

What is Seed Saving ?

The Farmers' Handbook - "Near The House 1", Chapter 8 - Seed Saving

Farmers need to have many skills to manage both the soil and the homestead. Out of those skills, seed saving is probably one of the most important. By giving more attention to seed saving, farmers can improve the quality of their seed each year. This can then improve crop production. This can be done without having to increase inputs of fertilizer, irrigation or cultivation. So with a little extra care in seed production, farmers can easily increase their farm production.



Mrs Devi Khatri's Cauliflower

Although this chapter mainly uses examples of vegetable seed production, the principles it describes are relevant to any species whose seed we want to save.



Why do Seed Saving ?

Many farmers have problems of either losing or not being able to acquire good, pure seeds. It's important to keep local, traditional varieties of pure and good quality. Also, there may be a need to breed and increase new open pollinated species or varieties. To guarantee good quality seed, good methods are needed. But the main benefit of saving seed yourself is that you can stand on your own feet and be more self-reliant.

Why save seed yourself, on your own land?

- so the seed required is available at the right time;
- to save the cost of buying seed;
- to trust that the species or variety of seed is the one you need;
- to produce seed that is adapted to the local climate, soil, etc.;
- to increase income from local resources, and
- to improve local varieties and conserve bio-diversity.



How to do Seed Saving ?

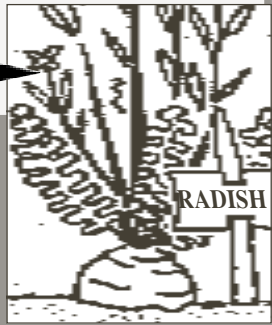
Things to pay attention to in seed saving

- ① Choose healthy and disease-free plants to save seed from.
- ② Select plants according to the qualities or characteristics you need. For example :-

Function	Qualities or characteristics needed
Timber	straight stems, strong, long lasting, etc
Fodder	dense foliage, nutritious, etc.
Vegetables	tasty, disease & drought resistant, etc.
Medicine	bitter, strong, stores well, etc

- ③ Seed producing plants are adapted to the local climate.
- ④ Select seeds from as many plants of one variety as possible. Save from at least 10 plants, in order to maintain genetic diversity and strength.
- ⑤ Once a plant has been identified to save seed, don't pick its leaves, flowers, etc. But if any part is damaged or diseased, these should be removed and discarded.

⑥ Select plants for seed saving as early as possible, and label them.



⑦ Give extra care to plants selected for seed saving. Provide water, nutrients, weed control, pest control, etc. according to the needs of the plant. Compost, liquid manure, ash, oil seed cake etc. can be used for this.



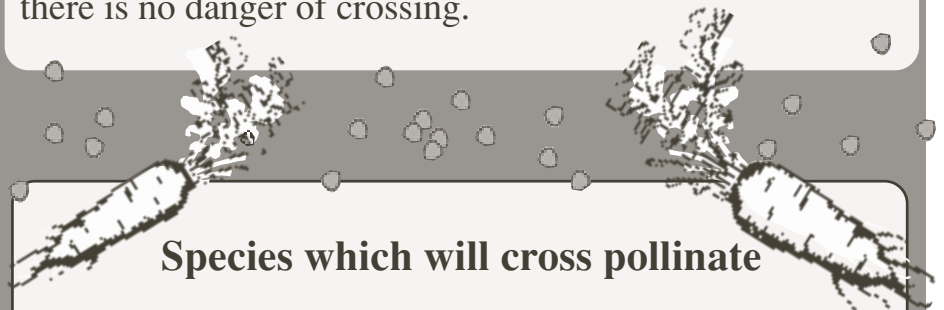
⑧ As plants mature they may fall over, so staking may be necessary.

⑨ Only allow the best plants to flower. For any variety, poorer plants should not be allowed to flower so they don't mix with the good plants, which will lower the quality of the seed. Leaving the plants for seed saving, all others should be pulled and eaten, composted or mulched before flowering.



⑩ Different species which cross pollinate should not be allowed to flower at the same time. It is possible that some species will cross, so they should not flower in the same place, at the same time. To prevent cross pollination one of the following 2 methods should be used:

- a. Plants that cross should be far apart, so that insects or wind will not be able to cross pollinate;
- b. Plants which cross should be planted to flower at different times. For example, if a cauliflower grown for seed flowers in July, a cabbage also for seed should flower in August. This way the flowering time will be separate, and there is no danger of crossing.



Species which will cross pollinate

The species in the following families will cross pollinate

Cauliflower family : cauliflower, cabbage, broccoli, sprout, kale, kohlrabi all cross.

Turnip family : turnip, chinese cabbage and chinese mustard all cross.

