### Food safety interventions: economic and health outcomes and impacts

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Better Targeting Food Safety Investments in Low and Middle Income Countries

24 May 2017 in Brussels



















#### Informal markets in sub-Sahara Africa

- Provide food and income to millions
- Hazards are common but do not always translate into risks
- Farmers, traders and retailers are all risk managers













### How to deal with informal markets? Ban or promote?

#### **Previously unsuccessful:**

regulation/inspection

- lack of prerequisites to meet standards
- lack of enforcement of standards
- vested interests

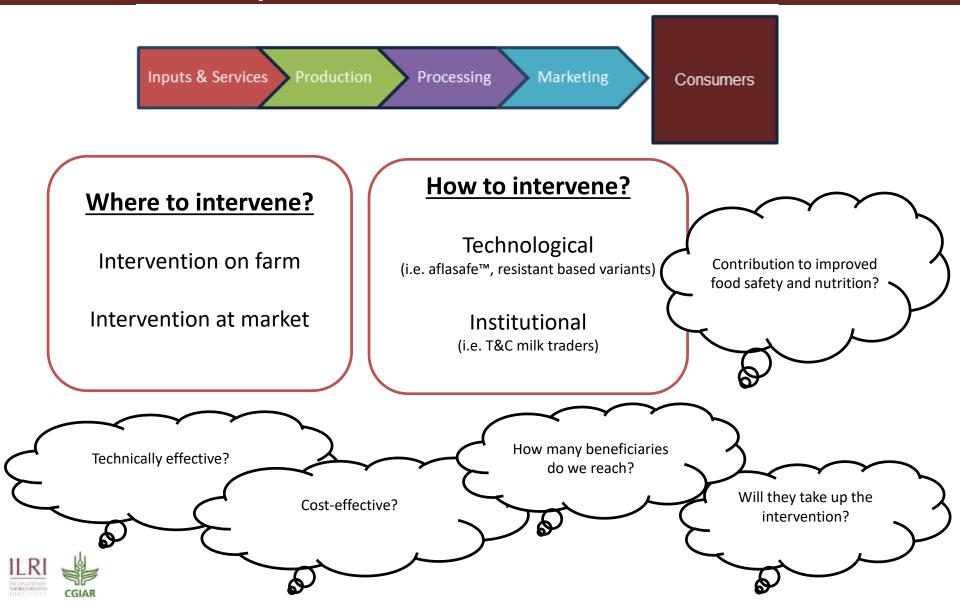


© Erastus Kangʻethe, 2014 (ILRI/BMZ Safe Food Fair Food)

FORM!

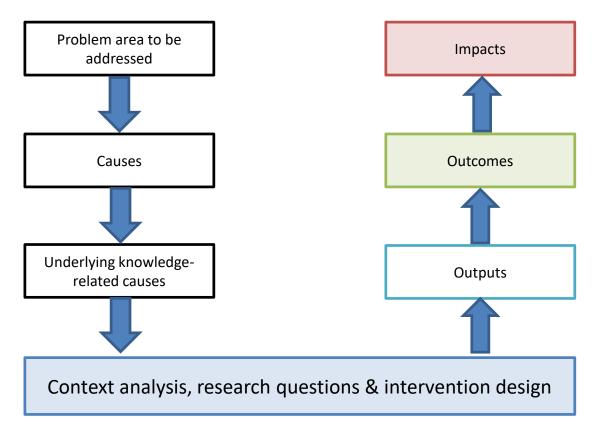


## Gaps in understanding how to manage food safety in informal markets



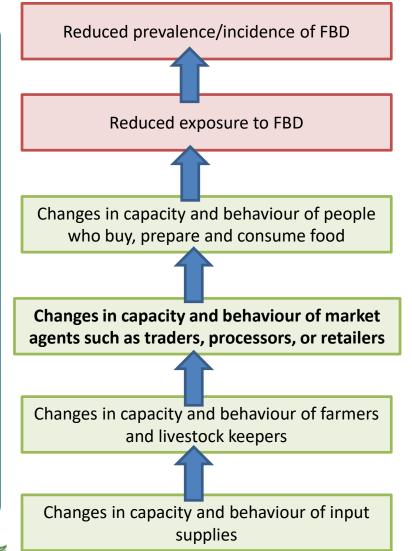
#### Impact Pathway for agHealth interventions

#### Problem analysis Impact pathway





# Impact pathway for agHealth interventions to improve food safety



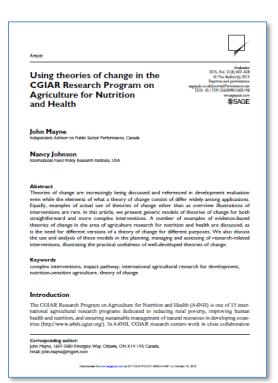
Interventions targeted at these outcomes could improve the quality of food produced and available on the market.

