

The Role of Business-Led Food Safety in Sustainable Food Systems

The Linkage Between Food Safety and Sustainability

Food loss and waste pose a major threat to both global food system security and sustainability. Postharvest loss is both nutrient and resource loss. When food is wasted, so are the resources required to produce it, namely land, water, and energy. In Africa, with the world's highest rates of hunger and malnutrition, about a third of all food produced is lost before it ever reaches consumers¹. Food loss and food safety are intrinsically tied – contamination and spoilage are the results of inadequate hygiene, temperature control, and storage. By improving pre-consumer handling practices, supply chains in emerging economies can be better positioned to reduce food loss, face climate shocks, and grow diversified local economies.

How BD4FS is Addressing Food Loss



Employees of Freshktm in Bhaktapur, Nepal trimming fresh vegetables.
Image Credit: Rajani Maharjan

For growing food businesses² (GFBs), adopting the appropriate set of food handling practices will improve food safety and contribute to a reduction in food loss. Feed the Future Business Drivers for Food Safety (BD4FS), funded by USAID and implemented by Food Enterprise Solutions, works with GFBs in Senegal, Nepal, and Ethiopia to adopt safe food handling practices and build a culture of food safety. By improving food safety management systems, businesses can also reduce food loss, thereby increasing revenue streams, gaining access to new markets, and improving nutrition content. BD4FS works alongside local food safety experts to provide customized technical assistance and training. The trainings prepare GFBs to implement food safety prerequisite programs³ (PRPs), including measures such as employee hygiene, pest control, and proper storage. These practices help to reduce both loss

of water, nutrients, and weight, as well as degradation of the appearance desired by consumers.

BD4FS has also developed a manual of 100 Affordable Food Safety Technologies for GFBs, identifying readily available tools and techniques that GFBs can adopt to safely process, handle, transport, and store foods. Accessible technologies, like insect glue traps for processing facilities, stamps for product coding and traceability, and reusable packaging trays to cushion products during transport can be used to preserve quality and prevent losses.

¹ FAO. 2011. *Global food losses and food waste – Extent, causes and prevention*. Rome

² A Growing Food Business (GFB) is considered a small-medium food enterprises that recognizes and embraces the importance of food safety as an integral part of its business model.

³ PRPs - Prerequisite programs (PRPs) are the minimum control measures, actions and procedures that must be performed to produce/manufacture a product that meets consumer needs. As no single policy or set of standards can be applied to every plant or distribution system, PRPs are used as guides in setting up individual policies. Food-safety management systems are management systems that involve the systematic and logical assessment of all the steps in a food-manufacturing operation. A food-safety management system cannot be successfully implemented unless the facility has PRPs in place.

Promoting GFBs as Leaders in Local Sustainability

In addition to building capacity for food loss prevention, BD4FS training empowers GFBs to reinvest in local supply chains and promote local ingredient sourcing while combatting post-harvest loss. Several companies BD4FS partners with have gained larger market access by improving their food safety, requiring them to scale purchasing to account for larger productions. Le Lionceau is one of the first companies in Senegal to produce baby food using locally produced ingredients, meeting the market demand for nutritious, diverse choices tailored to local tastes. Founder, Siny Samba, notes that food loss in the region is high, due in part to the lack of local processing facilities to buy fresh fruits and vegetables. Since partnering with BD4FS for food handling training, Le Lionceau has been able to safely increase production and plans to open a new processing facility. As production increases, Le Lionceau is able to source more products from local and sustainable farms, with a focus on produce that would otherwise go unused. For example, up to 50% of Senegalese mangoes are lost before harvest – to combat this, Ms. Samba’s team procures these mangos for purees.⁴ In addition to having a lower risk of food loss due to improper handling, Le Lionceau is creating a market for foods that have been diverted from being lost in the field. The resulting products are 100% Senegalese, reducing the need for imported products and making traditional Senegalese baby foods accessible to more people. BD4FS will continue to work with local entrepreneurs who are leading the culture of food safety, working to reduce food loss, and creating more resilient food systems.



Le Lionceau employee uses food safe handling to package product. Photo credit: Le Lionceau

Learn more about FES and BD4FS activities at <https://www.foodsolutions.global/> and follow us at:



⁴ Lechapelays, Maria. *In Africa too, everything is decided before the age of 2, including taste, education.* Le Monde, 2019.