



**High Level Strategy &
Writing Session:
Developing a Roadmap to
Manage Aflatoxin Risk**

Maanzoni Lodge | Nairobi, Kenya
June 19 – 23, 2017

**High Level Strategy
& Writing Session:
Developing a Roadmap
to Manage Aflatoxin Risk**

Maanzoni Lodge
Nairobi, Kenya
June 19-23, 2017

Agenda

**Aflatoxin risk management roles:
Pillars of aflatoxin co-regulation**

SWOT analysis

**Regulatory market mapping
& matrix**

Maize Value Chain | Agency Mandates |
Gap Analysis | Writing Assignment A

**Managing aflatoxin through co-
regulation: technical elements**

Aflatoxin Test Kit Validation Protocol |
Training & Qualification | Preventive Controls

Regulation mapping & matrix

Writing Assignments B - E

**Annex A: Presentations &
Minutes from High-Level
Breakfast Meetings**

High Level Strategy and Writing Session Developing a Roadmap to Manage Aflatoxin Risk

Maanzoni Lodge
Machakos County, Kenya
June 19-23, 2017

Monday, June 19, 2017

Start Time	Location	Description	Coordinator
		<i>Breakfast</i>	
9:00 AM		Welcome & Introductions	
9:30 AM		Aflatoxin risk management roles	
		Government	
		Industry	
		Producers	
		SWOT analysis	
Noon		<i>Lunch</i>	
1:00 PM		Group reports	
2:00 PM		Regulatory Market Mapping & Matrix	
		Maize value chain	
		Agency mandates	
		Gap analysis	
4:30 PM		Review & document	
5:00 PM		Dinner	

Tuesday, June 20, 2017

Start Time	Location	Description	Coordinator
		<i>Breakfast</i>	
8:00 AM		Announcements	
8:10 AM		The Act: Writing session overview	
8:30 AM		Writing Assignment A: The Act	
10:30 AM		Group reports	
Noon		<i>Lunch</i>	
1:00 PM		Managing aflatoxin through co-regulation: <i>technical elements</i>	
1:45 PM		Breakout sessions:	
		Aflatoxin test kit validation protocol	
		Analyst training & qualification	
		Preventive controls	
3:30 PM		Group reports	
4:30 PM		Review & document	
5:00 PM		Dinner	

High Level Strategy and Writing Session Developing a Roadmap to Manage Aflatoxin Risk

Wednesday, June 21, 2017

Start Time	Location	Description	Coordinator
		<i>Breakfast</i>	
8:00 AM		Announcements	
8:10 AM		Managing aflatoxin through co-regulation	
9:00 AM		Regulation mapping & matrix	
10:00 AM		Writing Assignment B: Subsidiary Legislation	
		Writing Assignment C: Directives, Guidance Documents & Standards	
		Writing Assignment D: SOPs, Training Manuals, Certification & Records	
Noon		<i>Lunch</i>	
1:00 PM		Writing assignments, cont.	
3:30 PM		Group reports	
4:30 PM		Review & document	
		Dinner	

Thursday, June 22, 2017

Start Time	Location	Description	Coordinator
		<i>Breakfast</i>	
8:00 AM		Announcements	
8:10 AM		Remaining Gaps Discussion & Review	
9:00 AM		Writing Assignment E: Remaining Gaps	
Noon		<i>Lunch</i>	
1:00 PM		Implementation Plan: Pillars of Co-regulation	
3:00 PM		Breakout groups	
4:30 PM		Review & document	
5:00 PM		Dinner	

Friday, June 23, 2017

Start Time	Location	Description	Coordinator
		<i>Breakfast</i>	
8:00 AM		Announcements	
8:10 AM		Finalize implementation plan – report back	
10:00 AM		Group Assessment, did we meet our goal to layout a roadmap to formalize co-regulation of aflatoxin risk	
11:30 AM		Final words by Parliament members and agency directors	
Noon		<i>Lunch</i>	
Afternoon		Writing session by staff	

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Pillars of Aflatoxin Co-Regulation

Objective

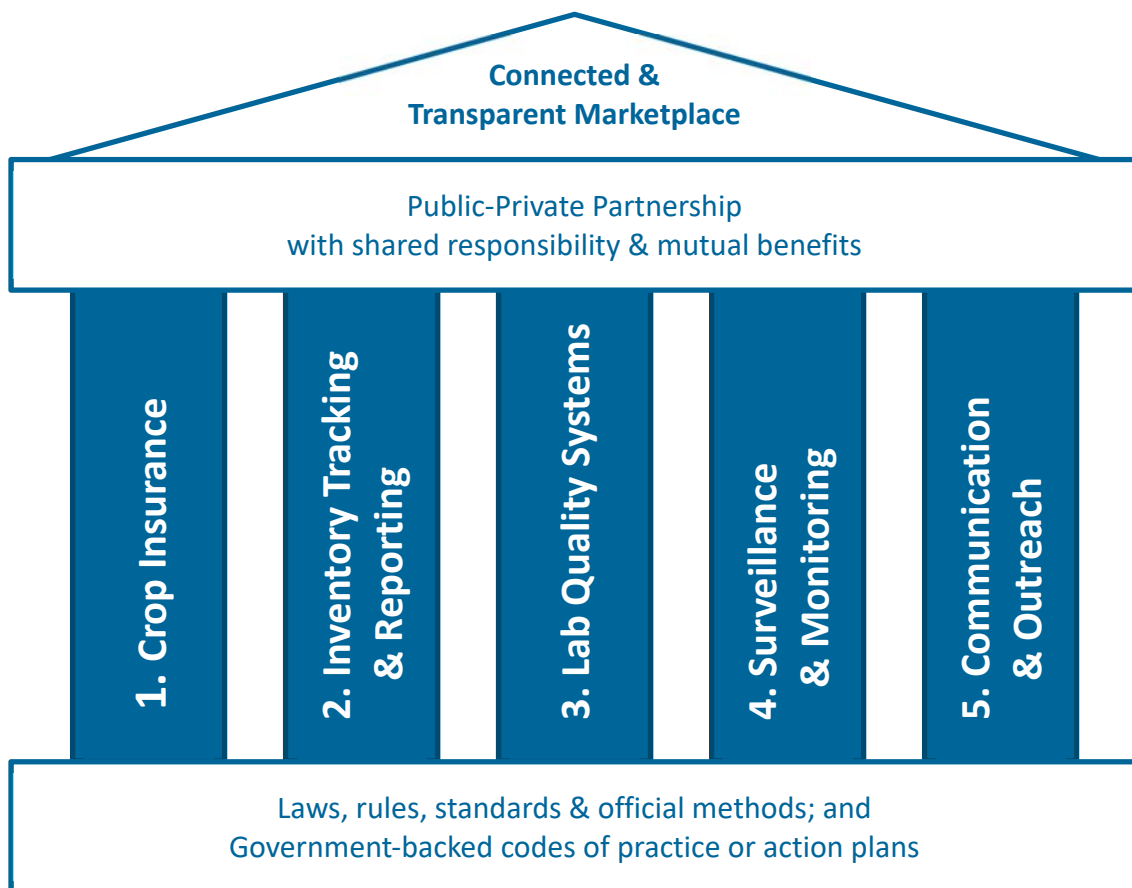
- Conceptualize the essential elements of a successful public-private partnership to manage aflatoxin risk and achieve a connected and transparent marketplace that delivers aflatoxin safe maize, maize products and milk to all of Africa.

Resources

- Minutes of the High-Level Breakfast Meetings to Discuss Continued Public-Private Sector Collaboration to Manage Aflatoxin Risk (January 2017; March 2017 & May 2017)

Activity

- Take notes on the following page as we review the diagram below and discuss the core responsibilities and mutual benefits for each stakeholder: government, industry and, where appropriate, producers or consumers.



