

WEBINAR SERIES

Livestock & Livelihoods

TUESDAY, SEPTEMBER 21
9 A.M. EST | 4 P.M. EAT

**The Critical Crossroads of Animal, Human, and
Environment Health: Scaling Up One Health**

Tech Tips

- **Put your full name and organization - Tsehay Gashaw (ILRI)**
- **Closed captioning** has been enabled
- **Microphone off** when not speaking, please.
- **If you can't hear or see:** close and restart zoom, close other programs.
- **Use the chat** to post comments or questions during the presentations. Create a conversation!
- **The session is recorded** - audio, video and chat - and any private chats are also visible to the organizers.

The Critical Crossroads of Animal, Human, and Environment Health: Scaling Up One Health



Mark Mitchell

Director of Livestock & Dairy
Venture37

The Critical Crossroads of Animal, Human, and Environment Health: Scaling Up One Health

Video: One Health: Wildlife, Livestock, and Human Health in the Mara-Serengeti Ecosystem



The Critical Crossroads of Animal, Human, and Environment Health: Scaling Up One Health



Kristina Roesel

Scientist, Animal and Human Health
ILRI

The Critical Crossroads of Animal, Human, and Environment Health: Scaling Up One Health

Presenters:



Bernard Bett

Senior Scientist, Animal and Human Health
ILRI



Lasha Avaliani

Deputy Chief of Party
Venture37



Bedasa Eba

Research Officer, Pastoralism and Rangeland
ILRI

The Critical Crossroads of Animal, Human, and Environment Health: Scaling Up One Health



Bernard Bett
Senior Scientist,
Animal and Human Health,
ILRI

Scaling One Health practices and policies in Africa – opportunities and challenges

Bernard Bett

Co-investigators:
Lian Thomas
Kristina Rosesel
Arshnee Moodley
Delia Randolph
Hung Nguyen



ILRI
INTERNATIONAL
LIVESTOCK RESEARCH
INSTITUTE



**RESEARCH
PROGRAM ON**
Agriculture for
Nutrition
and Health



Background:

- One Health scaling – an ambition or process of expanding the coverage of One Health, either through:
 - Institutionalization (national, sub-national levels), or
 - Horizontal expansion
- Quality refinements or improvements, as opposed to spreading out
- Scalable unit – need to identify microsystems/mesosystems/an organizing system that can be scaled

Vertical scaling

Support initiatives in place through:

- Evaluation of One Health platforms
 - Commenced in 6 countries: Kenya, Uganda, Tanzania, Ethiopia, Malawi, Burkina Faso, Senegal and Mali
 - Network for Evaluation of One Health tool -- competencies on One Health: planning, thinking, working, sharing, learning
 - Interventions based on gaps identified
- Research for development – business case for One Health
- On-line training modules

Horizontal scaling

- One Health graduate fellowship program:
 - PhD and MSc students – leaders of One Health in their countries
 - Technical trainings
 - Research partnerships
- Development of One Health training curricular in local universities
- Research partnerships
- Community outreach (capacity building efforts)

Opportunities and challenges

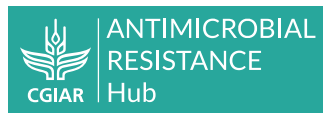
- Opportunities

- Existence of many One Health platforms and networks – with local and international development partners
- Skilled manpower in mainstream government departments and the private sector
- Strong interest to engage on One Health

- Challenges

- Poor financing of health systems
- Difficulties in conceptualizing One Health and its scalable unit
- Lack of reliable tools for assessment
- Low demand for preventative services at the community level

Partners & Prospective



biosciences
eastern and central africa



Mazingira Centre
environmental research and education centre

GBADs
Global Burden of Animal Diseases



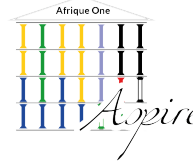
Federal Ministry
for Economic Cooperation
and Development
BMZ

Food safety

Zoonotic diseases

Antimicrobial resistance

Emerging Infectious
Disease



National and regional networks:
The One Health Central and Eastern Africa (AFRIHUN)
Network;
Zoonotic Disease Unit MoH Kenya;
Global One Health initiative ([GOHi](#))



