

Safe Food, Fair Food: From capacity building to implementation

Report on the Outcome Mapping strategy, implementation and
monitoring framework

Julius Nyangaga, Kristina Rösel, Saskia Hendrickx, Erastus Kang'ethe and Dao Daouda

July 2012

Contents

- Abbreviations and acronyms ii**
- Glossary of common outcome mapping terms iii**
- Introduction..... 1**
- The vision of the project 2**
- East Africa 3**
 - Eastern Africa boundary partners and target outcomes (or challenges) 3
 - Support activities and outputs for the eastern Africa partners 4
 - Eastern Africa progress markers (and their indicators)..... 5
- West Africa 6**
 - Western Africa boundary partners and target outcome (or challenges) 6
 - Support activities and outputs for the Western Africa Partners..... 7
 - Western Africa progress markers (and their indicators)..... 8
- Southern Africa 9**
 - Southern Africa boundary partners and target outcome (or challenges)..... 9
 - Support activities and outputs for the Southern Africa partners..... 10
 - Southern Africa progress markers (and their indicators) 11
 - Further probes to support outcomes recorded 13

Abbreviations and acronyms

ADCVI	Association pour le Développement des Cultures Vivrières Intensives
ANOPACI	Association Nationale des Organisations professionnelles Agricoles de Côte d'Ivoire
ASARECA	Association for Strengthening Agricultural Research in Eastern and Central Africa
ASF	Animal-source foods
AU-IBAR	African Union-Interafrican Bureau for Animal Resources
BMZ/GIZ	German Federal Ministry for Economic Cooperation and Development (BMZ)/ German Agency for International Cooperation (GIZ)
CARDESA	Centre for Agricultural Research and Development for Southern Africa
CSRS	Centre Suisse de Recherches Scientifiques en Côte d'Ivoire
EAC	East African Community
ECOWAS	Economic Community of West African States
EISMV	École Inter-États de Sciences et Médecine Vétérinaires de Dakar
EMUWA	Economic and Monetary Union of West Africa
FAO	Food and Agricultural Organization of the United Nations
FENACOVICI	Fédération Nationale des Coopératives du Vivrier de Côte d'Ivoire
ILRI	International Livestock Research Institute
IUCEA	Inter University Council for East Africa
MoH	Ministry of Health
MoLD	Ministry of Livestock Development
NARS	National Agricultural Research System
OIE	World Organization for Animal Health
OM	Outcome Mapping
PRA	Participatory Rural Appraisal
REC	Regional economic community
RUFORUM	Regional Universities Forum for Capacity Building in Agriculture
SADC	Southern Africa Development Community
SFFF	Safe Food, Fair Food
UNIDO	United Nations Industrial Development Organization
WHO	World Health Organization

Glossary of common outcome mapping terms

Vision	A description of the large-scale ultimate development changes (economic, political, social or environmental) to which the program hopes to contribute.
Boundary partners	Those individuals, groups or organizations with whom the program interacts directly and with whom the program can anticipate opportunities for influence. It is the (behavioural) change in these stakeholders that demonstrates the program's target outcomes. The behavioral change includes change in individuals, groups, communities, organizations, or institutions.
Outcome challenge	The ideal target outcome, i.e. how the actor would be behaving and relating to others if the program achieved its full potential or was fully successful.
Progress markers	For each boundary partner, this is a list of gradually developing (outcome) changes in a (boundary) partner indicating progression towards targeted target ideal change. They are sets of graduated 'change' indicators in partners from the minimum one would <i>expect to see</i> as an early response to the programs basic activities, to what it will be expected if the program were having a profound influence or was extremely successful. They are usually categorized as 'Expect to see...', 'Like to see...' and 'Love to see...' changes.
Strategies	A set of activities and outputs (causal, persuasive and supportive) used by the program to contribute to the achievement of outcomes in the boundary partner. The can be aimed directly either at the boundary partners or indirectly by exerting support or influence through the environment in which the boundary partner operates.

