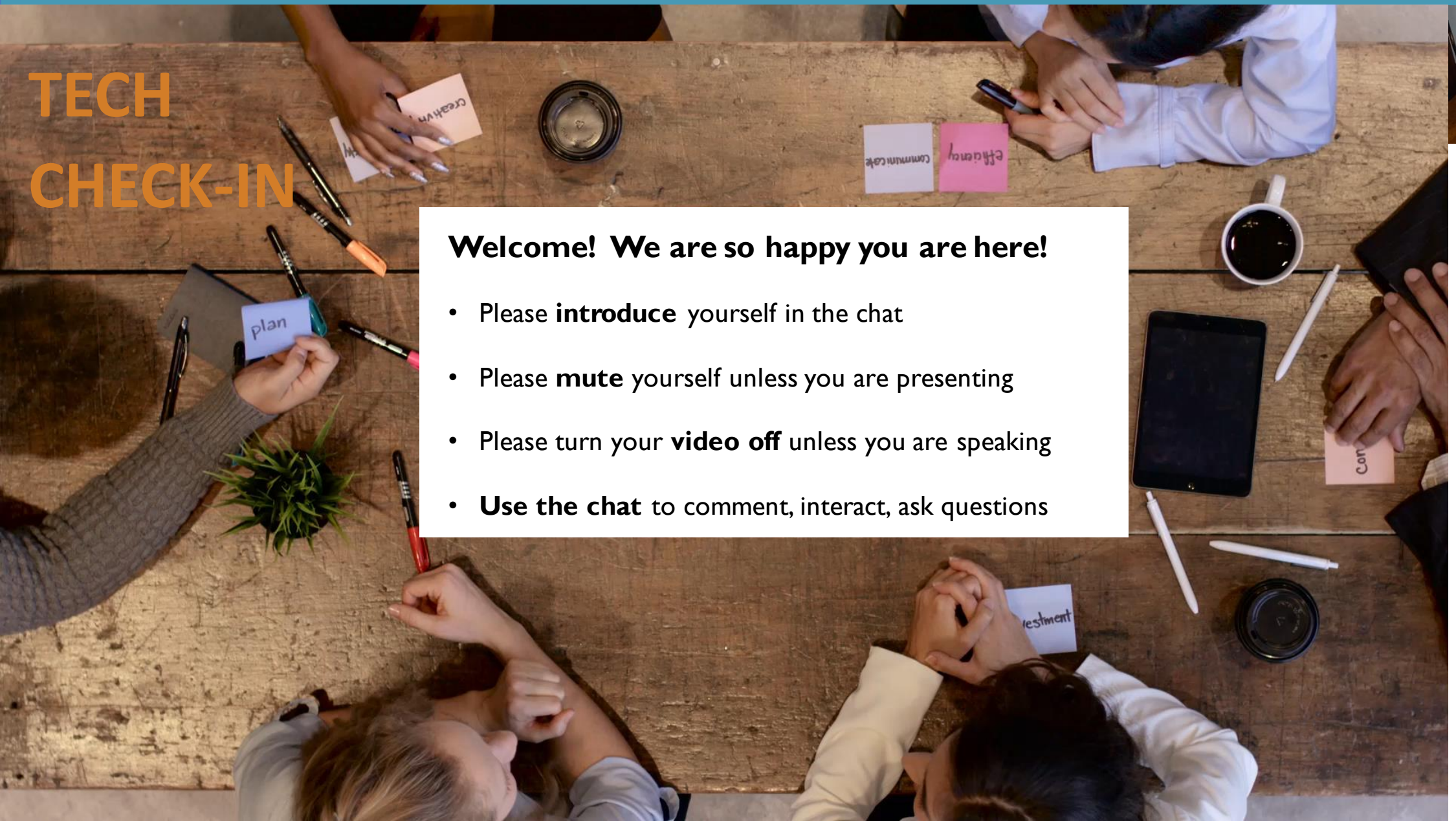
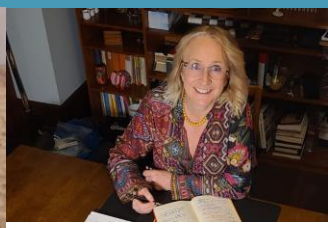
FEED THE FUTURE
The U.S. Government's Global Hunger & Food Security Initiative

TECH CHECK-IN



Welcome! We are so happy you are here!

