

Seed preservation is cheaper in terms of time and labour compared to grains for consumption. This contributes to the fact that volumes preserved as seeds are smaller compared to crop yields.



6. Freezing

6.1 SEEDS FOR CONSERVATION

Seeds are collected, fumigated, cleaned and stored at a 7% moisture content inside aluminium bags. The bags are then stored in freezers at a temperature of -18°C for the period of five years.



6.2 LEAFY VEGETABLES

This is the modern preservation method that could be adopted for indigenous leafy vegetables and can be applied where there is no space or equipment for drying. Vegetables have to be blanched before freezing to ensure that they keep well without negative changes in their texture, colour and taste. Vegetables are boiled for a few seconds to a few minutes, depending on the type of vegetables and the size they have been chopped into. Quickly cool blanched vegetables in cold water to stop the cooking process and preserve most of their nutrients. Like most

cooking methods involving heat, heat-sensitive nutrients in vegetables can be affected by blanching.

Advantages of indigenous ways of preservation

- Cheaper in terms of time and labour
- Cost-free technology
- Safe
- Affordable
- Reliable.

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Preservation of indigenous food and seeds



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BACKGROUND

Preservation is the action of preserving food in order to have a secure and reliable source of food during off-seasons. This keeps food safe from decay and the risk of going bad. Food can be preserved either traditionally or in a modern way. Indigenous communities had no option but to preserve indigenous food because most of the food crops are seasonal and there is a lack of processing or value-adding technologies to avoid food wastage. Traditional ways of preserving seed, vegetables and grain are not considered a priority after years of dependence on commercially produced high-yielding varieties and therefore have been largely ignored. Foodstuffs such as vegetables are wasted, rotting or being attacked by pests every year. By preserving food, households ensure food security without jeopardising future food consumption. The main methods of preserving indigenous vegetables, grains and seeds used are air and sun drying, smoked coating, ash mixing, leaving with their covers after harvesting, shading and freezing.

1. Drying

1.1 LEAFY VEGETABLES FOR FUTURE CONSUMPTION

People collect indigenous leafy vegetables when they are available and plentiful, especially during high precipitation seasons. The vegetables are then dried and used in winter, the time of scarcity, in contributing to household food security. Vegetables are prepared, parboiled and sundried for some days, depending on the intensity of the insolation. The vegetables are stored in bags, pots, etc. to maintain flavour and kept for a period of a year.



1.2 Seed for the next planting

Seeds of melons, pumpkins and bottle gourds are not treated with herbs or ash but undergo air and sun drying, after which they are kept in clay pots, bottles and calabashes to protect them from weather conditions. These seeds can stay for a year without being attacked by borers. Alternatively, the produce may be left in the fields until they are hardened and no longer eaten as fresh. The dried products are kept until the next planting season and the crushing is done towards the next planting season.



1.3 SEEDS FOR CONSUMPTION

Seeds are not preserved for planting only but also dried and sometimes roasted and ground to be used for adding to cooked vegetables in the absence of groundnuts. The seed powder is used as a way of adding nutritional value as well as enhancing flavour.

2. Leaving beans with covers

Beans such as cowpeas, mung beans and Bambara groundnuts are left with covers, stored in sacks, clay pots and drums and they last for one to two years.



3. Smoked coating

Millet and sorghum seeds tassels are cut, dried and smoked coated and simply hung in kitchen until the next planting season. Smoke produces a bitter taste, which deters pests.

4. Shade preservation

Melon, pumpkin and bottle gourd fruit varieties are preserved under shade in granaries or grain barns. Watermelons are seasonal and need to be used immediately. Pumpkins last from six to twelve months while other melon varieties can go up to the next season. If melons are left under the sun, they rot or turn bad and are then not edible.



5. Ash mixing

Grain sorghum, pearl millet, cowpeas, mung beans and Bambara groundnut are treated using burnt manure and wood or aloe ash as preservative. The ash is left over night to cool. The ash from trees is bitter and it is the bitterness that keeps rodents and pests away from the grain.