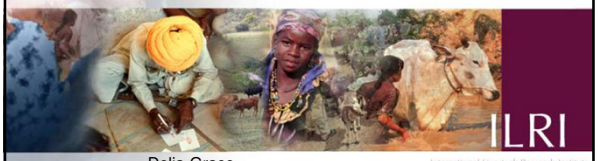
Research Program on Nutrition and Health

CGIAR

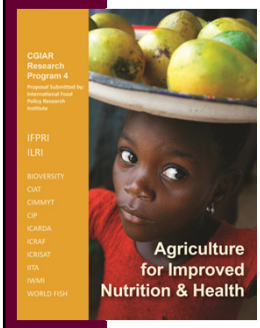
CRP 4.3 Prevention and control of Agriculture Associated Diseases



Delia Grace
International Livestock Research Institute

Safe Food, Fair Food 2 inception
April 12th -13th 2012

Agriculture for enhanced nutrition and health



Improving nutrition & health of the poor

Through agricultural research

2

Main aims of CRP

- Lead centre: IFPRI
- With 4 components
  - Leveraging VC for nutrition outcomes
  - Biofortification of staple crops
  - Prevention and control of AAD (ILRI ¾)
  - Integrated programs & harmonised policies (ILRI 2/9)

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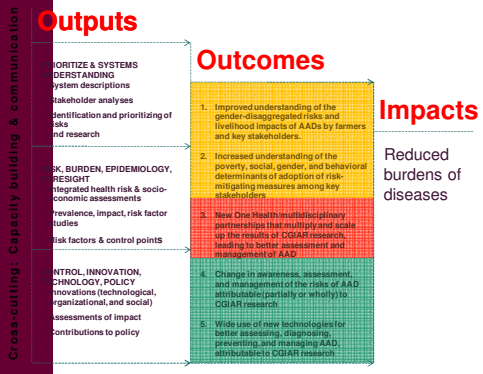

CRP 4.3: AAD

- Food-borne disease
- Zoonoses & emerging infectious disease
- Other health risks in agro-ecosystems

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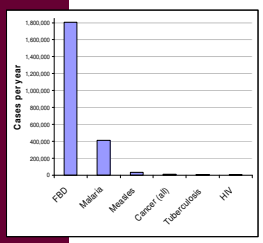
Food-borne disease
Safe Food, *Fair food*



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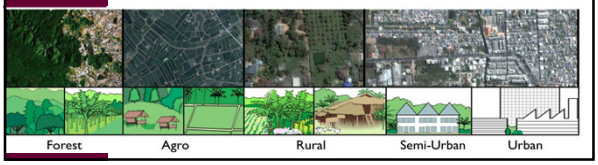
Zoonoses & EID

- Most diseases (>60%) are zoonotic
  - 7% of total burden, 17% of infectious disease burden in LDC are zoonotic or recently emerged
  - 4% of total burden 10% of IDB in LDC is zoonoses
- One new disease is emerging every 4 months
  - 75% of EIDs are zoonotic



Other health risks of agro-ecosystems

- Water associated disease
  - Malaria, schistosomiasis, cryptosporidiosis
- Occupational hazards
  - Pesticides, trauma, allergies
- Drug resistance
  - Antibiotics, insecticides, trypanocides
- Health regulation by ecosystems

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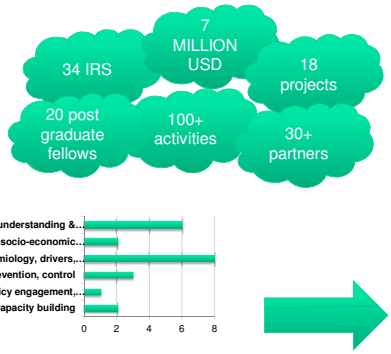

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- Systems understanding, rapid assessment, mapping & prioritization
- Risk, burden, epidemiology, foresight
- Disease management, innovation, technology, policy engagement
- Communication, capacity building

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Targeting
Systems understanding & prioritisation