AFRICANA
**INTERAFRICAN BUREAU
FOR ANIMAL RESOURCES**



OIE reference laboratories

(i.e. brucellosis and rabies at FLI; salmonellosis at BfR)

FAO reference centres

(i.e. AMR and VPH at FU Berlin)

WHO Expert Panels

(i.e. Food safety, zoonoses, Drug policies & Management)

Global Early Warning and Response System for Major Animal Diseases (GLEWS), International Food Safety Authorities Network (INFOSAN), Regional Animal Health Centres (RAHCs)



Visit the following sites for more information:

<https://a4nh.cgiar.org/our-research/flagship-5/>

<https://a4nh.cgiar.org/category/flagships/improving-human-health/>

The Critical Crossroads of Animal, Human, and Environment Health: Scaling Up One Health



Lasha Avaliani

Deputy Chief of Party,
USDA Safety and Quality Investment in
Livestock (SQIL) program,
Venture37



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Safety and Quality Investment in Livestock

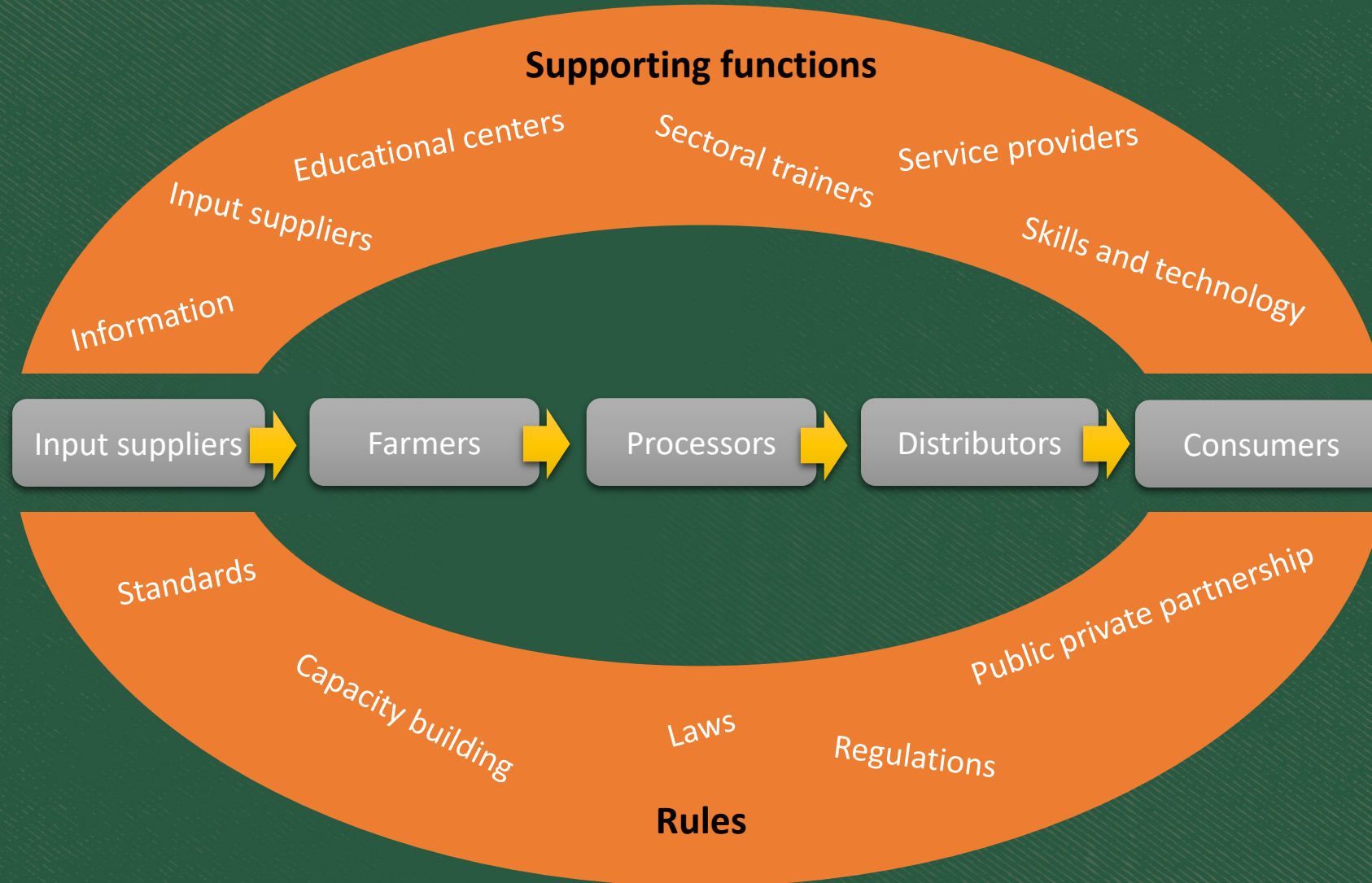
**One Health: Putting Theory into Practice
within the country of Georgia**



