Introduction

- Potato (Solanum tuberosum L.) is a key food and cash crop in Uganda, mainly produced by smallholder farmers in the southwestern and eastern highlands.
- Ugandan farmers sell a majority (>60%) of their production immediately after harvest while the remainder is stored primarily for food at home (>14%) or as seed (>16%) for the next cropping season.
- Very few farmers (~3%) store potato for selling later as ware potato; this results in seasonal mismatches between potato demand and supply leading to high price fluctuations.

Potato farmers tend to use diffused light storage facilities, however, these are suitable only for storing seed potato because light promotes sprouting.

Improved ambient stores have been piloted in Uganda: dark stores, locally available materials, temperature control by taking advantage of the cool temperatures at night, maintenance of the marketability of the stored potato up to 3 months.

Results

- Overall high performance of individual stores: 9 out of 10 have a benefit-cost ratio (BCR) > 1 (benefits outweigh costs), 8 out of 10 have a payback period < 5 years, easy to maintain, shared on an informal basis with other farmers from the community to increase storage capacity.
- Overall low performance of group stores: 1 out 5 has a BCR > 1, 1 out 5 has a payback period < 5 years, challenging typical of collective action endeavors (good maintenance of the store; low net cash flow returning to the group; unequal participation of group members; power imbalance resulting in the bulk of stored potato belonging only to a few influential group members, primarily men).

Materials and methods

- Cost-benefit analysis based on data related to operational costs and income of ware potato storage in improved ambient stores and collected for 2 seasons using record keeping templates.
- Survey and Focus Group Discussions on the management performance of improved ambient group stores.