

## ADDRESSING DIET-RELATED NCDs THROUGH BUSINESS TO BUSINESS TECHNICAL ASSISTANCE

### Farming practices

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.

### FARMING PRACTICES IN LOW AND MIDDLE INCOME COUNTRIES

Inefficient farming practices are a significant cause of harvest losses. For example, in Kenya, the majority of mango losses (39-52%) occur before and during harvesting. Poor production and harvesting techniques such as shaking trees and waiting for the fruit to drop, limited access to pesticides and poor linkages to traders or brokers result in immature, damaged or poor-quality mangos that are rejected by traders and processors. Similarly, in the Nerkh district of Afghanistan, the majority of apple losses during harvesting are caused by early harvest, lack of skill and knowledge amongst the harvesters and absence of harvesting equipment (ladders, baskets and apple pickers).

Studies have identified that in lower-resource countries, small-scale farmers with limited knowledge and with the lowest incomes were the most affected by postharvest losses of fruits and vegetables. Consequently, supporting better farming practices could not only increase availability and therefore accessibility of fruits, vegetables and grains for consumers in low- and middle-income markets but also improve livelihoods for farming populations at high risk of malnutrition. Interviews conducted in Bangladesh, Kenya, Nigeria and Tanzania highlighted the need for trainings and support to focus on farming techniques that would be feasible and affordable for small and medium-sized farmers.

## WHAT TO DO

To improve farming practices, SBN Global Members can help SMEs by:

- Providing trainings and/or investments in optimal pre-harvest production practices related to irrigation, fertilizer use, cultivation practices and agricultural chemicals.
- Delivering trainings and/or investments in optimal harvesting techniques related to timely and careful harvesting or handling methods with appropriate harvesting and packaging equipment and on-farm practices (e.g. shading to reduce water loss and wilting; curing of roots, tubers and bulbs).
- Providing trainings and/or investments in planning systems to ensure produce cost and timing meet buyer requirements and quality standards.





## Existing efficient farming practices

In 2012, as part of a pilot project on postharvest loss, smallholder farms and food processors in Tanzania were provided with on-site training and demonstrations of new technologies that can reduce post-harvest losses, maintain quality, protect food safety and enhance shelf life. Overall, the cost of the training programme for a group of 20 people for one day was estimated to be around USD 926 to 1,406. Demonstrations included the use of harvesting tools, such as clippers, hand-held pruners, a picking basket, harvesting bags and colour charts for visual inspection of the proper maturity for various fruits and vegetables.

Another demonstration included the construction of a shade cover costing approximately USD 100. The provision of shade for fresh produce after harvest helps reduce wilting and weight loss and extends shelf life. As a general rule, a decrease in the temperature of produce by 10°C will extend potential shelf life by 100%, such that tomatoes kept at 30°C will have a shelf life of four days, while at 20°C, the tomatoes will retain good quality for eight days. While the shading of vegetables may lead to only small gains, the investment cost can be quickly recouped. Other on-farm techniques, such as curing roots, tubers and bulbs, result in profits that are 2.5 times higher than without such practices.



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

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