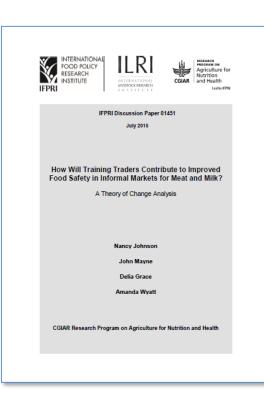
Will these translate into impacts on health outcomes?



**Enabling environment** 

# Theories of change (ToC) for A4NH food safety work



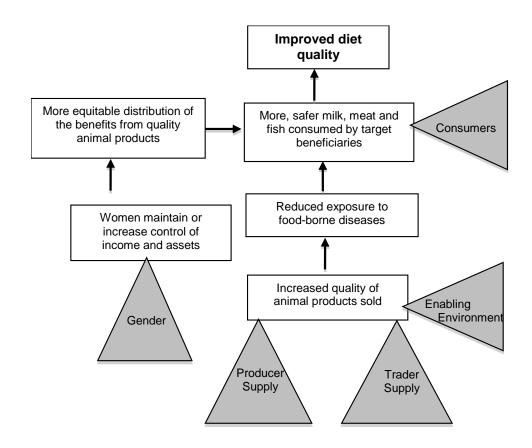






## ToC concept: example from CRP Livestock and Fish

- To understand impact logic of potential interventions
- Builds on research & experience
- Explains how intervention is expected to work on institutional level
- Identifies underlying assumptions







### ToC concept: examples from livestock value chains

Two examples of a training and certification (T&C) intervention targeted at value chain actors

Smallholder Dairy Project (Omore et al., 2005) → India

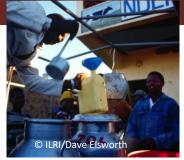
dairy, Kenya, 1997-2006, funded by DFID

Training of meat processors (Grace et al., 2012) → Ethiopia

meat, Nigeria, 2009, funded by CAPRi and others



### Why target raw milk traders??



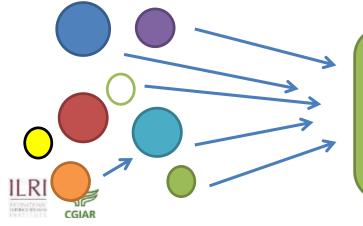




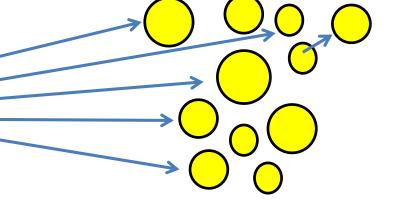






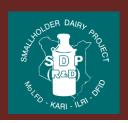


bulking



#### Smallholder Dairy Project

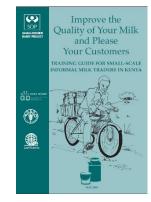
(1997-2006, DFID-funded)



- 1. Sector and value chain analysis, piloting best-bet interventions
- 2. Training & certification of milk traders (BDS model)
- Continued coordinated campaign for policy change: "milk war"; decriminalizing of informal milk sector in 2004; EAC dairy policy harmonization 2007

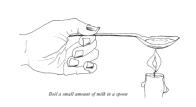
(Leksmono et al., 2006, Kaitibie et al., 2009)

Milk traders



Training service providers (BDS)







Omore et al., 2005; Omore and Baker, 2011 <a href="https://www.smallholderdairy.org">www.smallholderdairy.org</a>

### Sustainable impact?

- 2009: 4,000 traders (15%) registered
- Documented change in practices
- Economic-wide impact of policy change (US\$28m/year)
- Scheme still running but needs followup: policy buy-in, duplicated NGO efforts, vested interests of formal sector









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#### Policy pointers

#### Government players

need to better understand food systems: food sold in the informal sector is not necessarily risky and food in the formal sector is not necessarily safe.

