Food safety policy in 9 African countries

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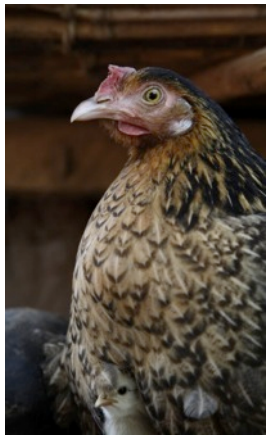
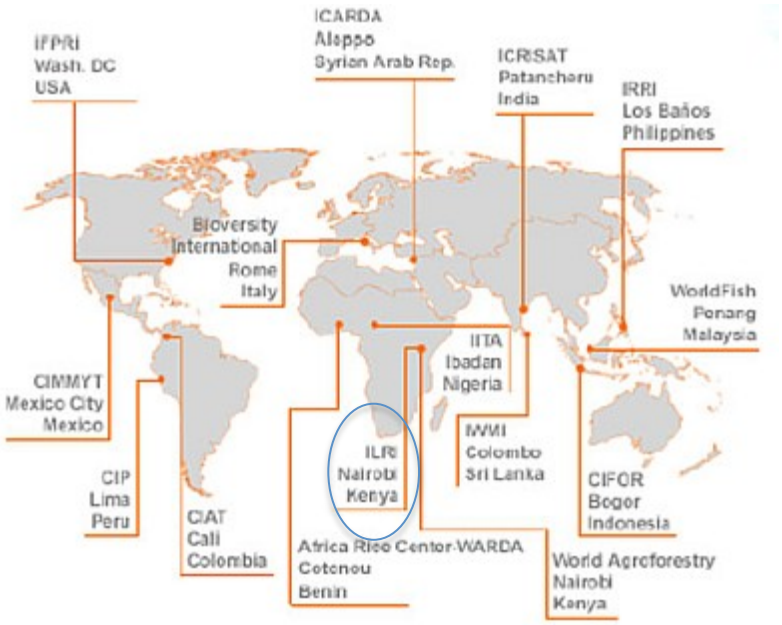


