In humid regions, the major factor contributing to loss of seed viability is lack of adequate drying. Seeds (and other dry commodities) must be dried soon after harvest to preserve quality. Once dry, they must be packaged to prevent reabsorption of water due to ambient high humidity. We have termed this the “DRY CHAIN” in analogy to the cold chain for fresh produce. However, once dry products are hermetically packaged, they do not need to be refrigerated and no further energy input is needed to maintain their quality during storage.

Sun or air-drying is generally unable to dry seeds sufficiently in humid climates.

Drying beads and hermetic storage maintained vegetable seed viability at multiple locations in Nepal.

Drying seeds below 40% RH prevents damage from storage insects.

Dry seeds should be packaged in water-proof containers.

Simple, low-cost methods are available for monitoring seed RH.

Drying beads are used by Dr. Budathoki for drying and storage of hybrid tomato seed in Kathmandu, Nepal.

Seeds are harvested at moisture contents that are too high for safe storage, so further drying is required before storage.

Field trial following onion seed storage.

Drying Beads (desiccant) can dry seeds to low moisture contents for safe storage.

Bead stored
Bag stored