Bundesministerium
für Ernährung
und Landwirtschaft

Nutrition – Diversified Agriculture for balanced Nutrition in Subsaharan Africa

Project brief: Aflatoxin
Networking on Aflatoxin Reduction
in the Food Value Chain

Country	Kenya
Funding Agency	German Ministry for Food and Agriculture (BMEL)
Project Administra-	Federal Office for Agriculture and Food – BLE
Project Duration	01.07.2016 – 31.07.2017
Thematic Area	Aflatoxin, Contamination of food and feed, Food Value Chains, Carry over of Aflatoxins from feed into milk and milk products, Aflatoxin rapid detection
Background	Aflatoxins are potent, naturally occurring carcinogenic mycotoxins produced as byproducts by fungi (moulds) that grow on maize, groundnuts and other food crops. The toxins occur everywhere in the world, but pose particularly high risks in tropical countries where maize and sorghum are the staple diet of the poor. Aflatoxins are categorized as group 1 carcinogen by the WHO/FAO (IARC 2012), because they lead to liver carcinogenicity. The uptake of aflatoxins in the diet, even the regular uptake of minor amounts is also associated with stunting of children and poses a serious threat to national public health. To protect consumers, aflatoxin limits are fixed in many countries, both for

	primary agricultural products and for processed foods, however this is often not strictly controlled. Especially small crop-livestock farmers require safe sources of feed for livestock because aflatoxins are also carried over into milk and milk products. Contamination of agricultural products (food and feed) causes damage to national industries such as the milk industry in East Africa.
Coordinator	**Executing Agency**: Federal Research Institute of Nutrition and Food, MRI, Haid-und Neu-Straße 9, 76131 Karlsruhe, Germany **Project Coordinator**: Dr. Christine Schwake-Anduschus at • Federal Research Institute of Nutrition and Food, MRI, Department of Safety and Quality of Cereals, Schuetzenberg 12, 32756 Detmold E-mail: Christine.Schwake-Anduschus@mri.bund.de, tel. +49 05231 741 132, fax +49 05231 741-308 **Cooperating Research Groups at MRI**: • Department of Safety and Quality of Fruit and Vegetables (OG), MRI Karlsruhe Prof. Dr. Rolf Geisen; E-mail: Rolf.Geisen@mri.bund.de / Dr. Markus Schmidt-Heydt; Email: markus.schmidt-heydt@mri.bund.de • Department of Safety and Quality of Milk and Fish (MF), MRI Kiel Dr. Hans-Georg Walte; E-mail: Hans-Georg.Walte@mri.bund.de
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Short Description	The project is designed as an initial study that should be followed by a more intensive, overall collaborative project with African partners. The goal of this project is to establish a long-term network between scientific and development partners in Kenya/East Africa and Germany to address the reduction of aflatoxins in the food value chain. The complex nature of aflatoxin contamination in food and feed will be assessed by the Federal Research Institute, MRI, during an initial study (situation assessment) in Kenya. First tangible solutions for the reduction of aflatoxin in the food value chain in Kenya will be developed by carrying out the following activities: 1. Conduct carry-over study of aflatoxins into milk, 2. Examine and verify available aflatoxin rapid detection test, 3. Develop aflatoxin minimization strategies using molecular methods. It is planned to disseminate the results and publications widely to decision takers in politics and networks in Kenya, Germany and Europe using new social media.