

Integrated assessment of food safety in Zambia: Stakeholder engagement and planning workshop

Wednesday 22-Thursday 23 January 2014

Protea Hotel, Arcades, Lusaka



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Meeting summary

On 22 and 23 January 2014, participants from six CGIAR centres and stakeholders in Zambia met at Lusaka in Zambia to share about their current activities related to food safety in Zambia and to plan for integrated action research to assess food safety issues in Zambia.

Purpose of the workshop

- To link CGIAR research centres and CGIAR Research Programs with a food safety interest in Zambia
- To meet food safety stakeholders in Zambia and discuss food safety priorities
- To visit field sites relevant to food safety
- To discuss plans for a one-year integrated assessment of food safety in CGIAR Research Program value chains in Zambia.

Present were representatives from the International Food Policy Research Institute (IFPRI), Bioversity, WorldFish, the International Potato Center (CIP), the International Institute of Tropical Agriculture (IITA) and the International Livestock Research Institute (ILRI). Zambian stakeholders included participants from the Food and Agriculture Organisation, Department of Fisheries, Department of Agriculture, University of Zambia, Zambia Agriculture Research Institute (ZARI), National Institute for Scientific and Industrial Research (NISIR) and Concern.

The workshop focused on:

- Listing food safety stakeholders
- Conducting a strengths, weaknesses and opportunities analysis of the food safety sector in Zambia
- Identifying and ranking food safety issues according to importance
- Identifying criteria for CGIAR successful food safety engagement in Zambia

The next steps are that the CGIAR Research Program on Agriculture for Nutrition and Health (A4NH) will develop a plan for a scoping study to conduct action research to assess and trial interventions to improve food safety in value chains in western Zambia along with stakeholders in Zambia. This will take place in the field sites where WorldFish is working as part of the CGIAR Research Program on Aquatic Agricultural Systems. Exploration will continue into addressing food safety issues in other parts of Zambia. To oversee CGIAR research on food safety, an advisory committee for food safety will be convened comprising the stakeholders attending the meeting and other important stakeholders attending. This will meet at regular intervals to discuss research for food safety in Zambia.



Food safety stakeholders in Zambia

Participants brainstormed on the different stakeholders with interests in food safety in Zambia

PUBLIC SECTOR

- Ministry of Health: Department of Environmental Health
- Ministry of Health: Department of Public Health
- Ministry of Health: Department of Food and Drug Control Laboratory
- Ministry of Health: Pharmaceutical Authority (regulates drugs)
- Ministry of Community, Development Mother and Child Health: Department of Public Health
- Ministry of Commerce: Zambia Bureau of Standards
- Ministry of Local Government and Housing: Department of Public Health, Water and Sanitation
- Ministry of Education, Science and Technology: National Biosafety Authority (NBA)
- Ministry of Agriculture and Livestock: Department of Agriculture
- Ministry of Agriculture and Livestock: Department of Fisheries
- Ministry of Agriculture and Livestock: Department of Vet and Livestock production
- District councils

RESEARCH AND TRAINING

- University of Zambia: School of Engineering (for testing)
- University of Zambia: School of Veterinary Medicine
- University of Zambia: Department of Food Science and Technology and Nutrition
- National Resources Development College: Department of Food and Nutrition
- NRDC: Department of Agricultural Engineering
- Zambian Agriculture Research Institute
- Ministry of Education NISIR: post-harvest food procession and nutrition program
- University Teaching Hospital Zambia: training courses on public health and environmental health
- University of Lusaka: Human nutrition
- CGIAR centres

DEVELOPMENT SECTOR

- International
 - Food and Agriculture Organization
 - World Food Programme

- Non-government organizations
 - World Vision
 - o CARE: poverty, micro-credit, youth and market access
 - o SNV: agriculture, energy, capacity building, water and sanitation
 - Profit+ (USAID project)
 - o CASH (USAID project for horticulture development)

REGIONAL

- South African Development Community
- Common Market for Eastern and Southern Africa

