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

Feed the Future Innovation Lab For Livestock Systems: Phase I accomplishments

Saskia Hendrickx and Gbola Adesogan

Virtual General Meeting, September 28, 2020

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BILL & MELINDA GATES foundation
ILRI INTERNATIONAL LIVESTOCK RESEARCH INSTITUTE
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VISION

To sustainably intensify livestock production to improve the nutrition, health, incomes and livelihoods of the poor

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CATALYZING COLLABORATION

- **45 subaward projects**
- **20 US universities and organizations**
- **43 foreign universities, government agencies and NGOs**

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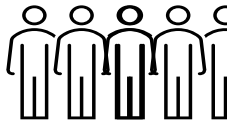
BUILDING LOCAL CAPACITY

12,924 participated in our programs



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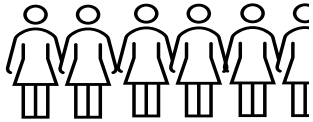

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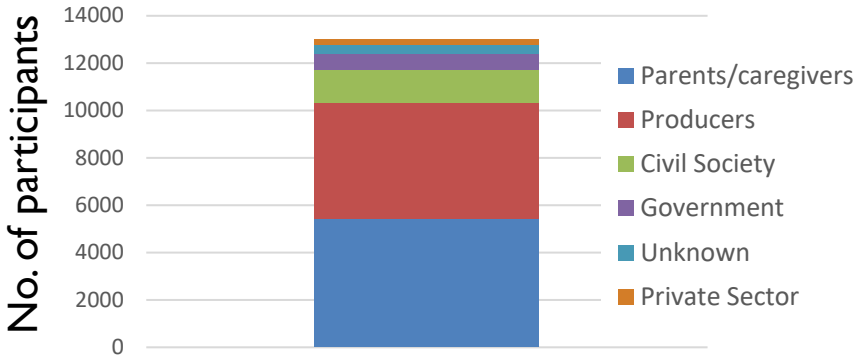
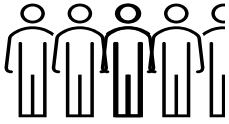


3,969 trained



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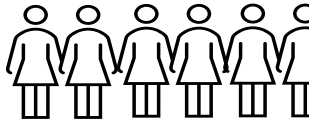