ILRI
INTERNATIONAL LIVESTOCK RESEARCH INSTITUTE

CGIAR
RESEARCH PROGRAM ON Agriculture for Nutrition and Health

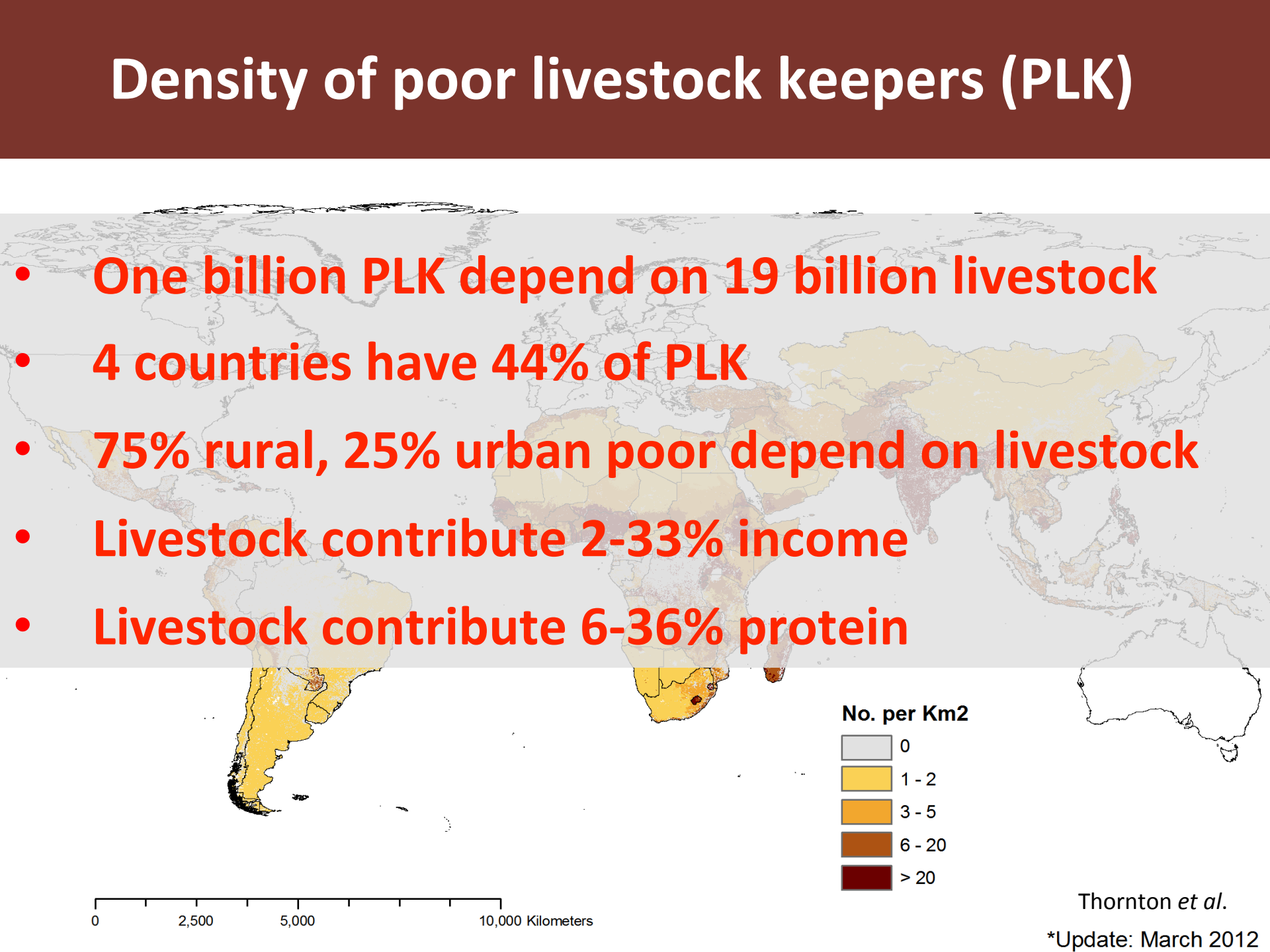
International Livestock Research Institute



- One of 15 CGIAR centers*: agriculture research for pro-poor development*
- Budget: $83 million in 2014
- 123 senior scientists from 39 countries
  - 56% are developing country nationals
  - 34% are women
- Large campuses in Kenya and Ethiopia.
  - Offices: Hanoi, Beijing, Bangkok, Delhi, Hyderabad, Guwahti, Ouagadougou, Ibadan, Maputo, Kampala, Dar es Salaam

Density of poor livestock keepers (PLK)

- One billion PLK depend on 19 billion livestock
- 4 countries have 44% of PLK
- 75% rural, 25% urban poor depend on livestock
- Livestock contribute 2-33% income
- Livestock contribute 6-36% protein