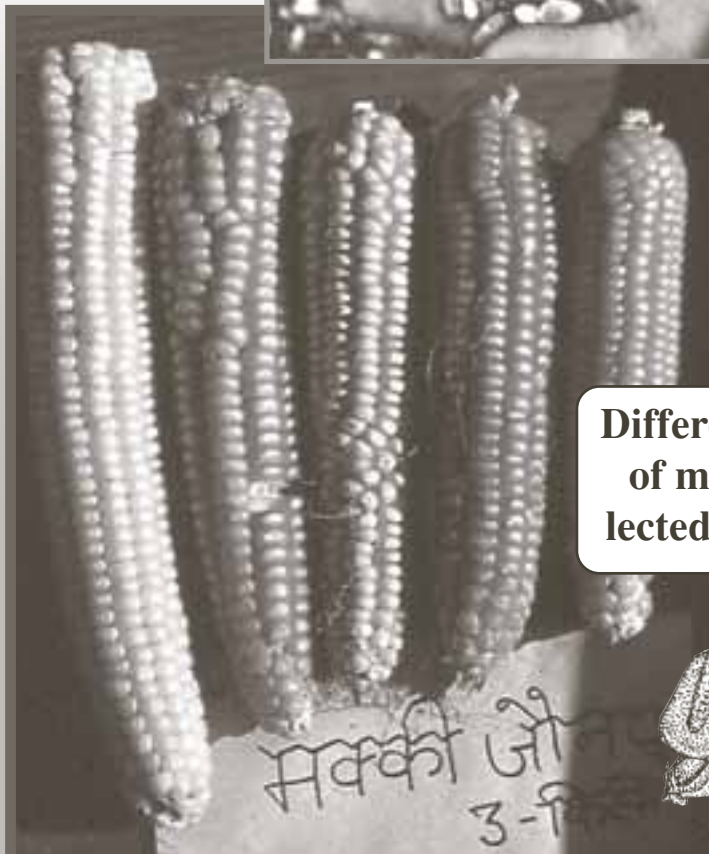
Chard family : red and green chard will cross.

Pepper family : chilli and sweet peppers will cross.

Pumpkin family : zucchini, dwarf and climbing pumpkins will cross.

When attention is paid to all these points, good quality, pure seed can be produced. But if any one is ignored, then the quality of the seed cannot be guaranteed and the work and time can be wasted.

See how many types of bean in a handful !



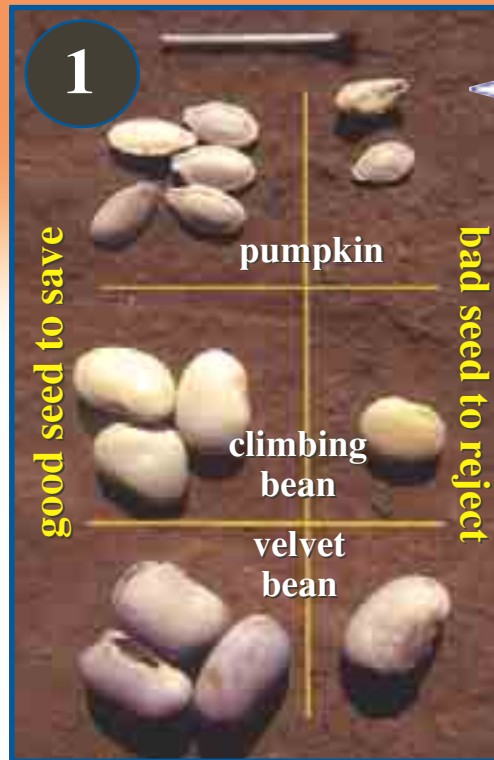
Different types of maize selected for seed



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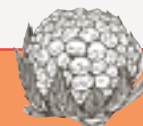
Let's See

How to do Seed Saving



On the left side the good seeds are all similar. On the right the rejected seeds are different colour, shape and size

The best plants for seed are selected early and labelled





Seed producing plants should be given maximum care and attention. Here, Khamba Prasad has built a roof to protect his seed cauliflower from hail and frost



Mrs Tulisara Gyami is picking the damaged leaves off her red Swiss Chard, grown for seed



Select only the best plants for seed production. Here, cauliflower is shown with Man Bahadur



