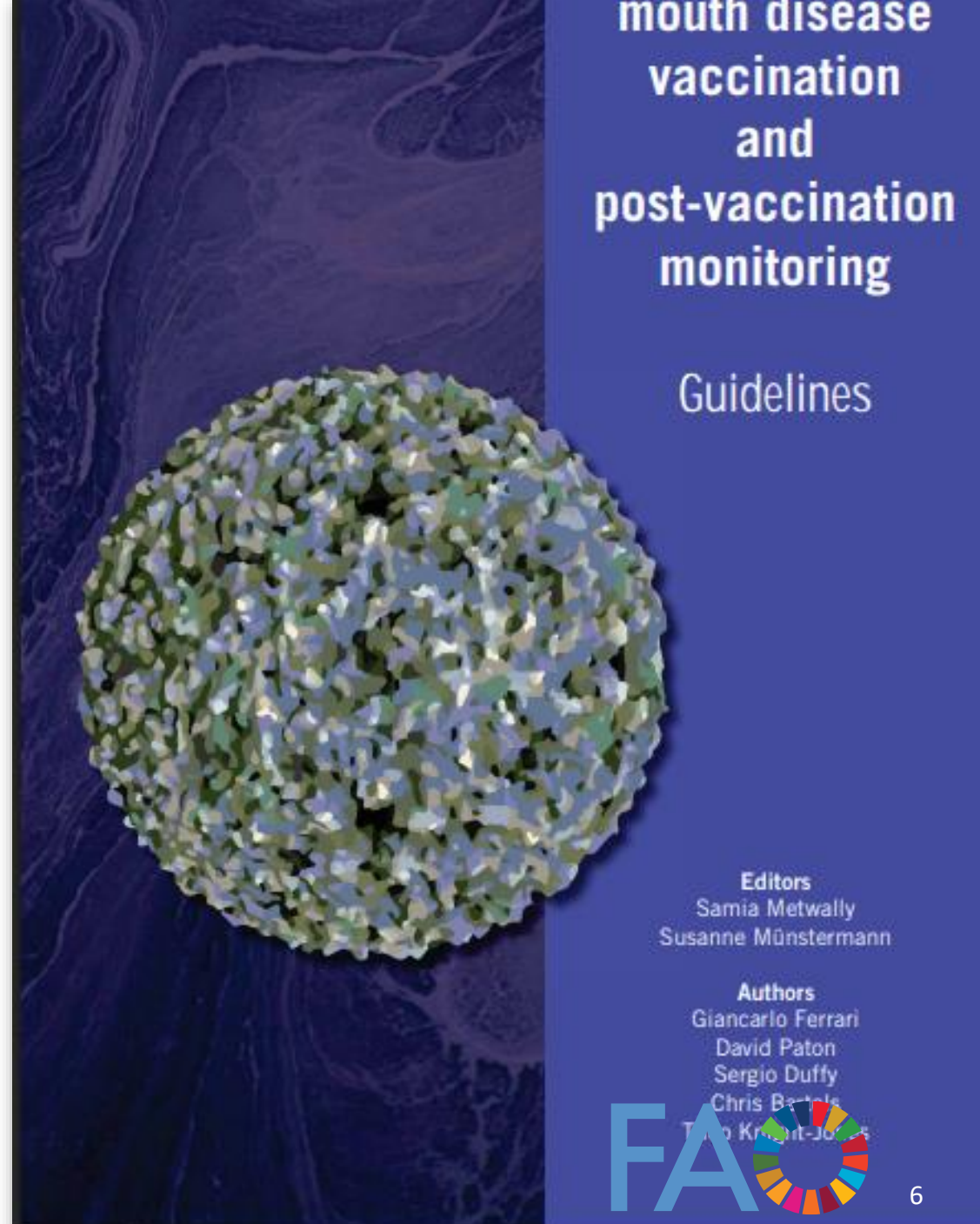
Accelerate a sustainable
transformation of
livestock sector through
greater cooperation and
partnership, innovation,
and resource
mobilization

“Outcome” = actors along the value chain share and adopt good practices

“Impact” = better production, better nutrition, better environment and a better life

The role of vaccines in promoting animal health and food security

- Vaccines are essential for ensuring global food security
- An effective strategy for the eradication of diseases (e.g. eradication of Rinderpest in 2011)
- Infectious animal diseases (HPAI and foot and mouth disease) still pose a threat in the sector and carry economic and public health risks
- Difficulties exist in monitoring the safety and quality of vaccines
- Monitoring their impact protects animal health, supports food production and prevent potential health crises
- FAO supports member countries in developing and implementing vaccination strategies for transboundary and priority animal diseases



