



# The Post-Harvest Management Business Model

Lessons from the Grain Post-Harvest Loss Prevention (GPLP) Project  
in Tanzania (2013 – 2020)



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Swiss Agency for Development  
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## Key Messages

- *GPLP project demonstrated that a business case for post-harvest technologies such as metal silos and hermetic bags can be built up.*
- *The chosen Market Systems Development approach allowed developing the input market for post-harvest technologies.*
- *Private sector input suppliers were key to procure, introduce and disseminate information and technologies such as metal silos and hermetic bags for improved post-harvest management and on-farm storage of grain.*

## 1. Background

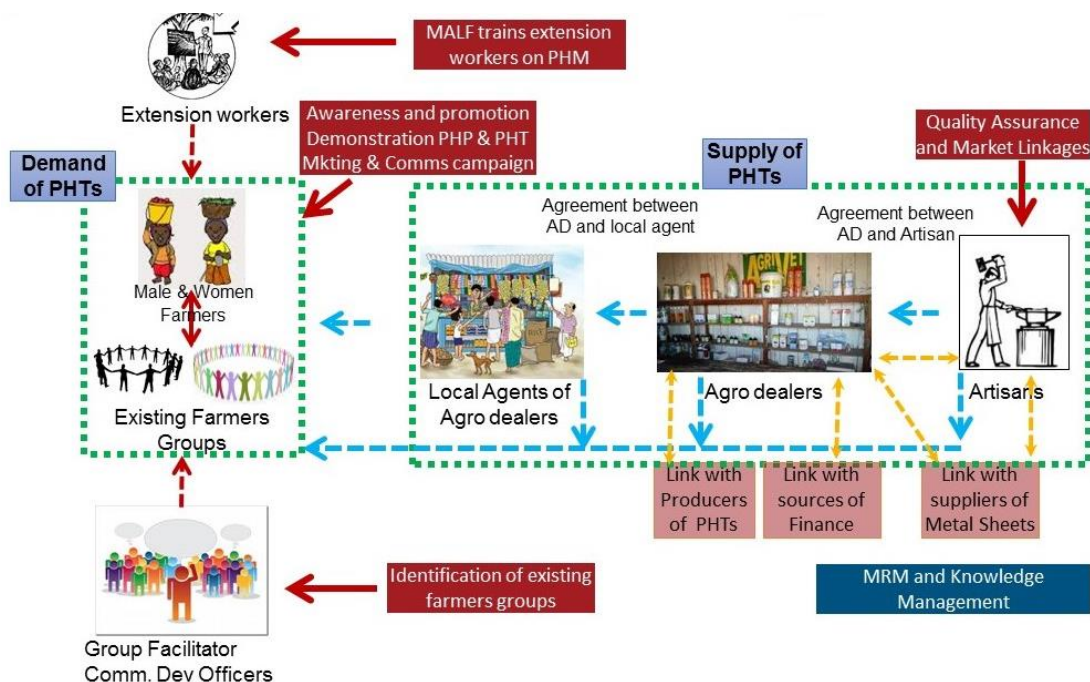
The Grain Post-Harvest Loss Prevention (GPLP) project of the Swiss Agency for Development and Cooperation (SDC) has been implemented between 2013 and 2020 by HELVETAS Swiss Intercooperation and its partners in four regions of the Central Corridor of Tanzania. GPLP aimed to increase food security and incomes of farming households by improving post-harvest management (PHM), i.e. mainly post-harvest practices (PHP) and technologies (PHT) for maize.

The GPLP project adopted the Market Systems Development (MSD) approach to strategically address PHM, which is guided by four underlying principles: systemic changes in market systems, sustainability by involving actors with incentives to contribute to long-term change, large-scale impact on the lives of poor farmers, and taking a facilitative role by the project implementers.

The project developed its PHM business model for matching the supply and demand of post-harvest technologies. As shown in the figure below, the model places the agricultural input suppliers at the centre. The selection of agro-dealers as the main business actors based on their experience with existing business for agro-inputs as well as on their relations and trust with different actors such as local governments, extension agents and farmers. The core function of the GPLP business model is to address supply and demand of PHT which include metal silos, hermetic bags and tarpaulins. This core function is embedded with supporting functions such as awareness events, training, coaching, input supply, access to finance, research and advocacy, which are necessary for the proper functioning of the core transactions.

