PACA | Partnership for Aflatoxin Control in Africa | Partenariat pour lutter contre l'aflatoxine en Afrique | Parceria para o Controle da Aflatoxina em África | الشراكة من أجل مكافحة الافلاتوكسين في أفريقيا

Concept Note

Regional Conference

On

Aflatoxin Challenge in West African States

Theme: Improving Health, Trade and Food Security through Regional Efforts to Mitigate Aflatoxin Contamination

Venue: **Accra, Ghana**

Tentative Dates: **18-20 November 2013**

IITA Research to Nourish Africa

FARA

Preamble

The Aflatoxin Challenge constitutes a significant threat to food and economic security, and undermines poverty eradication in Africa. It is a major cause of post-harvest loss that further constrains the quantum of food reaching our markets and households across the continent. In addition, it poses a major public health challenge to consumers all over the continent and can result in foregone revenues and profit from domestic and regional commerce and international trade.

Aflatoxin is a poison naturally produced by strains of the fungus *Aspergillus flavus* and related species. Although aflatoxin contamination poses a global problem, the impact of the problem is higher in tropical climatic regions, between 40° North and 40° South of the equator, including the entire African continent. Aflatoxin contamination commonly occurs in maize and groundnut and crops of regional importance in West Africa such as melon seed and yams. According to IITA, contamination frequency in the tune of 10 – 60% of maize and groundnuts is encountered (Ranajit Bandyopadhyay, personal communication). Aflatoxin can damage the liver and may lead to liver cancer. Evidence abounds that aflatoxin ingestion is frequent through contaminated foodstuffs and is one of the major etiological factors in human hepatocellular carcinoma (HCC) in China and sub-Saharan Africa. About 25% cases of up to 600,000 new HCC cases reported annually in the world may be attributable to aflatoxin exposure (Liu and Wu, 2010). Aflatoxin is also associated with stunting in children and immune-suppression. Studies carried out in Benin and Togo (Gong et. al., 2002, 2003, 2004), and also the Gambia (Turner et. al., 2003, 2007) have shown that elevated levels of aflatoxin in blood are associated with stunting and children being underweight for their age. Exposure to potentially harmful levels of aflatoxins begins in the womb and continues through breastfeeding, through baby weaning foods and beyond. Children under 5 remain particularly vulnerable to aflatoxin exposure significantly hindering children's growth and development while damaging their immunity. In several ECOWAS member countries (e.g., Ghana, The Gambia, Benin, Togo), more than 95% mothers and children have aflatoxin adducts in blood demonstrating high exposure to aflatoxins. In Sierra Leone, nearly 90% mothers had aflatoxin in breast milk, showing that not only the mothers but also the babies are at risk.

A review of aflatoxin contamination in foods in ECOWAS member states documents levels well above the internationally recommended maximum limits. For instance, studies found that 40 to 90% groundnut samples in farmers' stores in Mali had unsafe levels of aflatoxin. The economic impact of aflatoxin extends beyond crop production and utilization and significantly hampers the profitability of the livestock industry; for instance 62% of commercial poultry feed sold in Nigerian markets were found to be unsafe, greatly impacting productivity, increasing mortality and contaminating the gizzards of chickens commonly consumed as a local delicacy.

Because of the serious food safety risks, human exposure to aflatoxins is limited by regulations. Regulatory limits for aflatoxins exist in only 15 African countries and the regulations vary widely among these countries. The maximum concentrations of aflatoxin permitted in food for humans are less than 20 ppb in the U.S., and less than 4 ppb in the EU. Contamination therefore presents a barrier to cross-border trade and economic growth as the presence of excessive aflatoxin levels causes grain exports to be

rejected by importing countries. For example, Senegal and Nigeria, among the major exporters of groundnut in the 1970s, have seen their market share dwindle to almost a standstill due to difficulty of meeting aflatoxin regulations. If all countries were to adopt EU standards on aflatoxins, then global trade would decline by $3 billion (Dohlman, 2008). According to WHO (2011), aflatoxin contamination leads to 64% reduction in food quality in Africa.

