

## Safely store grain and seeds in hermetic containers during emergencies (e.g. covid-19)



### Background:

The COVID-19 is a health emergency and an economic and food security crisis. Crises disrupt food supply chains and slow down agricultural activities. Seeds are the foundation of crop production, which strengthens food security and income of smallholder farmers. The COVID-19 pandemic reminds us all of the importance of preserving seeds for future production and grain for household consumption. Development practitioners and government agencies need to recognize and support the efforts by farmers to preserve their seed and grain.

Hermetic storage methods help keep seed and grain on smallholder farms safe during crises such as the COVID-19. Most hermetic storage containers are available locally – in households, communities, markets, or inputs dealers' shops. Radio and cellphone (videos, sms and USSD) can be used to provide farmers with the information and train them on seed/grain storage.

### Hermetic storage methods:

Hermetic storage containers are available in several countries around the world. There are different options, depending of the quantity to be stored. These include hermetic bags such as Purdue Improved Crop Storage (PICS), GrainPro SuperBag, AgroZ, ZeroFly, and Elite. Other hermetic containers that can be used to store grain and seed include silos, drums, jerrycans, bottles, and other sealable containers.

#### 1. Hermetic bags



Can be used for storing small and large

quantities of grain and seed. Capacity ranges from 25 to 100kg. Available in several countries in sub-Saharan Africa, Asia, and Latin America.

#### 2. Jerrycans



Commonly used by farmers to fetch and store water; and available in local markets. Can be used to store grain and seed. Must be filled to the top for effectiveness. Capacity range from 5 to 20L.

#### 3. Silos and drums



More appropriate for grain storage. Seed quality can degrade if they are kept outside- exposed to the sun. Capacity of silos can range from 90 to 1000 kg.

Maximum drum capacity is 200L. Drums must be cleaned before grain storage, be sealable, and airtight.

#### 4. Bottles and jugs



These are recycled drink or other containers (e.g. water, soda and vegetable oil bottles or jugs). They are mostly used for small quantities of seed. They

work better than ash because seed is kept clean and not mixed with other material. Capacity of these recycled containers varies from 0.5 to 5L.

### How to use hermetic bags:

- How to use hermetic bags for grain storage
  - o English video grain and seed- [Online](#)
  - o French video on seed- [Online](#)
  - o Poster grain storage (22 languages)- [Online](#)
  - o Poster seed storage - [Online](#)

### Where to obtain hermetic bags:

- PICS bags: [Online](#)
- AtoZ AgroZ bag: [Online](#)
- ELITE bag: [Online](#)
- GrainPro SuperGrainbag: [Online](#)
- Vestergaard ZeroFly bag: [Online](#)