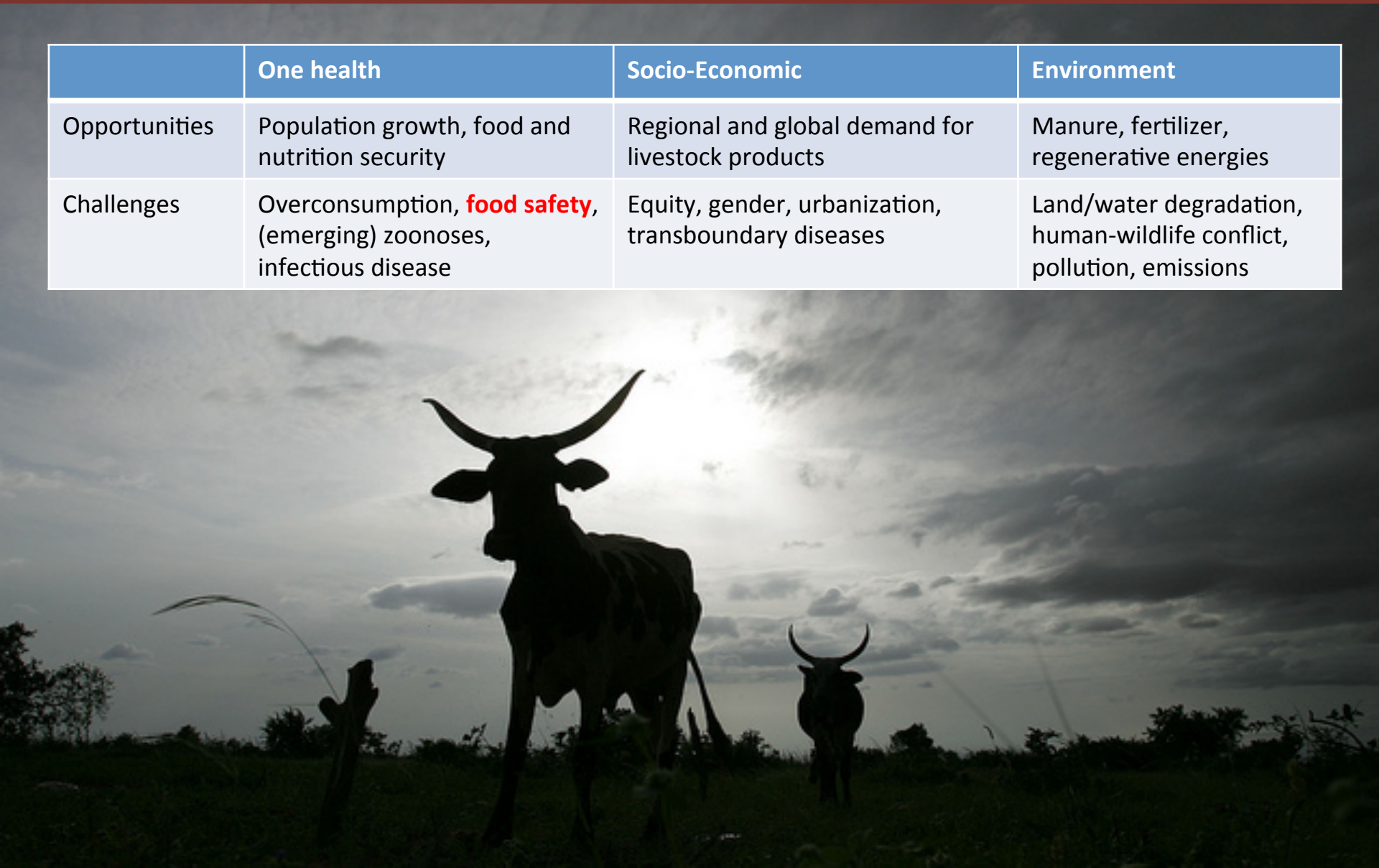


Thornton *et al.*

*Update: March 2012

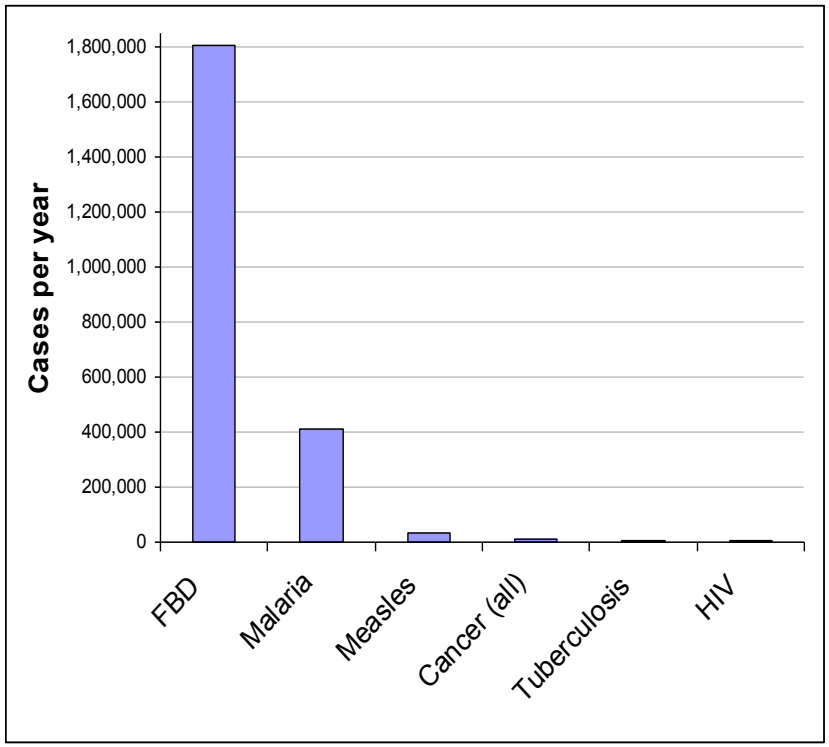
Livestock sector: Opportunities & challenges