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Photo credit: B. Shrestha

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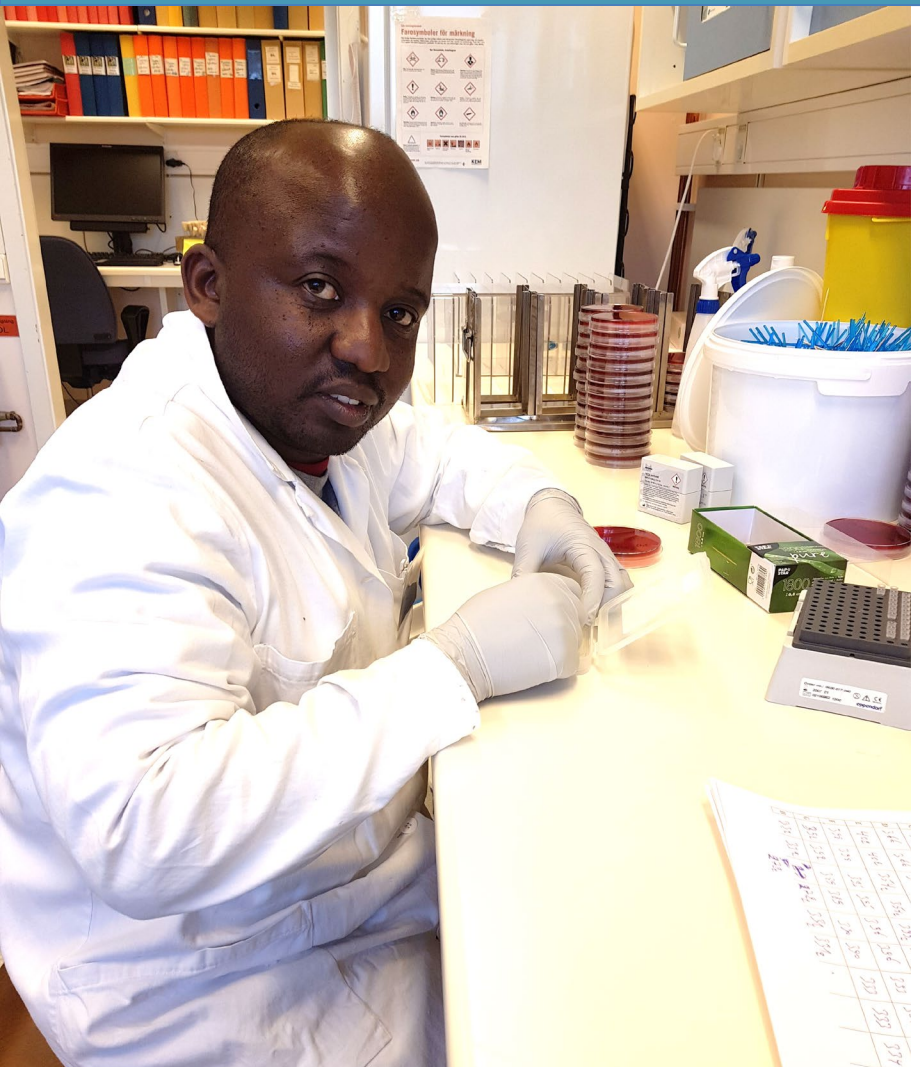
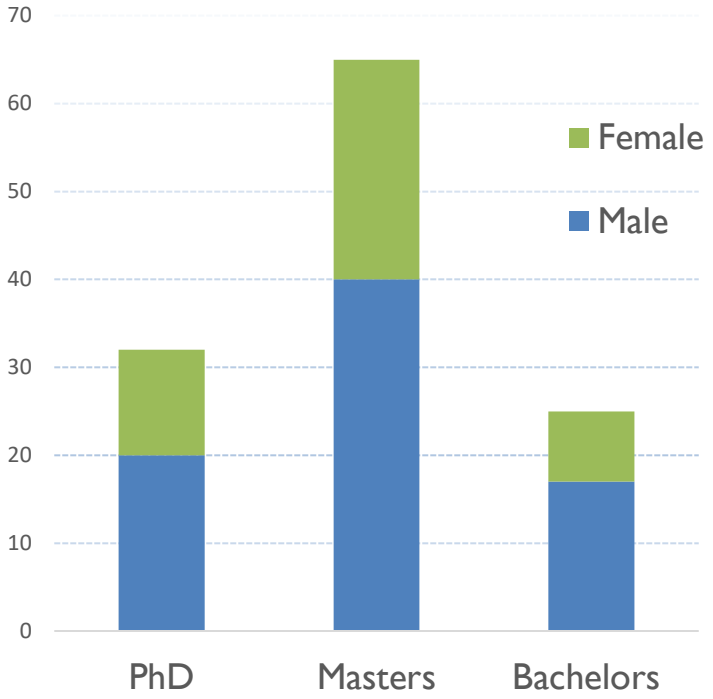


Dr. Jean Baptiste Ndahetuye, University of Rwanda, received the 2019 Student Researcher Award for Scientific Excellence from BIFAD.

INVESTING IN THE FUTURE

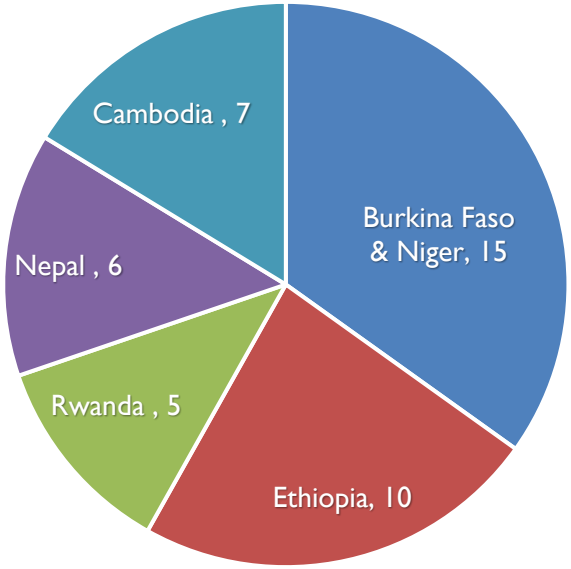
Supported **117** degree-seeking students
(63% Male; 37% Female)