- Please **introduce** yourself in the chat
- Please **mute** yourself unless you are presenting
- Please turn your **video off** unless you are speaking
- **Use the chat** to comment, interact, ask questions



Andrea Bohn

ZOOM POLL

Have you ever attended a Livestock Systems Innovation Lab event before?

- ❑ Yes, several
- ❑ Yes, once before
- ❑ No, this is my first one

FEED THE FUTURE
The U.S. Government's Global Hunger & Food Security Initiative

Innovation Platform Meeting

– RWANDA –

Held virtually on
March 31, 2021

From 2 to 4 pm CAT

FEED THE FUTURE INNOVATION LAB FOR LIVESTOCK SYSTEMS

Photo credit: LSIL

USAID FROM THE AMERICAN PEOPLE

BILL & MELINDA GATES foundation

ILRI INTERNATIONAL LIVESTOCK RESEARCH INSTITUTE

CGIAR

UF IFAS UNIVERSITY of FLORIDA

WELCOME AND OPENING REMARKS

Dr. Gbola Adesogan
Director of the Feed the Future Innovation Lab for Livestock Systems and the Food Systems Institute, University of Florida

Ms. Amy Beeler
Director, Economic Growth
USAID/Rwanda

MEETING PURPOSE

1. Share key research findings from Phase I
2. Describe research and local capacity development plans for Phase II
3. Prepare prospective applicants for the forthcoming Request for Applications

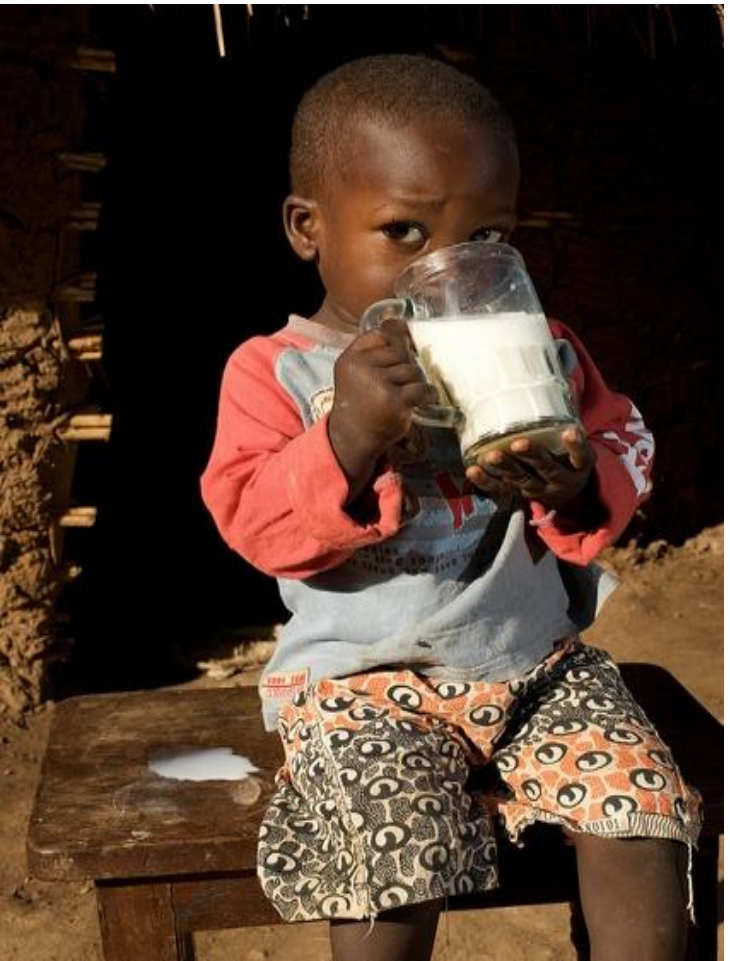
PHASE I

SELECTED RESEARCH FINDINGS

FEED THE FUTURE
The U.S. Government's Global Hunger & Food Security Initiative

Enhancing production, quality and consumption of milk for income and improved nutrition in Rwanda (completed)

International Livestock Research Institute, University of Rwanda, TechnoServe, RTI International, Three Stones International



- Showed that mothers tended to underestimate the number of food groups a child should eat daily. Less than 50% were aware of the importance of feeding ASF to children.
- Showed that the positive impact of Girinka program on child milk consumption and household food security is significant for households with relatively larger livestock herd size (> 1 tropical livestock units) and land size more than 0.1 acres.
- Worked with the Rwanda National Early Childhood Development Program, which allowed to incorporate ASF-related messaging into the national assistance cards and related training.
- Developed the capacity of 20 dairy farmer cooperatives which improved their financial management, governance and operations.