	One health	Socio-Economic	Environment
Opportunities	Population growth, food and nutrition security	Regional and global demand for livestock products	Manure, fertilizer, regenerative energies
Challenges	Overconsumption, **food safety**, (emerging) zoonoses, infectious disease	Equity, gender, urbanization, transboundary diseases	Land/water degradation, human-wildlife conflict, pollution, emissions



Food safety: the most important agriculture associated disease

- World wide per year >3 billion cases of diarrhea
  and 0.5 million deaths of children under 5
- 80% of child deaths due to diarrhea in South Asia and Africa
- Animal source foods are most important source of food borne disease (FBD)



Situational Analysis of food safety in 9 countries

CSRS
Centre Suisse de Recherches Scientifiques en Côte d'Ivoire

Mali

Côte d'Ivoire

Ghana

South Africa

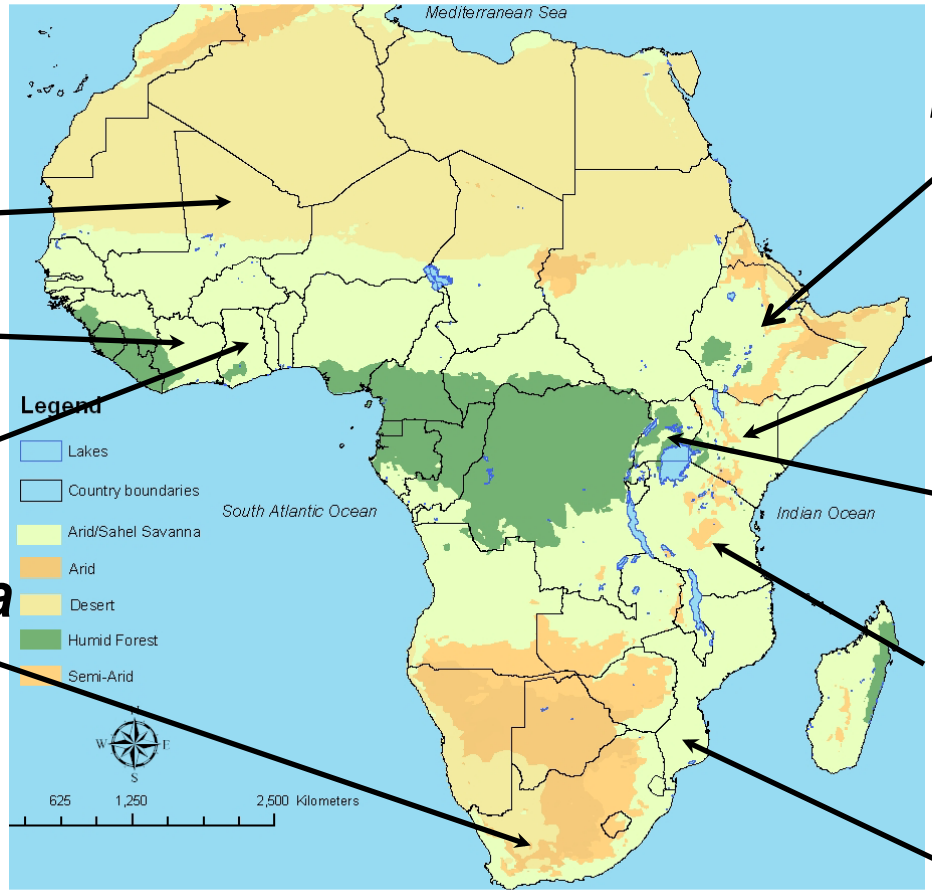
Ethiopia

Kenya

Ugand

Tanzania

Mozambique



giz

University of Pretoria

Addis Ababa University

Sokoine University of Agriculture '1984' Ardhi ni Hazina

BfR
Bundesinstitut für Risikobewertung

CGIAR
Research Program on Agriculture for Nutrition and Health

ILRI
International Livestock Research Institute

Freie Universität Berlin

IIAM
Instituto de Investigação Agrária de Moçambique

Rakuno Gakuen University
酪農学園大学

Key findings for food safety

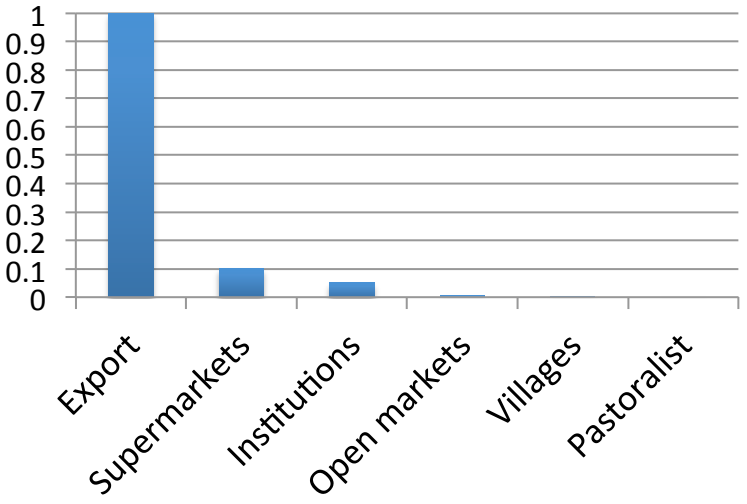
- Multiple FS institutes with overlapping mandates
  - 13 in Mozambique; 7 in Cote d'Ivoire
- Multiple policies/ legislative acts
