Klára Hrdá

Seeds in Our Hands



Seed library methodology

CZECH AID
UNDP
SEMÍNKOVNA
SÁZEJ, SKLÍZEJ, SDÍLEJ...



Klára Hrdá

Seed library methodology based on experience gained from the Semínkovna (“Seed Library”) initiative in the Czech Republic in 2015–2024



The project “Bridging Cultures Through Seeds - Czech Seed Library Inspiration Spreads to Georgia” is implemented by the United Nations Development Programme (UNDP) with the financial support of the Ministry of Foreign Affairs of the Czech Republic.

The content of this document does not necessarily reflect the official views of the Ministry of Foreign Affairs of the Czech Republic, the United Nations, including UNDP, or UN Member States.

CZECH AID

UNDP

SEMÍNKOVNA
SÁZEJ, SKLÍZEJ, SDÍLEJ...



Introduction

For centuries, humanity has depended on the art of seed production, i.e. knowledge of the principles behind the proper cultivation, harvesting, selection and preservation of seeds from one season to the next. In this way, small farmers prepared their own seeds that were best adapted to local conditions. The sheer scale of local varieties was inconceivable. Each region had its own unique set of varieties that thrived in that particular area. As modern farming evolved and globalisation took hold, specialised seed and breeding companies began to emerge that began producing hybrid varieties and certified seed. The chief arguments in favour of this approach were that it prevented the spread of disease and that hybrid varieties were more successful. Farmers, followed over time by small-scale gardeners, gradually switched to this new type of seed. However, despite all the benefits that were promised by the switch to hybrid varieties, there was one significant downside. The shift away from seed production was accompanied by a rapid decline in the diversity of crop varieties and the complete disappearance of numerous varieties that had been well adapted to local conditions. With most farmers no longer producing seeds, knowledge of domestic seed production all but vanished.

As time went on, what had seemed like an ideal solution turned out to be problematic, to say the least. The narrower pool of varieties prompted a decline in the biodiversity and richness not only of the crops that were grown, but also of the animals that relied on them. The fields were now dominated by monocultures. These, it subsequently transpired, are much more likely to succumb to pests and diseases. Unable to adapt to local conditions, they need to be treated with fertilisers, herbicides and pesticides in order to grow successfully. As a result, agriculture



became heavily chemicalised, which had multiple repercussions detrimental not only to nature, but also to our health.

Today, most commercially available seeds are F1 hybrids. These are not suited to home seed production because their seeds produce genetically imbalanced stock. Farmers and gardeners are therefore forced to buy new seeds year after year and become beholden to the production and pricing policies of corporate giants.

We are now truly starting to recognise these adverse implications. More and more farmers and gardeners are looking elsewhere for solutions, spurred on by factors such as the failure of hybrid varieties to adapt sufficiently to local conditions, the rising cost of seeds, chemical fertilisers and sprays, and a desire to revert to natural farming and gardening practices. This has given rise to various associations of enthusiasts who are determined to champion the promotion of indigenous seed production and spread awareness about the art of seed production.

These awareness-raising efforts have been aided considerably in the Czech Republic by seed libraries, which act as a means of exchanging and sharing seeds, but also play an educational and informative role, helping to build new communities and forge new friendships. They have gradually taken on the mantle of a new source of biodiversity in our gardens. In this manual, I have compiled experience gained from the eight years that this initiative has been running in the Czech Republic.

Klára Hrdá

Chapter 1



Seed libraries

What is a seed library?

As the name implies, seed libraries are a parallel to traditional libraries, where readers borrow books to their liking and return them after reading them. Similarly, in seed libraries, seeds are shared and loaned out, with borrowers committing to return them at the end of the season if the plants they have grown produce suitable seeds.

The mission of a seed library is to distribute seeds to the public, who will grow them in a range of different local conditions and share them further. This will allow varieties to be preserved and gradually adapted to changing local and climatic conditions. The aim is not to compile a structured catalogue or to curate collections. The rules for labelling, sorting and storing seeds are not as strict as those for seed banks. Seeds are available free of charge to everyone as a gesture of solidarity.

In recent years, people have increasingly come to understand how necessary and important it is to preserve seeds. Semínkovna ("Seed Library") is a civic initiative established to promote domestic seed production.



What is a seed bank?

Seed banks are designed to preserve seeds over the long term and to establish seed collections. Seed banks are often funded by the state or other official institutions with the primary aim of preserving genetic material that can then be used for scientific purposes, breeding new varieties, etc. The public usually has no or very limited access to these seeds.