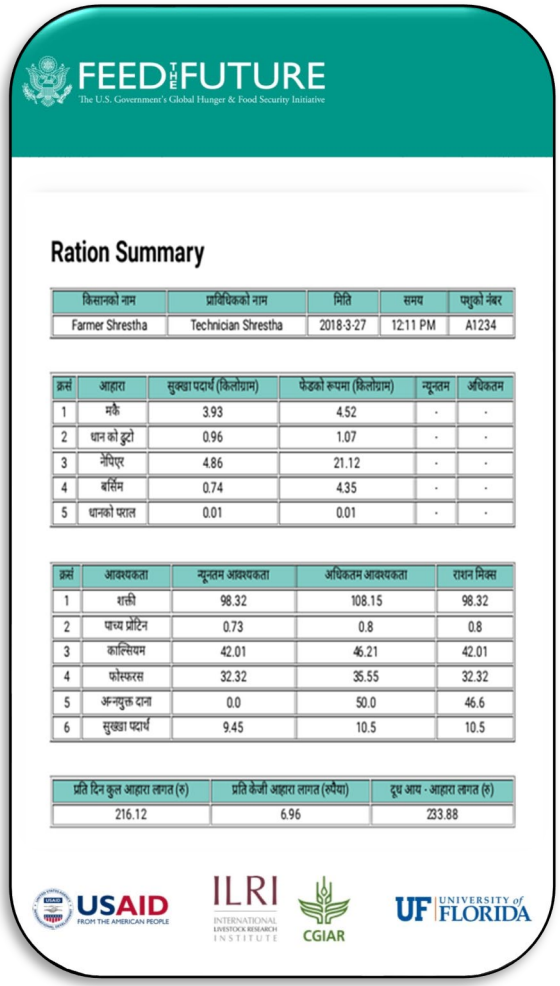


INNOVATIONS DEVELOPED

43 novel practices, approaches and technologies developed

2,935 people are using our innovations





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Ration Summary

किसानको नाम	प्राविधिकको नाम	मिति	समय	पशुको नंबर
Farmer Shrestha	Technician Shrestha	2018-3-27	12:11 PM	A1234

क्रमं	आहारा	सुख्खा पदार्थ (किलोग्राम)	फेडको रूपमा (किलोग्राम)	न्यूनतम	अधिकतम
1	मकै	3.93	4.52	-	-
2	धान को ढुटो	0.96	1.07	-	-
3	नेपियर	4.86	21.12	-	-
4	बर्सिम	0.74	4.35	-	-
5	धानको पराल	0.01	0.01	-	-

क्रमं	आवश्यकता	न्यूनतम आवश्यकता	अधिकतम आवश्यकता	राशन मिक्स
1	शक्ती	98.32	108.15	98.32
2	पाच्य प्रोटिन	0.73	0.8	0.8
3	कालसियम	42.01	46.21	42.01
4	फोस्फरस	32.32	35.55	32.32
5	अन्नयुक्त दाना	0.0	50.0	46.6
6	सुख्खा पदार्थ	9.45	10.5	10.5

प्रति दिन कुल आहारा लागत (रु)	प्रति केजी आहारा लागत (रुपैया)	दूध आय - आहारा लागत (रु)
216.12	6.96	233.88

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SOME OF OUR INNOVATIVE TECHNOLOGIES

- Diarrhea pathogen detection kit
- Aflatoxin detection kits
- Mastitis reduction package
- Improved forage hybrids
- Ration formulation app
- Disease reporting app
- NIRS feed analysis technique
- Methane emissions analysis equipment
- Market empowerment app
- Distance learning app
- Disease surveillance package
- Behavior messaging package