Introduction

Safe Food, Fair Food (SFFF) is the short name for the project titled "*Risk-based approaches to improving food safety and market access in smallholder meat, milk and fish value chains in four African countries*", led by ILRI and funded by BMZ/GIZ. The project aims at improving the livelihoods of poor producers and consumers by reducing the health risks and increasing the benefits associated with meat, milk and fish value chains.

The project's purpose is to further research into the practical application of risk analysis and economic and social methods by food safety stakeholders and value chain actors, improving food safety and market participation of the poor in informal markets for livestock products in sub-Saharan Africa. The project will work with value chains in four countries (Ethiopia, Mali, Tanzania and Uganda), university and research networks, as well as economic communities operational in three African regions (East, West and Southern Africa).

In developing its methodology the outcome mapping (OM) approach is being used to provide a strategic and operational approach for its dissemination objective. OM is being used to support changes in the behavior, relationships, activities or actions of the people, groups and organizations (boundary partners) whose role is to improve food safety and safeguard market access. OM will particularly underpin the operational engagement with policy-makers in the regional economic communities to create a more enabling environment for food safety, and with universities and training institutions for continued research, related curricula development and capacity building.

On 28-29 May 2012, the research team organized a training and strategy workshop during which the outcome mapping framework was developed. In attendance and developing content from the different regions were:

- Dao Daouda, Centre Suisse de Recherches Scientifiques en Côte d'Ivoire (CSRS)
- Saskia Hendrickx, International Livestock Research Institute (ILRI)
- Erastus Kang'ethe, University of Nairobi
- Amos Omore, ILRI
- Delia Grace, ILRI
- Kristina Rösel, ILRI/Freie Universität Berlin

Joseph Karugia, coordinator of the Regional Strategic Analysis and Knowledge Support System – East and Central Africa, was absent with apology.

Development of the project's OM framework started at the workshop but was completed a couple of weeks thereafter after the participants re-worded initial drafts and added more relevant material.

The following sections therefore contain the OM framework with details on the targeted outcomes and the project's support strategies, and will be used to monitor progress and guide any corrective actions.

The vision of the project

The vision has been developed after reviewing content from the write-ups from East, West and South Africa targets. In all the three regions where the project will be operating, the following vision is targeted. The regional economic communities (RECs) and governments of partner states or countries acknowledge food safety and promote and support related policies. In addition they recognize and acknowledge the role of informal traders in their food supply activities and provide them support to ensure the food safety principle is upheld.

To do that, RECs and governments are using research evidence (through participatory processes) to establish food safety standards suitable to their regional and localized specifications. These processes use participatory risk analysis tools to generate risk-based evidence to guide policy framework and appropriate standards development. Relevant government bodies then establish, support and sustain systems and practices by all relevant actors (including informal traders) to ensure food safety is maintained while supporting the informal traders. Such system's changes include developing and implementing relevant policies, while providing requisite resources, capacity and infrastructure.

Such outcome change requires accompanying change among the other actors, notably research and other 'knowledge generators'. They continue to research and develop evidence to feed into the required food safety standards for their countries and advise on systems and practices that support the food safety objective. The researchers generate information and recommendations that support informal traders' food supply activities while adhering and ensuring the food safety objective is maintained. Institutions of higher learning and research in the partner states are developing and implementing curricula (for relevant veterinary and public health schools) to build capacity needed to support accepted and operational food safety research and systems.

To achieve and sustain safe and fair food from the informal sector, the standards organizations in the partner states engage with national research organizations to establish and run appropriate (practical, achievable) incentive-based standards for improved compliance. As a result all supply chain actors, including the informal traders, comply with agreed and operating food safety regulations while participating (by providing relevant information and developing solutions) in continued development of standards, systems and practices that enhance food safety.

In East Africa the target REC is the East African Community (EAC); in West Africa it is the Economic Community of West African States (ECOWAS). In South Africa, the REC targeted is the Southern Africa Development Community (SADC). The region's vision includes the Centre for Agricultural Research and Development for Southern Africa (CARDESA) and the National Health and Agricultural Research Institutes working on food safety aspects in general and those related to the informal markets in particular using participatory risk analysis methods where appropriate. It is expected that universities and academic Institutions in each region will include food hygiene and safety and participatory methods into their training curricula. In addition to economic and academic target partners, others were identified (see boundary partners below).

