

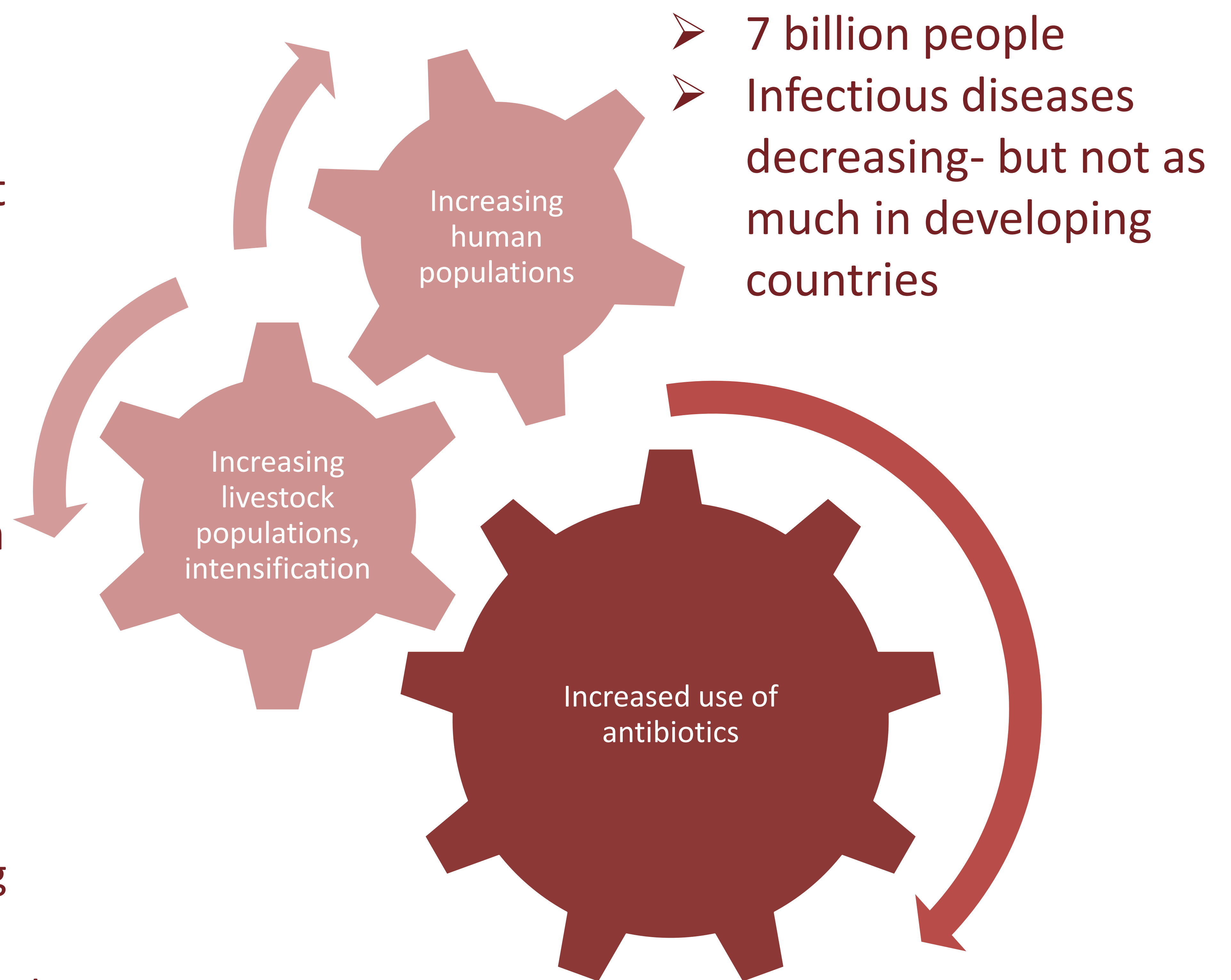
Antibiotic use and misuse in low-income countries: Research at the International Livestock Research Institute



Johanna Lindahl^{1,2}, Hanna Lunden¹, Ram Pratim Deka², Manish Kakkar³, Delia Grace²

¹Swedish University of Agricultural Sciences, ²International Livestock Research Institute, ³Public Health Foundation India

- 37 billion livestock
 - After rice, second most important source of food
 - 31 billion in developing countries
 - 1 billion poor people depend on livestock
 - ✓ 600 million in South Asia
 - ✓ 300 million in Sub-Saharan Africa
 - ✓ 25% urban
- Antibiotic use in developing country agriculture is not well understood
 - More antibiotics used in developing countries than in developed
 - More antibiotics used in agriculture than in human medicine



India - the world's largest consumer of antibiotics, no prescription required

Antibiotic residues in Assam- a pilot

- Milk samples from 150 randomly selected farms, 74 that had had previous training in hygienic milk production, and 76 without training.
- Most advised by veterinarian or veterinary field assistant on which antibiotic to use
- 28.5% of trained farmers were aware that there could be antibiotic residues in milk after treatment, 10.5% of untrained farmers.
- Most stated that they did not use nor sell the milk after during treatment.
- Milk samples tested with Charm EZ reader
- 88.6% positive for aminoglycoside residues
- 22.8% positive for sulphonamides
- Very few farmers could name the antibiotic they used.

Risk factors for antibiotic residues

An upstarting project in peri-urban dairy farms in 3 Indian cities:

- Antibiotic use
- Levels of antibiotic residues
- A risk assessment

Johanna Lindahl | Johanna.Lindahl@slu.se, Department of Clinical Sciences, SLU
J.Lindahl@cgiar.org • Box 30709 Nairobi Kenya • +254 20 422 3000
Nairobi, Kenya • ilri.org

This project was funded by Sida and DFID



This document is licensed for use under a Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported License June 2012

ILRI
INTERNATIONAL
LIVESTOCK RESEARCH
INSTITUTE