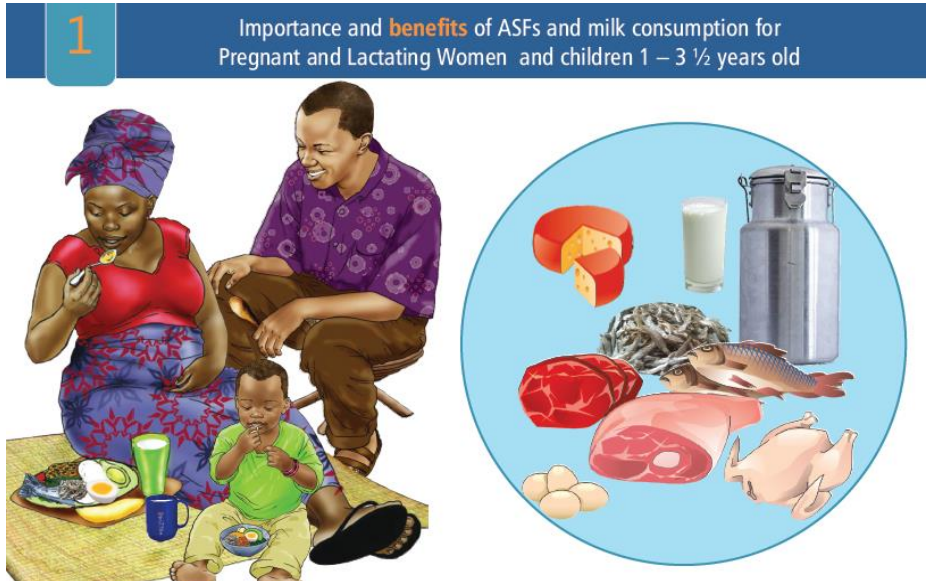
Engaging men in supporting maternal and child consumption of milk and other animal source foods in Rwanda (ongoing)

International Livestock Research Institute, University of Rwanda

- Assessed men's and women's perceptions of their own and each other's roles in nutrition, especially ASF production, consumption and purchase
- Conducted Knowledge, Attitude and Practices (KAP) baseline assessment with men and women to identify how men could be engaged in maternal and child nutrition

Ongoing:

- Implementing a nutrition intervention targeting men to involve them to gain support for nutrition, including consumption of milk produced in the household



FEED THE FUTURE
The U.S. Government's Global Hunger & Food Security Initiative

Assessment and mitigation of aflatoxin and fumonisin contamination in animal feeds in Rwanda (completed)

Iowa State University, University of Rwanda

- Detected high levels of aflatoxin contamination of purchased concentrate feed and by-products.
  Most smallholder dairy farmers rely on locally produced fodder, which was not tested.
- Co-hosted a national workshop on mitigation and prevention of mycotoxin contamination of feeds and food together with MINAGRI and the USAID Hinga Weze activity.
- Established a laboratory at the University of Rwanda that can provide low-cost aflatoxin testing service.
  (Note: service temporarily suspended)

Aflatoxin mitigation through education, intervention, and policy in Rwandan dairy products (ongoing)

Iowa State University, University of Rwanda

- Introduced a video (in Kinyarwanda) that is raising awareness about the dangers of mycotoxins and distributed it to dairy farmers, poultry farmers, feed vendors, and feed processors

Forthcoming:

- Assess seasonal fluctuations of aflatoxin contamination in feeds and milk
- Examine on-farm use of mycotoxin binders/sequesters in dairy feed as a strategy to reduce aflatoxin excretion in milk

Milk production practices, udder health and their impact on milk quality, safety and processability in Rwanda (completed)

University of Rwanda, Swedish University of Agriculture Sciences

- Screened 572 cows for subclinical mastitis from 404 herds linked to eight milk collection centers (MCC) across Rwanda
- Collected 406 bulk milk samples; found bacterial count to increase substantially during transportation
- Detected high prevalence of sub-clinical mastitis mostly due to lack of awareness
- Trained trainers (veterinarians & MCC managers) on milking techniques and postharvest handling of milk

FEED THE FUTURE
The U.S. Government's Global Hunger & Food Security Initiative

Challenges of implementing modern milk quality standards in developing countries: Case of Rwanda (ongoing)

University of Rwanda, Rwanda Agricultural and Livestock Resources Development Board and International Livestock Research Institute

- Collected survey data from 600 households from six sectors (3 in Kigali, 3 in Nyabihu district) on milk consumption, consumption behavior and preferences.

