



Food Security Innovation Lab

**COLLABORATIVE
RESEARCH**

Adapting livestock systems to

CLIMATE CHANGE

HALI 2: Strengthening Tanzanian Livestock Health & Human Nutrition

Christopher Gustafson, University of
California, Davis & HALI Project

HALI Project

- Collaboration w SUA since 2006
- “One Health” focus:
 - Zoonotic disease transmission
 - Environmental risk factors
 - Effects on economic “health” of

HALI



LCC CRSP Seed Grant: Veterinary Capacity Assessment

- Pastoralists & Livestock Extension Officers near Ruaha
- Access to vet. services, & diseases of importance
- Use of veterinary health services



LCC CRSP Seed Grant: Veterinary Capacity Assessment - Results

- Important diseases vary spatially
- Lack of disease agreement between pastoralists & LEOs
- Limited interaction
- To improve health?
→ Education



LCC CRSP Long Term Grant

- 4 Components:
 - Education intervention w/ pastoralists
 - Capacity building/training with LEOs
 - Primary schools
 - Ecosys. services (UVT)
- Collaborative project,



Education Intervention

- Village-level
 - All villages in the research area
- Balanced design w/ education on
 - Livestock Health
 - Human Nutrition
- Education on zoonotic disease prevention



Education Intervention

- Livestock Health Focus Groups
 - 5 pastoralist reps from each village
- Design of education
- Baseline (pre-edu) data collection completed



Education Intervention

- Outcomes
 - Disease incidence in livestock,
 - Livelihood-related measures (wealth & income),
 - Nutritional status (women & young children)



Education Intervention

- Developing cell phone-based disease reporting network,
- Educational reminders via cell phone,
- Conduct short surveys by cell phone,



Capacity Building w/ LEOs

- Additional health training,
- Diagnostic tools and facilities,
 - Solar-powered lab in the study area,
 - Diagnostic kits.
- Reference manuals.



Environmental Education w/ Primary Schools

- Updating environmental edu to include climate change,
- Zoonotic disease prevention edu.,
- Lessons on science/data, w/ rain gauges &





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Questions?