

Postharvest Management improves food security and rural livelihoods in Sub-Saharan Africa: Lessons from the field

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Since 2011, the SDC has been implementing programs on postharvest management (PHM) in Sub-Saharan Africa (SSA) to increase food security of smallholder farmers through reducing postharvest losses at farm and community levels. These programs have contributed significantly to an increasing knowledge base on PHM in African contexts.

The Postharvest Management in Sub-Saharan Africa project is one of the projects mandated by Global Program Food Security (GPFS) that built their conceptual and technical foundation on the great success achieved from the POSTCOSECHA program in Central America. The overall goal

of the project is to **test and promote simple technical solutions and storage options for grains and pulses** and to work at the regional policy level using experiences from experimental pilots in two focus countries; **Mozambique and Benin**. Focusing on the scale-up of existing postharvest management technologies and systems, the project aimed at instituting policy dialogues at both national and continental levels. After a successful implementation for eight years (2012 – 2020), the SDC commissioned an independent final evaluation as an essential part of the evaluation process for GPFS-PHM portfolio and to fulfill its requirements for assessing the accountability and learning contributions of the project. The evaluation was carried out under the circumstances of the global COVID-19 pandemic leading to a change in methodological approaches to a fully online format. This adapted and completely virtual methodology with no direct contact to beneficiaries and partners has been challenging as direct verification of information and data gathered from secondary sources was not possible. Despite these challenges, the evaluation provided a useful analysis of the project performance, mainly since a considerable amount of data collection and reflection has been done over the course of the project implementation.

The evaluation confirmed that the project was highly relevant and matched well with the needs of the beneficiaries and partners. It addressed the critical loss points and the main causes of food losses at household level. Basket of PHM options were introduced and adopted to reduce the postharvest losses in the target communities. Particularly, the **introduction and promotion of simple and practical PHM practices and technologies were found to be the most effective option to reduce postharvest losses and ensure food security and nutrition**. The adoption of these improved PHM practices and technologies resulted in livelihood improvements (in terms of increased income and reduced hunger period/gap) for the beneficiaries. The cost/benefit analysis also showed that investments in PHM techniques are highly profitable and have solid return on investment figures.

The project also triggered a number of positive changes in the beneficiaries and institutions involved. The institutionalization of PHM in key organizations, such as **national research institutions, higher learning institutions and local agricultural offices, enhanced their capacity to mainstream and further replicate the knowledge generated on PHM in their activities**. It is important for partners to build on these institutional



Workshop in Mozambique, 2017 © Helvetas

frameworks and partnerships created to further the PHM agenda in the region and beyond. The project included gender and equity aspects from the start. Improvement of PHM meant a positive development and recognition of the role of women. Due to these PHM improvements, women have access to granaries and thus have more control on the stored grains. The project also enabled to make PHM part of the political discourse as an indispensable topic both in Benin and Mozambique through mobilizing governments and multiple interest groups. Policy advocacy initiatives take time to show results, especially on subjects like PHM that are mostly perceived as rather technical and unemotional. Furthermore, **PHM needs to be linked to more sensitive issues such as economic empowerment, rural job creation, nutrition and food safety/quality in order to be considered a priority in national and regional policy dialogues.**

Sustainable business models for marketing of PHM technologies and the capacity to facilitate multiple market links greatly influences the outcome of a market system development approach. To reach scale with postharvest loss reduction technologies, a self-sustaining system that considers the wider and interlinked commodity market system needs to be established. Prolonged large-scale information campaigns are also necessary to create a genuine demand and willingness to pay for the PHM technologies. In line with demand creation, the **supply chain needs to be built up through supporting agro-dealers, silo producers and artisans that can produce metal silos with optimum quality.** However, pushing entrepreneurs towards adopting a specific business model and providing too much “hard support” in the initial stage of market creation can hamper the sustainability of the business. Data around the extent of postharvest losses and the possible gains (business case, sustainability issue etc) of reducing these losses are key to enhancing government commitment, attracting the private sector and raising farmer awareness.



New warehouse in Boukombé, Benin © Helvetas

There were also challenges encountered in the project implementation, including limited financial and logistical capacity of small agro-dealers that lead to a low market uptake, lack of a broad campaign for creating demand, and the sustainability of *Warrantage* groups in Benin and metal silo artisans in Mozambique among others.

Lastly, postharvest food loss reduction issues had been one of the thematic areas for engagement for GPFS since 2011. The results of this evaluation also reiterated

SDC’s initial argument that postharvest losses can be significantly reduced with reasonable investments, government commitment and engagement of the private sector at the right scale. It was also evident that **several technically proven and affordable baskets of options are to be made available and can be promoted through appropriate approaches and business models that aim at systemic changes in postharvest market systems.** However, in 2017, the GPFS decided to phase out PHM as a core thematic focus by 2020/2021 as it’s believed that sufficient knowledge, innovations and policy and norm setting platforms on PHM are available in a number of African countries. These enriching experiences and resources can be used by countries and development practitioners to launch and scale up PHM initiatives at country level. However, the impact of the GPFS’s PHM interventions in SSA and its decision to phase out should be assessed in 3-5 years in order to draw further lessons and design a more comprehensive thematic engagement that is cognizant of the ground realities and current achievements.

Read more: [Capitalization of Experiences of SDC’s Post-Harvest Management Projects in Africa](#)