The region-specific outcomes depend on target (boundary) partners and these are presented in the following sections.

East Africa

Eastern Africa boundary partners and target outcomes (or challenges)

Boundary Partner	Who they are, their current roles	Target outcomes; Outcome challenge
Policy group	Hygiene divisions in MoH, MoLD, Food Safety Authorities, Local authorities <ul style="list-style-type: none"> • Hygiene during production, slaughter, and eating places • Ensuring food safety and surveillance 	<ul style="list-style-type: none"> • Provide infrastructure and services for informally marketed foods
EAC, Standard Bureaus	Include livestock and health desk, animal foods standard officers <ul style="list-style-type: none"> • Harmonize standards • Develop standards 	<ul style="list-style-type: none"> • Embrace role of informal ASF markets • Develop appropriate standards for informal ASF
Academia and research Institutions	Deans of veterinary and public health schools, food science, IUCEA, RUFORUM, NARS <ul style="list-style-type: none"> • Train professionals • Carry out research • Quality of university education • Capacity building in tertiary institutions • Develop curricula 	<ul style="list-style-type: none"> • Harmonize food safety curricula • Build capacity to deliver developed and harmonized curricula • Engaged in food safety research and enrich the curricula with emerging knowledge
Producers, informal marketing and consumer organizations	<ul style="list-style-type: none"> • Organized groups dealing in informal ASF • Advocacy for food safety 	<ul style="list-style-type: none"> • Embrace and implement appropriate food safety standards • Work with policy to improve on hygiene • Active advocacy of food safety issues amongst members

Support activities and outputs for the eastern Africa partners

Boundary Partner		PERSUADE <i>What will be done to build interest and capacity in partner</i>	SUPPORT <i>How will you support, guide and mentor the partner</i>
	Activities aimed at:		
Policy	... the individual partners	<ul style="list-style-type: none"> • Provide evidence of food safety • Organize forums • Facilitate the discussions • Make information available 	<ul style="list-style-type: none"> • Literature and manuals availed in project website and shared
	... their environment	<ul style="list-style-type: none"> • Encourage the adoption of food safety policy • Encourage the Formation of a Food Safety Authority 	<ul style="list-style-type: none"> • Sharing the progress reports and limitations and through networks and platforms
EAC and Standards Bodies	... the individual partners	<ul style="list-style-type: none"> • Organize forums • Avail information • Facilitate discussions 	<ul style="list-style-type: none"> • Manuals and literature availed in website, sharing information through networks and platforms
	... their environment	<ul style="list-style-type: none"> • Strong advocacy of consumer organization • Demand for better services and need for regulation by informal ASF markets and consumer organizations 	<ul style="list-style-type: none"> • Information on food safety availed • Progress reports of other boundary partners
Consumer organizations and informal ASF players	... the individual partners	<ul style="list-style-type: none"> • Willingness of the actors to work towards better safety standards • Attendance of sensitization meetings 	<ul style="list-style-type: none"> • Information on benefits of safer foods
	... their environment	<ul style="list-style-type: none"> • Policy regulators demand changes in food safety • Provision of better working conditions that demand implementation of changes in food safety regulations 	<ul style="list-style-type: none"> • Encourage policy group to demand changes in food safety issues • Encourage consumers to demand safe food from the sector
Deans of Public Health and Veterinary Schools, IUCEA and RUFORUM	... the individual partners	<ul style="list-style-type: none"> • Avail information on benefits of curriculum change to include food safety issues • Provide information on the needs for better quality graduates 	<ul style="list-style-type: none"> • Encourage review of the curriculum • Encourage building the capacity of the veterinary and public health schools by higher education bodies of IUCEA and RUFORUM to mount the revised curriculum
	... their environment	<ul style="list-style-type: none"> • Demand by employers for better quality graduates who can holistically address food safety issues of informal markets 	<ul style="list-style-type: none"> • Avail information on food safety market needs for food and veterinary science graduates

Eastern Africa progress markers (and their indicators)

