Safety Practices in Livestock Management as a Tool to Improve Nutrition, Health, and Economic Growth

Across global emerging economies, livestock is a vital component of a diverse, nutritious, resilient food system, and will continue to play a key role in reducing malnutrition and hunger. Animal-sourced foods contain a variety of bioavailable nutrients, and consumption is proven to correlate positively with improved childhood growth. As diverse diets that include animal-sourced foods are of high importance to nutrition, childhood health, and economic development, food safety in handling livestock products is increasingly essential. Small and medium sized food enterprises that have capacity to prioritize food safety, referred to as Growing Food Businesses (GFBs), are key to driving a culture of safety for animal-sourced foods.

Growing food businesses in the livestock industry face obstacles to sustainable food safety, particularly in handling and transportation. Lack of appropriate slaughter facilities can cause cross contamination and spoilage. Phytosanitary problems are often combatted with excessive antibiotic usage and wash water that can be contaminated with toxic substances. Many communities lack a trusted or centralized method of tracing outbreaks of contaminated foods, which prevents proactive product recalling.

As incomes rise, and as populations grow and migrate to urban areas, demand for higher quality, and sustainably and safely produced animal proteins is expected to grow. To meet this demand, Feed the Future Business Drivers for Food Safety (BD4FS), funded by USAID and implemented by Food Enterprise Solutions, has analyzed opportunities for improvements in food safety across the animal-sourced food system, from farmgate to market. Foremost in controlling quality and safety is a “cold chain”, which is the temperature-controlled component of the supply chain in perishable food. There are many productive opportunities in value-added processing for animal proteins, such as dry aging, high pressure processing, and fermentation, which, if handled and stored sanitarily, reduce risk of foodborne illness in addition to adding diversified income streams for producers. Although proper cold chain and processing facilities require investment, they can benefit producers by reducing food loss, mitigating food contamination, and increasing market access and value.

BD4FS works to create scalable food safety practices in animal-sourced foods, including goat products in Nepal. Nepal recently released the National Food Safety Policy of 2019, and the Food Hygiene Bill of 2021, which has improved the regulatory framework of food safety. Still, enforcement of existing food safety policies is underfunded, and therefore inadequate to monitor risk. The difficulty of government inspection for many diverse retailers and processors across the country makes creating safety practices on a business level all the more important. In the Kathmandu and Chitwan food corridors, the BD4FS team has partnered with several GFBs in the goat meat sector to design food safety training, identify existing cold chain technology, and implement feasible hygiene practices. With improved safe handling of animal-sourced foods, GFBs become more reputable in emerging markets, are able to share best practices through cooperative networks, and are more likely to attract investment for further safety capacity. Co-designing safety interventions with GFB partners allows the solutions in animal-sourced food chains to be locally relevant, product specific, and sustainable on a long-term basis. To address consumer food safety concerns around traceability, BD4FS will explore potential for certification, documentation, and reporting processes to issue recalls for contaminated product. As consumer demand for nutritious animal-sourced foods continues to grow, as will the importance of ensuring market solutions for safety and traceability across each step of the food system.

Learn more about FES and BD4FS activities at https://www.foodsolutions.global/ and https://agrilinks.org/activities/business-drivers-food-safety; and follow us at: