Highlight 2: East African Community Policy Support on Aflatoxin Mitigation

Aflatoxin contamination of maize and groundnut infected by Aspergillus flavus and closely related fungi is common throughout Sub-Saharan Africa. However, not all A. flavus genotypes are aflatoxin producers. Those that are unable to produce aflatoxin (i.e., atoxigenic) can be used as biocontrol agents to outcompete the toxigenic strains and hence decrease crop aflatoxin content. A4NH researchers at the International Institute of Tropical Agriculture (IITA) and partners have developed several biocontrol products under the trade name Aflasafe®. Each Aflasafe product contains four atoxigenic A. flavus genotypes native to the target country.

Prior to 2018, Aflasafe products were registered for use in Nigeria, Kenya, Senegal, Gambia, and Burkina Faso. During 2018, six Aflasafe products were approved by regulatory authorities responsible for biopesticide registrations for use in Ghana, Zambia, and Tanzania—two products per country. Extensive supporting data were required for registration, including demonstration that the atoxigenic genotypes were native to the target nations and evidence of their effectiveness in hundreds of farmer field trials, environmental safety, benefits to farmers, and the potential to unlock premium markets as a result of treatment. In all cases, aflatoxin in treated crops ranged from 80 to 100 percent lower compared to untreated adjoining crops—the reductions occurring at harvest and even in sub-optimal storage conditions.

Aflasafe products in Ghana, Tanzania, and Zambia are now available for use at commercial scale. Private sector actors are being mobilized to receive information on the benefits of using Aflasafe-treated crops for the profitability of their industries, such as poultry production; to be linked to producers of Aflasafe-treated, aflatoxin-compliant crops; and to be informed about both business opportunities to manufacture and distribute Aflasafe and potential to unlock domestic and international premium markets when treating crops with Aflasafe.

In these three countries, availability of Aflasafe for use at scale will allow farmers nationwide to produce crops complying with aflatoxin standards, furthering their trade opportunities and income generation, as well as providing nutrition and health benefits for consumers.

Policy uptake around aflatoxin control using Aflasafe also progressed in 2018. Technical papers led by IITA under a prior USAID-funded project were adapted into nine policy briefs launched by the East African Community (EAC) during a two-day regional forum in Nairobi. The briefs provide an implementation strategy and action plan for aflatoxin control and prevention for the health, agriculture, livestock, trade, industry, and environmental sectors. They outline key strategic policy recommendations and actions to prevent and control aflatoxin contamination along food and feed value chains in East Africa and the associated threat to human and livestock health, trade, and food security in the region. The launch was organized by the EAC Secretariat in partnership with IITA and USAID and was attended by members of the East African Legislative Assembly (EALA) Committee on Agriculture as well as delegates from the five EAC partner countries (Burundi, Kenya, Rwanda, Tanzania, and Uganda) and other development partners.

Also in 2018, six countries where the Partnership for Aflatoxin Control in Africa (PACA) works—Malawi, Nigeria, Tanzania, Senegal, Gambia, and Uganda—prioritized aflatoxin mitigation strategies, including use of Aflasafe as a mitigation tool, developed stakeholder-aligned aflatoxin control action plans, and mainstreamed these plans into National Agriculture and Food Security Investment Plans.

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