  - Mostly unfocused and generic
- Collective action
  - Small scale processor/retailer: mostly absent, often ambiguous position
  - Consumer, farmer: in place but weak and un-representative
  - Large scale processor/ retailer: strong
- Laboratory and human resources mostly scored "inadequate" or "highly inadequate"

Key findings for food safety

- There is no information on presence of many important pathogens

Problem	Eth	Gh	Ke	Mz	SA	TZ
Campylobacter	Medium		Medium	Low	Low	Medium
Clostridium perfringens			Low	Medium	Low	Medium
Cryptosporidium parvum			Low		Low	Medium
Toxigenic Escherichia coli	Medium		Medium	High	Low	Medium
Listeria	Low			Low	High	
Norwalk virus						
Salmonella spp.	High	High	High	High	High	High
Staphylococcus aureus	Medium		High	Medium	Medium	High
Toxoplasma gondii	Low			High	High	
Yersinia eterocolitica*					Low	
Botulism					Low	
Enterococcus faecalis					Low	
Rotavirus			Low		Medium	

- Probability of inspection varies inversely with poverty



Growing concern about food safety

RED PEPPER. WEDNESDAY, JUNE 13, 2012

WAR ON PIGS

KCCA Vows To Abolish Pork Business

Bujagali Energy Project; Energy Ministry has Shs366.91bn as unspent money

Bujagali Energy Project; Energy Ministry has Shs366.91bn as unspent money

By Hope Muhairwe

KAMPALA CAPITAL City Authority has opened a fresh war on pork joints claiming that most of them are dirty and operate illegally.

"All pork supplied in Kampala for human consumption is contaminated, KCCA public health department said, threatening to close all pork joints around the city.