FORMAL PRIVATE

- Food industry sector
- Export and trading Group (ETG), for example, COMACO

INFORMAL PRIVATE

- Processors
- Producers
- Marketers
 - Soweto market and other markets
- Consumers

DONORS

• USAID, EU, DFID



Food safety systems: Strengths, weakness, opportunities

STRENGTHS

- Existence of public sector structures and training institutions
- Existence of some standards and guidelines
- · National policies about food quality and safety in place
- For some issues regulation and response are very adequate e.g. Zambeef
- Information sharing processes exist

WEAKNESSES

- Inadequate training in food safety issues
- Weak implementation/enforcement of standards and compliance
- Poor coordination among stakeholders
- Over-reliance on government to provide and maintain public health infrastructure
- Poor understanding food safety at all levels: a silent problem
- For some issues laws are weak e.g. aflatoxins
- Lack of economic information

OPPORTUNITIES

- Potential to enhance training
- Awareness raising of food safety issues
- New standards are to be developed to fill gaps
- Possibility of establishing a Food Safety Authority
- Opportunity to enhance coordination among stakeholders and leadership from the top



Food safety issues

Priority foods

Staples	Animal Source Food	Fruits and Vegetables
 Maize 	Meats	 Soft skinned
 Cassava 	• Fish	 Unpeeled
 Sorghum 	Poultry	 Vegetables – dried and
• Rice	• Eggs	fresh
 Others 	Dairy	
Others	Water and Beverages	
 Groundnuts and other 		
Legumes		
 Fortified foods 		
 Processed foods 		
 Imported foods 		

Important food safety problems

- Mycotoxins (aflatoxins)
- Pesticides
- Storage
- Handling hygiene and marketing hygiene
- Water source treatment
- Stock feed, slaughtering protocol

Important food safety contexts

- Street foods
- Perishable foods
- Traditional processing
- Household practices
- Sanitation

Important trade considerations

- Standards
- Labelling

- Enforcements
- Legislation
- Monitoring
- Public awareness

Other important considerations

- Poverty reduction
- Impact on nutrition/health long/short term
- Income compliance/incentives
- Gender roles- who is in charge of food safety, burden dealing with food safety
- Limited choices due to poverty
- Hunger season



Discussions

The emerging issues during the feedback session touched on two main items, that is, (i) what will happen following the workshop and, (ii) the issue of nutrition in Zambia?

- A4NH agreed to fund a scoping study of food safety issues and action research into food safety solutions in sites in western Kenya where the CGIAR Research Program on Aquatic Agricultural Systems is currently working.
- It was proposed that A4NH explore how it could work with existing projects/programs, including those of government. For example, there are already some community nutrition projects for children featuring groundnuts, which might incorporate a food safety component.
- It was noted that there is a strong association between aflatoxin and stunting in children, but the evidence is not yet enough to convince public health stakeholders. It was proposed that a priority for the program would be to implement research that would definitively address the question. This would require harnessing the resources of a number of other programs and organizations, including the USAID CRSP on aflatoxins and Concern Worldwide.
- It was observed that the issue of sustainability of interventions is important. For example, government run advisory services, which provided advice on child nutrition to pregnant mothers visiting clinics used to exist, but no longer do so.
- It was also observed that it might be useful to strive to have animal products, including fish, in community nutrition programs as opposed to the current practice where all such products are avoided, partly because of concern over safety. Related to this is the issue of school milk feeding programs which one participant felt could foster emergence of a milk consumption culture in Zambia.
- Lack of funding was observed to be an important constraint to researchers and research organizations in Zambia.
- The issue of involving all key line ministries, and at all levels national, provincial, district in addressing food safety was recommended as essential for success.