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One Health in Market Systems

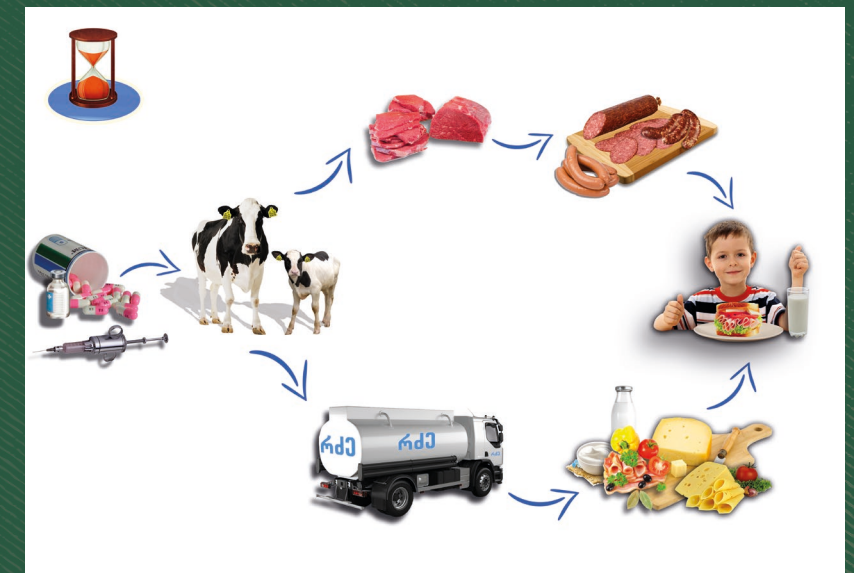
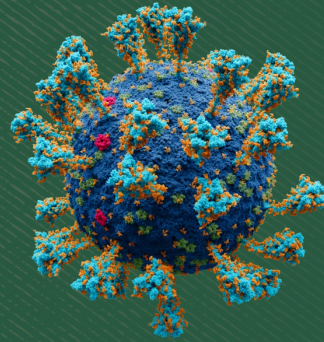


- Training state inspectors in HACCP principles and audit
- Food safety system in dairy processing facilities
- Hygiene principles for animal-based food producers
- COVID-19 and food safety
- Training slaughterhouse veterinarians
- Promoting modern standards in primary production
- How to build and operate cattle farm
- ToT Interactive training delivery