Economy Watch spoke to some abattoir owners in different parts of the city and this is what they said;

"We are so frustrated over this warning because this has put our business at risk since being the job that helps us earn income. Butchers said they make awesome profits from the business ranging from Shs8,000 a kilo.

Emilia Ahimbisibwe, a KCCA Senior Veterinary Officer said that pork sold in the city is increasingly becoming risky for human consumption, citing the reported unhygienic nature in which meat is being slaughtered and prepared.

"A big percentage of pigs slaughtered in Kampala are not cleared for human consumption," Ahimbisibwe said. He threatened that loyal pork consumers face the danger of contracting epilepsy or running mad among other related ailments. "The city is littered with illegal pork abattoirs in various suburbs such as Bweyogerere commonly known as Ekimezza, Nsambya-Kamwanyi Zone, Kinawatakka and Wambizzi in Lubaga Division and many more," he added.

He explained that pork contains tape worms which cause epilepsy when consumed without excellent preparation and warned consumers against feasting on meat which is not thoroughly cooked. Ahimbisibwe said they are drafting new laws to guide butchery attendants and animal transportation to end this food insecurity in the city.

A team of officials who included Policemen, KCCA law enforcement personnel and inspectors from the Ministry of Agriculture raided pork joints in Nsambya, Makindye and Luzira. A dozen of pigs were carried away and more than 200 kilogrammes of fresh pork impounded.

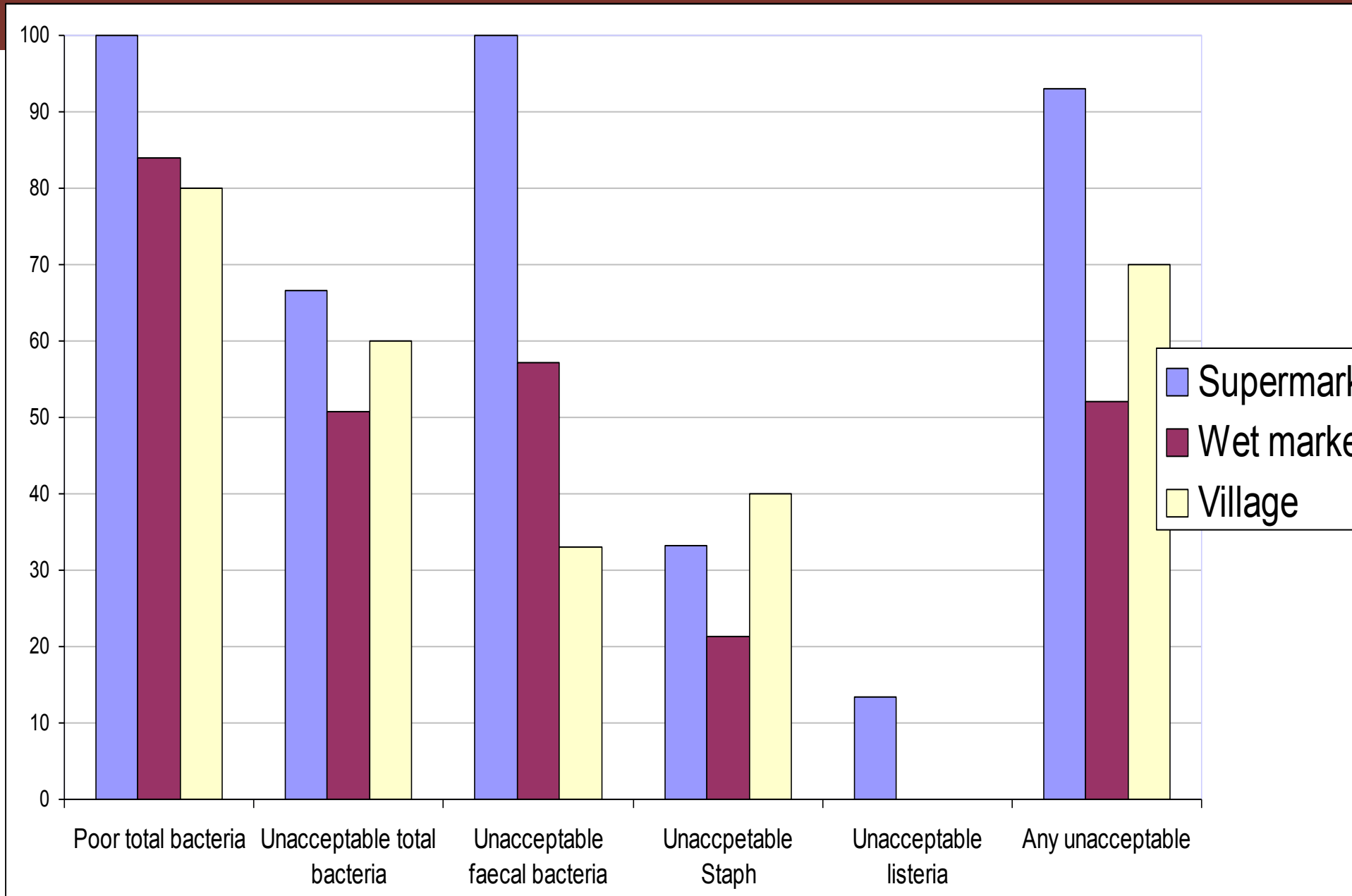
Pork is a delicacy enjoyed by a vast number of people who purchase the meat at different pork joints around the city. In the recent years, it has become a profitable business to venture into.