There are also community seed banks that are more open to the public. They have particular rules on the labelling and storage of seeds. They try to put together a collection of seeds representing local varieties, often those that are non-hybrid and have been adapted locally.

How does a seed library work?

How a seed library works is simple. From the seeds on offer, you select the ones you want to try to grow and to produce seeds from in your garden. There are rules on the number of packets you can take away. You only take seeds which you actually plan to sow, for which you have the right growing conditions, and which, ideally, you know how to grow. If necessary, you can look up the necessary information in the available literature or consult a more experienced grower.

Then, when the time is right, you sow the seeds in a suitable place in your garden. You pick out the best healthy plants, label them, and let their seeds fully ripen. You then harvest them, dry them and remove impurities (it is advisable to freeze-treat legumes to prevent weevil infestation). You pack the seeds in small batches (a minimum of 10) into packets or sachets, label them and then return them to the seed library for someone else to borrow.

If seed production fails, so be it. Semínkovna expects situations like this to happen. It is recommended that you at least donate a small gift (marigold seeds or other annuals or herbs) to Semínkovna that will give joy to someone else. Even novices who are still new to seed production can get involved. It is important to choose a crop that is easy to produce seed from and to learn the basics about the correct seed production procedure.

What role do seed libraries play?

While it may not initially be apparent, a seed library does more than just offer free seeds. Its mission is also to raise awareness. It draws attention to the importance of seeds, which are often neglected today and tend to be taken for granted. It points out locally adapted non-hybrid varieties, shows how traditional domestic seed production works and motivates people to return to natural gardening that avoids unnecessary chemicals. There is also a modicum of activism, in that it gives us a voice in the fight for our right to enjoy free access to seeds. **There are many missions a seed library can pursue**, depending on local needs and how attuned the community is.



"Personally, I believe we have a legitimate claim to access and freely exchange the seeds of our choosing, just as our ancestors did for centuries. I think it is our right to be allowed to produce seeds domestically and to help ensure that this knowledge is not lost. I consider the ability to produce our own seed-to-seed food to be essential, as it is a guarantee of our freedom and independence. And even if we are successful with just one single variety, that is still a small step we should take. Everyone should join in the efforts to save our vanishing biodiversity," **says Klára Hrdá, the founder of the Czech Republic's Semínkovna initiative.**

Below is a list of what else might be included in a seed library's mission:



an increase in public library patronage and broader community engagement



the creation of a network of experienced custodians of locally adapted varieties and other people actively involved in seed production



the provision of education on how to produce seeds



the articulation of a legitimate claim to the free sharing of and access to seeds



a safe alternative to GMO seeds



the passing-on of important knowledge and experience from one generation to the next



support for the local gardening community



the conservation of endangered varieties and varieties that are not commercially available



the promotion of genetic diversity



the establishment of a source of locally adapted
open-pollinated/non-hybrid seeds



a deeper sense of communion with nature



the preservation of traditional customs, and traditional food and cuisine



the fostering of a community’s self-sufficiency, the elimination of hunger



the establishment of a source of seeds for those
who cannot afford to buy them



the promotion of a healthy diet



the promotion of natural gardening practices

History of seed libraries

USA

The first modern seed library was set up in 1999 at the Ecology Center in Berkeley, California, under the name Bay Area Seed Interchange Library (BASIL). This was the brainchild of Sasha DuBrul, who came up with the idea when he was looking for a use for seeds following the closure of a university farm that had been used to research organic farming and grow indigenous crop varieties.

The first seed library to be housed in a public library was founded in 2004 by Ken Green at the Gardiner Library in New York State. The seed library initiative gradually spread throughout the United States and into neighbouring Canada, leading to the formation of numerous organisations dedicated to the preservation of indigenous local varieties and the promotion of domestic seed production.

France

France's first seed library was opened in La Rochelle in 2014 by the non-profit organisation Graines de Troc. The organisation's founder, Sébastien Wittevert, was inspired by American seed libraries. Les grainothèques, as seed libraries are called in French, immediately fired the imagination of the locals, who were excited by the simplicity and ecological overtones of the concept, and had spread to other towns and cities within a year. There are currently several hundred grainothèques, which are now spreading even beyond France and can be found in neighbouring Belgium, the Netherlands and other countries.

