In a world with over 800 million undernourished people, it is hard to believe that an estimated one-third of all harvested food is lost on the way from the field to our bellies. The SDC is successfully working to reduce these losses and striving in the process to include all stakeholders in the food supply chain in the effort.

Losses occur along the entire food supply chain, from agricultural production all the way to the consumer. In middle and high-income countries, waste by consumers accounts for the bulk of the losses as edible food is thrown out. In low-income countries, however, losses occur primarily at the beginning and middle of the food supply chain, during harvesting, drying and storage, while losses at the consumer end are far smaller.

These losses in developing countries are of special concern because a significant portion of the populations in these countries suffer from hunger – indeed, they often occur in households that are themselves facing hunger. The problem arises when the means used to process and store food are not suitable.

WHAT IS THE SDC DOING?

In the 1980s the SDC’s food loss reduction activities centred mainly on Central America (see text box). Based on its success there, since the start of the new millennium it has also launched projects in Africa and at the global level. The focus is on reducing losses of staples such as maize, rice and millet as well as beans and other legumes. The work is concentrated at the household and community level, where in sub-Saharan Africa, for example, some 40% of all losses occur. Merely reducing these losses by half would make an enormous difference.

ACTIVITIES AT THE NATIONAL LEVEL

The SDC includes all stakeholders in the food supply chain in its work. The first step is analysis of the supply chain for a given country’s key products to identify the main sources of losses. In the north of Benin, for example, losses occur mainly through insect infestation, especially during storage. In the south of Benin, on the other hand, the problem is more likely to be faulty drying of products leading to mould growth during storage. In Ethiopia it was found that, in addition to losses during storage, losses occur mainly during the harvest and threshing. Kernels fall out of the corn ears or are crushed during rudimentary threshing with wooden sticks.

A different approach is needed to avoid each of these types of loss. In the north of Benin the introduction of metal silos produced by local craftpeople is being tested. A further approach being taken is the marketing at cost of hermetic or insecticide-treated bags. In Ethiopia, by contrast, efforts focus on distributing corn varieties in which the grains are more tightly seated in the ears and on shared procurement of simple threshing machines.

The SDC currently supports post-harvest loss reduction projects in 16 countries, mostly in Latin America and Africa. These projects are undertaken in collaboration with Swiss and international non-governmental organizations.
COMMUNITY OF PRACTICE

As part of an SDC-financed project, the three UN agencies based in Rome, the FAO, IFAD and WFP, have formed a community of practice on the issue of reducing food losses. Cooperation between the three UN agencies originates from a Swiss initiative and has become a model for inter-agency cooperation. It has enormous potential to facilitate the flow of acquired knowledge into the specific country strategies of the three agencies and beyond. A web-based platform offers experts and decision makers the opportunity to share their experiences in the field of food losses. The primary aim is to publicise successes and widely disseminate the latest research results on technologies and management systems in food supply chains.

FOOD LOSSES ON THE GLOBAL AGENDA

For a long time the strategy of choice for enhancing food security was expanding production. But the food price crises of 2007–2008 and 2011 drew greater attention to the issue of food losses. As a result, there is global interest today in the SDC’s experience as described above. One reason is that food loss wastes increasingly scarce resources such as soil and water, and accelerates climate change.

In 2014 a group of experts appointed by the Committee on World Food Security (CFS) presented a report on the topic that included recommendations for various stakeholders in the food supply chain, including governments, international organisations and the private sector. Concurrently, in late June 2014, the heads of government of the African Union committed themselves in the Malabo Declaration to reducing post-harvest losses by half by 2025. Experts agree that reducing food losses is often a more cost-effective means of improving food security than investing in increased production. A recently published study by Grow Africa - an initiative of the African Union Commission, NEPAD and the WEF - draws a similar conclusion.

The study shows that investments by small farmers in four regions of Kenya in activities immediately after the harvest, such as improved drying methods and maize storage at the household level, yield a better cost-benefit relationship than investments in measures such as irrigation or synthetic fertilisers. Recommendations for governments can also be derived from these findings: instead of subsidising agricultural production, investing in improved drying and storage methods such as bags or small silos offers a better approach. The success of the SDC’s Postcosecha programme in Central America supports this conclusion (see text box).

POSTCOSECHA — A SUCCESS STORY FROM CENTRAL AMERICA

From the mid-1980s until 2003 the SDC financed projects in various countries of Central America with the aim of reducing post-harvest losses of maize. These projects were based on training craftspeople to produce metal silos which were then purchased by individual households to store maize for their own use or later sale. The government of Guatemala subsidised the distribution of silos for poor households by providing sheet metal for the silos to craftspeople free of charge. Although SDC support ended in 2003, the number of silos in Honduras, Nicaragua, Guatemala and El Salvador continues to grow. An independent study shows that SDC investments of approximately USD 20 million resulted in prevention of maize losses worth up to USD 100 million. Moreover, the food security of households with metal silos was appreciably improved.

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