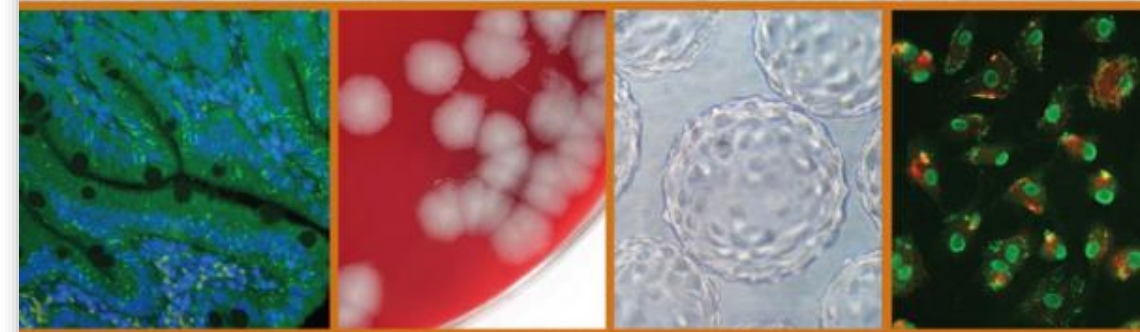
FAO Vaccine support Mechanisms

FAO **supports vaccine banks** and **vaccine security** through:

- Technical expertise,
- Strategic partnerships, and
- Emergency response mechanisms. .

Its efforts focus on ensuring the quality, availability, and delivery of vaccines for major TADs, particularly in vulnerable regions.

(Note FAO does not directly operate vaccine banks)



VETERINARY VACCINES

PRINCIPLES AND APPLICATIONS

FIRST EDITION

EDITED BY

SAMIA METWALLY | GERRIT VILJOEN
AHMED EL IDRISI



Food and Agriculture
Organization of the
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WILEY Blackwell

FAO Vaccine support Mechanisms

Technical and quality assurance support



- **Prequalification of vaccines:** The FAO's EuFMD works to establish a system for prequalifying high-quality vaccines against FMD and Similar Transboundary Animal Diseases (FAST). This ensures reliability of vaccines in advance of an emergency, a crucial aspect of vaccine security.
- **Production and quality control:** Provides guidance and expertise on the production and quality control of veterinary vaccines, especially in developing countries. This includes producing technical manuals and holding expert consultations to ensure consistent standards are met.
- **Support for national laboratories:** The FAO and its partners, such as the IAEA), provide training, equipment, and consumables to national veterinary institutes to improve their vaccine production and development capabilities.

Strategic partnerships and coordination



- **Global collaboration:** with WOA, WHO, & IAEA to improve animal health globally. FAO is a key partner in the Quadripartite alliance, which coordinates efforts to address global health threats.
- **Multi-stakeholder platforms:** Organizes and support MSP that involve private and public sectors. These forums work to **identify market failures** in the vaccine supply chain and develop solutions to ensure vaccine security and timely delivery.
- **Facilitating supply agreements:** For emergency vaccine needs, FAO establishes Long Term Agreements (LTAs) with vaccine producers for priority diseases like Peste des Petits Ruminants (PPR) and FMD. This streamlines the procurement process for member countries



Emergency Response & Logistics



- **Emergency Centre for Transboundary Animal Diseases (ECTAD):** ECTAD, a major FAO program, helps member nations prevent, detect, and respond to outbreaks of transboundary animal diseases. This work is critical to ensuring rapid deployment of vaccines and other interventions during an emergency.
- **Global stockpiles:** The FAO implements a Global Stockpile for Emergency Animal Diseases that maintains a reserve of diagnostic reagents, lab consumables, and personal protective equipment. This provides immediate resources for early containment efforts while a full-scale response, including vaccine mobilization, is organized.
- **Logistics and delivery:** The FAO assists in the distribution of vaccines, especially in hard-to-reach areas. For instance, in Sudan, the FAO has piloted cross-border vaccine delivery to ensure vulnerable communities can be reached. The FAO also issues guidelines for conducting effective livestock vaccination campaigns, covering logistics such as maintaining the cold chain

Supporting vaccination strategies in member countries- FAOs role

- Capacity building, disease surveillance and vaccination campaigns
- Collaboration with quadripartite agencies and partners (FAO-WOAH-WHO-UNEP)
- GF-TADs
- Emergency prevention systems

Guidelines for livestock vaccination campaigns

From collection to injection

FAO ANIMAL PRODUCTION AND HEALTH / GUIDELINES 31



Recent FAO-Supported Vaccination Campaigns in Africa: by target

Ghana: PPR, small ruminant diseases. FAO conducted vaccination of **3,500+ sheep and goats** in Upper East Region; trained 24 veterinary officers; introduced **digital vaccination tracking tools**.

Sudan: PPR, SGP, CBPP, AHS, Anthrax. Nationwide vaccination drive (**Oct 2025 – Jan 2026**) targeting **9.4 million livestock**; included **cross-border delivery** to conflict-affected areas; donors included EU, SDC, Sida.