- Small motivator

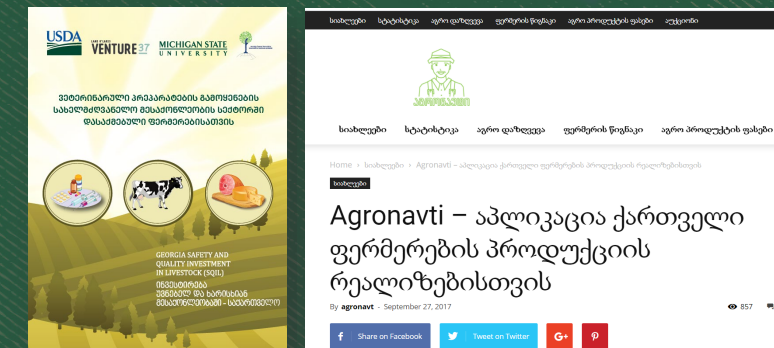
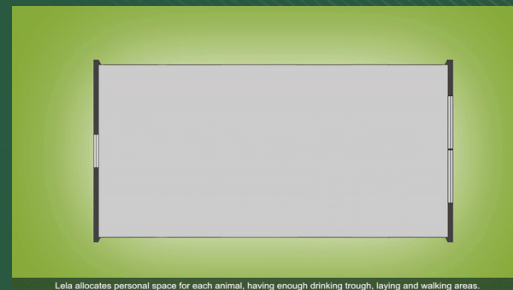
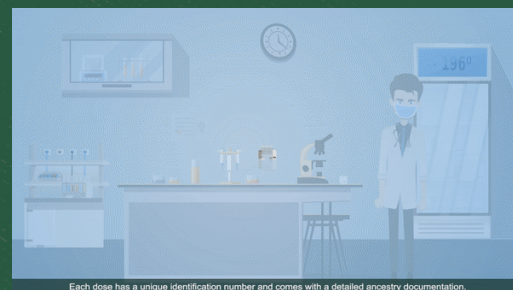
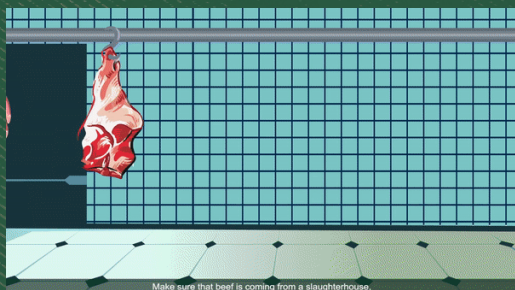
SARS-CoV-2 virus
(80-120 nm)



- Manual for proper use of VMPs in livestock farm
- Guideline on how to purchase safe beef
- Practical manual for slaughterhouse veterinarians
- Manual on How to Protect Farm from Chronic Disease
- Manual on prevention and control cattle mastitis
- Manual on tick born diseases prevention (pending)



- Short animated videos on the selected topics from the developed manuals
- Disseminated via social media and regional televisions





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Thank you for your attention

One Health matters for all



Bakhmaro, SQIL training 2021

The Critical Crossroads of Animal, Human, and Environment Health: Scaling Up One Health



Bedasa Eba

Research Officer,
Pastoralism and Rangeland,
ILRI



OH 4
HEAL

Linking rangeland management to One Health in Ethiopia



OH 4
HEAL

The critical crossroads of Animal, Human, and
Environment Health: Scaling Up One Health webinar

21 September 2021

Bedasa Eba, Rangelands Scientist, International Livestock Research Institute





Why rangeland health is important for One Health?



Photo credit: ILRI

- Rangelands cover more than half the world's surface.
- Livestock production systems cover 84% of rangelands
- Healthy rangelands are important for livelihoods.
- More than 50 million pastoralists rely on rangelands.
- The One Health approach, that brings together
rangeland, human and animal health, provides a good
opportunity for improved rangeland management.





The One Health for Humans, Environment, Animals and Livelihoods (HEAL) Project

Aim: enhancing the well-being and resilience to shocks of vulnerable communities in pastoralist and agro-pastoralist areas of Ethiopia, Kenya and Somalia.

Approach: HEAL project is the first to integrate land health into the health of humans and animals.

Outcomes: Members of pastoral communities are engaged in defining sustainable, demand-driven and need-based One Health Units (OHUs).