Responsibilities & Benefits

1. Crop Insurance

A. Responsibilities:

Government _____

Industry _____

Producer/Other _____

B. Benefits: _____

2. Inventory Tracking & Reporting

A. Responsibilities:

Government _____

Industry _____

Producer/Other _____

B. Benefits: _____

3. Lab Quality Systems

A. Responsibilities:

Government _____

Industry _____

Producer/Other _____

B. Benefits: _____

4. Surveillance & Monitoring

A. Responsibilities:

Government _____

Industry _____

Producer/Other _____

B. Benefits: _____

5. Communication & Outreach

A. Responsibilities:

Government _____

Industry _____

Producer/Other _____

B. Benefits: _____

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**Annex A: Presentations &
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Breakfast Meetings**

SWOT Analysis

Objective

- Identify your agency's Strengths, Weaknesses, Opportunities and Threats (SWOT) pertaining to aflatoxin risk management.

Resources

- Co-regulation core responsibilities

Activity

1. Agency breakout groups: Consider the following factors as you answer the questions below and enter your responses on the SWOT Analysis worksheet.
 - Agency authority;
 - Personnel & resources;
 - Processes (e.g. document control, relational database, management information system, standard operating procedures, facility inventory, training of employees, outreach);
 - Collaborations;
 - Communication and outreach programs;
 - Lab capabilities; and
 - Other facilities.
 1. What are your agency's strengths (e.g., advantage, what you do better than anyone else, any benchmarking to provide evidence, etc.)?
 2. What are your agency's weaknesses (e.g., what could you improve, where are you lacking authority, budget, influence or compliance, etc.)?
 3. What opportunities are available (e.g., changes in technology or processes, influence or other trends, etc.)?
 4. What do you consider to be a threat (e.g., obstacles you face, competitors, areas where quality standards aren't being met, etc.)?
2. All participants: Report your responses to the group

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Agency Name: _____

Cooperating Agencies: _____

Strengths	Weaknesses

Opportunities	Threats

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Regulatory Mapping & Matrix: Maize Value Chain

Objectives

- Identify the elements from production to sale and distribution, that must be regulated to manage aflatoxin risk in a maize, maize product and milk value chain

Resources

- Kang'ethe, E.K. (2011) Situation Analysis: Improving Food Safety in the Maize Value Chain in Kenya. Roles and mandates of Government Institutions (pgs. 87-89)

Activity

1. All participants: For each stage in the simplified maize value chain below, identify the elements that need to be addressed in the law. Please note that some elements will fall under more than one stage. For example, maize may be tested at the production, storage and at the processing stages.

Stage	Elements to be addressed in the law
Production	
Transport	

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Storage	
Processing	
Sale & Distribution	

Regulatory Mapping & Matrix: Agency Mandates

Objectives

- For each element in the maize value chain, identified in the previous activity, determine and indicate your agency's existing regulatory authority

Resources

- Kenya Law full text search <http://kenyalaw.org/kl>
- Kang'ethe, E.K. (2011) Situation Analysis: Improving Food Safety in the Maize Value Chain in Kenya. Roles and mandates of Government Institutions (pgs. 87-89)

Activity

1. Agency Breakout Group: Complete a worksheet for each element in the simplified maize value chain
2. Note your agency's existing authorities and any associated legislation, or mark as 'none' or 'partial'

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Agency: _____

PRODUCTION					
#	Elements	Mandate	Subsidiary Legislation (Regulation, Rule or Order)	Supporting directives, Guidance Documents & Standards	SOPs, Training Manuals & Records
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					

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Agency: _____

TRANSPORT					
#	Elements	Mandate	Subsidiary Legislation (Regulation, Rule or Order)	Supporting directives, Guidance Documents & Standards	SOPs, Training Manuals & Records
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					

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Agency: _____

STORAGE					
#	Elements	Mandate	Subsidiary Legislation (Regulation, Rule or Order)	Supporting directives, Guidance Documents & Standards	SOPs, Training Manuals & Records
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					

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Agency: _____

PROCESSING					
#	Elements	Mandate	Subsidiary Legislation (Regulation, Rule or Order)	Supporting directives, Guidance Documents & Standards	SOPs, Training Manuals & Records
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					

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Agency: _____

SALE & DISTRIBUTION					
#	Elements	Mandate	Subsidiary Legislation (Regulation, Rule or Order)	Supporting directives, Guidance Documents & Standards	SOPs, Training Manuals & Records
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					

Regulatory Mapping & Matrix: Gap Analysis

Objectives

- Identify gaps in Kenya’s laws as pertaining to the regulation of aflatoxin in Maize value chain

Resources

- Kenya Law full text search <http://kenyalaw.org/kl>
- Kang’ethe, E.K. (2011) Situation Analysis: Improving Food Safety in the Maize Value Chain in Kenya. Roles and mandates of Government Institutions (pgs. 87-89)

Activity

1. All participants: For each stage in the value chain, summarize the results from the Agency Mandates activity in the matrices below.
2. Identify any regulatory gaps that pertain to regulation of aflatoxin in maize, maize products and milk.

PRODUCTION								
#	Elements	AFA	KALRO	KEBS	KEPHIS	MOA	MPHS	NCPB

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TRANSPORT								
#	Elements	AFA	KALRO	KEBS	KEPHIS	MOA	MPHS	NCPB

STORAGE								
#	Elements	AFA	KALRO	KEBS	KEPHIS	MOA	MPHS	NCPB

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PROCESSING								
#	Elements	AFA	KALRO	KEBS	KEPHIS	MOA	MPHS	NCPB

SALE & DISTRIBUTION								
#	Elements	AFA	KALRO	KEBS	KEPHIS	MOA	MPHS	NCPB

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Writing Assignment A: The Act

Objectives

- For each element identified in the Gap Analysis, identify the relevant Act and write draft language to address the gap

Resources

- Kenya Law full text search <http://kenyalaw.org/kl>

Activity

1. Agency breakout group: Use the amendment/revision worksheet to document amendments or additions to the Act

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Element/Topic(s): _____

Agency: _____

Act Title: _____

Section(s) to be amended or added:

Describe the changes:

Add a new section. Section to be added after: _____

Repeal and Replace a section. Section to be repealed:

Delete and substitute a sub-section or paragraph. Subsection/Subsection and paragraph to be deleted:

New draft language:

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List any relevant any related Subsidiary Legislation (Regulations, Rules or Orders) needed to implement the suggested revision.

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Aflatoxin Test Kit Validation Protocol

Objectives

- Identify validation elements
- Assign science-based performance standards
- Determine writing session assignments

Resources

- GIPSA Aflatoxin Test Kit Criteria
- AAC SOP M0052 Test Kit Validation
- Policy on Mycotoxin Rapid Test Kit Validation
- Rapid ELISA
- Rapid Determination of Fumonisin
- Others in directory

Activity

1. List design and performance requirement:
 - Use of reference material
 - Grinding/particle size
 - Sample storage
 - Preparation of reference material
 - Preparation of Standard Solutions
 - Written Instructions
 - Time of Analysis
 - Accuracy

2. Assign Science Based Performance Standards for Accuracy:
 - Minimum required range of conformance
 - Extended range of conformance
 - Matrices
 - Acceptable limits

Analyst Training & Qualification

Objectives

- Identify training elements
- Assign qualification performance standards
- Determine writing session assignments

Resources

- KEBS-KALRO Grain Grading Training
- One-Sample-Strategy Handbook
- APTECA Manual
- SOP for Sampling and Testing
- Republic of Kenya Sampling Form
- Analyst Qualification
- Other SOPs

Activity

3. List training elements:
 - Use of reference material - traceability
 - Preparation of reference material and sample
 - Preparation of Standard Solutions
 - SOPs
 - Uncertainty
 - Proficiency
 - Test performance
 - Results analysis
 - Analyst authorization

4. Performance Criteria:
 - Test analysis
 - Required analysis range
 - Number of sample
 - Dixon outlier test

Preventive Controls

Objectives

- Identify preventive controls for the prevention and reduction of mycotoxin contamination in maize
- Determine writing session assignments

Resources

- CODEX ALIMENTARIUS CX/CF 14/8/9
- USDA Mycotoxin Handbook
- USDA Grain Inspection Handbook: Sampling
- USDA Equipment Handbook
- USDA Loss Adjustment Manual Standards Handbook
- APTECA Handbook
- One Sample Strategy Handbook

Activity

5. From the point of incoming maize at the first point of commerce to outbound raw or processed product, determine relevant sampling and analysis control points. For example:
 - Sampling and testing food safety plan
 - Sampling
 - Grinding/particle size
 - Official sample analysis
 - Control sample analysis
 - Lab scale calibration
 - Retained file samples
 - Corrective actions
 - Recordkeeping & reporting
6. Identify points specific to each sector:
 - Formal (F)
 - SME/Posho (S)
7. Determine writing session assignments

