

# HERMETIC BAGS FOR SAFE STORAGE OF GRAINS

Low cost storage technologies for grain

## TECHNOLOGY / SOLUTION



Hermetic bags technology is a triple layer hermetic storage bag which has an outer woven polypropylene bag and two inner bags of high density polyethylene (HDPE). The inner bags have very low gas permeability and are water repellent. The outer bag has the strength to handle the weight of the grain it contains.

Hermetic bags are air tight bags that preserve the contents while restricting the existence of cereal pests by depleting oxygen supply levels and producing carbon dioxide.



## PROBLEM / ISSUE SOLVED

- Food insecurity and poor livelihoods for small-scale farmers
- High post-harvest grain losses due to inadequate storage techniques and pest infestations
- Sale of grains at low prices after the harvest



## GOOD FOR Resellers of bags for grain storage



## BENEFITS

- ✓ Prevents air and moisture from entering the grain
- ✓ Kills insects and microbial organisms by stopping renewal of oxygen that is consumed by pests and by the grain and accumulating carbon dioxide
- ✓ Preserves grain quality and allows storage for up to two years
- ✓ No need to use fumigants and insecticides for conservation
- ✓ Cheap, affordable, easy to use and available from local and regional manufacturers



**Equipment**  
Speciality

**Maize, Rice, Wheat, Sorghum/Millet, Soybean, Bean**  
Commodity

**US\$1.5 to US\$2 per piece**  
Purchase price

**US\$2 to US\$3 per piece**  
Reselling price

ALREADY IN USE IN



Kenya, Uganda

## HOW DOES IT WORK?

Make sure your product is dry, clean and properly sorted.

Insert the two liners in the woven outer liner, fold over and fill while shaking to compact and lose the air in the grain. Twist the first inner liner and tie tightly with a string as well as the second liner and then lastly to the top woven bag. Keep in a place protected from sunlight, use elevated platform and keep the bag away from ordinary bags that are infected.

