



Transformational Strategies for Farm Output Risk Mitigation

TRANSFORM

2021-2025
Program Report

Working at the intersection of animal agriculture and human health



TRANSFORM Chief of Party Annie Kneedler (center) attends a training with dairy farmers and implementing partners in Nairobi, Kenya.

MESSAGE FROM ANNIE KNEEDLER

Let me begin by thanking our partners – farmers, companies, associations, universities and governments – for the collective effort in embracing new practices in an effort to safeguard global health security. As African Swine Fever, Highly Pathogenic Avian Influenza and other diseases make headlines around the world for their devastating effects, we see now more than ever the critical role we all play in feeding our growing population while also protecting each other from some of the world's most pressing disease threats.

Through TRANSFORM, we saw firsthand the impact we can have when we work together. By collaborating across the public and private sector, we implemented improved biosecurity and animal nutrition practices, mobilized financing to support investments on-farm, and catalyzed industry support for antimicrobial use stewardship practices. These efforts will continue to improve animal health, decrease risk of zoonotic disease and reduce the need to use antimicrobials all while improving farmer productivity and profitability.

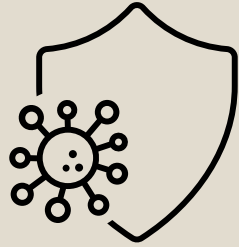
Together, we hope these systems become the foundation for farmers to grow and expand their businesses. Their livelihoods – and our global health security – depend on it.

With gratitude,

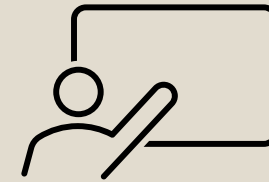
Annie Kneedler

TRANSFORM Chief of Party

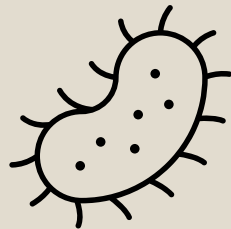
TRANSFORM Supported Global Health Security



Antimicrobial Resistance



Risk Communication



Zoonotic Diseases



Human Resources

TRANSFORM Goals



IMPROVE
animal
health



DECREASE
risk of zoonotic
disease



REDUCE
the need to use
antimicrobials



Project Impact

Improving Farmer Livelihoods

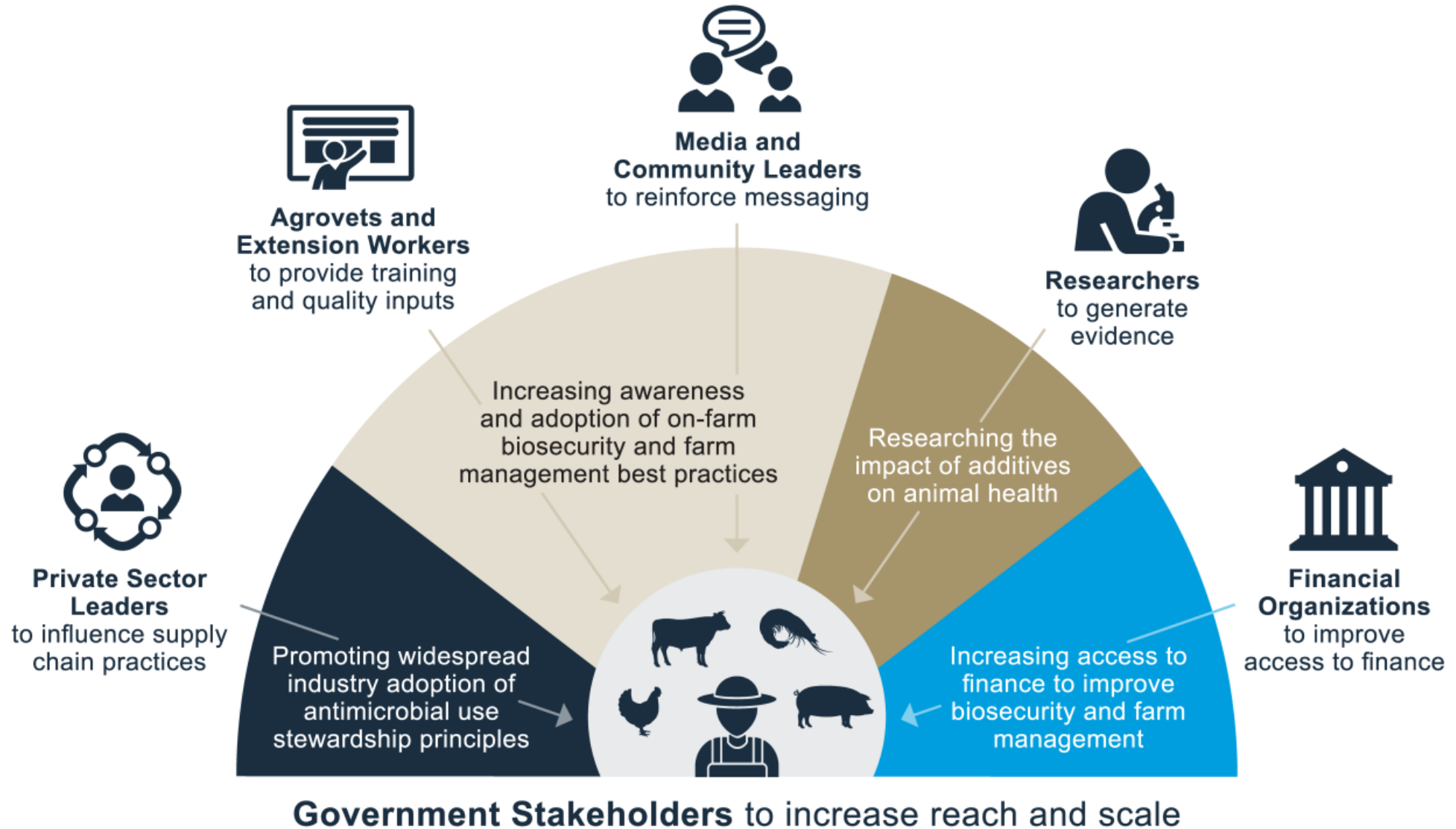
A sustainable system where farmers adopt farm management, animal nutrition and biosecurity best practices that **reduce animal disease and mortality and improve farmer livelihoods**