Boundary Partner	Progress markers	Progress marker indicator (data, evidence)	
Ministries – Public Health, Livestock Development and Food Safety Authorities	P 1	<ul style="list-style-type: none"> • Participate consultative forums • Acquire knowledge, awareness and interest in food safety in informal markets 	
	P 2	<ul style="list-style-type: none"> • Integration of the two ministries collaboratively tackling public health issues related to ASF • Participatory engage with informal sector ASF • Develop policies to support the informal ASF • Ensure legislations are in place to support policy 	
	P3	<ul style="list-style-type: none"> • Build capacity of actors on food safety and hygiene • Provide infrastructure that promotes food safety, hygiene and market access in informal markets 	
EAC desks on health and livestock	P 1	<ul style="list-style-type: none"> • Interest in food safety; hold meetings 	
	P 2	<ul style="list-style-type: none"> • Convene EAC secretariats to discuss • Discussions of the need in the EAC Parliament 	
	P3	<ul style="list-style-type: none"> • Harmonization of the food safety regulations 	
Bureau of Standards	P1	<ul style="list-style-type: none"> • Interests in appropriate standards • Engage with selected informal sector actors 	
	P2	<ul style="list-style-type: none"> • Engage with smallholders to discuss appropriate standards 	
	P3	<ul style="list-style-type: none"> • Standards developed in participatory manner 	
Deans of Veterinary and Public Health Schools	P1	<ul style="list-style-type: none"> • Interest in curricula change • Appoint committees to oversee inclusion of food safety, risk analysis and participatory methodologies in curricula 	
	P2	<ul style="list-style-type: none"> • Review of curricula • Capacity building to implement 	
	P3	<ul style="list-style-type: none"> • Graduation of students through the curricula 	

West Africa

Western Africa boundary partners and target outcome (or challenges)

Boundary partner	Who they are, their current roles	Target outcomes; Outcome challenge
Regional organizations	These include ECOWAS/EMUWA; FAO; WHO; and UNIDO <ul style="list-style-type: none"> • They are the regional and sub-regional economic bodies 	<ul style="list-style-type: none"> • Develop harmonized standards in food safety that are applied to national level
The national government (of Côte d'Ivoire)	Mainly the ministries of agriculture; livestock production; health; and of infrastructure <ul style="list-style-type: none"> • They are in charge of national policy/regulations/surveillance/enforcement 	<ul style="list-style-type: none"> • Application of regional standards into mandatory laws "<i>Loi d'orientation agricole</i>" (including the prerequisites such as training required for license) • Provide infrastructure (physical, anti-corruption), prerequisites (cold chain, electricity, potable water)
Producer organizations	This includes ANOPACI (<i>producers</i>), ADCVI (<i>producers</i>), Filière bétail viande FENACOVICI (<i>traders</i>) <ul style="list-style-type: none"> • They serve producer protection and lobby for members 	<ul style="list-style-type: none"> • Compliance with national regulations • Cooperation • Promote quality-based payment • Capability to produce food in different levels of quality
Consumer organizations	Refers to <i>L'association de consommateurs libre en CI</i> (Free consumer association in Côte d'Ivoire) <ul style="list-style-type: none"> • Consumers protection/lobby 	<ul style="list-style-type: none"> • Change of attitude • Free choice based on different levels of quality plus quality-based payment
Research centres	They include EISMV, Dakar Institut Pasteur Universités; and platforms like AfriqueOne <ul style="list-style-type: none"> • Evidence creation 	<ul style="list-style-type: none"> • More research on food safety risks • Produce training materials • Provide innovative interventions • Curricula development

