

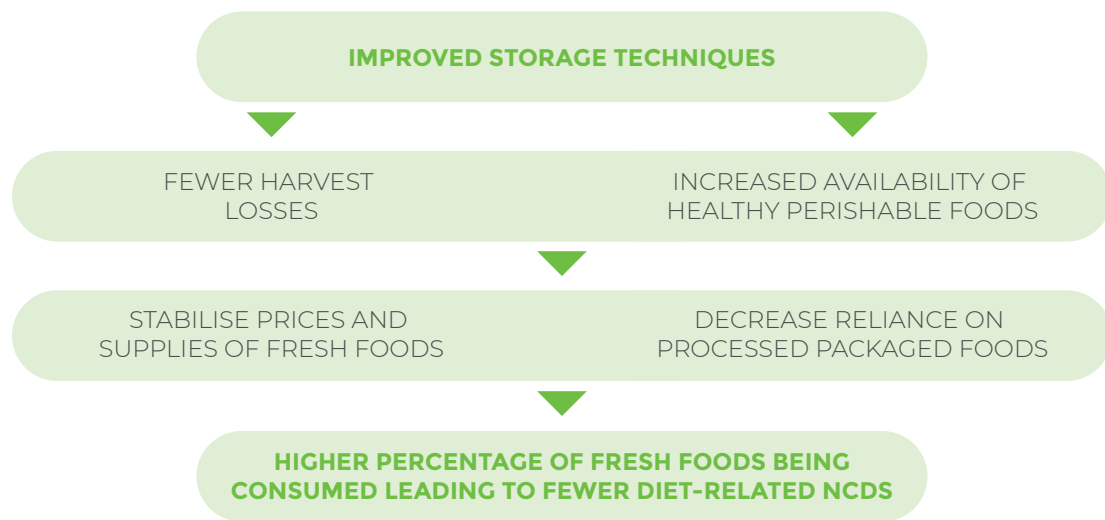
ADDRESSING DIET-RELATED NCDs THROUGH BUSINESS TO BUSINESS TECHNICAL ASSISTANCE

Storage of perishable foods

The SUN Business Network (SBN) matches the expertise of its Global Members and the needs of its national members (mostly small- and medium-sized enterprises (SMEs)) to support better nutrition. Overweight and obesity may result in diet-related non-communicable diseases (NCDs). NCDs, such as cardiovascular diseases (like heart attacks and stroke), cancers, chronic respiratory diseases and diabetes, kill more than 40 million people each year. In order to help address this issue, SBN with the support of the George Institute for Global Health has identified a set of business-to-business (B2B) technical assistance initiatives that could contribute to the prevention of diet-related NCDs. The analysis focused on four countries: Kenya, Nigeria, Tanzania, and Bangladesh.



IMPROVE METHODS AND INFRASTRUCTURE FOR BETTER STORAGE OF HEALTHY PERISHABLE FOODS



FOOD LOSS AND WASTE IN LOW AND MIDDLE INCOME COUNTRIES

In regions such as Southeast Asia and Sub-Saharan Africa, 37% of food loss (in kcal) occurs during the handling and storage stage. Food loss and waste, measured by weight, is the highest for fruits and vegetables (44%), followed by roots and tubers (20%) and cereals (19%). By decreasing the loss of these foods critical for a healthy diet, it is possible to increase their availability, potentially making them more accessible and affordable.

Solutions to prevent food loss and waste of healthy foods should enable SMEs to increase price stability in often highly volatile markets.

Research estimated that cooling practices of vegetables could lead to savings and revenue gains of up to 7.5 times higher than the initial costs.¹

¹ Rosegrant M ME, Valmonte – Santos RA, Mason-D'Cros D. Returns to investment in reducing postharvest food losses and increasing agricultural productivity growth. 2015; <https://www.ifpri.org/publication/returns-investment-reducing-postharvest-food-losses-and-increasing-agricultural> Accessed 6 Jan 2020, 2020.

WHAT TO DO

To improve methods and infrastructure for better storage of perishable healthy foods, SBN Global Members can help SMEs by:

- Providing guidance on good-practice storage methods (such as washing and drying before storage and ensuring low-temperature storage from production through to distribution).
- Providing information on low-cost storage technologies (e.g. plastic crates, storage bags) and infrastructure (e.g. metal silos, cold storage).

Technical assistance should be tailored based on the local context, the targeted market and the local companies' resources (e.g. finance, infrastructure, staff). Acknowledging that SBN Global Members face resource constraints and might not have relevant technical experts available in-country to respond to the technical assistance demands, both remote and in-country support can be considered. It is critical that SBN Global Members consider low-cost solutions as much as possible: interviews conducted in Kenya, Nigeria, Tanzania and Bangladesh highlighted that the initial investment required for storage infrastructure, especially cold storage, is the main barrier preventing SMEs from reducing loss and waste of their perishable products.



Existing business practices to prevent food loss and waste

To improve methods and infrastructure for better storage of healthy perishable foods, SBN Global Members can help SMEs by sharing information or facilitating access to existing solutions such as:

- Evaporative coolers: a low-cost, low-energy technology that does not require electricity to extend the shelf life of foods and avoid spoilage by keeping food colder than room temperature.
 - The “zeer” pot is a simple evaporative cooler invented by a Nigerian teacher. It costs less than 2 USD to produce, stores up to 12 kg and can be reused for several years. It has been shown to substantially extend shelf life of fruits and vegetables (e.g. from two days to up to 20 days in tomatoes and guavas).
- Other larger cool storage technologies. While refrigerated cold rooms of approximately 80 m² in size require a reliable electricity supply that can cost up to 30,000 USD, there are more affordable alternatives.
 - Zero-energy cooling chambers vary in size and cost, with smaller units holding 200 kg costing 200 USD whereas larger units with 1,000 kg capacity cost 1,000 USD.



For more information about the SBN B2B technical assistance platform please consult our [webpage](#)

If you have any question regarding this document or the SBN B2B technical assistance platform, please email laubert@gainhealth.org