Radish seed collected

Ripe radish seed pods seen close-up





8 When put in water, any dead seeds will float on the top. These can be thrown away, leaving just the good seeds



The seeds are dried well in the sun



After drying, good storage is essential

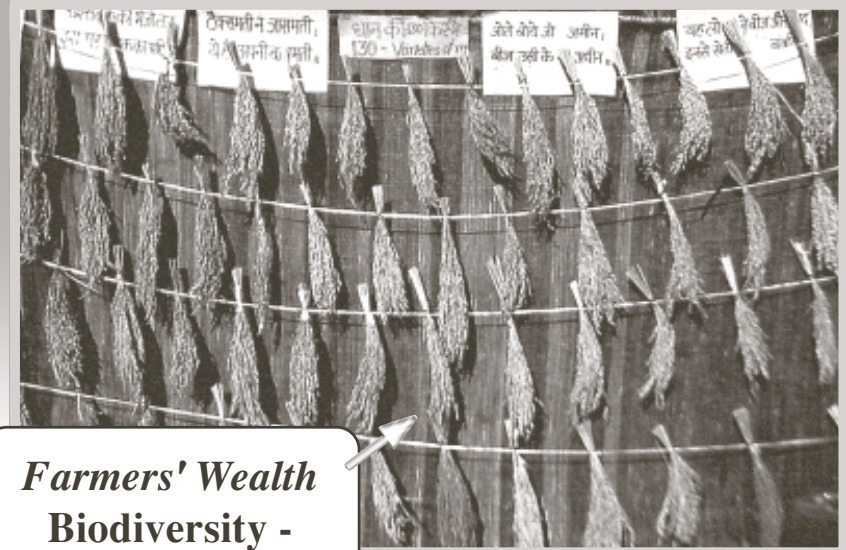
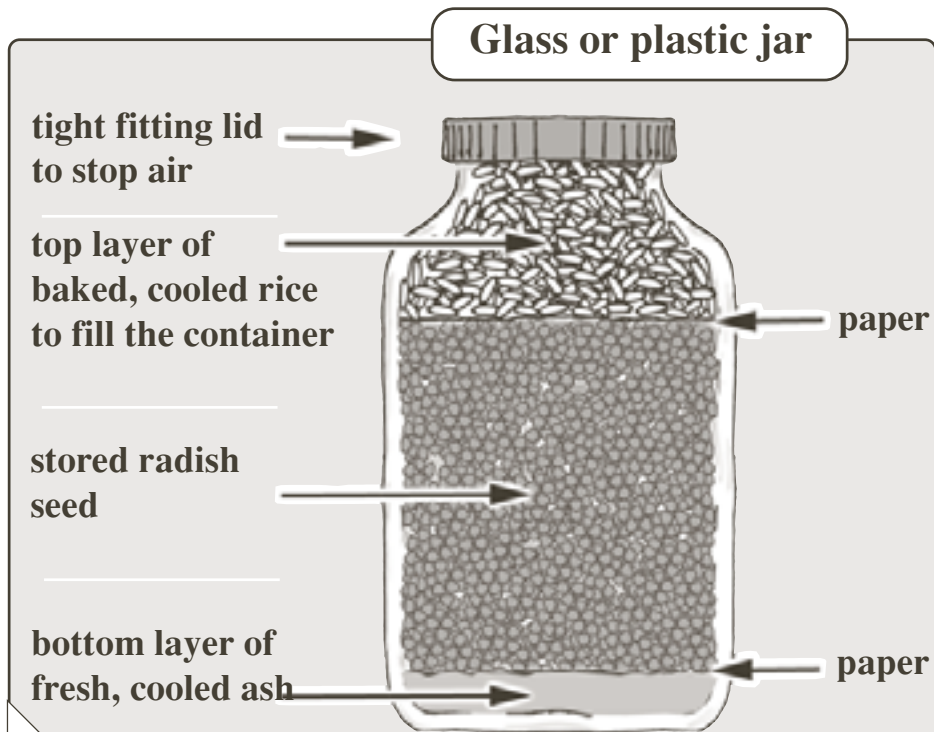
Maintenance What to do after Producing Seed

Things to consider when picking and storing seeds

- ☹ Only pick seeds or pods when they are ripe.
- ☹ Only collect good seed or pods.
- ☹ Reject any seeds different in size, shape or colour from the average good seed.
- ☹ Dry the seeds well. Usually seeds are dried in the sun. Some types, like lemon, orange, etc. should be dried in the shade, for example above the fireplace.
- ☹ If seed is sun dried, be sure to allow them to cool before packing.
- ☹ If possible, pack seed in an airtight container, and try to fill the container full, without leaving excess air space. Add ash or baked rice, which help to keep seed dry.
- ☹ Put fresh, cool ash or baked rice in the bottom of the container. This absorbs water in the air, which helps to keep the seed dry. This can be placed on top of seed also (see drawing, page 12).