Support activities and outputs for the Western Africa Partners

Boundary Partner		PERSUADE <i>What will be done to build interest and capacity in partner</i>	SUPPORT <i>How will you support, guide and mentor the partner</i>
	Activities aimed at:		
Regional organizations	... the individual partners	<ul style="list-style-type: none"> • Advocate, invite ourselves 	<ul style="list-style-type: none"> • Identify one contact person/office per institution, Policy briefs, research brief, response to call for proposals from ECOWAS, regular updates through website and newsletter
National governments		<ul style="list-style-type: none"> • Advocate, invite ourselves, persuade to change/amend regulations; 	<ul style="list-style-type: none"> • Identify one contact person/ office per institution, initiate forums including producer and consumer associations
Producer organizations		<ul style="list-style-type: none"> • Involve them in cost/benefit research of food safety (participative); training in food hygiene 	<ul style="list-style-type: none"> • Identify contact person/office per institution, organize forum for exchange; trade fair to enhance competition & award; training materials always available
Consumer organizations		<ul style="list-style-type: none"> • Involve them in cost/benefit research of food safety (participative); training in food safety 	<ul style="list-style-type: none"> • Identify one contact person/office per institutions, organize forum for exchange; invite them to the trade fair of producers; training materials always available
Research centres/ think tanks		<ul style="list-style-type: none"> • Engage them in more PRA research projects • Development of curricula in PRA • More cost/benefit research 	<ul style="list-style-type: none"> • Identify one contact person per institutions, development of MSc curriculum
		... all the boundary partners' environment	<ul style="list-style-type: none"> • Media, international conferences, encourage dialogue, facilitate discussion, lobby

Western Africa progress markers (and their indicators)

Boundary Partner	Progress markers		Progress marker indicator (data, evidence)
Regional organizations	Expect to see	<ul style="list-style-type: none"> • Participate consultative forums • Acquire Knowledge Awareness and interest in food safety in informal markets 	
	Like to see	<ul style="list-style-type: none"> • Availability for dialogue 	
	Love to see	<ul style="list-style-type: none"> • Documented regulations 	
National governments	Expect to see	<ul style="list-style-type: none"> • Availability for listening 	
	Like to see	<ul style="list-style-type: none"> • Availability for dialogue 	
	Love to see	<ul style="list-style-type: none"> • Documented laws 	
Producer organizations	Expect to see	<ul style="list-style-type: none"> • Develop criteria for different levels of quality for quality-based payment 	Different levels of quality stipulated (participatory with policy makers, producers, consumers, researchers)
	Like to see	<ul style="list-style-type: none"> • Participation in trade fair (award winner) 	Award winner
	Love to see	<ul style="list-style-type: none"> • Quality-based payment; Charter for common way forward 	Charter for common way forward
Consumer organizations	Expect to see	<ul style="list-style-type: none"> • Develop criteria for different levels of quality for quality-based payment 	
	Like to see	<ul style="list-style-type: none"> • Participation in trade fair and communication towards consumers – press release 	
	Love to see	<ul style="list-style-type: none"> • Quality-based payments 	
Research centers	Expect to see	<ul style="list-style-type: none"> • Develop criteria for different levels of quality for quality-based payment 	
	Like to see	<ul style="list-style-type: none"> • Accept the idea of including food safety to university curriculum; develop curriculum and training materials 	
	Love to see	<ul style="list-style-type: none"> • MSc curriculum in food safety 	

Southern Africa

Southern Africa boundary partners and target outcome (or challenges)

Boundary Partner	Who they are, their current roles	Target outcomes; Outcome challenge
<ul style="list-style-type: none"> Regulatory bodies/policy makers 	<p>Who:</p> <ul style="list-style-type: none"> SADC – Food Safety committee Food safety Dept at Min of Agriculture Food safety Dept at Min of Health Food Safety Dept at any other Ministries Bureau of Standards OIE FAO - WHO UNIDO AU IBAR <p>Current roles</p> <ul style="list-style-type: none"> Legislation at regional level. Legislator and implementation bodies at national level. Hygiene during production, slaughter and eating places. Develop standards 	<ul style="list-style-type: none"> They recognize the importance of food safety and informal markets to household, local and national economies. They formulate policies that support food hygiene and safety activities. They use research for evidence based decision making and are investing in research on food safety and markets infrastructure.
<ul style="list-style-type: none"> Academia and Research Institutions 	<p>Who:</p> <ul style="list-style-type: none"> Centre for Agricultural Research and Development for Southern Africa (CARDESA) (when operational) National Agricultural and Health Research Institutes Universities – Veterinary, Medicine, Food Sciences... RUFORUM <p>Current roles:</p> <ul style="list-style-type: none"> Conduct research at regional and national level Are in charge of graduate and post graduate education in veterinary and public health school and food sciences. 	<ul style="list-style-type: none"> They are conducting research in the area of food hygiene and safety and disseminating results to different audiences on a regular basis. Universities are including food safety and participatory method into the curricula and updating when needed. They are teaching graduates and post graduates in food safety and participatory methods including for risk analysis.
<ul style="list-style-type: none"> Intermediary and end users 	<p>Who:</p> <ul style="list-style-type: none"> Food handlers groups or associations National producers associations Consumers associations <p>Current role:</p> <ul style="list-style-type: none"> Trade, sell and buy animal sourced food at formal and informal markets. 	<ul style="list-style-type: none"> Traders and sellers are organized. Traders and sellers are trained in food hygiene and safety and sell animal sourced foods according to set standards that are incentive based in order to encourage adoption. The buyers are interested in buying local animal sourced foods that are safe and continue buying (although not exclusively) at informal markets.