Forthcoming:

- Conduct microbiological and physicochemical analysis of milk samples collected from informal channels.
- Assess performance of main actors of the informal dairy subsector in terms of overall milk production and quality.

Enhancement for enabling policy support to the dairy sector in Rwanda (ongoing)

University of Florida, University of Rwanda

- Conducted structured food safety expert elicitation;
- Completed telephone surveys with 600 milk transporters and 800 farmers;
- Started obtaining survey responses from policy makers and industrial milk processors.

Forthcoming:

- Develop policy options to promote the stimulation of increased production and marketing of processed milk and milk products for both the domestic and export markets.

COMPLEMENTARY ACTIVITIES

- Conducted a **rapid assessment of the gaps in cattle feeding and management**
- Researched the **cost of production and competitiveness for milk production**
- Developed a **dairy farm assessment and advisory tool** in collaboration with the University of Rwanda
- Conducted a **Training of Trainers on the assessment tool** targeting personnel at milk collection centers, public and private veterinarians

Q & A

ABOUT PHASE I

Find more detailed results:

https://livestocklab.ifas.ufl.edu/projects/

&

Attend upcoming thematic webinar series

PHASE II

RESEARCH PRIORITIES

FEED THE FUTURE
The U.S. Government's Global Hunger & Food Security Initiative

OVERARCHING GOAL

Contribute to more balanced diets, which include Animal-Source Foods (ASF), to ensure nutrition and food security for vulnerable populations.

SPECIFIC OBJECTIVES

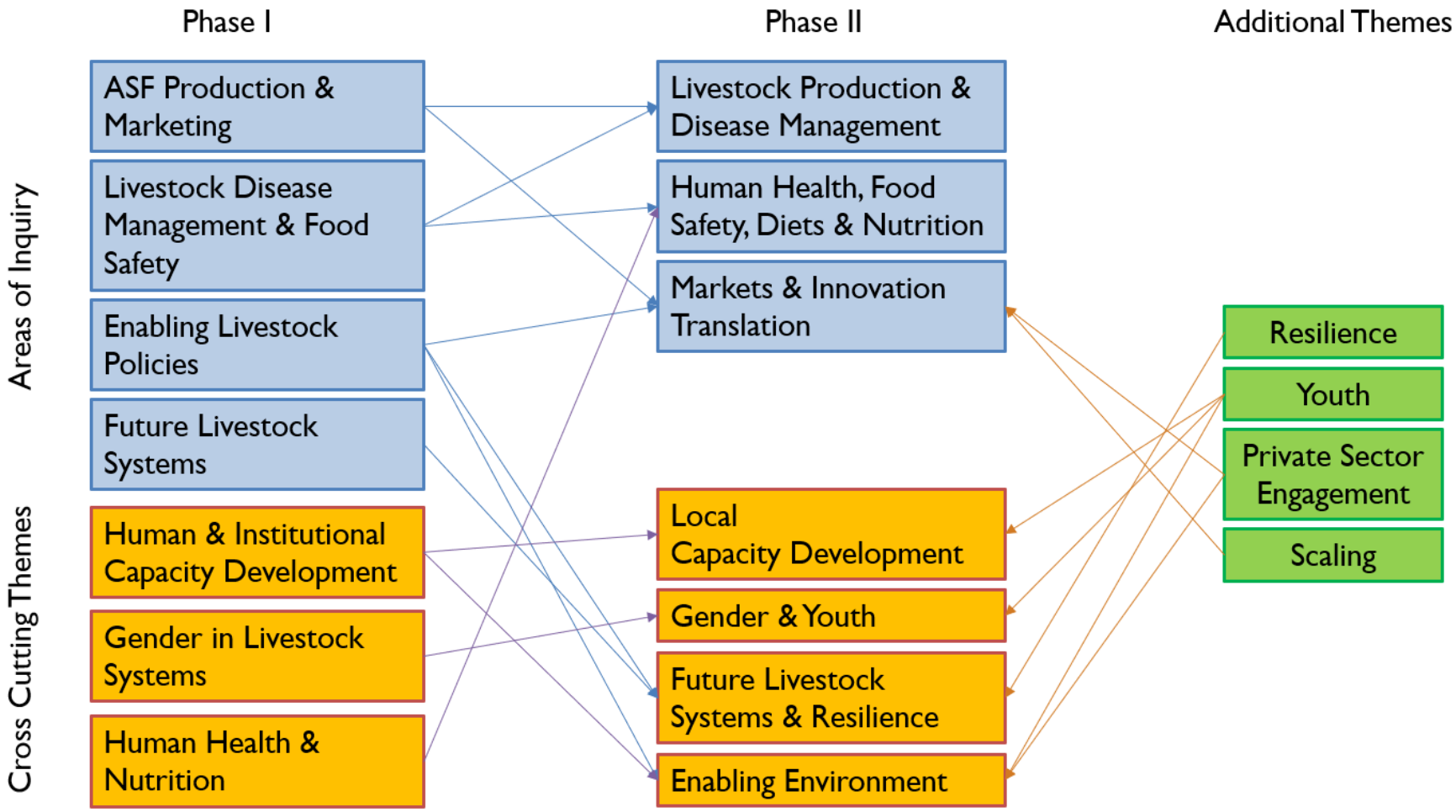
1. Sustainably improve livestock productivity and marketing and ASF consumption using appropriate improved technologies, capacity development, and policy advocacy;