#### The tendency to ratchet up regulations and solve

problems by increasing bureaucracy places a burden on industry and is often ineffective. A light-touch approach can be more effective than heavy-handed inspectand-ourish interventions.

Working with actors from the informal sector towards inclusive

### Legitimising informal markets: a case study of the dairy sector in Kenya

When five per cent of milk fails to meet standards, you have a problem with milk. When 50 per cent does not meet standards, you have a problem with standards. In developing countries, perishable food is mostly sold in informal markets and often does not meet national food safety standards. Government regulation in informal markets has not improved food safety in the past and formalisation does not guarantee safe food. New approaches, based on gradual improvements and an inclusive path to formalisation, show greater promise. A scheme to train and legitimise dairy traders in Kenya has revealed benefits for public health, farmers, vendors and consumers. But governments must withstand pressure from vested interests and show genuine commitment to supporting progressive, effective and inclusive policies if these are to be successful.

http://pubs.iied.org/17316IIED.html

### Training of meat processors in Ibadan, Nigeria (2009)

- Interactive training workshop for 68 representatives sent by 22 butchers associations
- Participants provided with training materials and equipment
- Immediate (short-term) impact
- Cost-effective

Grace et al., 2012 (TAHP):

https://dx.doi.org/10.1007/s11250-012-0207-0

https://dx.doi.org/10.1007/s11250-012-0208-0







## Status of the evidence for T&C intervention (milk traders or butchers)

Outcomes	Assumptions	Evidence
Exposure to food borne disease	Currently fresh foods are mostly unsafe (hazards)	Fair to strong
decreases	Most fresh foods are bought in wet markets	Strong
Food is safer	Practices are effective	Fair short-term
		Weak long-term
Value chain agents change practices	Practices are feasible and generate benefits	Fair
	VC agents and consumers are motivated	Weak
Value chain agents buy in to scheme	VC agents can access training	Fair
	Materials and approaches are effective, relevant	Fair
Value chain agents	Most VC agents can be reached	Weak to fair
are reached by scheme	Policy environment can be made enabling	Fair



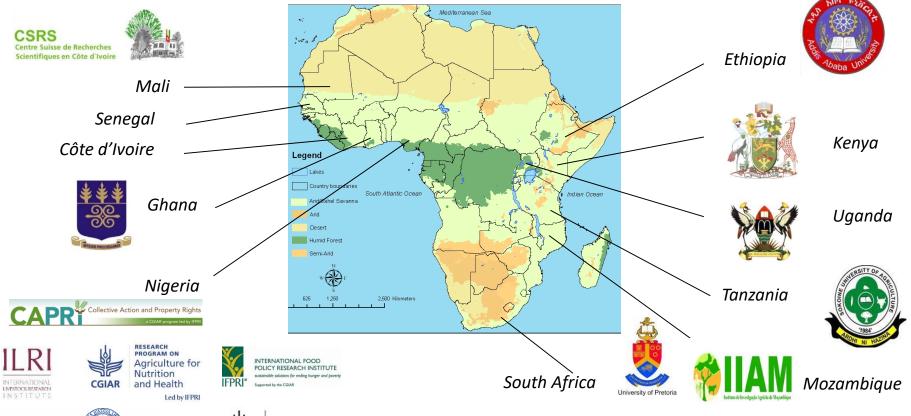
#### Next steps

- More rigorous evaluation of incentives for the trained actors
- Follow up to see if outcomes persist in longer term
- Test the approach in other food value chains





### Acknowledgements









RESEARCH

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**International Agricultural Research** 



#### THANK YOU!

Kristina Roesel

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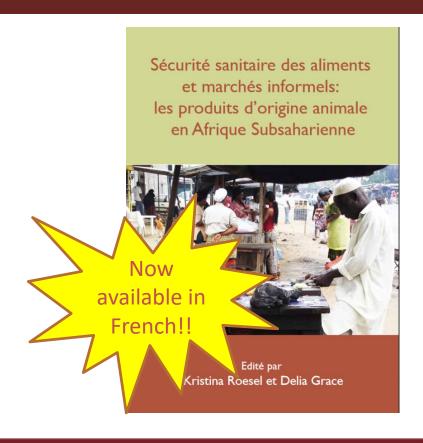
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