Support activities and outputs for the Southern Africa partners

Boundary Partner		PERSUADE <i>What will be done to build interest and capacity in partner</i>	SUPPORT <i>How will you support, guide and mentor the partner</i>
	Activities aimed at:		
Regulatory bodies / policy makers	... the Individual Partners	<ul style="list-style-type: none"> • Policy brief on SFFF1 findings produced and shared. • 	<ul style="list-style-type: none"> • SFFF 1 book shared widely • Presenting on SFFF1 results and making the results available
	... their Environment	<ul style="list-style-type: none"> • Publish progress reports on implementation status • Encourage formation of national food safety authorities 	<ul style="list-style-type: none"> • Project website with various products continuously updated • Initiate and encourage sustained platforms for information exchange
Academia and Research institutions	... the Individual Partners	<ul style="list-style-type: none"> • Train partners on participatory risk analysis methods. • Share curricula and modules from other countries to assist with curriculum revision. 	<ul style="list-style-type: none"> • Presenting on SFFF1 results and making the results available at universities • Sharing of peer reviewed articles from SFFF1 • Training of trainers in participatory risk analysis • Manual for trainers available
	... their Environment	<ul style="list-style-type: none"> • Publish progress reports on implementation status 	<ul style="list-style-type: none"> • Project website with various products continuously updated
Intermediary and end users	... the Individual Partners	<ul style="list-style-type: none"> • Share training modules on food safety with food safety department. • Support training courses for handlers 	<ul style="list-style-type: none"> • Manuals available.
	... their Environment	<ul style="list-style-type: none"> • Mass media on food safety research and risks 	<ul style="list-style-type: none"> • Project website with various products continuously updated

Southern Africa progress markers (and their indicators)

Boundary Partner	Progress markers ¹		Progress marker indicator (How will we know? Data, evidence)
Policymakers	E 1	Policy makers are engaged in dialogue with market chain actors related to food safety about its importance	Is Food Safety being discussed at SADC technical meetings and at ministerial meetings at national level? YES/NO Sources of info/data; How we will know? • Meeting reports • Verbal feedback on meetings
	E 2	Policymakers acquire knowledge and understand the importance of food safety and recognize the co-existence of the formal and informal markets for food supply	Staff from Food Safety departments attends meeting facilitated by ILRI and other relevant actors on the topic. YES/NO Sources of info/data; How we will know? • Meeting reports • Verbal feedback on meetings
	E 3	Bureau of standards, are interested in developing and possibly reviewing food safety standards that are achievable	Staff from Bureau of Standards attends meeting on the topic. YES/NO Sources of info/data; How we will know? • Meeting reports • Verbal feedback on meetings
	Li 1	Public sector is developing infrastructure and other facilities for private sector use	Are new market infrastructures constructed and existing markets upgraded? YES/NO Sources of info/data; How we will know? • Plan and budget approved for investment • Improved market infrastructure in place
	Li 2	Build capacity of value actors along the value chain ²	Value chain actors attend training or seminar on food safety YES/NO ³ Sources of info/data; How we will know? • Training report available
	Lo 1	Policymakers using research for evidence based decision making (documented regulations) and constantly reviewing regulations and standards	Research outputs feed into policy YES/NO Sources of info/data; How we will know? • Regulations revised and updated
	Lo 2	Incentive based approaches for standards	Revised standards in place YES/NO Sources of info/data; How we will know? • Standards revised and incentives defined
	Academia and research institutions	E 1	Academia are interested in curricula change to include food safety and participatory methods

