



# STRENGTHENING FOOD SAFETY AND SECURITY IN THE UNITED REPUBLIC OF TANZANIA

In August 2017, 61 cases of aflatoxin and 17 deaths were reported from five districts in the Dodoma and Manyara regions. The Government took immediate action to investigate the outbreak. Out of the 115 maize samples tested, 52 showed high levels of aflatoxin poisoning that exceeded the World Health Organization's (WHO) threshold of 5 micrograms per kilogram of cereal and the Tanzania Bureau of Standards' maximum acceptable limits for maize and groundnut. Maize is the United Republic of Tanzania's staple food and is also prone to the development of mycotoxins, produced by fungi (e.g. *Aspergillus*). Aflatoxins can cause acute or chronic health effects, depending on the level and duration of exposure. The health effects that occur shortly after ingesting high levels of aflatoxin are severe illness and death. To prevent further contamination, awareness raising among maize consumers and producers was necessary to restore the food security of maize throughout the country. Additionally, postharvest technologies and good agricultural practices were disseminated to further improve food and nutrition security.



## WHAT DID THE PROJECT DO?

Guidance, training and technical support were provided to raise awareness of how to prevent aflatoxin contamination of the maize value chain. This was achieved through an aflatoxin awareness campaign that sensitized stakeholders on the general problem, signs and effects of contaminated grains and how to implement Good Agricultural Practices (GAP) to avoid contamination. The use of biocontrol (afasafe) to mitigate mycotoxin in maize was optimized through field trials that analysed soil and grain for aflatoxin levels before and after harvest. Postharvest handling practices and technologies were disseminated to stakeholders, and the necessary equipment and materials (metal silos, Purdue Improved Crop Storage [PICS] bags, tarpaulins and drycards for measuring moisture levels before storage) were made available for purchase or through distribution so that beneficiaries can apply good agricultural practices before and during maize storage.

## IMPACT

The dissemination of knowledge about aflatoxin and its effects and prevention resulted in increased awareness of all stakeholders. Application of good agricultural practices increased productivity of maize, insured food security and increased farmers' income as they were able to sell their surplus. Furthermore, postharvest handling practices will reduce the amount of grains that can be lost after harvest. The knowledge and skills gained can continue to be disseminated to farmers to ensure the continued use of good agricultural practices and appropriate postharvest handling to reduce aflatoxin contamination and strengthen food security.

## KEY FACTS

### Contribution

USD 151 000

### Duration

February 2017 – January 2019

### Resource Partner

FAO

### Partner

Ministry of Agriculture

### Beneficiaries

Farmers, government staff, non-governmental and civil society organizations' staff

## ACTIVITIES

- Critical aflatoxin contamination point along the food supply chain was identified.
- Awareness about aflatoxin was raised in 61 villages from Kongwa, Kiteto, Chamwino, Kondoia and Chemba District Councils and Dodoma Municipal Council.
- An aflatoxin awareness meeting was held for 28 participants to ensure that high-level leaders were aware of the problem and were ready to propose policy to mitigate aflatoxin.
- Messages about aflatoxin and its effects were created and broadcast to the public through various channels.
- Good Agricultural Practices promoted to farmers.
- 120 farmers participated in field trials to optimize the use of biocontrol to mitigate mycotoxin in maize.
- Improved postharvest handling practices were promoted in 63 villages, to a total of 3,302 farmers, traders and millers.
- Material and equipment (metal silos, Purdue Improved Storage [PICS] bags, tarpaulins and drycards) necessary for appropriate storage of maize were distributed to 100 beneficiaries.
- Project implementation was monitored and evaluated.



**Project Code**  
TCP/URT/3605

**Project Title**  
Aflatoxin mitigation response through dissemination of appropriate postharvest management technologies and awareness raising in Dodoma and Manyara regions

**Contact**  
FAO Office in United Republic of Tanzania  
[FAO-TZ@fao.org](mailto:FAO-TZ@fao.org)



Resource Mobilization Division  
Marketing, Outreach and Reporting Unit  
[Reporting@fao.org](mailto:Reporting@fao.org)