Suggestions for engagement

- Key champions in Zambia identify CGIAR support with research products
- Core group to guide research process, based on SH here
- Coordinate different ministries map the different roles and responsibilities
- Need to bring in high level people in public sector: link with FAO on this; focus on NIPE
- Get FS better addressed in key strategies
- Agriculture Productivity for Southern Africa (APSA) maize, rice, fruits & legumes need to integrate food safety better into Mis
- Work through the WB partners GFSP not covering FS well
- Multiple engagement strategies
- Identify implementation partner for work on the ground
- Awareness raising needed at all levels food safety not perceived as a problem due to lack of well-presented evidence
- Start with grassroots which will trickle up to the ministry
- Bring in learning institutions and students and link research into use
- Link Harvest Plus with aflatoxin control
- System CGIAR Research Programs are transition mechanism for food safety work
- Baseline of hazards in fish can feed into policy standards



Way forward

Participants next discussed some of the key areas for development in the next phase of A4NH mycotoxin work.

Diagnostics

- Key for management as well as research
- Desired test characteristics depend on intended use
- Opportunity to adapt diagnostics developed by private sector and others outside CGIAR
- Useful for CGIAR to have common protocols and diagnostic tools
- Diagnostics need to address sampling protocols

Microbial populations

- Important to understand effectiveness and externalities of biocontrol
- Tools: proteomics; RNA; biochemical; abiotic measures, perhaps metagenomics
- May identify future biocontrol and control options
- CGIAR has an advantage is this research

Risk assessment

- Risk assessment requires consumption data as well as prevalence data
- Evidence around human health is key to buy-in from medical community
- Definitive link with human stunting probably requires randomized control trials
- Important to put economic values on impacts and look at multiple impacts

Theory of change and impact pathways

- Scaling up aflatoxin research in phase 2 of A4NH requires a strong impact pathway
- This should link CGIAR research to impacts for millions of people
- Ongoing work by A4NH(Nancy Johnson) is developing a theory of change
- Need a joined up and programmatic approach across the CGIAR centres

Way forward

- Commission some papers over targeted areas of key research
- Contribute to theory of change being currently developed
- Build communication around mycotoxins in A4NH
- Form working groups around key areas



Agenda

Time	Agenda item	Person responsible						
DAY 1: Wednesday 22 January - Communication and stakeholder engagement								
09.30	Welcome Tabeth Chiuta, WorldFish							
	Workshop objectives	Delia Grace, ILRI						
10.00	Self introductions (Name, Organisation,	All participants						
	Activities in Zambia) – to include details of							
	each organisation's role in food safety issues							
11.00	Coffee break							
11.30	Stakeholder mapping of interests in food	All participants						
	safety (card exercise)							
12.30	Lunch break							
14.00	Assessing food safety in informal markets:	ILRI						
	experiences from elsewhere							
14.30	Food safety issues in Zambia	TBD						
15.00	Tea break							
15.15	Brainstorming on way forward	All participants						
16.45	Close of meeting							
DAY 2: Th	ursday 23 January – Detailed planning							
09.00	Introduction to Day 2	Delia Grace, ILRI						
09.10	Overviews of the CGIAR Research Programs &							
	food safety aspects							
	 Aquatic Agricultural Systems 	S. Cole & M. Beveridge, WorldFish						
	 Livestock & Fish 	Malcolm Beveridge, WorldFish						
	 Safe Food, Fair Food 	Delia Grace, ILRI						
	 Agriculture for Nutrition & Health 	John McDermott, IFPRI						
10.00	Rapid integrated assessment of food safety	Delia Grace, ILRI						
10.30	Coffee break							
11.00	Interests and activities in food safety in	All participants						
	Zambia							
12.30	Lunch break							
14.00,	Detailed planning for rapid assessment	All participants						
with tea	activities							
at	 Systematic literature review 							
15.00	 Policy analysis 							
	 Rapid participatory assessment 							
	 Biological sampling 							
16.30	Summary and close of meeting	Delia Grace, ILRI						



Meeting participants

Organization	Name	Title	e-mail	Field Trip 21 Jan	Safe Food Workshop 22-23 Jan
IFPRI	John McDermott	Director, A4NH CRP	J.McDermott@cgiar.org		Υ
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