"Every seed of every variety has been planted with care, harvested, year after year, passed on from generation to generation, from garden to garden, from person to person, everywhere on our planet for 10,000 years…

Sorry to repeat myself, but everywhere on the planet, from person to person, from garden to garden, from generation to generation, every seed, every variety has been adapted to our needs and to our conditions. So I believe that, even today, we should be concerned about what is happening to this heritage of ours and what we will do with it in the future…," **says Sébastien Wittevert, founder of the network of seed libraries (grainothèques) in France.**

"In Canada, people are familiar with the seed library concept and the seed sharing process works seamlessly. Here in France, the initiative is just getting off the ground. It is in its second year here. So far, people have tended to take the seeds, but not to return them much. However, we remain optimistic, knowing that everything takes time. We know from experience elsewhere that once people understand the process, the sharing system starts to work. But the rules need to be laid down from the outset.

For example, we ask that, in exchange for seeds, people sign up for our newsletter, which we can then distribute. It features information on seed production and natural gardening, as well as invitations to our events. This serves as a subtle reminder that, once harvested, some of the seeds should be returned to our seed library. Having said that, we are realists. Most importantly, we are trying to build a small community of really dedicated people that will grow over time." **Experience of the seed library in Lille from 2015.**



Seed libraries (semínkovny) in the Czech Republic

The network of seed libraries in the Czech Republic was set up in 2015 by Klára Hrdá as the Semínkovna initiative. She was inspired to do so in France, where she came across the local version of seed libraries – les grainothèques.



How did the Semínkovna initiative come about?

"I was immediately drawn to the whole concept. At the time, I was writing a small blog and often posted articles about the events we visited in France with my family. One of them was an event held by the local seed library in Lille. This is where I was introduced to the whole concept. I spoke to a few people here and picked up some basic information about why this initiative was created and how it works.

I thought it was amazing what one little box of seeds could do in France, and I was sorry that no initiative like this existed in the Czech Republic. That gave me the idea to try to start one up myself. I got in touch with the founder of the French network, Sébastien Wittevert, who gave me more valuable advice, information, and a starter kit of seeds to get me going on my own seed library.

At night, while the family was asleep, I researched, created a website, a Facebook page, a logo, and threw together the rules, the first leaflet and an infographic. I also connected with other active people who were a huge help in the early days. Immediately after I got back to Bohemia, I opened a seed nursery in a public garden in Libenice, a village near Kolín. This was followed a month later by another, which operated out of a small library in Prague. It was here that I managed to draw media attention, and it didn't take long for seed libraries to spring up in other places, like mushrooms after a shower of rain. And while those very first two seed libraries have since closed down, they gave the whole initiative of seed libraries in the Czech Republic the impetus it needed at the beginning."
Klára Hrdá



The Semínkovna initiative today

In the eight years that the initiative has been up and running in the Czech Republic, more than 230 sites have joined it. It quickly inspired neighbouring Slovakia, where a dozen or so seed libraries – Semienkarne – have gradually been set up. In 2023, the first seed library opened in neighbouring Poland, again inspired by the Czech Republic.

Since 2015, Klára Hrdá has been constantly promoting the Semínkovna initiative in the media, organising film screenings, lectures and presentations, or attending these events as a guest. She is also engaged in educating adults and children about seed production. She is currently working on the establishment of an online training academy dedicated to home seed production. Beyond that, she has children's programmes in the pipeline and is trying to advance the idea of the whole initiative.

In 2016, she set up the non-profit organisation Semínkovna, z. s., which in 2022 was awarded a prestigious grant from the United Nations Development Programme (UNDP) to establish a network of seed libraries in Moldova. In the same year, Klára reached the semi-finals of the SDG's 2022 Biodiversity Awards and registered a trademark for the name Semínkovna.

Chapter 2



Seed production

What is seed production?

Seed production = the cultivation of one's own seeds

Simply put, the idea is to **conserve seeds from the best plants of your chosen favourite variety**. Or if you want a textbook definition, then we could say that seed production is **the conscious preservation of the reproductive parts of plants with the intention of sowing or planting them again in the following season**. Seed production can therefore include all activities encompassing the creation of a seed plan, sowing and planting, the care of plants, the selection of the very best specimens, the collection of seeds, the cleaning of those seeds and their safe storage for the next season.

There is nothing complicated about it. Generations of our ancestors managed to do it, so there is no reason why you should not be able to do it, too. With a little effort, even a novice can plant seeds; you just need to choose the right crop. The key to success is understanding the plants, what they need and how they reproduce. The plants themselves want to reproduce. So all you have to do is certain things to ensure you get the result you want.



Why produce your own seeds in this day and age?