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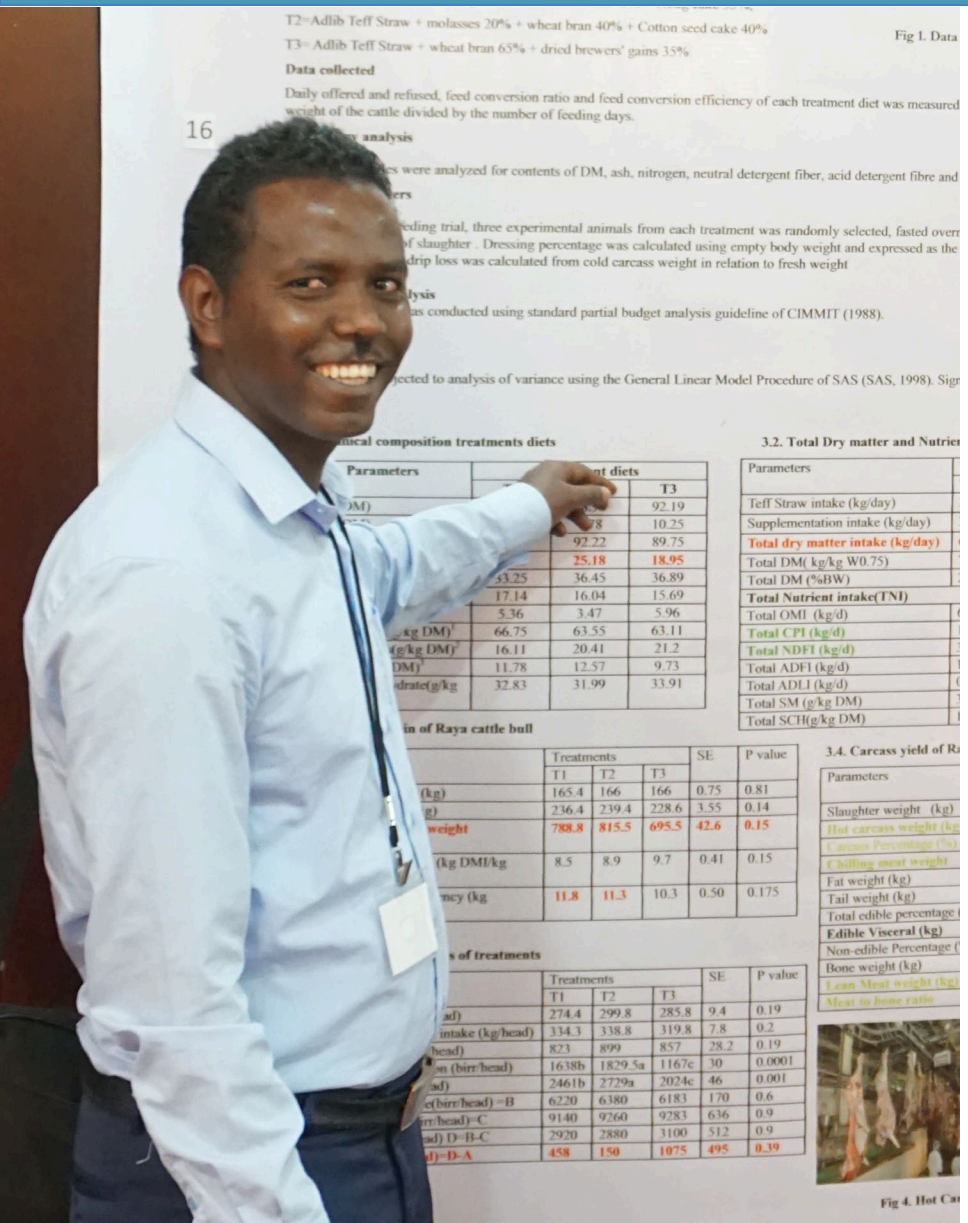
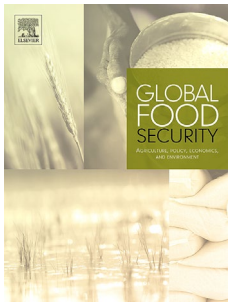


THOUGHT LEADERSHIP

> **250** publications/communication products

- **3** journal "special issues" on our work
- **30** journal papers published in 2020
- **40+** keynote presentations at professional meetings
- **66** subawardee presentations