2. Increase the resilience of vulnerable populations;

3. Reduce the environmental impact of livestock systems;

4. Advance the understanding of evolving livestock systems and their roles in food security, nutrition, and health.

TECHNICAL APPROACH



LSIL RESEARCH PORTFOLIO

Phase I Focus

- improve livestock feeds and feeding
- increase ASF consumption
- improve livestock disease surveillance and mitigation
- strengthen markets
- improve food safety
- foster a conducive livestock policy environment

Phase II Focus

Continue working in Phase I areas but stronger emphasis on improving dietary diversity and adequacy with ASF by:

- reducing ASF production costs,
- increasing ASF safety and markets,
- reducing ASF consumption barriers.

More research on environmental enteric dysfunction (EED) to improve nutritional outcomes.

PRIORITIES IN RWANDA

- strengthen the dairy and small stock (goats, poultry) value chains through better animal health service delivery, and improved feeding, breeding and marketing;
- continue the work in the dairy sector, including improved preservation during transport, and processing;
- develop interventions that overcome barriers to consumption of animal-source foods.

Q & A

ABOUT PHASE II

RESEARCH PRIORITIES

FEED THE FUTURE
The U.S. Government's Global Hunger & Food Security Initiative

ADOPTION PATHWAYS AND SCALABILITY

SCALING EXAMPLE: RWANDA

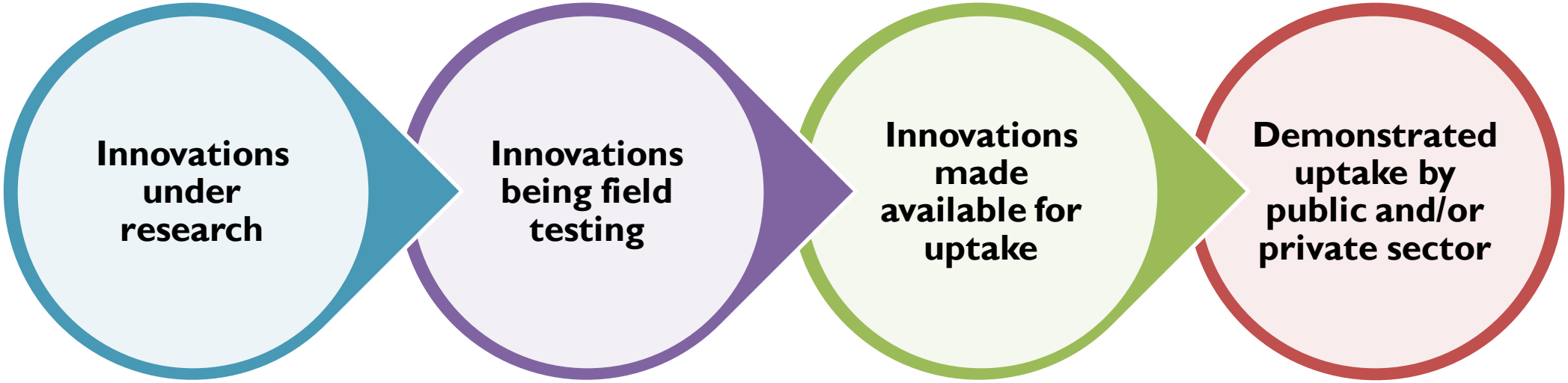
Aflatoxin related work sparked interest in holding an **Aflatoxin workshop** in April 2019, which was organized collaboratively with USAID funded Hinga Weze activity and the Ministry of Agriculture and Animal Resources (MINAGRI)