All deaths	57,000,000
Deaths from infectious disease	18,000,000
Child deaths in which malnutrition implicated	**5,000,000**
Diarrhoeal disease death (many zoonotic)	**3,000,000**
Tuberculosis death (a small percentage is zoonotic)	**2,500,000**
HIV (a disease emerged from animals)	**2,000,000**
Road traffic deaths	1,200,000
Fatal agricultural injuries	**170,000**
Rabies deaths	**55,000**
Cysticercosis (pig tapeworm) deaths	**50,000**
Trypanosomosis (sleeping sickness) deaths	**40,000**
Liver cancer deaths attributable to aflatoxins	**35,000**
Extreme weather related deaths	20,000

Numbers of global deaths each year from selected causes in the early 21st century

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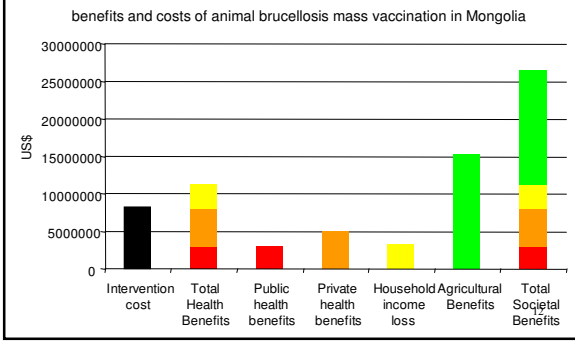
Understanding:
Risk, burden, epidemiology, impact



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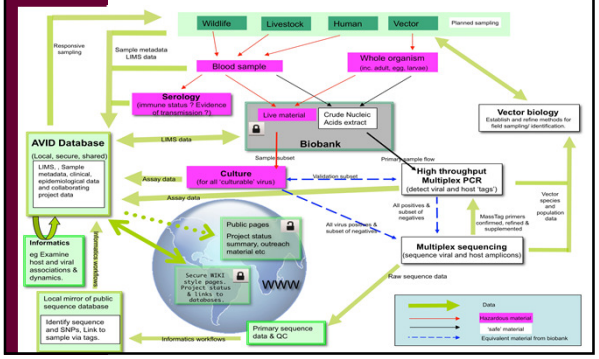
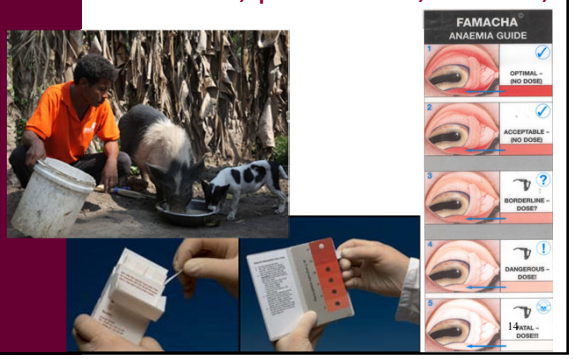
Understanding: dynamics, foresight



Risk reduction: surveillance, prevention, control,



Communication, capacity-building

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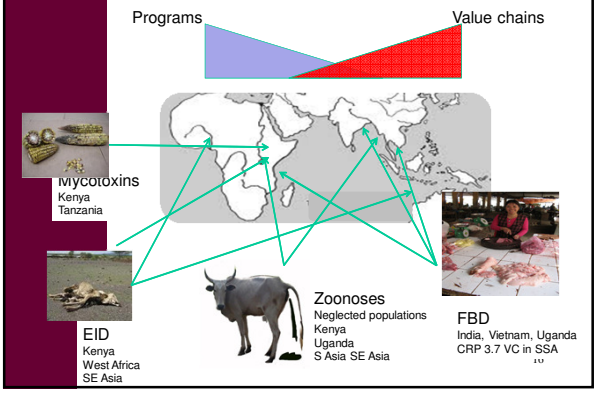
Locations



Research Activities

- Safe food in informal markets
  - Mycotoxins
- Emerging infectious disease
  - Neglected zoonoses
- Ecohealth

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Generating evidence to support enhanced traditional dairying in India

WP 5. Measuring and mitigating the risk of mycotoxins for poor milk and maize producers and consumers in Kenya

IFPRI

Food Africa Program Inception Workshop, October 2011

Reducing disease risks and improving food safety in smallholder pig value chains in Vietnam

Managing risk in emerging pork markets:
A South-South Symposium
Organised by ILRI and ACIAR

Safe food, fair food 2:
from capacity building to implementation

Kristina Rösel
Date, Place, event