South Sudan: Anthrax, PPR, CBPP. FAO implemented vaccination for **≈ 130,000 livestock** in Western Bahr el Ghazal; trained **community-based animal health workers (CAHWs)**.

Nigeria: Anthrax, PPR. FAO provided **technical and logistical support** for national vaccination campaigns; strengthened **veterinary surveillance** and outbreak coordination in affected states.

Uganda: Anthrax, FMD, PPR, Black quarter. FAO donated **assorted livestock vaccines worth ≈ US\$1 million** to Karamoja & Mt Elgon regions to protect cross-border herds and strengthen surveillance.

Zambia: Anthrax. FAO supported outbreak response with **338,000 vaccine doses**; coordinated with WHO & Ministry of Agriculture to control animal & human cases

Between January to April 2026, FAO targets 1.7 Million, small ruminants against PPR, 200,000 against CBPP, 1,000,000 Against CCPP in Karamoja sub region.

Recent FAO-Supported Vaccination Campaigns in Africa

Country	Year	FAO/Partner Support Highlights
Sudan	2025	National vaccination campaign (TADs) to protect ~9.4 million livestock (Oct 2025–Jan 2026).
South Sudan	2018	FAO's largest livestock vaccination campaign (TADs), targeting over 9 million animals.
Tanzania*	2007–2008	Over 4 million livestock vaccinated during outbreak control campaign (Rift Valley Fever).
Kenya	2006–2007	Emergency vaccination (RVF) launched in January 2007 alongside movement restrictions.
Mauritania	2020	FAO supported risk-based vaccination and surveillance (RVF) across affected regions.

• *The Government of Tanzania in 2025 launched a **five-year national livestock vaccination and identification campaign (2025-2029)**, budgeted at TSh 216 billion (~USD 90+ million) targeting cattle, goats, sheep and indigenous chickens.*

RAF PPR support in Africa:

- Support immunization of sheep and goats in Burundi, Guinea, Liberia and SL to protect small stock, prevent further spread of PPR virus
 - Procurement and delivery of quality vaccines and sero-monitoring test kits
 - Allocation of budget to support vaccination campaigns and monitoring of immunity
- PPR impact studies to generate and use data to support resources mobilization for a Comprehensive PPR Control /Eradication program
 - Through an LoA, the West Africa Network of National Agriculture Research Institutes (CORAF) is conducting studies on the socio-economic impacts of PPR in Ghana, Niger, Congo



Achievements to date

1. Vaccines procured and delivered to all target countries
(Burundi 3,000,000; Guinea 4,000,000, Liberia 500,000, Sierra Leone 800,000), = \$230,000
2. Funding support to DVS channeled through FAO (\$60,000)
3. Vaccination strategy formulated and vaccination campaigns (December 2021) and sero-monitoring (2022)
4. CORAF led Socio-economic study (December 2021)



FAO Support for Anthrax Vaccination Campaigns in Africa (Selected Countries)

Country	Year	FAO/Partner Support Highlights
Zambia	2023	FAO supported national response through provision of 338,000 anthrax vaccine doses during outbreak response; coordinated with WHO and MoA to contain animal and human cases.
South Sudan	2023	FAO supported livestock vaccination in Western Bahr el Ghazal; ~130,000 animals vaccinated against suspected anthrax; capacity building for local veterinarians and CAHWs.
Nigeria	2023	FAO provided technical assistance and logistics for anthrax mass vaccination campaigns; strengthened veterinary surveillance and outbreak coordination in affected states.
Ghana	2023	FAO provided support of 25,000 USD for anthrax outbreak response in the Upper East region. 100,000 doses of Anthrax Spore Vaccine donated to Veterinary Services Directorate (VSD) for mass vaccination.



Progressive Management Pathway for Terrestrial Animal Biosecurity (FAO-PMP-TAB) published in May 2023



<https://www.fao.org/documents/card/en/c/CC5771EN>



Stepwise biosecurity management
in bottom-up approach
+ virtual learning
= contributes to various disease control &
improves livelihood

FAO's work on AMR in agrifood systems through a One Health approach



InFARM System— Supporting evidence-based policies via data generation and sharing on AMR in agrifood systems at national, regional and global levels

RENOFARM initiative— Reducing the need for antimicrobial use at farm level (10-year initiative supporting sustainable agrifood system transformation)

AMR Multi-Stakeholder Partnership Platform — Catalyzing engagement and support from the One Health stakeholders (**more than 200 members, 13 action groups**)

Multi-Partner Trust fund — Supporting National Action Plan implementation at the country level – **AMR MPTF (16 country projects, 4 global projects)**



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SUSTAINABLE
DEVELOPMENT
GOALS

Thank you!