The aflatoxin problem is so complex that it straddles the agriculture and food security, trade and health sectors. Cognisant of these, in March 2011 at the 7th CAADP Partnership Platform, the African Union Commission was urged to oversee the establishment of a Continental SPS Working Group to mainstream sanitary/phytosanitary matters in the CAADP framework and establish an Africa-led Partnership for Aflatoxin Control. Through this call, the Partnership for Aflatoxin Control in Africa (PACA) was established.

PACA aims to provide consistent coordination and coherent leadership to the continental efforts on aflatoxin control. It aims at supporting adoption of proven solutions, and identify new ones, that will work to mitigate the impacts of aflatoxin on food security and agriculture, trade, and health in Africa. Many actors are involved in developing comprehensive solutions to control aflatoxin along the value chain, from crop production through processing and food preparation to consumption. Many measures can be taken to reduce aflatoxin exposure to local consumers and improve opportunities to sell aflatoxin-safe crops to markets, but some options need to be supported by appropriate policy and regulatory actions. It is expected that comprehensive and feasible solutions being developed for the African context will also be useful for other regions where aflatoxin is a problem. Combating aflatoxin will also contribute to the Millennium Development Goals (MDGs) and PACA will look for ways to contribute to the MDGs and the post 2015 development agenda.

Through the leadership of the African Union Commission (AUC), and with participation from African and other governments, Regional Economic Communities, the private sector, farmers' organizations, and civil society leaders from across Africa, PACA is establishing a comprehensive, Africa-wide approach to mitigate the agriculture and food security, trade, and health impacts of aflatoxin. In this context, regional workshops will further sensitize key stakeholders about comprehensive solutions to control aflatoxin that are appropriate to the region based on priorities identified by stakeholders themselves.

Inception of Workshop on Aflatoxin Challenge in West African States

Partnership for Aflatoxin Control in Africa, AUC, ECOWAS, The Forum for Agricultural Research in Africa (FARA), and International Institute of Tropical Agriculture (IITA) propose to jointly support and organize the West Africa aflatoxin workshop. The workshop will engage experts and relevant stakeholders towards setting regional priorities to address the aflatoxin problem in the agriculture, trade and health sectors.

Goal and Areas for Discussion

The goal of the workshop will be to assess the status of member states' efforts to develop comprehensive solutions to control aflatoxin, and to set regional priorities and begin to develop a regional action plan on aflatoxin mitigation to benefit ECOWAS countries.

Areas for potential discussion and action include:

1. **Scoping the Problem and Current Actions for Aflatoxin Mitigation in ECOWAS States**
    - Understanding aflatoxin situations in ECOWAS member states
    - Lesson sharing on initiatives currently addressing aflatoxin control in ECOWAS States which demonstrate best practices

2. **Regional Trade and SPS Standards**
    - Role of harmonized standards for aflatoxin levels in food for humans and feed for animal in the region;
    - Role of ECOWAS in regional policy and protocols for regulation of disposal systems and alternative uses of aflatoxin contaminated commodities;

3. **Institutions and Systems for Implementing Interventions**
    - Role of Private Public Partnership (PPP) and innovation platforms in promoting dissemination and adoption of aflatoxin-control technologies
    - Development of regional policy on registration, licensing and application of biocontrol products

4. **Risk Mapping**
    - Development of a data platform for national statistics offices to report to for a synchronized regional risk mapping system; (CILLS to take lead on this)

5. **Awareness Building**
    - Raising awareness of producers and processors groups on impact of aflatoxins and technology solutions

Proposed Programme of Workshop

In line with the workshop goal and discussion areas outlined above, the following draft propgram has been developed in consultation with workshop proponents.