Strengthening Global Health Security

Farmers increase animal health at scale, reducing the emergence and spread of zoonotic and transboundary diseases while **combatting antimicrobial resistance and reducing threats to human health around the world**



Working with the Public and Private Sector



TRANSFORM BY THE NUMBERS

222,989

farmers
trained

\$1.7M+

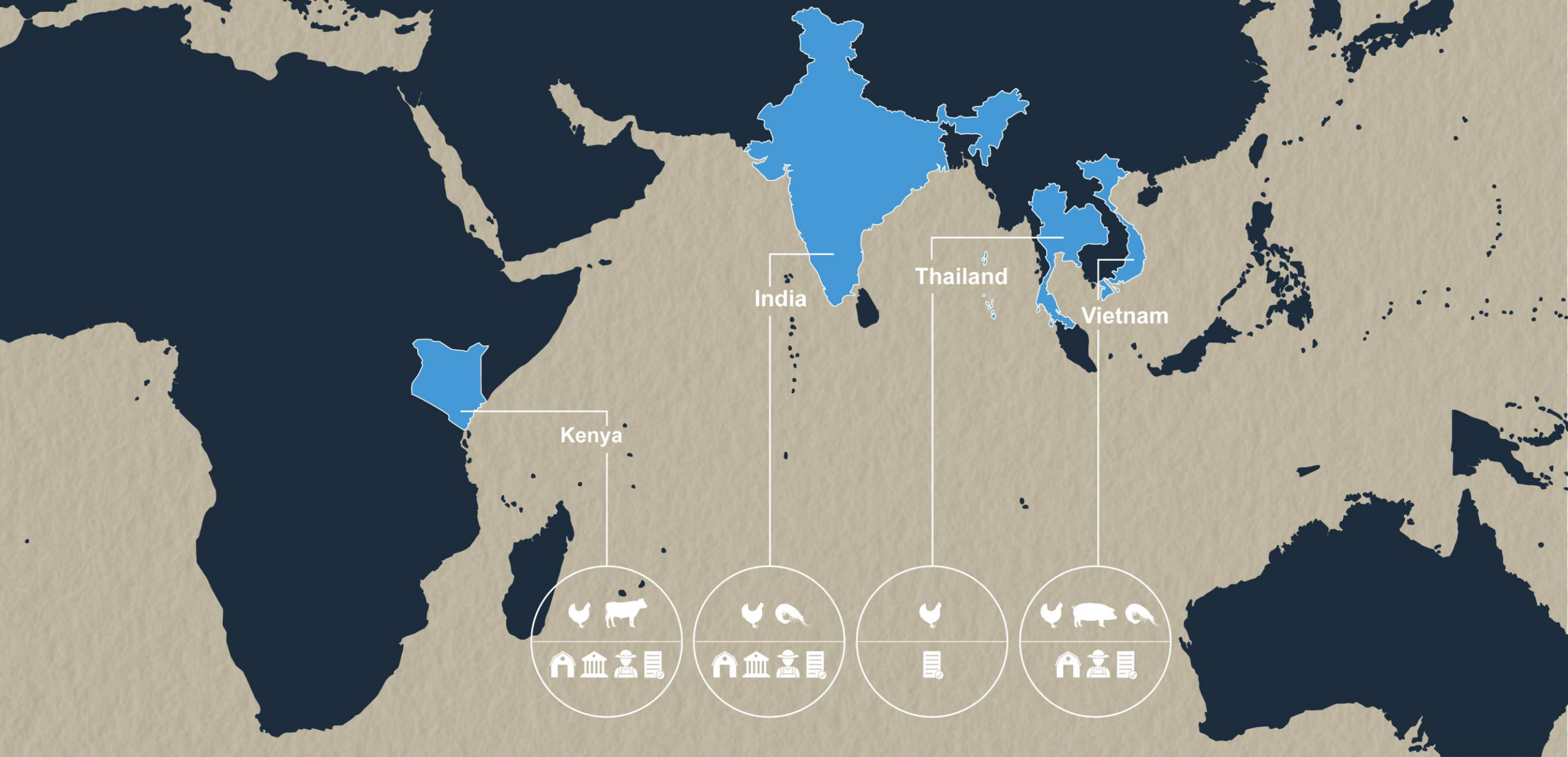
in financing
deployed

42

organizations
supporting
antimicrobial use
stewardship
principles

13

animal nutrition
research trials
completed



Components

-  On Farm Practices
-  Access to Finance
-  Holistic Animal Nutrition Research
-  Antimicrobial Use Stewardship

Value chains

-  Poultry
-  Dairy
-  Swine
-  Shrimp

**Work in Vietnam concluded in December 2024*

TRANSFORM PARTNERS WITH FARMERS

Farmers are on the frontlines of global health security, working closest with animals that could contract and spread disease across flocks, herds, borders, and species.

TRANSFORM partnered with both private sector companies and intermediaries, such as Community Agro-Veterinary Entrepreneurs (CAVEs) and government extension workers, to reach farmers with improved biosecurity, farm management, animal nutrition and antimicrobial use practices.

Trainings focused on farmer benefits like decreased animal mortality and increased farm productivity to increase adoption. When farmers experience the benefits of improved practices, we all benefit through strengthened global health security.

222,989
farmers trained

84.6%
adopted at least one new practice

51.3%
reported
reduced animal
mortality

43.9%
reported
improved
productivity

35.6%
reported
increased
income

**Metrics are derived from the mid-term evaluation and are based on a comparison of results from a sample of farmers at the mid-term to the baseline*



“When I first started as a CAVE, I realized the need for better biosecurity practices among local farmers. With the training I received, I was able to guide them in adopting these practices. Seeing the reduction in mortality and the increase in their income has been incredibly rewarding. It’s fulfilling to know that my work is making a real difference in the lives of these farmers.”

POULTRY FARMER IN ODISHA, INDIA

How healthy farm animals help protect us all

[Learn More](#)

TRANSFORM BUILDS FINANCIAL CAPACITY

Farmers cannot implement the biosecurity measures necessary to protect their animals from disease without the financial capital to invest in improved farm management practices. Smallholder farmers are especially impacted by limited financing options, with many lenders reluctant to issue loans due to the perceived risk in small-scale farming.

TRANSFORM worked with financial institutions, government agencies and supply chain actors in Kenya and India to adapt or create loan products to meet the unique needs of small-scale farmers. In addition, TRANSFORM engaged buyers and offtakers to purchase from farmers who implement improved practices which provides financial incentives to sustain these practices.