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<i>F</i>	<i>SP</i>	<i>POINT</i>	<i>OBJECTIVE</i>	<i>CONTROL PARAMETER</i>	<i>REFERENCES</i>
X		Sampling frequency	Ensure that representative portions of all maize entering the facility is tested		CODEX (CX/CH 14/8/9)
X		Sampling pattern & sample size	Ensure that the sample represents the entire truckload of maize		CODEX (CX/CH 14/8/9); GIPSA Grain Sampling Handbook (pg 2-12); LAM (pg 260)
X		*Maize Sample Identification	Ensure traceability to sample date, truck ID (if appropriate), and aflatoxin level		GIPSA Grain Sampling Handbook, Chapter 1 (pg 1-8)
X		Subsampling	Ensure that the test portion represents the entire truckload of maize		GIPSA Mycotoxin Handbook, Chapter 4 (pg 4-4)
X		*Maize Retained File Samples	Retain a representative file sample for each composite sample tested; send sample to for verification analysis		GIPSA Mycotoxin Handbook (pg 4-5)
X		*Finished Product Stream	Ensure quality of finished product		APTEC Handbook
X		*Finished Product Retained File Samples	Ensure quality of finished product		APTEC Handbook
X		*Finished Product Identification	Ensure traceability to product run, production date, lot, and aflatoxin level		APTEC Handbook
X		*Particle Size/ Grinder check	Ensure that the sample is finely ground and homogeneous		GIPSA Mycotoxin Handbook, Chapter 4 (pg 4-9)

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X		Grinder cleaning	Ensure that the grinder is cleaned after each official sample		GIPSA Mycotoxin Handbook, Chapter 4 (pg 4-8)
X		Moisture (Grinding)	Ensure that the sample can be properly prepared for testing		GIPSA Mycotoxin Handbook, Chapter 4 (pg 4-6)
X		Segregation/ Storage	Ensure that maize is segregated and stored to prevent adulteration		GIPSA Mycotoxin Reference (pg 21)
X		*Lab scale calibration	Ensure that the scale is calibrated		GIPSA Equipment Handbook, Chapter 2 (pg 2-8)
X		*Control sample analysis	Maintain analytical performance to accurately measure aflatoxin concentrations		APTECA & One Sample Strategy Handbooks

* Denotes control point with recordkeeping requirements

Describe the required records:

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Writing Assignment B: Subsidiary Legislation

Objectives

- For each element identified in the Gap Analysis, write draft subsidiary legislation to address the gap

Resources

- Kenya Law full text search <http://kenyalaw.org/kl>

Activity

1. Agency breakout group: Use the amendment/revision worksheet to document amendments or additions to the Subsidiary Legislation

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Element/Topic(s): _____

Agency: _____

Act Title: _____

Type of Subsidiary Legislation: _____

Section(s) to be amended or added:

Describe the changes:

Add a new section. Section to be added after: _____

Repeal and Replace a section. Section to be repealed:

Delete and substitute a sub-section or paragraph. Subsection/Subsection and paragraph to be deleted:

New draft language:

High Level Strategy and Writing Session
Developing a Roadmap to Manage Aflatoxin Risk

List any relevant any related supporting directives, guidance documents or standards

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Writing Assignment C: Directives, Guidance Documents & Standards

Objectives

- For each element identified in the Gap Analysis, write supplemental documents such as Directives, Guidance Documents and Standards to address the gap

Resources

- Kenya Law full text search <http://kenyalaw.org/kl>

Activity

2. Agency breakout group: Use the amendment/revision worksheet to delineate supplemental documents

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Element/Topic(s): _____

Agency: _____

Document Title: _____

Select Type of document:

- Supporting Directive
- Guidance Document
- Standard
- Other: _____

New draft language:

List any relevant SOPs, Training Manuals & other records

Writing Assignment D: SOPs, Training Manuals, Certification & Records

Objectives

- For each element identified in the Gap Analysis, list and describe/write documents such as: SOPS, training manuals, certification requirements and records

Resources

- Kenya Law full text search <http://kenyalaw.org/kl>

Activity

- Agency breakout group: Use the amendment/revision worksheet to outline documents that support the implementation of the regulation of aflatoxin risk in maize-value chain

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Element/Topic(s): _____

Agency: _____

Document Title: _____

Select Type of document:

- SOPs
- Training Records
- Work Products
- Other: _____

New draft language/Document description:

List any other relevant items

Writing Assignment E: Remaining Gaps

Objectives

- For each remaining gap, describe how this gap will be addressed within the maize value chain

Resources

- Kenya Law full text search <http://kenyalaw.org/kl>

Activity

- Agency breakout group: For each remaining gap, identify and/or describe the following:
 - Pillar of co-regulation
 - Stakeholders involved
 - How the gap will be addressed
 - Resources needed
 - Additional documents to be developed

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Gap: _____

Industry Association/Agency/Stakeholder Group:

How will the gap be addressed (Briefly describe):

Resources needed to address gap

List any acts or subsidiary legislation that will need to be amended

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List other documentation to be developed

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OFFICE OF THE TEXAS STATE CHEMIST

APECA

Aflatoxin Proficiency Testing and Control in
Africa, Asia, Americas and Europe

GOOD MORNING - WELCOME

PUBLIC-PRIVATE SECTOR COLLABORATION TO
MANAGE AFLATOXIN RISK
19 January, 2017

OFFICE OF THE TEXAS STATE CHEMIST

AFLATOXIN-PRONE DIETARY STAPLES

Maize	Dairy
Peanuts	Poultry
Cassava	Pork
Nuts	Farmed Fish
Upland Rice	Oils
Beans	
Chillies	
Spices	
Spices	

OFFICE OF THE TEXAS STATE CHEMIST

AGENDA

- INTRODUCTIONS
- MEETING OBJECTIVES
- APECA OVERVIEW
- DISCUSSION
- WAY FORWARD

OFFICE OF THE TEXAS STATE CHEMIST

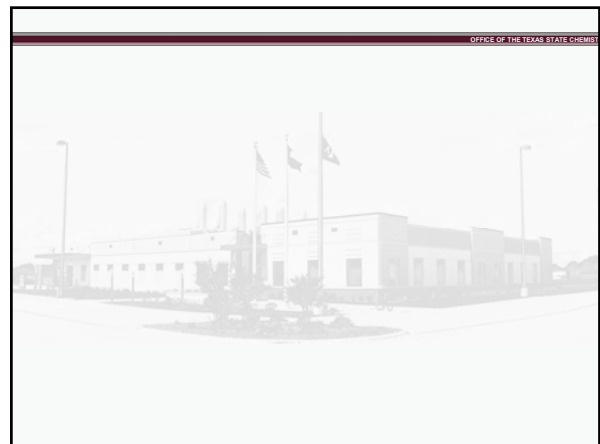
AFLATOXICOSIS IS EXPOSURE RELATED

- **Large Doses** – acute illness and death, usually through liver cirrhosis
- **Chronic Low Doses** – nutritional & immunological consequences
- **All Doses** have a cumulative effect on the risk of cancer (bioaccumulation)

OFFICE OF THE TEXAS STATE CHEMIST

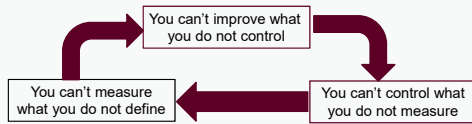
MEETING OBJECTIVES

- AGREEMENT TO FORMALISE A NATIONAL PUBLIC-PRIVATE SECTOR PARTNERSHIP TO MANAGE AFLATOXIN RISK
- DEVELOPMENT OF A ROADMAP TO GET THERE – WITH ROADBLOCKS IDENTIFIED



AFLATOXIN PROFICIENCY TESTING AND CONTROL

A continuous improvement approach to measure and control aflatoxin



Continuous Improvement Cycle for aflatoxin control



Timeline of Accomplishment

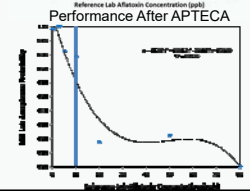
2015

- ISO 17025 accreditation
- 50 analysts qualify
- 80% of the formal maize millers participate (16 mills) in APTECA
- Food safety improved