The agro-dealers created demand for PHT through awareness events and training of farmer groups, which were conducted in collaboration with government extension officers and artisans. The supply of PHT was furnished either by the agro-dealers themselves or through their established networks of agents at local level. Agro-dealers supplied these materials and technologies on cash bases or through established credit systems. They also provided commissions to agricultural extension officers at ward or village level, who acted as their local sales agents. In the case of metal silos, farmers purchased them through agro-dealers and their agents or directly from artisans. The established forums at district level and the national platform comprising of different PHM actors provided space for policy dialogue and advocacy to draft the bylaws and develop the national PHM strategy thereby creating an enabling business environment. Furthermore, the platform and forums collaborated with research institutions to advocate PHM. The GPLP project through its M&E system conducted some capitalization of experiences and shared the lessons learned with PHM stakeholders.

In designing its interventions, GPLP was conscious to influence the behavioural change of the key actors concerning their core or supporting functions and within their enabling business environment. This holistic analysis and positioning of the project were based on the knowledge that GPLP only exists as facilitator for a predefined period and is not market actor. In realising this fact, GPLP was strategic in terms of selecting the key partners to work with and the areas to intervene with the goal to get sustainable impact at scale.



## 2. Key Lessons Learnt

- 1) **To be successful, the chosen MSD approach had to be understood by all stakeholders, be handled with flexibility and to consider the existing PHM context.** Introducing the market systems development approach required capacities among the stakeholders, which at the beginning still had to be built. This capacity building process then also revealed that farmers and other market actors need clear information concerning the business case and the economic benefits out of the proposed PHM and PHT. All market actors on the demand side as well as on the supply side had to see economic benefits to adopt and engage in PHM. These benefits were different for different market actors. Hence, the MSD approach as such had to be handled in a flexible manner, depending on the view and situation of the concerned actor. Flexibility was also required because in some areas other actors were subsidising PHT or distributing them for free, while the GPLP project aimed at building a business case for PHT.
- 2) **Enabling business environment is important for MSD projects.** During the implementation of the GPLP project, one focus was on the enabling business environment. Initiating the PHM District Forums and the Tanzania Post-Harvest

Management Platform (TPMP) and advocating for the establishment of by-laws at the district levels and for a national PHM strategy created increased understanding for post-harvest losses and PHM measures and resulted in recognising PHM as integral part of crop production.

- 3) **Enhanced business opportunities are a driver for PHT suppliers.** An assured greater network of customers to whom agro-dealers can sell different products is vital. A PHT business alone does not attract any potential market actor to invest but it creates an opportunity for linking other products and for strengthening business relations and networking with customers. Hence, agro-dealers were interested to add PHT to their business.
- 4) **Selection of right partners is crucial.** Special mechanisms to identify committed market actors who share a similar vision had to be created by the project; e.g. a standard procedure of inviting interested PHM stakeholders to apply for partnership did not work. The GPLP project invested a lot of time to identify, brief and train suitable agro-dealers as partners to carry on with the chosen MSD approach to promote post-harvest management.

### 3. Conclusion and recommendations

**Private sector input suppliers are needed to promote PHT.** Through the MSD process a common PHM vision among the stakeholders could be created and a business case for PHT was built involving the private sector. It is important that the business partners' strategy meets with the project's vision and even more with the clients' needs. For GPLP, this process has been consultative, engaging and discussing with the prospective partners. Nevertheless, promotion of technologies and products must be done by involving private input suppliers. To promote PHT, it is therefore recommended to properly identify and capacitate these actors to take up their assigned roles.

**A conducive policy environment is a key support function to promote PHM.** The GPLP project secured the cooperation with respective Government agencies through a memorandum of understanding and supported the Ministry of Agriculture in developing a PHM strategy. Creation

of such an enabling environment to promote PHM is highly recommended as it is the common ground for the various PHT market actors which acknowledges their business activities and provides them with the required business security.

**The post-harvest management business model ensures the supply of PHT, has to consider the demand side.** The PHM business model applied by the GPLP project has put the manufacturers and suppliers of PHT (metal silos, hermetic bags) in the centre. Since supply is following the demand, the project identified at farmers' level various existing schemes and models to acquire PHT. However, adopting PHT remained based on the farmers' expected benefits. Hence, any PHM business model must show comparative advantages to the farmers; it should not distort the demand, and at the same time it should be sustainable. Therefore, it is important that on the demand side a level playing field between various PHM initiatives and PHT procurement models is ensured.



A farmer in Bukulu ward Kondoa district handling maize ready to store in bags after threshing

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