84

organizations trained on creating or adapting financial products for farmers

\$1,747,719

deployed to support farmers in India and Kenya

+14,974

loans dispersed to farmers



“We now have confidence in our ability to develop financial products. We have identified a niche with lending to poultry farmers. After the training, we changed our lending process...this has assisted us in reducing cases of defaulting on loans.”

MANAGER, SIAYA SEED SACCO IN SIAYA COUNTY, KENYA

FINANCIAL PRODUCTS DEVELOPED AND ADOPTED

Working capital
lending

Infrastructure
loans

Asset finance
loans

Group
lending

Livestock insurance
financing

TRANSFORM DRIVES ANTIMICROBIAL USE STEWARDSHIP

TRANSFORM drove change within animal agriculture by uniting poultry industry associations and private sector companies in support of antimicrobial use stewardship principles that guide actions to avoid the need to use, but when needed, ensure proper use of antimicrobials.

Collaboration across the public and private sector is essential for industry-wide change. Working alongside global health leaders, TRANSFORM has participated in local, national and global conversations on antimicrobial resistance, including a presentation to the United States' Presidential Advisory Council on Combating Antibiotic-Resistant Bacteria.

42

organizations committed to antimicrobial use stewardship principles

150

countries

~50%

of the global poultry industry

ANTIMICROBIAL USE STEWARDSHIP PRINCIPLES

1

Take a risk-based approach around each instance of antimicrobial use and consider why, when, which and how much to administer.

2

Commit to using antimicrobials only in compliance with national authorizations.

3

Adopt farm management practices that improve animal health and would reduce the need for antimicrobial use.

4

Antimicrobials critically important for human medicine should only be used under a supervising veterinarian's diagnosis and oversight.

Seven additional private sector leaders announce support for antimicrobial use stewardship principles

[Read the Press Release](#)

TRANSFORM LEVERAGES ANIMAL NUTRITION

TRANSFORM developed and conducted locally led research to better understand how animal nutrition could have an impact on pathogens that threaten human health. This robust research portfolio aimed to examine nutrition solutions that could reduce zoonotic and foodborne pathogens, minimize the need for antibiotic interventions, improve post-vaccine immune response, and increase farmers' productivity and return on investment.

By working with local research partners and using locally available products and breeds, TRANSFORM designed research trials that mimic local farm conditions most closely.

13

research trials implemented



7

poultry



2

swine



2

dairy



2

shrimp



“Over 1.3 billion people depend on livestock as their source of income, so the productivity of their animals is truly consequential. Our research portfolio aimed to show how animal nutrition, together with creating a healthy environment for livestock and following good farming practices, can promote overall health and lead to improved farm productivity and profitability in addition to reducing threats to global health security.”

DR. VICTOR NSEREKO

Cargill Animal Nutrition Scientist
TRANSFORM Research Lead

PROGRAM RESULTS

By advancing the adoption of improved biosecurity, farm management, animal nutrition, and antimicrobial use stewardship practices, **TRANSFORM worked with farmers to improve animal health and increase farm productivity and profitability to drive sustainable change.**



ON-FARM PRACTICES

38

private sector training sessions



222,989

total farmers trained covering



10.3M birds



336K dairy

1,860

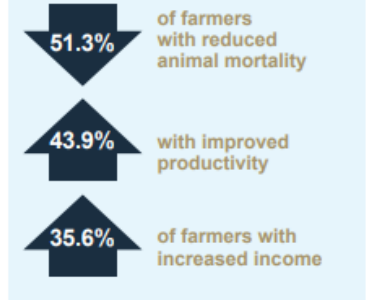
animal health field staff and community agro-vet entrepreneurs trained



84.6% of farmers adopted at least one new practice

4

average number of new practices adopted



2,440,831

people reached by social behavior change campaigns



ANTIMICROBIAL USE STEWARDSHIP

42

organizations committed to antimicrobial use stewardship principles

150 countries

~50%

of the global poultry industry



HOLISTIC ANIMAL NUTRITION RESEARCH

13

research trials

14

priority pathogens and antimicrobial resistant genes tested



7 Poultry



2 Dairy



2 Swine



2 Shrimp



ACCESS TO FINANCE

84

organizations trained on improving financial products and services for farmers

\$1,747,719

deployed in India and Kenya