→ Various organizations shared expertise and compiled recommendations

→ Aflatoxin Task Force reenergized

→ Now MINAGRI, in partnership with Alliance for Green Revolution in Africa (AGRA) is developing the **Aflatoxin National Strategic Plan**

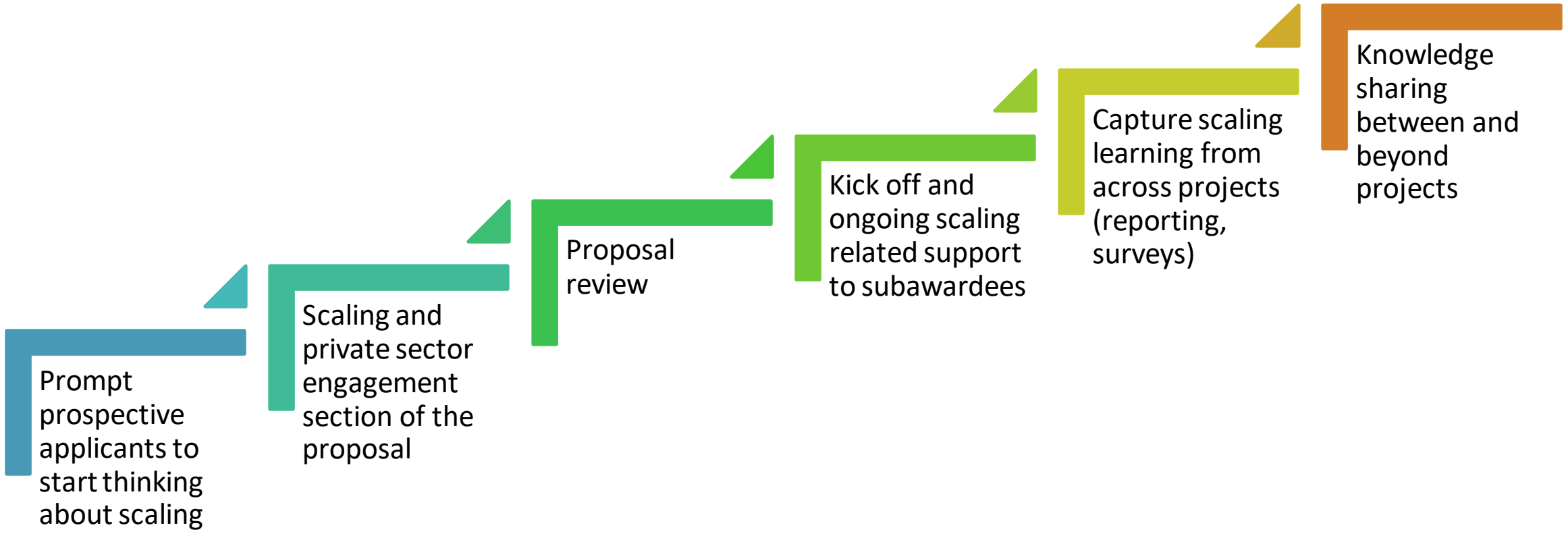
LINEAR APPROACH



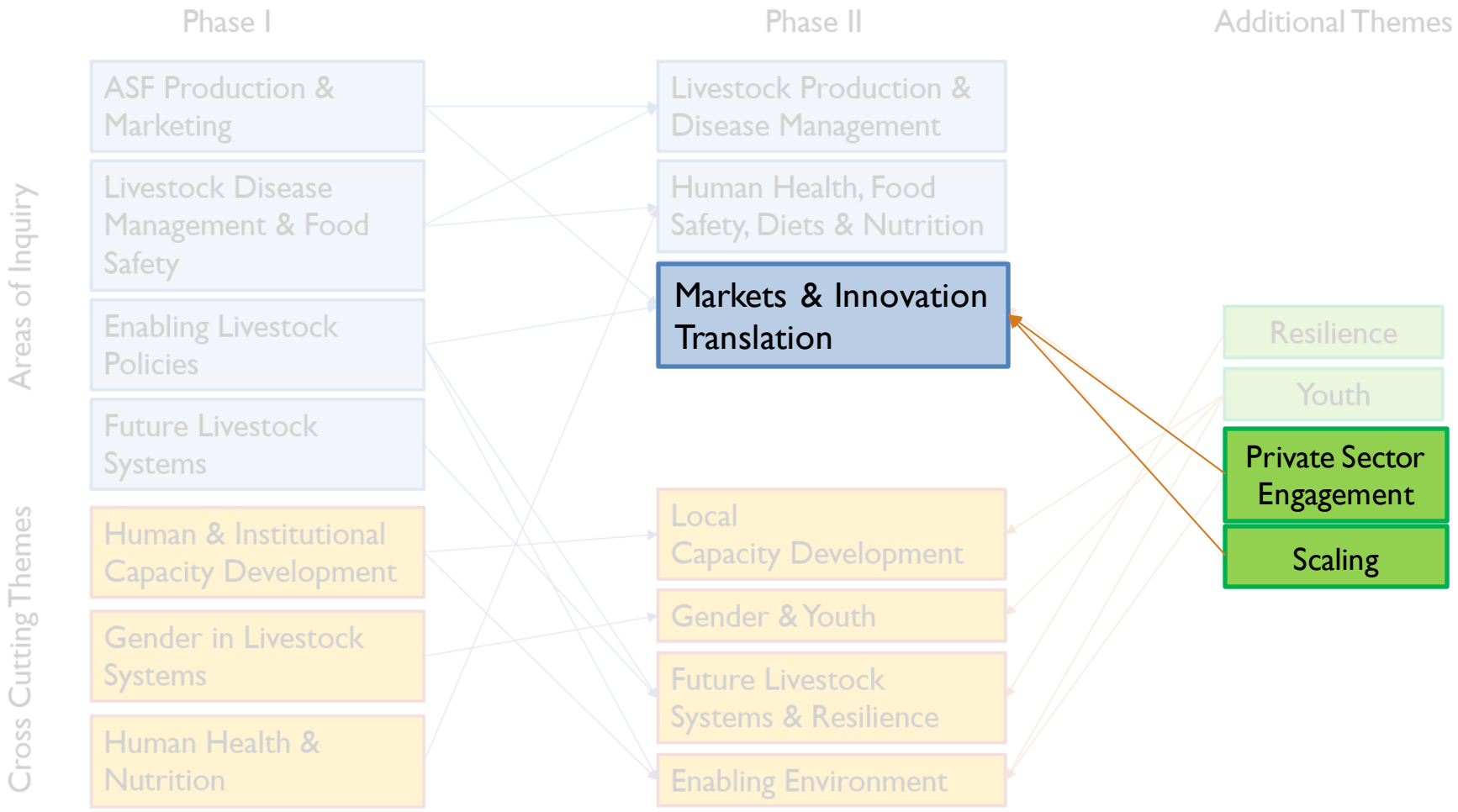
At each stage it matters

- **WHO is involved in WHAT role**
- **WHAT questions are being asked, what information is collected by WHOM**
- **HOW findings are shared**
- **WHETHER adjustments can be made**

PURSUING THE SCALING AMBITION THROUGHOUT THE PROJECT CYCLE



AOI MIT – LED BY DR. MULLALLY



PROPOSALS MAY NEED TO

- **Demonstrate that there is demand** for the prospective findings and innovation(s) arising from your work
- Describe the **potential applicability, relevance, feasibility, and scalability** of the work you propose to undertake.
- Identify the likely **adoption pathway**: Public, PPP, or Private?
- Include a plan for **determining the farm or business level costs and benefits** of adopting the innovation(s)
- Include a plan for **assessing the country/economy wide benefits**

PARTNERSHIPS ARE KEY

Find partners and key stakeholders that will facilitate adaptation and scale out of the innovation(s) arising from your work.

- Who could assist with the "business case' and economic assessments?

- Who can provide complementary products and services to form an attractive innovation package?

How do you plan to engage with them throughout the research phase?

SOME OF OUR PHASE I PARTNERS IN RWANDA:

- Ministry of Agriculture (MINAGRI)
- Rwanda Agriculture and Animal Resources Development Board
- Rwanda National Early Childhood Development Program
- University of Rwanda
- RTI International
- TechnoServe
- Three Stones International
- Zamura Feeds

Q & A

ABOUT PHASE II

ADOPTION PATHWAYS AND SCALABILITY

LOCAL CAPACITY DEVELOPMENT PHASE II

LOCAL CAPACITY DEVELOPMENT

- Informed by forthcoming USAID policy
- Local capacity development (LCD) will measure success by the strengthened performance of local actors and local systems in achieving and sustaining demonstrable results
- The indicator – CBLD9 – measures the percentage of improved performance of a system or organization

