

Improvements in post-harvest storage and management

help farmers to reduce losses after harvesting, increasing their food supply and income.

CHALLENGE

In sub-Saharan Africa, 30-50% of food produced for human consumption is lost or wasted along the value chain every year. These losses equally affect nutrition, food security and income. Post-harvest losses exacerbate food insecurity and threats to livelihoods globally when combined with the pressures on future food systems which climate change is expected to bring.

CSA PRACTICE

Post-harvest storage and management encompass a wide range of activities, influenced by a wide range of actors and factors along any value chain. In Lesotho and Botswana, cereal production (maize, sorghum and wheat) is critical and smallholder farmers account for a large percentage of farming activities. Introducing strategies for smallholder farmers in the post-harvest storage and management of cereals will be crucial.

Production & pre-harvest losses

Damage in the field before harvest, due to biological and biotic factors such as weeds, insect, pests and diseases

Harvest and handling

Poor harvest scheduling and timing and careless handling of produce contribute to food loss and waste along the chain

Storage

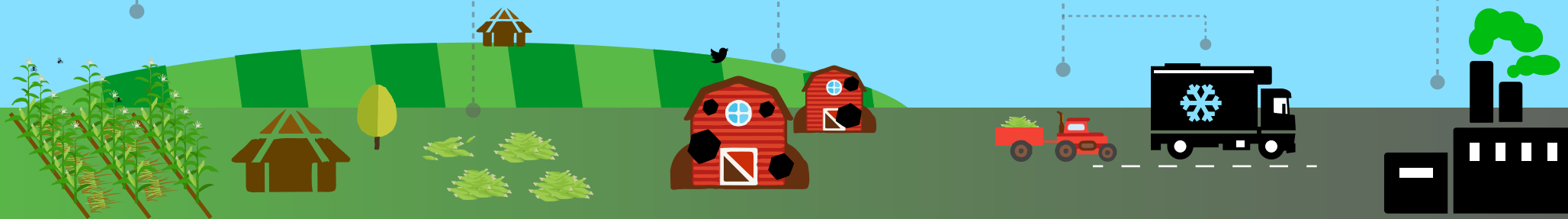
Lack of proper storage facilities is a major cause of losses. Highly perishable produce requires adequate storage facilities with suitable conditions: - temperature, humidity & gas composition

Transport

Transport introduces an element of longer time span between production and consumption, of particular importance for fresh products, as well as additional risks of mechanical and heat injury

Processing and Packaging

Food losses at the processing stage are mainly due to technical malfunctions and inefficiencies. Errors during processing often lead to defects in the end product and processed food can be discarded for not adhering to set standards



In Lesotho and Botswana:

The Departments of Agricultural Research consider post-harvest storage and management a key adaptation measure to climate change due to high performance against four key criteria; Effectiveness, Cost, Feasibility and Speed of results.

The effect of postharvest losses and losses as a result of degradation and soil erosion, reduces countries' capacity to be food secure. This, coupled with the effects of climate change (limited rainfall and higher temperatures) will further compound the food and livelihood security challenges which Botswana and Lesotho face.

How does it help farming?

IMPROVES PRODUCTIVITY

Increases amount of farm output that reaches market.

ENHANCES ADAPTATION

Increases farm gate output and therefore income (livelihoods).

PROMOTES MITIGATION

Achieves higher productivity per unit of land by minimising loss prior to farm gate.

Produced by:



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