- Seed should be stored in a cool, dry, dark place.
- It is very important to protect seed from disease, insects and fungus. There are many local herbal remedies for doing this, for example mixing ash, powdered neem leaves, neem oil, powdered oil seed cake or wormwood. Another method is to store seeds of different sizes mixed together, such as wheat and mustard, or corn and millet, This is a traditional practice in many places.
- Check the seed regularly for pest damage. From time to time take the seed out and dry in the sun, or add fresh herbs.



Farmers' Wealth
Biodiversity - various types of rice seed shown in an exhibition

Seed store made from traditional wisdom and local resources, Southern Nepal



Farmers' Experience

Mrs Pavisara Shris

From Nepal, Surkhet district, Gumi - 3, Ratadada village, and a member of "Hariyali" women's group, Mrs Pavisara Shris has produced and saved her own seed. Now let's hear about her experience.



Mrs Pavisara Shris

“ I first learned seed saving from the Homestead Programme (JPP). Even after saving seed for myself I have been able to sell a surplus for a few hundred rupees, which has been useful. It's no trouble to save seed. We always saved corn, wheat, mustard beans and the like anyway. And it's easy to learn more. I saved potato seed and after I kept what I needed, made 200 rupees. Timing is important, and not eating the seed, and you can save for ever. Now I've saved 40-day radish, tomato, lettuce, coriander, fenugreek and peas. I keep the seed plants separate, look after them well, and keep them labelled. Now I'll always save my own seeds, and want to learn how to save more varieties, and to teach others how to do it. ”

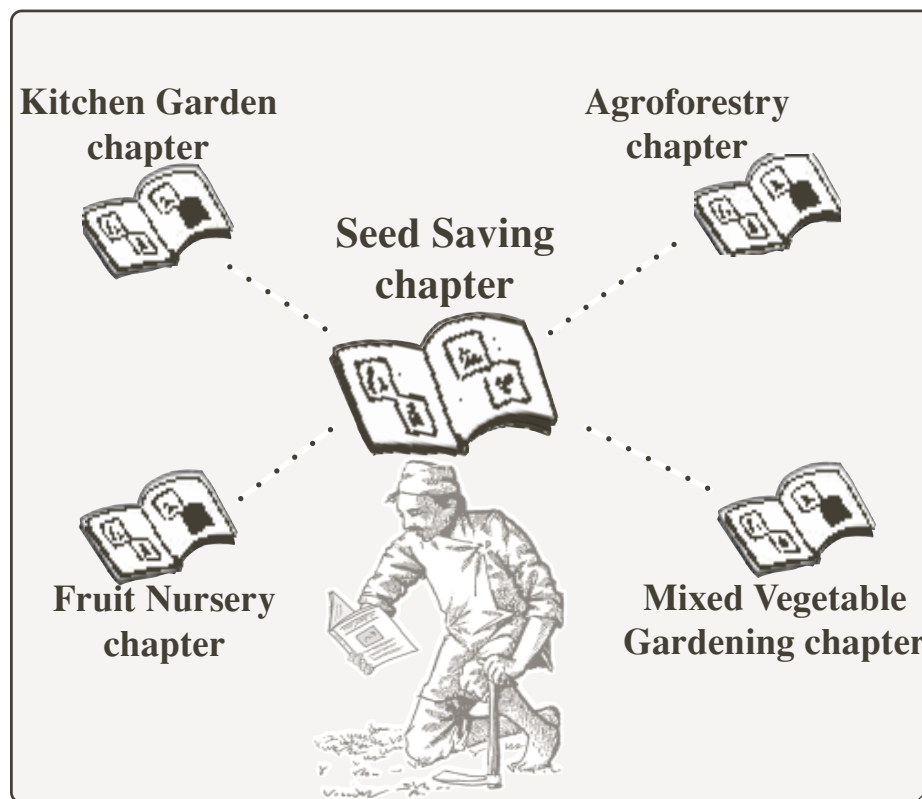


Read On !



Subjects Related to Seed Saving

This book provides enough information to be able to save much of your own seed. However, this information is also linked to other methods. For extra benefits let's read, learn and practice from other related chapters.



Related Subjects



Kitchen Garden chapter

Good seed is essential for successful vegetable gardening. Information about this, and other easy methods to home-produce healthy vegetables at low cost, is given in this chapter



Agroforestry chapter

When planning agroforestry seed production and collection are very important. Information about the importance and methods of agroforestry to increase production from less land is given in this chapter



Fruit Nursery chapter

In this chapter information is given about how to make a nursery for grafting or budding local fruit varieties



Mixed Vegetable Gardening chapter

Grow various types of vegetables with less weeding, watering and other work, and harvest from 3 weeks to 6 months after planting. Information on this easy technique is given in this chapter

