Maziwa Zaidi (More Milk) in Tanzania
Feed quality and safety measures to improve the smallholder dairy value chain in Tanzania

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Key messages
• The safety of feed and dairy products is critical at all stages along the dairy value chain. Most of the hazardous milk and milk-products contaminants can be traced to toxins in feeds.
• Irrespective of the origin of the toxin, contaminated dairy feed has deleterious health effects and significant loss of productivity in dairy cattle and more importantly, pose serious health risks to human through consumption of products derived from these animals.
• Majority of the dairy farmers are constrained by lack of appropriate management skills for ensuring high feed and milk safety standards and therefore a need for capacity building, and enabling policy and business environment.

Objectives and approach
Household survey, field observations, stakeholder analysis, analysis of risk components (risk assessment, risk management and risk communication) and extensive literature review was carried out to determine best practices that will improve feed and milk safety along the dairy value chain.

Key results
• A high proportion of stakeholders along the value chain lack knowledge on appropriate management skills needed to reduce hazardous contaminants in feed and milk products
• Among the stakeholders especially producers there is very little effort to undertake agribusiness options that lead into designing, fabricating and validation of simple equipment to improve quality and quantity of feeds and milk
• Mechanisms to share information and enforce laws and standards such as regular inspection and testing of feeds and milk by feed inspectors and technicians is extremely weak
• Actions identified include: capacity building for actors to follow feed and milk standards, recruiting inspectors of feeds and milk, promoting best practices that improve feed and milk safety, and critical and regular reviewing and benchmarking of feed and milk standards and legislation.

Opportunities to invest and scale
• Feed quality certification - a market-based mechanism is needed to drive poor quality feed producers out of the market, hence benefit high quality producers.
• Leveraging institutions of high learning and local artisans to create partnership in supporting agribusiness especially designing, fabricating and validating equipment and simple machines to improve quality and maintain safety of feeds and milk.
• Unlike poultry feeds, dairy feeds companies are still very few in the country and there is a need to encourage farmer organizations and the private sector to invest in dairy feed milling companies.
• Supporting technology transfer in post-harvest preservation of grains such as maize, sunflower and others that are used in compounding animal feeds but also pastures and forages.
• Support in disseminating user friendly materials on the existing guidelines, policies, and laws on feed and milk safety standards.

Potential sources of aflatoxin poisoning of dairy cows and pathway for contamination of milk on smallholder farms