- Many/most reported concern over food safety (**40-97%**)
- Willing to pay **5-10%** premium for food safety
- Buy **20-40%** less during animal health scares
- Younger, wealthier, town-residing, supermarket-shoppers willing to pay more for safety

Informal markets have a major role in food security and safety

- Account for 39% of the national GDP
- More than 80% of food is sold in informal markets
- Accessible and affordable to everyone
- Involve many actors
- Prone to activities that may compromise food safety
- Perceived to be unsafe by policy makers

Compliance : Formal worse than informal



More regulation associated with worse practices

Average of 17.25 risk mitigation strategies used

Farmers who believed UA was legal used more strategies

Hazard Transmission		Risk mitigation strategies currently practiced (%)			
	Ecosystem to cow	Keep only one species Zero-graze Use own land only for feed Avoid common grazing Keep local breeds	29% 38 41 56 27	Treat cattle often Don't keep calves Use Artificial insemination Vaccinate against brucellosis	31% 39 44 1
	Milk shed to cow	Use feed/water trough Have concrete/stone floor Use bedding	94 96 41	Stack manure Have a waste disposal strategy	11 96
	Milk shed / dairy to milk	Have washable shed wall Have metal/tin roof Store containers off floor Keep milk bar dry	100 96 29 45	Use just metal/ glass vessels Use piped water Keep premises clean Depose waste >5m away	19 75 51 38
	Milk handler to milk	Use hot water to clean Use soap to clean Wear protective clothing Wash hands with soap before handling milk	18 81 1 59	Have no discharges/ wounds Have clean hands Have clean/short nails Access to latrine Good personal hygiene	97 79 81 98 49
	Transport to milk	Don't drink unsold milk	10	Don't sell/store unsold milk	90
	Milk to consumer	Treat milk Avoid drinking raw milk Check milk quality by smell/taste	50 93 48	Sell milk quickly (=6 hrs) Don't consume milk until withdrawal period passed	82 64

Efforts in managing food safety in informal markets must be pro-poor

- The poor are more prone to food-borne disease but cannot afford to fall ill
- Risk management needs training, skills development and prerequisites
- Linking formal and informal markets can decrease poverty
- Impact assessment on economic losses and gains of food safety risks is needed

Improvements are feasible, effective, affordable

- Branding & certification of milk vendors in Kenya: secured livelihoods, improved milk safety & saved economy $33 million
- Peer training, branding, innovation for Nigerian butchers led to 20% more meat samples meeting standards and cost $9 per butcher but resulted in savings $780/per butcher per year from reduced cost of human illness
- Providing information on rational drug use to farmers, led to knowledge increase x 4, practice x 2, disease decrease by 1/2

Acknowledgements

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