2016

- 4 aflatoxin workshops in Rwanda, Uganda, Tanzania
- APTECA expanded globally
- Africa ranks first among continents in total aflatoxin measurement accuracy
- Work begun with small holder farmers



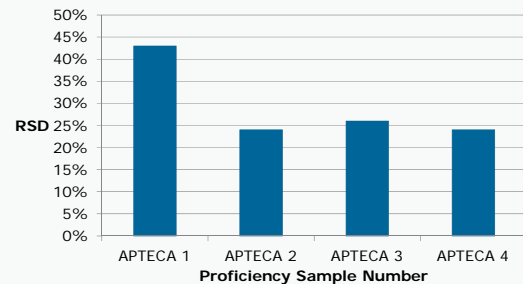
APTECA

Aflatoxin Proficiency Testing and Control in Africa,
Asia, Americas and Europe



Handbook
January 2017
Version 4.1

Kenya Milling Industry Performance



MINUTES OF THE HIGH LEVEL BREAKFAST MEETING HELD ON 19TH JANUARY, 2017 TO DISCUSS THE ONGOING PUBLIC-PRIVATE SECTOR COLLABORATION TO MANAGE AFLATOXIN RISK (VILLA ROSA KEMPINSKI)

PRESENT:

1. HON. ADAN NOOR – CHAIRMAN –Parliamentary Committee on Agriculture – KENYA NATIONAL ASSEMBLY
2. HON. KAREKE MBIUKI – VICE CHAIRMAN - Parliamentary Committee on Agriculture – KENYA NATIONAL ASSEMBLY
3. ANGELINE NASERIAN – CLERK ASST. - PARLIAMENT
4. AHMAD GULIYE – CLERK ASST. – PARLIAMENT
5. **NICK HUTCHINSON - CMA, CHAIRMAN – MD, UNGA HOLDINGS LTD – MODERATOR**
6. BOB THIEME –AKEFEMA, CHAIRMAN – GROUP OPERATIONS MANAGER, UNGA HOLDINGS LTD
7. PALOMA FERNANDES –CMA, CEO
8. DR. ESTHER KIMANI - KEPHIS, MD
9. ERIC CHESIRE – KEBS – DIRECTOR, QUALITY ASSURANCE & INSPECTION
10. CHEBII KILEL –AFA, HEAD OF FOOD DIRECTORATE
11. PHILIP KANDIE –NCPB, ASST. MANAGER OPERATIONS
12. DR. JAMES MWITARI – MINISTRY OF HEALTH, DEPUTY DIRECTOR, DEPT. OF PUBLIC HEALTH
13. ROBERT KILONZO – MINISTRY OF HEALTH, HEAD OF FOOD SAFETY
14. D.K. MWANGI – STATE DEPARTMENT OF AGRICULTURE , MINISTRY OF AGRICULTURE, LIVESTOCK AND FISHERIES
15. ONESMUS MWANIKI– KEPHIS, HEAD OF LABS
16. JULIAN SITEMBA – AFA, TECHNICAL ASST.
17. DR. TIMOTHY HERRMAN – DIRECTOR, OTSC-TAMU, APTECA
18. ANNE MUIRURI – APTECA , PROGRAM COORDINATOR

Arrival and breakfast – 7.30am to 8.30am

Meeting started at 8.30am

Agenda of the meeting:

- Introductions
- Meeting Objectives
- APTECA Overview
- Discussion
- Way Forward

Opening remarks were made by the moderator and Introductions were done around the room

Objectives of the meeting:

- Agreement to formalize a national public-private sector partnership to manage Aflatoxin risk
- Development of a roadmap to get there – with roadblocks identified

A presentation was given by the Moderator (Nick Hutchinson) concerning the food items prone to Aflatoxin contamination and Dr. Tim Herrman outlining the objectives, activities and achievements of the APTECA program. (See Appendix 1 for both presentations)

Moderator then requested the participants to write up to 3 questions that they would like addressed in the forum. (Full list of questions found on last page: APPENDIX 2)

Questions discussed during the forum were as follows:

Number 1:

- a) How can all regulators be harmonized to be efficient and effective?
- b) Is there sharing of information (results)? Is sharing ethical?
- c) Who will coordinate partnerships?

Answers:

Right now the Food safety issue involves multisector agencies working with respect to specific parts of the chain through their mandates.

Ministry of Health and Ministry of Agriculture have a National Food Safety Coordinating Committee Chaired by Ministry of Agriculture. There is talk of a Food and Drug Authority Agency to be put in place in line with the East African Community (as in Tanzania's TFDA).

However, there is a lack of clarity and/or interplay/ duplication of mandates and roles amongst the different regulators.

It was noted that the National Biosafety Authority was not present and should be invited and included in the next meeting.

It was also mentioned that information was shared when required or when there is a national disaster which causes government agencies to come together.

All agencies need to be capable of testing accurately and standards of testing should be harmonized.

Who has final say when it comes to test results?

Number 2:

- a) What is required to form a public-private partnership (legal framework)?
- b) Legality of test results in a Kenyan Court of Law
- c) Is the partnership here to stay (sustainability)?

Answers:

Are we committed to developing some sort of a partnership?

Legal backing is required. An Act of Parliament may be necessary so as to give regulators teeth to fight the menace.

Standardization of tests, sampling protocols required so as to build trust. There is need for a coordinating body which validates results.

Develop criteria (checklist) for laboratories that do the testing.

Posho mills are the biggest road block. They need to be encouraged to form groups – aggregation of produce.

Create and/or avail cheap kits for testing.

Closing remarks from Hon. Noor and Hon. Mbiuki

From the discussions below Hon. Noor and Hon. Mbiuki summarized the meeting with the following remarks:

Hon. Kareke Mbiuki's remarks:

- There is need to look into the Posho Mills and a strategy needs to be established on how to regulate them because they serve almost 60% of the Kenyan Population
- Small scale farmers also need to be included in the efforts to manage Aflatoxin risk

Hon. Adan Noor's remarks:

- Thanked the organizers
- There is need to develop a standard framework to be followed by every institution
- A checklist must be developed to determine minimum requirements for a testing laboratory in terms of equipment, training of personnel
- There is need for specialized labs for food safety
- Coordination among and between Agencies should be complementary rather than competitive
- Capacity building is required – technology, training dynamics
- Funding is needed for our research institutions as we look forward and hope for a permanent solution for Aflatoxin management in the country

“YES there is a total need for private – public sector partnership”

Action Items and Next Steps:

1. Write Minutes of meeting and circulate by the 26th January 2017 – Anne, Paloma, Nick, Tim
2. Review and comment back by the 9th February 2017 – By all participants
3. Next meeting to be held on the 2nd March 2017 – By all participants

Meeting was adjourned at 10.30am

**Coming together is a beginning
Staying together is progress and
Working together is success.**

APPENDIX 1: PRESENTATION

Aflatoxin - Prone Dietary Staples were mentioned and include:

Maize	Upland Rice
Peanuts	Pork
Cassava	Farmed Fish
Nuts	Oils and Oil seeds (cotton and sunflower)
Beans	Dairy
Chilies	Poultry
Spices	

Aflatoxin Exposure effects:

- Large Doses – acute illness and death, usually through liver cirrhosis
- Chronic Low Doses – nutritional & immunological consequences
- All Doses have a cumulative effect on the risk of cancer (bioaccumulation)

APTECA Overview: given by Dr. Tim Herrman

The APTECA lab is located at the International Livestock Research Institute (ILRI) hosted in their Mycotoxin and nutritional platform in BecA Hub. .

Aflatoxin Proficiency Testing and Control in Africa (APTECA) - involves a continuous improvement approach to measure and control Aflatoxin

You cannot improve what you do not control, you cannot control what you do not measure, you cannot measure what you do not define

Continuous Improvement Cycle for Aflatoxin control is composed of the following factors:

- Standardized methods
- Standardized training
- Verification of employee performance
- Documented program outcomes
- Monitoring & corrective actions
- Reduced market and food safety risk

Accomplishments of APTECA

2015:

- The Lab attained ISO/IEC 17025:2005 accreditation
- 50 analysts were trained and qualified both from Industry(millers) and government through COMESA Food Safety initiative
- 80% of the formal maize millers participate in APTECA - Kenya's milling industry performance has improved since 2014. Accuracy has improved from 20% to 80%.