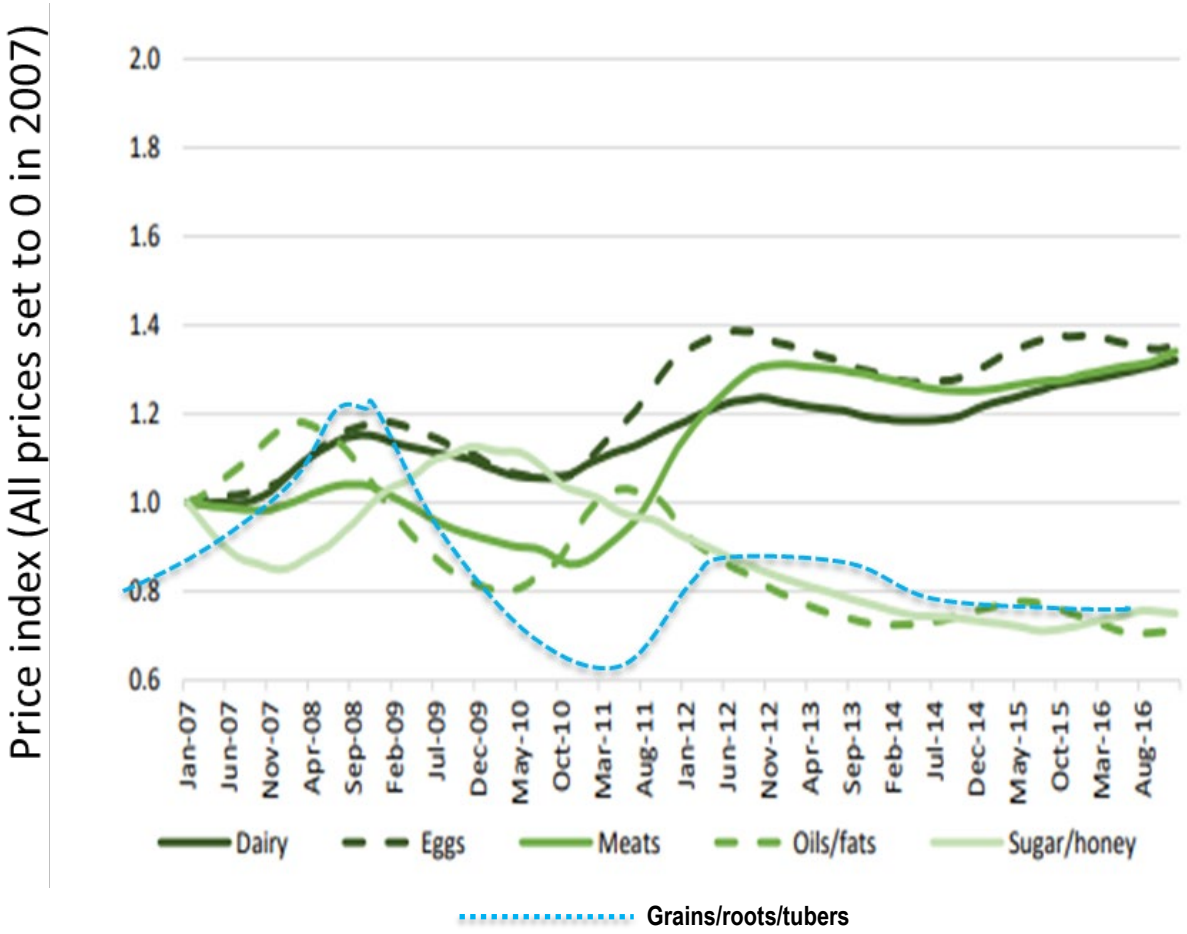
> **120** knowledge sharing events



GENERATING POLICY EVIDENCE

Ethiopia

Demonstrated dramatic increases in ASF prices (real expenditures increased by 50%)



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IMPACTING POLICY

Rwanda

- Detected high aflatoxin levels in purchased feeds
- Conducted national workshop to prevent /mitigate aflatoxin in food and feed
- Partners:
  - Ministry of Agriculture and Animal Resources
  - USAID/Rwanda Hinga Weze Activity
- Govt. **aflatoxin task force** now implementing recommendations.