LIVESTOCK SYSTEMS RESEARCH

- Research is embedded in existing systems
  - Research organizations including universities
  - Situated in and funded by different ministries and donors
  - Organizational culture
  - Institutional structures

- Livestock research is one piece of the entire livestock system

- Priorities are determined by and shift according to who is engaged

LIVESTOCK SYSTEMS INNOVATION LAB
PHASE I & PHASE II

Capacity Development Activities

Phase I – Emphasis on technical and soft skills training

Phase II – Emphasis on strengthening organizations and enabling environment

THE GROUNDWATER APPROACH

PRIMARY ACTIVITIES IN PHASE II

- **Host LCD collaboration processes in each country**
  - Co-designing pilot projects to address systemic issues in livestock systems research
  - Updating on current situation and trends
- **Provide technical support** to and collaborate with subawardees, AOIs and CCTs

THE LCD PROCESS

ENGAGEMENT & COLLABORATION

- Engage old and new partners and stakeholders
- Engage policy and decision-makers
- Collaborate with subawardees on LCD activities
- Collaborate with Enabling Environment CCT

ANALYSIS & ROADMAP

Developing and refining LCD roadmaps to strengthen local livestock research systems

- ✓ Reality check 1: Where could capacity development solve one of the identified systemic problems?
- ✓ Reality check 2: How to have an impact with a pilot project?
- ✓ Reality check 3: What institutional commitments and networks are needed to initiate and sustain local systems changes?
- ✓ Reality check 4: Requires higher level administration to participate. Is this realistic?

DESIGN & MONITORING

Design:

Through an RFA and competitive award process

Specifics will depend in part on the road map consultations

Monitoring:

By country coordinators and LCD team

ZOOM POLL

Would you like to join the launch meeting for the consultative LCD roadmap development?

- ❑ Yes
- ❑ Maybe
- ❑ Probably not

THOSE WHO SAID YES / MAYBE:

Follow link to the Google spreadsheet

https://docs.google.com/spreadsheets/d/1WaSZgqC4FVigJgsf4QCrOMkPeh9qZKE9e08xj2I0_24/edit?usp=sharing *(see chat, await follow up email)*

1. **Enter <u>your</u> full name, title, institution and contact information.**
2. **Add contact details for <u>others</u> who you think should be invited.**

Q & A

ABOUT PHASE II

LOCAL CAPACITY DEVELOPMENT

TYPES OF RESEARCH PROJECTS IN PHASE II

This year we aim to award (in each country)

- **1 longer term REACH project**
- **2-3 short-term FOCUS projects**
- **Funding for Local Capacity Development**

Future

- **Add-on projects**
- **Private Sector scaling projects**
- **Challenge project**

TEAM COMPOSITION AND ELIGIBILITY

- Target country & US/Western institutions
- Inclusion of Minority Serving Institutions (MSI) is highly encouraged
- Private sector, civil society, non-governmental organizations (NGO)

STRONG PARTNERSHIPS ARE KEY TO SUCCESS

- Possess complementary technical skills
- Have longstanding experience and network of contacts in target country
- Can navigate ethical clearance and fulfill compliance needs
- Are suitable bridging or scaling partner

NEXT STEPS

Complete **Event evaluation survey** *(see link in chat & email)*

Stay tuned **Join the mailing list (newslettter)**
https://livestocklab.ifas.ufl.edu/contact/

April 2021 **Global, pre-RFA informational webinars:**

- **AOI Human Health, Food Safety, Diets & Nutrition** (April 9)
- **Application requirements and processes** (April 14)

May 2021 **Anticipate release of the RFA**

FEED THE FUTURE
The U.S. Government's Global Hunger & Food Security Initiative

CLOSING REMARKS

Dr. Gbola Adesogan

Disclaimer

This work was funded in whole or part by the United States Agency for International Development (USAID) Bureau for Food Security under Agreement # AID-OAA-L-15-00003 as part of Feed the Future Innovation Lab for Livestock Systems. Any opinions, findings, conclusions, or recommendations expressed here are those of the presenters alone.

Feed the Future Innovation Lab for Livestock Systems
Department of Animal Sciences | University of Florida | P.O. Box 110910 | Gainesville, FL 32611
livestock-lab@ufl.edu | http://livestocklab.ifas.ufl.edu

FEED THE FUTURE

The U.S. Government's Global Hunger & Food Security Initiative

www.feedthefuture.gov