2016:

- 4 aflatoxin workshops in Rwanda, Uganda, Tanzania
- APTECA expanded globally
- Africa ranks first among continents in total aflatoxin measurement accuracy
- Work begun with small holder farmers

APPENDIX: 2

Questions

1. For a testing laboratory to manage aflatoxin risk, sampling is key because 80% of the result errors are due to sampling. How is the program involved in checking the performance of sampling?
2. Testing is the end of the process check which should act as a confirmatory to whether GAP is followed. Can the program go beyond testing to monitoring of cereal quality before it reaches the miller?
3. What support does the program offer to the government agencies to help strengthen achievement the program has achieved?
4. Have studies been done to ascertain the extent to which aflatoxin contribute to terminal and lifestyle diseases such as cancer?
5. How do we get all public and private laboratories standardized in sampling and testing?
6. What minimum testing equipment for screening or quantitative testing should exist in private and regulator laboratories?
7. If the private sector uses label (aflatoxin tested), would government support this process or would we be target for victimization by government regulatory agencies?
8. How do we harmonize the many regulators in the country and merge them into one major effective, efficient and competitive institution which can stand the test of time?
9. Could there be a need to have a legal backing of the National Agreement of public private partnership in managing aflatoxin risk?
10. Aflatoxin is both a pre and post-harvest problem, will the partnership address predisposing factors at the start of the chain (especially farm level) ?
11. Regulators usually use legal action as the last result for non-conformity amongst business operators; will the partnership address the admissibility of rapid test results in Kenyan courts?
12. Sustainability of the partnership; Aflatoxin cannot be eradicated at this point in time. Is the partnership here to stay?
13. How will we share information given that we come from different independent agencies/ministries?
14. Who will coordinate the partnership?
15. Who will bear the costs that will be incurred in the process?
16. What happens to the commodities with high aflatoxin levels (disposal options)?
17. Which platform would be ideal for ease of sharing data for an improved partnership?
18. Is the training for proficiency testing still being carried out and where?

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APTECA

Aflatoxin Proficiency Testing and Control in
Africa, Asia, Americas and Europe

GOOD MORNING - WELCOME

PUBLIC-PRIVATE SECTOR COLLABORATION TO
MANAGE AFLATOXIN RISK
2 March, 2017

OFFICE OF THE TEXAS STATE CHEMIST

19-01-2017 MEETING OBJECTIVES

- AGREEMENT TO FORMALISE A NATIONAL PUBLIC-PRIVATE SECTOR PARTNERSHIP TO MANAGE AFLATOXIN RISK
- DEVELOPMENT OF A ROADMAP TO GET THERE – WITH ROADBLOCKS IDENTIFIED

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AGENDA

- INTRODUCTIONS
- MEETING OBJECTIVES
- CO-REGULATION – AN OVERVIEW
- BREAKOUT GROUP DISCUSSIONS
- BREAKOUT GROUP FEEDBACK TO PLENARY
- WAY FORWARD

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19-01-2017 MEETING INSIGHTS

Hon. Adan Noor:

- There is need to develop a standard framework to be followed by every institution
- There is need for specialized laboratories for food safety
- A checklist must be developed to determine minimum requirements for a testing laboratory in terms of equipment, training of personnel
- Coordination among and between Agencies should be complementary rather than competitive
- Capacity building is required – technology, training dynamics
- Funding is needed for our research institutions as we look forward and hope for a permanent solution for Aflatoxin management in the country

.... There is a total need for private – public sector partnership



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19-01-2017 MEETING INSIGHTS

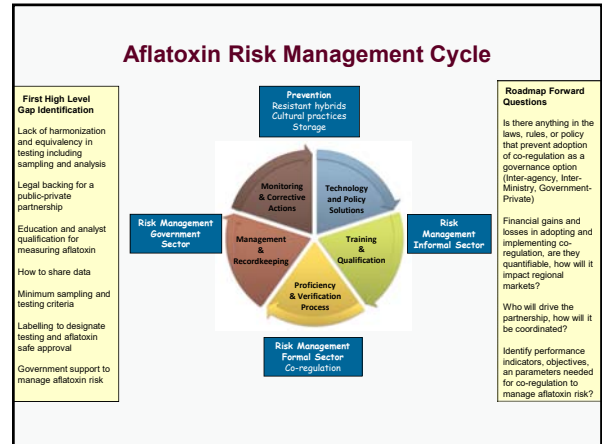
Hon. Kareke Mbiuki:

- A strategy needs to be established on how to regulate Posho Mills because they serve almost 60% of the Kenyan Population
- Small scale farmers also need to be included in the efforts to manage Aflatoxin risk

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MEETING OBJECTIVES

- DEVELOPMENT OF A ROADMAP TO FORMALISE A NATIONAL PUBLIC-PRIVATE SECTOR PARTNERSHIP TO MANAGE AFLATOXIN RISK – WITH ROADBLOCKS IDENTIFIED
 - CO-REGULATION AS THE GUIDING FRAMEWORK



Co-regulation as a governance option to manage aflatoxin risk

Second High Level Breakfast Meeting

March 2, 2017

Tim Herrman, Ph.D. Texas State Chemist and Professor

OFFICE OF THE TEXAS STATE CHEMIST
Texas Feed and Fertilizer Control Service • Agriculture Analytical Service

Co-regulation Roadmap to a Government-Private Partnership to Manage Aflatoxin Risk

Vision

- A public-private partnership will manage aflatoxin risk through a connected transparent market place that delivers aflatoxin safe food and feed to all Africans

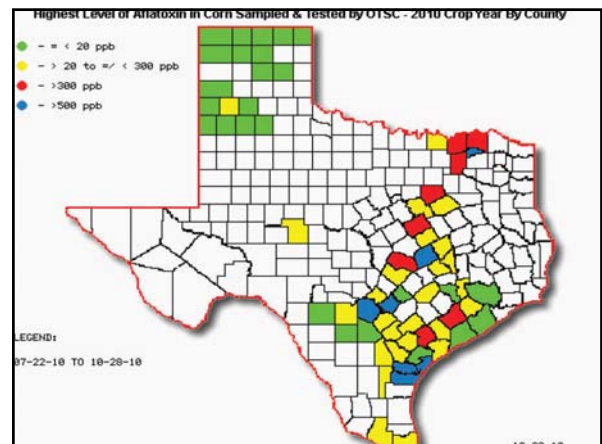
Objectives

- Facilitate adoption of a quality systems approach to accurately measure aflatoxin and other mycotoxins
- Work with all sectors of the food chain to identify gaps and deliver affordable solutions to manage aflatoxin risk
- Deliver globally an accredited aflatoxin proficiency testing program and certified reference material
- Formalize a government-private partnership that facilitates policy solutions and communicate these solutions to stakeholders including general public
- Achieve sustainability

Generic List of Governance Options

NO INTERVENTION	No government regulation Private controls
SELF-REGULATION	Voluntary private codes of practice Farm assurance schemes Retailers' proprietary quality assurance schemes
INFORMATION AND EDUCATION	Government assembles and publishes evidence and provides information/advice to consumers 'Naming and shaming'
COREGULATION	Government-private partnership in regulation: Statutory or government-backed codes of practice or action plans
INCENTIVE-BASED STRUCTURES	Government rewards desirable behavior by private or voluntary sector Creation of market incentives for food safety investments Liability rules
DIRECT REGULATION	Prohibition requirement for certain actions, products, and/or processes Prescription process standards, labeling Sanctions and penalties

National Research Council 2013; FIGURE 4-1. Options for assigning private-public responsibility to ensure food safety. SOURCE: Adapted from Garcia-Martinez et al. (2007).