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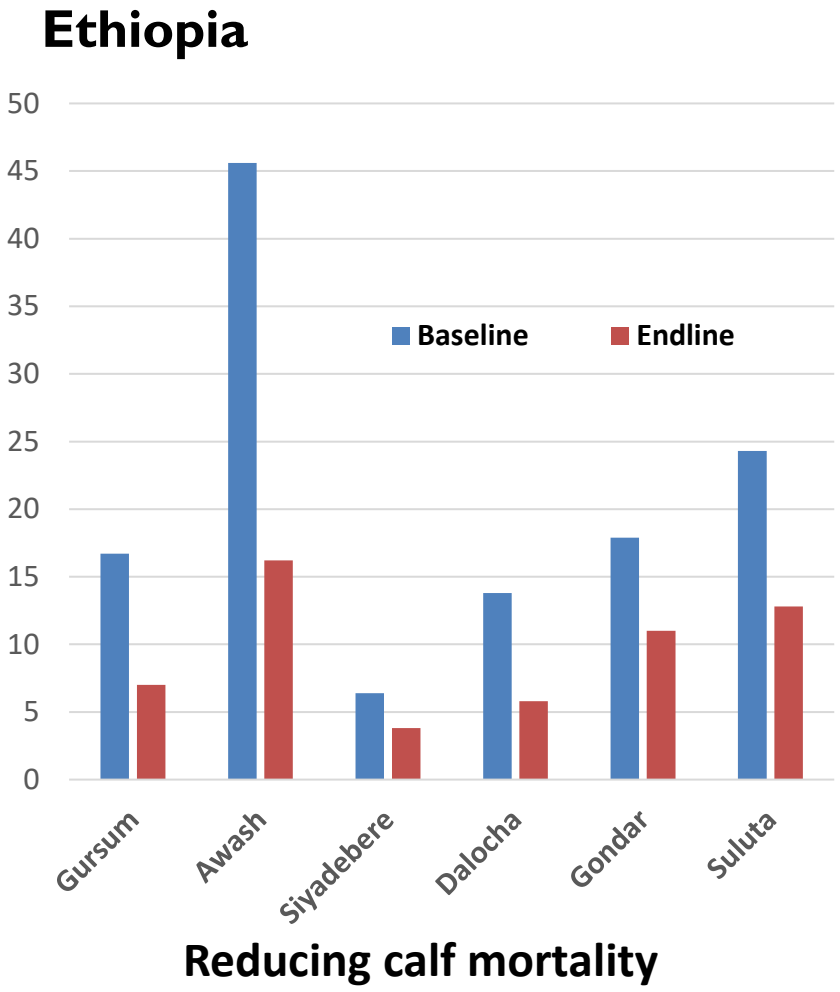
INCREASING RESILIENCE



New drought-resistant sorghum genotypes for year-round feeding

IMPROVING HEALTH


Photo credit: H. Nguyen

Cambodia

Determined that each case of foodborne disease costs $62.

Main diagnoses:

- Acute diarrhea (74.4%),
- Food poisoning (24.4%),
- Typhoid (0.8%)
- Chronic diarrhea (0.4%)

Now piloting food safety interventions.

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IMPROVING HEALTH AND NUTRITION

Burkina Faso

We increased infant egg consumption from 0 to 6 eggs weekly.

- This significantly reduced wasting.
- Results made the national news
- Discussed how to scale the approach with policy makers

Photo credit: S. McKune

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WOMEN'S EMPOWERMENT


Photo credit: B. Shrestha

Nepal

Compared to classroom training, our distance learning course helped **24%** more women become community animal health workers

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INCREASING INCOMES


Photo credit: V. Bado

Niger

We expanded market access for feed traders by linking them with livestock keepers 800 km away.

Feed costs were reduced by **30%**

12.6 tons of feed sold in 4 months **($3,600)**

Ramana Doni earned **33%** more money from sales of her (well-fed) sheep.

SUMMARY

- We are making a difference:

  We have improved livestock productivity, reduced disease prevalence, empowered women, improved food safety, increased incomes, and improved nutrition.

- Special thanks to each of you for your many contributions.

- COVID-19 has made the need for our work much greater.

- We look forward to building on and expanding our work with you in Phase II.

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www.feedthefuture.gov

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