

Regional Training Seminar for WOA National Focal Points on Veterinary Laboratories

Ekta Patel, PhD

International Livestock Research Institute (ILRI), Nairobi, Kenya

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Presentation overview



- ILRI Overview
- Laboratories' role in outbreak investigation, risk analysis, disease surveillance, and international trade
- Innovations in the lab: Emerging Diagnostic Technologies

ILRI today: charting a new strategic direction

- **International Livestock Research Institute is the only CGIAR center dedicated to livestock**, working to advance inclusive, sustainable livestock systems in low- and middle-income countries.
- Our **2024–2030 strategy** focuses on transforming food systems through better livelihoods, nutrition, equity, and sustainability.
- **We work through national partnerships to support women, youth, and smallholders** — not just by delivering solutions, but by building capacity and systems that last.



ILRI One Health strategy

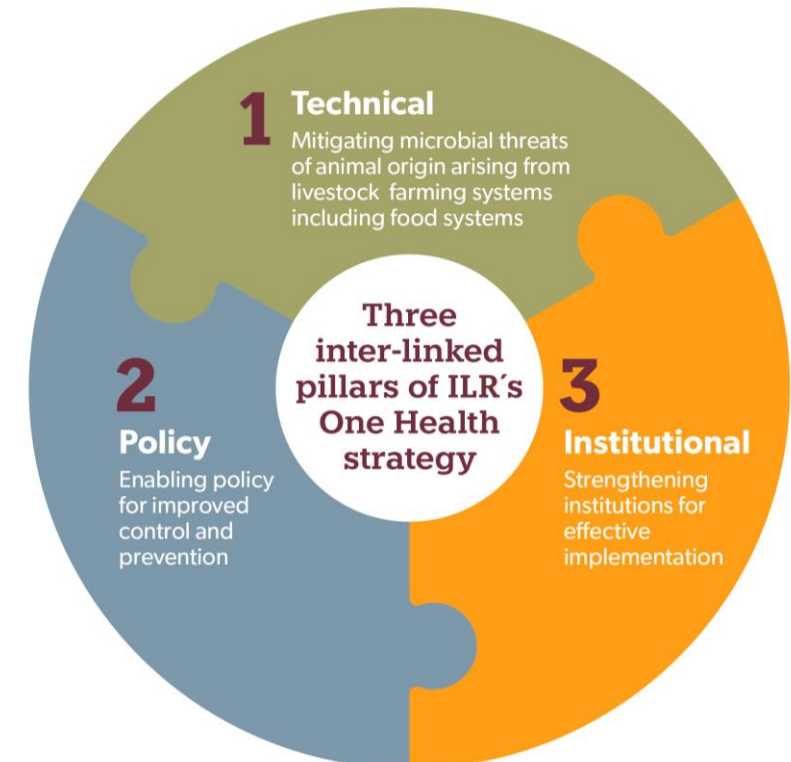
A holistic approach to preventing pandemics - epidemics and other microbial threats from animals - environment

Vision

To improve the lives, livelihoods and well-being of people in the global south by building healthy, sustainable and resilient systems at the intersection of humans, animals, and the environment.

Three thematic areas

- Epidemics and Pandemics & Endemic zoonoses
- Food-borne diseases
- Antimicrobial Resistance



Key Capabilities and Achievements



- **BSL III Facility in Nairobi:** This facility enables high-containment research essential for studying dangerous pathogens and aligns with ILRI's commitment to research excellence.
- **Machakos Research Site:** The 13,000-hectare property supports controlled field trials and epidemiological studies, underpinning ILRI's capacity for realistic outbreak simulations.
- **Advanced Genomics Laboratory:** Equipped with the latest sequencing technologies, this laboratory supports early pathogen detection through wastewater and abattoir surveillance—cornerstones of the One Health approach.
- **COVID-19 Testing Contribution:** ILRI's rapid conversion of livestock facilities into testing centers during the pandemic illustrates its operational agility and commitment to public health.
- **KENSA Certification:** The Attainment of ISO/IEC 17025:2017 certification reinforces ILRI's reputation for high-quality laboratory standards and technical competency, aligning with both its corporate and One Health objectives.
- **Technical Expertise:** Scientists are embedded strategically in working groups and international forums to gather intelligence



Laboratories' role in outbreak investigation, risk analysis, disease surveillance and international trade

Role of Labs in Outbreak Investigations



- Early detection
- Confirming agents
- Supporting outbreak source tracing
- Interfacing with national veterinary services
- ILRI COVID-19

Contributions to Risk analysis and surveillance

- Provides data for risk assessment
- Surveillance backbones – early warning systems, for both passive and active surveillance
- Labs help ensure that surveillance is targeted and cost-effective
- Integration with digital tools – data that feeds into dash boards, risk maps and predictive models
- ILRI Rift Valley Fever

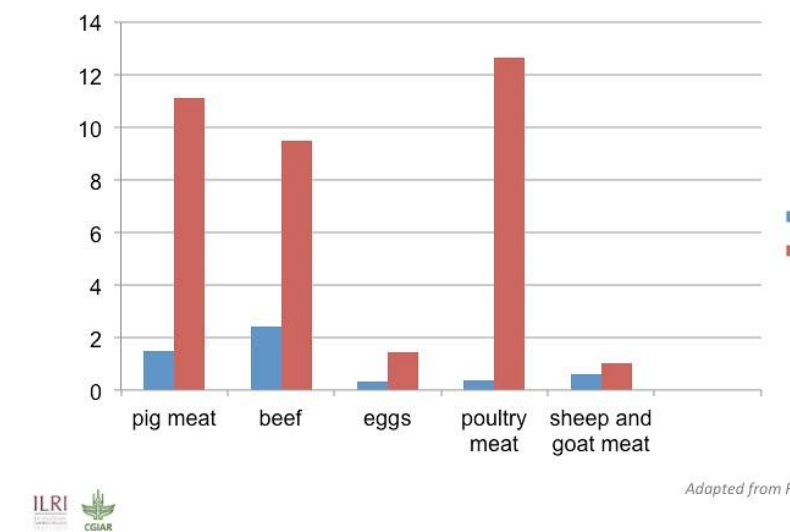


Facilitating safe and international trade

- Certification on animal products and or animals for export/import purposes
- Quality assured lab data supports transparent risk communications
- Establishing trust between partners such as accreditation, proficiency testing and quality systems



Global trade of livestock products
(million tonnes, milk *excluded*)



Key Messages

- Labs are the scientific backbone of outbreak response, surveillance, and trade
- Timely, trusted lab data shapes national and international decisions
- Investments in lab capacity are investments in health security and economic stability
- Strong lab systems = faster control, safer trade, better preparedness





ILRI

The International Livestock Research Institute (ILRI) is a non-profit institution helping people in low- and middle-income countries to improve their lives, livelihoods and lands through the animals that remain the backbone of small-scale agriculture and enterprise across the developing world. ILRI belongs to CGIAR, a global research-for-development partnership working for a food-secure future. ILRI's funders, through the [CGIAR Trust Fund](#), and its many partners make ILRI's work possible and its mission a reality. Australian animal scientist and Nobel Laureate Peter Doherty serves as ILRI's patron. You are free to use and share this material under the Creative Commons Attribution 4.0 International Licence ©i.

*better lives
through
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