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One-Sample-Strategy

Purchasing
Crop Insurance
Regulatory monitoring

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OTSC Corrective Actions

- Oversee adjustment or repair of equipment
- Oversee retraining of personnel
- Report missing or non-compliant equipment
- Report records that are missing, inaccurate, or appear to reflect poor performance
- Suspend or remove an employee or firm

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Approval Process

1. Sampling & Testing Plan
2. Training to review criteria
3. Background check
4. Proficiency evaluation
5. Approved as a designee of OTSC

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Outbound Seals Certificate of Analysis

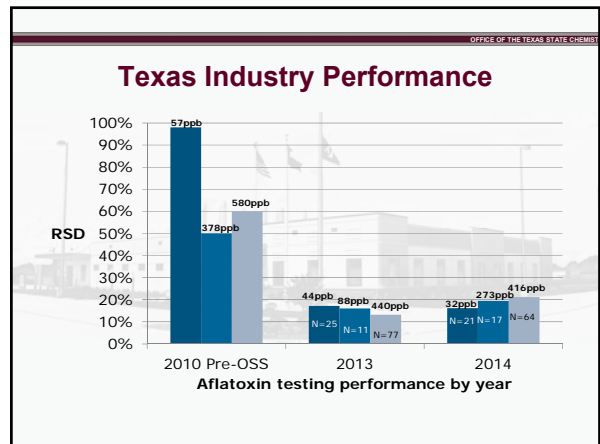
Full Participant

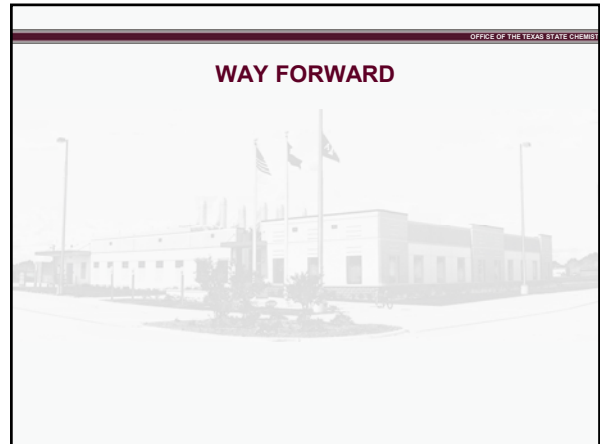
All incoming loads are sampled & grain is always segregated. Seal is attached to outbound documentation.

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OTSC Monitoring

- Employee performance
- Equipment performance
 - Grinder check
 - Lab scale calibration record
- OTSC control standard record
- HPLC analysis of verification samples





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- ### BREAKOUT GROUP DISCUSSION
- QUESTIONS
- Is there anything in the Law, policy or the regulations that prevents adoption of co-regulation as a governance option? What legal/policy support is required to enable adoption?
 - Consider inter-Agency, inter-Ministry, Government-Private Sector, EAC and COMESA
 - List the financial gains/losses in adopting and implementing co-regulation. Are they quantifiable? How will co-regulation impact regional trade?
 - What are the objectives, performance indicators and parameters needed for a co-regulation model?
 - Who will drive the partnership? How will it be coordinated? What other stakeholders?

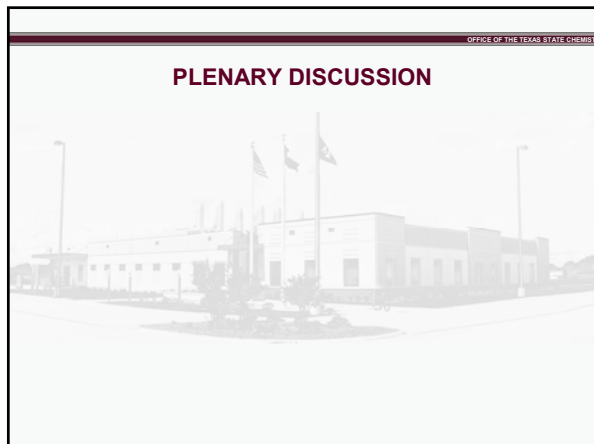
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REMEMBER ...

“COMING TOGETHER IS A BEGINNING,
STAYING TOGETHER IS PROGRESS, AND
WORKING TOGETHER IS SUCCESS”

Henry Ford

THANK YOU



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APTECA

*Aflatoxin Proficiency Testing and Control in Africa,
Asia, Americas and Europe*

Handbook
January 2017
Version 4.1

MINUTES OF BREAKFAST MEETING HELD ON 2ND MARCH 2017 TO DISCUSS CONTINUED PUBLIC-PRIVATE SECTOR COLLABORATION TO MANAGE AFLATOXIN RISK, FORMALIZING A ROADMAP AT THE INTERCONTINENTAL HOTEL

PRESENT

1. HON. KAREKE MBIUKI – Vice Chairman - Parliamentary Committee on Agriculture – KENYA NATIONAL ASSEMBLY
2. HON. VICTOR MUNYAKA – Member- Parliamentary Committee on Agriculture – KENYA NATIONAL ASSEMBLY
3. AHMAD GULIYE – CLERK ASSISTANT – KENYA NATIONAL ASSEMBLY
4. **NICK HUTCHINSON - CMA, CHAIRMAN – MD, UNGA HOLDINGS LTD – MODERATOR**
5. BOB THIEME –AKEFEMA, CHAIRMAN – GROUP OPERATIONS MANAGER, UNGA HOLDINGS LTD
6. PALOMA FERNANDES –CMA, CEO
7. ANN ONYANGO – AGRICULTURE SECRETARY - MINISTRY OF AGRICULTURE, LIVESTOCK & FISHERIES (Chair, National Food Safety Coordination Committee)
8. JOHN K. MUMU – POLICY OFFICER- MINISTRY OF AGRICULTURE, LIVESTOCK & FISHERIES
9. CHEBII KILEL –AFA, HEAD OF FOOD DIRECTORATE
10. DR. WILLY TONU – MD, NATIONAL BIOSAFETY AUTHORITY
11. PHILIP KANDIE –NCPB, ASST. MANAGER OPERATIONS
12. ONESMUS MWANIKI - KEPHIS
13. CHARLES MANNARA – KEBS – DIRECTOR, QUALITY ASSURANCE & INSPECTION
14. ROBERT KILONZO – MINISTRY OF HEALTH, HEAD OF FOOD SAFETY (Secretary, National Food Safety Coordination Committee)
15. BACKSON MWANGI – CEREAL GROWERS ASSOCIATION
16. JULIAN SITEMBA – AFA, FOOD DIRECTORATE
17. DR. TIM HERRMAN – Director and State Chemist, Office of the Texas State Chemist, Director- APTECA
18. ANNE MUIRURI – Program Coordinator, APTECA
19. SAMMY KHAKATA– APTECA

Arrival and breakfast – 7.00 am to 8.00 am

Meeting started at 8.20 am

Agenda of the meeting:

- Introductions
- Meeting Objectives
- Co-Regulation – An overview
- Breakout group discussion
- Breakout feedback to plenary group and discussion
- Way Forward

Opening remarks were made by the moderator and introductions were done around the room.

Objectives of the meeting:

- Agreement to formalize a national public-private sector partnership to manage aflatoxin risk
- Develop a roadmap to get there – with roadblocks identified

The moderator highlighted Hon. Noor's and Hon. Mbiuki's remarks outlined in the last meeting.

Dr. Herrman provided a detailed explanation concerning co-regulation framework in Texas (presentation attached).

The participants were divided into 2 groups (Group 1-Public sector and Group 2-Private sector).

The following questions were formulated prior to the meeting to be discussed and answered by the 2 groups.

- a) Is there anything in the laws, rules, or policy that prevents adoption of co-regulation as a governance option? What legal/policy support is required to enable adoption
Inter-agency, Inter-Ministry, Government- Private, EAC and COMESA
- b) List the Financial gains/losses in adopting and implementing co-regulation? Are they quantifiable? How will co-regulation impact regional trade?
- c) What are the objectives, performance indicators and parameters needed for a co-regulation model?
- d) Who will drive the partnership? How will it be coordinated? What other stakeholders need to participate?

Answers are attached below from the 2 groups (Appendix I)

Hon. Munyaka's remarks:

- There's need to review and form or amend law to enable adoption of co-regulation
- The group to consider that Parliament will go on final recess early June 2017

However Hon. Mbiuki assured the group that there was no need for alarm and that this endeavour can and should continue beyond the current (11th) Parliament.