8:15 am -9:00 am	**DAY I** **Registration**	**Time allocation** (45 mins)
9.00 am- 9:45 am	**Opening Session** ***Welcome note:*** Dr Janet Edeme, Head of Division, Rural Economy, DREA- AUC ***Opening remarks:*** Harold Macauley, Executive Director, West and Central African Council for Agricultural Research and Development (CORAF) ***Opening Speech:*** Mr. Alain SY Traore, Agriculture Development Director (ECOWAS) ***Key Note Address:*** Dr. Yemi Akinbamijo, Executive Director (FARA)	(5 mins) (15 mins) (10 mins) (10 min)
	Meeting Objectives: • Develop a common understanding of the information available and steps being taken to control aflatoxin in West African States • Identify technical, institutional, and policy opportunities to address the aflatoxin challenge in West African States • Set regional priorities to address the aflatoxin problem in the agriculture, trade and health sectors	(5 Mins)
9:45 am-11:00 am	**Session I: Technical Presentations** ***Overview of the Partnership for Aflatoxin Control in Africa (PACA):*** Dr. Amare Ayalew, Programme Manager, PACA ***Overview of Global Food Safety Partnership (GFSP):*** John Lamb, Principal Associate/Scientist, Abt Associates ***Technical Presentations:*** • Aflatoxins and Trade and Policy --- ECOWAS • Aflatoxins and Health – Dr. Pauline Jolly (invited) • Aflatoxins and Agriculture • Technology Solutions Available for Abating the Aflatoxin Challenge - Ranajit Bandyopadhyay, IITA	(10 min) (10 min) (40 min)
11:00 am–11:20 am	**Coffee Break**	
11:20 am–11:30 am	Moderator	

11:30 am -12:30 pm	**Session II: Country Presentations: Knowledge and Experiences from Countries** • Senegal - Trade experiences in peanuts – Lamine Senghor, Direction de la Protection des Végétaux (DPV), Ministere de l'Agriculture, Senegal • The Gambia - Effects of aflatoxins on health - Lamin Jobe (invited) • Mali - Pre and post harvest integrated aflatoxin control - Moses Osiru, ICRISAT	(45 min presentation) (15 min Q&A)
12:30 pm- 1:30 pm	Lunch	
1:30 pm-3:00 pm	**Session III: Country Presentations: Knowledge and Experiences from Countries** • Nigeria - Bio-control – Tola Sunmonu, Doreo Partners • Ghana - Awareness creation and traing of farmers organisations - Richard Awuah (invited) • Cote d'Ivoire – Dr. Nemlin G. Jean, CNRA (invited) • Burkina Faso – Dr. Saïdou BONKOUNGOU, INERA	(60 min presentation) (30 min Q&A)
3:00 pm-3:20 pm	Tea/coffee	20 min
3:20 pm-4:50 pm	**Session IV: Country Presentations: Private Sector Experiences** • Food Sector - Klutse Kudomor, Ghana Regional Procurement Manager, Nestle • Feed Sector - Dr. Dotun Oladele • Fair trade groundnut experiences – Mariétou Diawara, SODEFITEX (invited) • ECOWAS on CAADP Compact	60 min presentation 30 min Q&A
4:50 pm- 5:00 pm	Closing Remarks and Adjourn	
6:30 pm-8:30 pm	No-Host Dinner	
	Day II	
9:00 am-9:20 am	**Recap and Logistics** Scene setter (preamble and discussions on expectations)	10 min 10 min
9:20 am- 10:30 am	**Parallel working groups (based on templates to be provided)** Trade- led by ECOWAS Health led by WAHO or WHO Agriculture to be led by IITA (Environment group to be spread across trade and agriculture)	
10:30 am -10:45 am	Self-service tea break	

10:45 am -12:30 pm	**Parallel working groups (based on templates to be provided)** Trade- led by ECOWAS Health led by WAHO or WHO Agriculture to be led by IITA (Environment group to be spread across trade and agriculture)	
12.30 pm-1.45 pm	Lunch	
1:45 pm -2:45 pm	**Populating templates in groups for presentation to general group**	
2:45 pm – 3:00 pm	Tea Break	
3:00 pm - 4:00 pm	**Presentation of discussions (following specified template)** Trade Plenary discussion	30 min 30 min
4:00 pm - 5:00 pm	**Presentation of discussions (following specified template)** Health Plenary discussion	30 min 30 min
5:00 pm – 5:15 pm	Wrap up, Announcements and Logistics	
	DAY III	
9:00 am -10:00 am	**Presentation of group discussions (following specified template)** Agriculture- Human food Plenary discussion	30 min 30 min
10:00 am -10:15 am	**Tea break**	
10:15 am-11:15am	**Presentation of group discussions (following spedcified template)** Agriculture- Animal feed Plenary discussion	30 min 30 min
11:15 am-12:00 pm	**Wrap up and Closing Session**	