- Context-specific cost-effective One Health service delivery models are in operation
- HEAL-OHUs is recognized as a solution for service delivery for pastoralist communities in the Horn of Africa by policymakers and investors



Photo credit: HEAL





Participatory Rangeland Management (PRM) for One Health

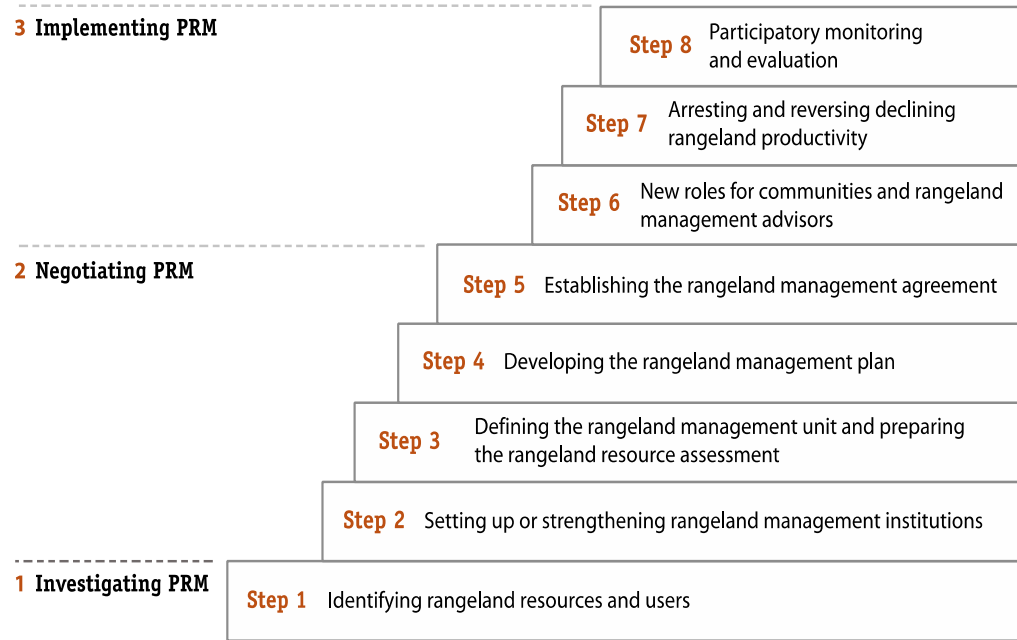


Figure 1: Stages and steps of PRM (Flintan and Cullis 2010)

Mapping and integrated plan management:

- Tick infestations and tsetse (trypanosomiasis)/livestock health issues ↔ rangeland degradation /bush encroachment



Example from Arda Olla rangeland unit of Moyale district of the Somali region

One Health and grazing: Movement, concentration, displaced grazing (farms, exclosures, degradation, toxic plant, diseases/parasites)





Institutional roles, service delivery and the OH service centre

- Institutional roles
 - HEAL, MSIPs, OHUs, local rangeland institutions, local government
- Service delivery
 - PRM for OH
 - Land use planning
 - Grazing management
 - Active restoration
 - Confirmed relevance of three strategies to One Health intervention in Arda Olla



Why?

- Maintain adequate pasture area and reduce concentration of livestock
- Reduce degradation and initiate restoration
- Limit spread of diseases and parasites

How can we further improve rangeland health and livestock health?

- Integrative, 'win-win' actions will be most effective for people's livelihoods
- These actions are developed through interdisciplinary collaboration in HEAL
- They will rely in part on information systems, also in development





Conclusion and key messages

- Rangeland health is key to improving the productivity of the agro-livestock production system.
- The entire value chain benefits from improved rangeland management. Healthy rangelands lead to healthy animals, healthy livestock products and healthy people.



For more information
Visit our website: www.oh4heal.org
Email us: heal@vsf-suisse.org
Follow us on twitter: [@OH4HEAL](https://twitter.com/OH4HEAL)
YouTube channel (past webinars):

https://www.youtube.com/channel/UCUMCG6JPVbudjgaF53jdNKw?view_as=subscriber



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Agency for Development
and Cooperation SDC



RESEARCH
PROGRAM ON
Livestock



AGENZIA ITALIANA
PER LA COOPERAZIONE
ALLO SVILUPPO



USAID
FROM THE AMERICAN PEOPLE



Panel Discussion

The Critical Crossroads of Animal, Human, and Environment Health: Scaling Up One Health



Christine Jost

Global Health Security Initiative 3 Senior Livestock Technical Advisor,
a contractor with the United States Agency for International Development Bureau for Humanitarian Assistance

Thank you!

Follow us on social media
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webinar in our Livestock &
Livelihoods series.

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