Ms. Anne Onyango's closing remarks:

- The National Food Safety Coordination Committee (NFSCC) is an *ad hoc* committee
- The committee was formed to deal with the aflatoxin problem in 2010
- A lot of research and work has been done - not all of it is documented
- The Committee is stuck in terms of movement and facilitation
- Co-regulation is important as it will help define roles for efficient and effective management of aflatoxin risk and eventually enable provision of safe product to humans

- The Cabinet Secretary (Ministry of Agriculture, Livestock and Fisheries) will be briefed
- There is goodwill by Government to work with private sector
- Co-regulation is the way to go. Government may not have capacity to implement all rules but with help from private sector, management can be achieved
- The concept paper to be prepared will be added to the Ministry's Agriculture Development Strategy

Hon. Kareke Mbiuki's closing remarks:

- There's need to have a one stop shop to ease bureaucracy of doing business
- This is a noble cause and all participants are stakeholders
- Discussions are encouraged to go to the next level
- Need to continue engaging with one another
- The concept paper should recommend way forward and highlight any regulations that need amendment
- The 2 Members of Parliament present learned and witnessed how the One Sample strategy has helped Texas
- Farmers are a vulnerable group and need to be managed from planting to harvest to storage so as to be able to sell clean produce
- NCPB needs to improve testing capabilities so as to make it cost effective
- State Agencies are overwhelmed hence there may be need for an independent agency anchored in law to help manage aflatoxin risk
- There may also be need to donate some powers to private players enacted in law
- On behalf of the National Assembly Agriculture Committee we will work together for the benefit of all our people – Parliament is 100% in support of this initiative
- It is unfortunate that we work best in crisis
- There is goodwill from both the public and private sectors
- Let us anchor leadership of the partnership to Ministry of Agriculture as they have the mandate for food safety
- There's need to consider Crop Insurance to secure the farmer from loss of crop- it should be considered in the concept paper

Action Items and Next Steps:

1. Minutes of meeting to be recorded and circulated by 10th March 2017 – Anne, Tim, Nick
2. Concept Paper Draft to be prepared and an Interim review done by 12th April 2017 – Anne Onyango
3. Next meeting to be held on the 4th May 2017 - All

APPENDIX I

BREAKOUT GROUP 1: PUBLIC SECTOR

Participants: Led by Dr. Herrman

- Hon. Mbiuki
- Hon. Munyaka
- Anne Onyango
- Chebii Kilel
- Dr. Tonui - Presenter
- Charles Mannara
- Onesmus Mwaniki

- 1. *Is there anything in the law, rules, or policy that prevents adoption of co-regulation as a governance option? What legal/policy support is required to enable adoption Inter-agency, Inter-Ministry, Government- Private, EAC and COMESA***

Deliberations:

- Efforts have been put in place to support public private partnerships
- Laws exist that need to be evaluated for adequacy. There is need to harmonize law as well as to strengthen some existing laws and institutional policies
- There is need to document existing Inter-agency deliberations
- Research to provide data on Aflatoxin in Kenya
- There's need to develop a concept paper to provide a way forward

- 2. *List the Financial gains/losses in adopting and implementing co-regulation? Are they quantifiable? How will co-regulation impact regional trade?***

Deliberations:

- Overall, co-regulation will lead to increased financial gains due to market and consumer confidence. It is expected that this will be provided by quality improvement
- Institutions will also save on costs leading to more funds to support capacity building (training and laboratory capacity)
- International trade will be enhanced due to improved quality assurance. There exists regional policies and some standards are working
- To reduce costs in Kenya, testing can be done at the producer level which is acceptable across the board

- Inter-agency meetings should continue towards formulation and implementation of procedures and standards
- Consider NCPB to drive testing at producer level

3. *What are the objectives, performance indicators and parameters needed for a co-regulation model?*

Deliberations:

- Need to define measures that answer whether conformance is working or not
- To factor performance indicators, objectives and parameters needed into the concept paper. The paper would be a proposal on behalf of the group to outline a roadmap that would lead to adoption of co-regulation – Ms. Anne Onyango to lead these efforts
- Need to invite other parties including KENAS, KALRO, Department of Veterinary Services, Council of Governors, KENTRADE for discussions

4. *Who will drive the partnership? How will it be coordinated? What other stakeholders?*

Deliberations:

- Ministry of Agriculture, Livestock and Fisheries would be best placed to coordinate such a partnership
- The Cabinet Secretary (Ministry of Agriculture, Livestock and Fisheries) to be briefed in order to provide guidance and support
- Ms. Anne Onyango agreed to develop concept paper and move the agenda forward

BREAKOUT GROUP 2: PRIVATE SECTOR

Participants: Led by Paloma Fernandes

- Robert Kilonzo - Presenter
- Bob Thieme
- Ahmad Guliye
- Julian Sitemba
- John Mumu
- Philip Kandie

1. Is there anything in the law, rules, or policy that prevents adoption of co-regulation as a governance option? What legal/policy support is required to enable adoption

Inter-agency, Inter-Ministry, Government- Private, EAC and COMESA

Deliberations:

- Co-regulation objective is food safety
- Acceptance of private sector results - currently the law only accepts the results of a public analyst (CAP 254). There may be need to address this in form of a revision
- There's need to harmonize standardization on sampling testing - sampling protocol may have some gaps which need to be addressed
- The Treasury has provision for Public-Private participation

2. List the Financial gains/losses in adopting and implementing co-regulation? Are they quantifiable? How will co-regulation impact regional trade?

- Not Discussed

3. What are the objectives performance indicators and parameters needed for a co-regulation model?

Deliberations:

- There is need to define the whole system
- Issues to be streamlined would ideally include :
 - sample collection - sampling
 - alternative use of consignment or lot which is >10ppb – to be used as feed-distinction based on the different animal species
 - regulation on aflatoxin labelling
 - traceability of raw materials (it is possible to trace what goes to NCPB and millers but difficult to track down for posho millers)
- What can be done at farm level?

4. Who will drive the partnership? How will it be coordinated? What other stakeholders?

Deliberations:

- Currently, there is a National Food Safety Coordinating Committee (NFSCC), however it does not have legal backing
- There's need to incorporate Private sector including CMA, AKEFEMA, CGA, other Farmers Associations, Consumer Federation, among others, in the NFSCC
- The NFSCC requires a terms of reference for an Aflatoxin Management Committee

Meeting One Objectives

- AGREEMENT TO FORMALISE A NATIONAL PUBLIC-PRIVATE SECTOR PARTNERSHIP TO MANAGE AFLATOXIN RISK
- DEVELOPMENT OF A ROADMAP TO GET THERE – WITH ROADBLOCKS IDENTIFIED

Meeting Two Questions

- IS THERE ANYTHING IN THE LAW, RULES OR POLICY THAT PREVENTS ADOPTION OF CO-REGULATION AS A GOVERNANCE OPTION? WHAT LEGAL SUPPORT IS NEEDED FOR ADOPTION?
- LIST FINANCIAL GAINS AND LOSSES IN ADOPTING AND IMPLEMENTING CO-REGULATION
- WHAT ARE THE OBJECTIVES, PERFORMANCE INDICATORS AND PARAMETERS NEEDED FOR A CO-REGULATION MODEL
- WHO HAS AUTHORITY TO DRIVE AND IMPLEMENT CO-REGULATION?
- DEVELOPMENT OF A ROADMAP TO GET THERE – WITH ROADBLOCKS IDENTIFIED

MEETING THREE AGENDA

INTRODUCTION AND REVIEW OF PURPOSE

- KEBS REVIEW OF GRAIN GRADIN CERTIFICATION, IS THIS A MODEL FOR AFLATOXIN CO-REGULATION

- OBSERVATIONS FROM THE TEXAS MODEL, PRESENTION BY THE HONORABLE KAREKE MIUKE AND THE HONORABLE DR. VICTOR MUNYAKA

- AFLATOXON CO-REGULATON PREVENTIVE CONTROL CRITERIA

- AFLATOXIN RISK COMMUNCATION

- PUBLI SECTOR AFLATOXIN RISK MANAGEMENT AUTHORITY GAP ANALYSIS

- WAY FORWARD

MINUTES OF THE HIGH LEVEL BREAKFAST MEETING HELD ON 4TH MAY, 2017 TO DISCUSS CONTINUED PUBLIC-PRIVATE SECTOR COLLABORATION TO MANAGE AFLATOXIN RISK (INTERCONTINENTAL HOTEL)