¹ E 1, 2, and 3, Li 1, 2 and 3, Lo 1, 2 and 3 = Expect 1, 2, 3; Like 1, 2 and 3 and Love 1, 2 and 3

² This is more like a support rather than the outcome (behavioral change). If the later, it should read Value actors demonstrate increased capacity ...

³ If Li 2 is the change sought, then this is not an appropriate indicator

Boundary Partner	Progress markers ¹		Progress marker indicator (How will we know? Data, evidence)
	E 2	Academic institutions establish working groups to include food safety and participatory methods into curricula	Working group established? YES/NO Sources of info/data; How we will know? <ul style="list-style-type: none"> • Group members identified • Meetings take place regularly • Meeting notes
	E 3	Academia and regional and national research institutions work on food safety issues and share findings with relevant actors continuously	Is Food Safety research being conducted? YES/NO Sources of info/data; How we will know? <ul style="list-style-type: none"> • List of project names and possibly project proposal summaries
	Li 1	Academia changed their curricula to include food safety and participatory methods and modules are developed	IS food safety included in the curricula YES/NO Sources of info/data; How we will know? <ul style="list-style-type: none"> • Study program – curricula available from the different universities
	Lo 1	Students graduating with new curriculum	Did students graduate from new curriculum that includes food safety? YES/NO Sources of info/data; How we will know? <ul style="list-style-type: none"> • List of universities from which students did graduate
Intermediary and end users	E 1	Value chain actors are interested in food safety and participate in capacity building	Did capacity building take place? YES/NO ⁴ Sources of info/data; How we will know? <ul style="list-style-type: none"> • Training report available
	E 2	Value chain actors (e.g. producers and traders) are involved in development of standards	Did meetings on standards take place? YES/NO Sources of info/data; How we will know? <ul style="list-style-type: none"> • Meeting report • Verbal feedback on meetings
	Li 1	Value chain actors adhere to recommended standards because it increases the value of their products	Value chain actors changing behaviour in order to comply with standards? YES/NO Sources of info/data; How we will know? <ul style="list-style-type: none"> • Number of value chain actors following new standards • Increased demand from value chain actors to follow training in order to comply with new standards
	Lo 2 ⁵	Value chain actors organize themselves in stakeholder networks that facilitate interaction and strengthens negotiation power	Are networks or groups being created? YES/NO Sources of info/data; How we will know? <ul style="list-style-type: none"> • Number of groups created and their objectives

⁴ As an outcome, the statement should be "Did 'the users' register and attend capacity building forums?"

⁵ What happened to Lo 1?

Further probes to support outcomes recorded

Saskia also recommends further probing into the changes sought and sources of information to be used:

For meetings:

1. Who organized the meeting
2. Who attended?
3. What were the objectives?
4. Who put (the topics, issue) on the agenda?
5. What exactly was discussed?
6. Were decisions made? If so, which one?
7. Possible impact

For training forums:

1. Who organized the training?
2. Who financed the meeting?
3. Who attended?
4. What were the objectives?
5. What has been the possible impact of training and decisions made

For plans and budget approved for investment (in infrastructure, etc.):

1. Who initiated this?
2. Who is financing it?
3. Possible impact of activity

In revisions of standards and incentives:

1. Who took the lead in this process?
2. Who financed it?
3. What standards were changed?
4. Possible impact of new standards

For food safety research:

1. Which institutions are involved?
2. Who is funding (the research)
3. Possible impact

On value chain actors following new standards:

1. What made them change?
2. Have their incomes increased thanks to this change?
3. Possible impact of changed behaviour?

For the formation of networks or groups:

1. What made them organize themselves?
2. Who is funding (the networks, group)?
3. What exactly is discussed at the meetings?
4. Were decisions made? If so, which one?
5. Possible impact