PRESENT:

1. HON. KAREKE MBIUKI – VICE CHAIRMAN - Parliamentary Committee on Agriculture – KENYA NATIONAL ASSEMBLY
2. HON. DR. VICTOR MUNYAKA – MEMBER- Parliamentary Committee on Agriculture – KENYA NATIONAL ASSEMBLY
3. AHMAD GULIYE – CLERK ASST. – PARLIAMENT
4. ROBERT KILONZO – MINISTRY OF HEALTH, HEAD OF FOOD SAFETY UNIT
5. BOB THIEME –AKEFEMA, CHAIRMAN – GROUP OPERATIONS MANAGER, UNGA HOLDINGS LTD
6. PALOMA FERNANDES –CMA, CEO
7. ONESMUS MWANIKI– KEPHIS, HEAD OF LABS
8. LUCY NAMU- KEPHIS, HEAD OF QUALITY ASSURANCE & LABORATORY ACCREDITATION
9. CHARLES MANNARA– KEBS – PRINCIPAL ANALYST
10. SHADRACK OYUGI –AFA, REPRESENTING DG’S Office
11. PHILIP KANDIE –NCPB, ASST. MANAGER OPERATIONS
12. CHARLES NKONGE- KENYA AGRICULTURE AND LIVESTOCK RESEARCH ORGANIZATION (KALRO)
13. PATRICK KIRIMI- AFA, FOOD DIRECTORATE
14. JULIAN SITEMBA – AFA, TECHNICAL ASST.
15. MARTIN BUNDI – NATIONAL BIOSAFETY AUTHORITY (NBA)
- 16. DR. TIMOTHY HERRMAN – DIRECTOR, OTSC-TAMU, APTECA- MODERATOR**
17. ANNE MUIRURI – APTECA , PROGRAM COORDINATOR

Arrival and breakfast – 7.00am to 8.00am

Meeting started at 8.15am

Agenda of the meeting:

- Introductions and review of purpose
- KEBS review of grain grading certification, is this a model for aflatoxin co-regulation?
- Observations from the Texas Model, presentation by the Hon. Kareke Mbiuki and Hon. Dr.Victor Munyaka
- Aflatoxin co-regulation preventive control criteria (based on APTECA Food Safety Plan)
- Aflatoxin risk communication strategy
- Analysis of gaps within the Public Sector Authority in Risk Management
- Way Forward

KEBS review of grain grading certification, Is this a model for aflatoxin co-regulation?

By Charles Mannara

KEBS in conjunction with KALRO have been conducting training for inspectors and graders of cereals and cereal products as per the NCPB act 214. This act requires that all officers undertaking inspection and grading of cereals be trained and certified by the two organizations.

Scope of training includes Maize, Wheat, Rice among other cereals

The training is done in Egerton University at Njoro in the Food Science Department and takes 5 days.

The certificate attained is renewed every two years.

USDA wants a logo on the pack as an incentive of using Aflasafe.

Concerns of KEBS regarding co-regulation:

- Co-regulation has to be anchored on reliable measurements – use of Certified Reference Materials (CRMs)
- Costs of the Logo – Would it increase price of the product?
- What are the Legal implications and what are its effects with regard to Trade?

The criteria for a grader/inspector to be trained is that they have a minimum of a diploma and approver to have a minimum of a degree

The grading course is to be upgraded to include aflatoxin testing as part of the training

Q&A session:

1. Why does KEBS shy from sharing results with Private sector (CMA)?
 - Confidentiality reasons
 - Only authorized to share with Parliament
2. What is normally done with the data generated from KEBS with regards to Aflatoxins?
 - KEBS uses the data to follow up with individual manufacturers to improve on his/her GMPs
 - However, there is no legal framework to follow with regard to sharing. There is a law (Chapter 254) that could be strengthened especially with regard to managing contaminated maize
 - The authority to deal with this is Ministry of Health

Observations from the Texas Model

Presentation by **Hon. Kareke Mbiuki and Hon. Dr. Victor Munyaka**

Hon. Mbiuki's comments:

- Visits were made to a grain elevator where it was observed that receipt of load was done upon testing of the grain that took 10 minutes. The result is then issued in form of a certificate (with an OTSC letterhead) which is given to the farmer.
- In case the grain is above 20ppb the farmer claims crop insurance. This would also be an ideal way of compensating farmers here.

Hon. Dr.Victor Munyaka's Remarks:

- There is need to innovate simple rapid test kits especially for farmers who produce grain for subsistence to test kits.

Aflatoxin co-regulation preventive control criteria (based on APTECA Handbook)

By Dr.Herrman

There are a number of points within the risk management process that need to be monitored to maintain a laboratory quality system. These criteria are found in the APTECA handbook.

Test Kit Selection

- The group reached a consensus that test kit validation is important. A validation authority is also important. KEBS was suggested as a possible entity to provide validation service.
- KEBS prefers to use HPLC in court based on past experience losing cases with data from test kits.

These and other criteria will form points of deliberation for the technical part of the breakout group session to be done in June 2017

Aflatoxin Risk Communication Strategy

By Robert Kilonzo and Paloma Fernandes

The Objective of Risk communication is to inform people about potential hazards and thus allow people at risk to understand and adopt protective behaviours. In this case we must endeavor to communicate in a way not to scare the public.

There are 2 forms of communication.

- Internal Communication – Between Ministries, Agencies
- External Communication – Between Government - Private Sector and the Public

In this regard we should be careful how we relay information especially when dealing with the Media.

When communicating about Food Safety the provisions and principles to adhere to include:

- i) Presence of evidence /facts on food safety – Scientific research
- ii) There must be a sense of transparency – credibility of source of information
- iii) Consistency must be adhered to, to avoid controversy.
- iv) Timeliness of communication and responsiveness must be well monitored
- v) The Value Chain must be well outlined
- vi) Stakeholder Involvement is key. Those relevant must be fully engaged throughout the process
- vii) The County Government is key in the implementation phase
- viii) What are the resources that would be involved in the process?
- ix) A Monitoring and Evaluation mechanism is necessary throughout the process and most especially after implementation

This is also a topic for further discussion during the next meeting.

Analysis of gaps within the Public Sector Authority in Risk Management

By All

Gaps identified during the session include:

- i) Information Sharing especially between Government and Private sector
- ii) Unclear mandates of the different regulatory authorities
- iii) Lack of standards or rules with regard to managing contaminated maize
- iv) Test Kit validation – lacks a competent authority
- v) The regulatory agencies need to divide tasks based on their strengths

Way Forward

Hon. Mbiuki issued an imperative from parliament to draft a bill outlining individual agency responsibilities and identifying a road map to get to coregulation

Action items and Next steps

1. Minutes of the meeting to be recorded and circulated by 15th May 2017 – Anne, Tim, Robert, Paloma
2. KEBS and KALRO will prepare a process for certifying analysts along with representatives from (Onesmus Mwaniki) KEPHIS, AFA, County Government and Anne Muiruri (APTECA)
3. Robert Kilonzo and Paloma Fernandes will prepare a session for the conference on developing a communication strategy along with representatives from (Lucy Namu) KEPHIS, (Julian Sitemba)AFA and (Philip Kandie) NCPB
4. Dr. Tim Herrman will chair the session on Technical requirements along with representatives from KEBS, KALRO and AKEFEMA (Bob Thieme as co-chair)
5. Each agency participant to prepare a one page report on mandates of their agencies and send them to Ms. Anne Muiruri (muiruri@otsc.tamu.edu) by the 25th May 2017
6. Ms. Anne Onyango from The Ministry of Agriculture, Livestock and Fisheries will be requested to Chair serve as co-chair of the 5 day meeting. A private sector co-chair was not identified during the meeting.
7. Texas A&M Agrilife Research will cover the lodging and meal expenses.

Note: The Clerk from the National Assembly together with help from participants will help in wording the draft bill.

The working groups formed are advised to meet beforehand to discuss on their topics before the next meeting in order to prepare adequately.

Next Meeting to be held on 19th to 23rd June 2017

The meeting was adjourned at 10.15am