"When you conserve your own seeds, you are making a declaration of independence. It allows you to pick out precisely the varieties that suit you. As opposed to dependence on wholesale seed production, which means bending to someone else's style, taste and preferences." **Carol Deppe**



You save money

Seed saving and sharing **is starting to make more and more sense, not only in terms of biodiversity conservation, but also from an economic perspective**. You get to produce your own seeds at no cost. With many crops, you are able to harvest so many seeds that you can share them within your family, friends or community. Not only will you save on the cost of the seeds themselves, but also on fertilisers and sprays, and you should also see a **reduction in the water you consume**. All you have to do is find a non-hybrid variety that you like the look and taste of and that will thrive in your garden. And start producing seeds from it.

You preserve heritage

Many varieties that have great qualities are impossible to buy in shops. Often they do not conform to the characteristics required for registration in the central varieties catalogue, which in turn means that, by law, they cannot be offered for sale. This means that they can only be offered as private exchanges between gardeners, at seed exchanges, seed libraries, and seed banks.

You can experiment and get creative

With home seed production, you can **play, discover, choose and be creative**. The end result might be an o**riginal variety that becomes a family heirloom**.

You know what you are growing in your own natural garden

Another big plus of home seed production is that you know the origin of the seeds, the requirements of the variety and the taste of the fruit. Plants remember your gardening style and the conditions of your garden. And if you grow them season after season, they gradually adapt and become more resilient. As a result, they have fewer diseases and parasites and you enjoy a healthy, chemical-free garden.

You protect biodiversity

This is true not only for the crops you grow, but also for the insects and other animals that rely on them. By allowing, for example, lettuce or carrots to flower, you increase the choice of forage for pollinators, and attract beneficial insects such as hover flies and green lacewings. These species are important controllers of pests, especially mites and aphids.

You are independent

Another advantage of home seed production is that you can save the seeds of your favourite varieties indefinitely and **you are not dependent on what seed companies happen to be offering at any given time**. Because you always have your own seeds to hand.



The importance of indigenous local varieties and their conservation



One of the missions of seed libraries, as noted above, may also be the preservation of locally adapted varieties. These are often of no commercial interest or appeal to seed companies. Yet the fact that they have been adapted to local conditions results in numerous benefits. In many cases, they have arisen through long-term selection, whether intentional or completely accidental, and have been influenced by the local conditions specific to a particular location or region ("local varieties"). They tend to be well adapted to certain soil and climatic conditions and locally occurring stressors. They often also share certain common characteristics, such as taste or storability, reflecting the needs of the people living in the region.

By sharing them in a seed library, there is a chance that more people will start growing them and producing seeds from them, so that these often valuable varieties will not fall into oblivion.

"Seed production is also a vital leg on our journey to freedom and self-sufficiency."
Carol Deppe

Hybrid varieties

Hybrid varieties are created by crossing two different parent species. Due to this “heterosis effect”, they frequently have remarkable characteristics. They are usually labelled **F1 or hybrid**. This is the predominant type of seed on commercial offer today.

However, it is not suitable for domestic seed production. It does not hold its qualities down the generations and cannot be adapted to local conditions. If you want to achieve the same result over and over again, you need to buy new seed every year.

For this reason, always choose varieties that you know for sure are not of hybrid origin for your home seed production.





Chapter 3



Seeds suited to a seed library

What seeds to go for?

Seeds from your own harvest, collected from healthy and vigorous plants that have not been chemically treated, are best suited to a seed library. These should be seeds from non-hybrid varieties, preferably ones that thrive in your own garden. Ideally, they should be a traditional regional variety. Remember to keep the seeds well dried, clean, and free of unwanted impurities. When it comes to legumes, consider freeze-treating them to prevent weevil infestation.

Where can I find them?

For any seed library, seeds from your own garden are always a good place to start. You can also make use of gifts from friends, family or neighbours. You can also organise a public seed collection or a seed exchange, and place leftover seeds in the seed library. Existing seed libraries can be approached for help. In the worst-case scenario, you can buy the seeds. But if you do, choose non-hybrid and non-dressed seeds. Avoid varieties with a registered plant breeding right holder.







Where to begin?

Plants and crops that are easy to grow and produce seeds from are definitely a great place to start, even for a complete novice. This will increase the chances of seeds returning to the seed library once the season is over. When it comes to vegetables, you should mainly be looking at common legumes (peas, beans), tomatoes, peppers and lettuce. You can also use watercress, rocket or mizuna. Various annuals and herbs such as calendula, nasturtium, and garden cosmos are also particularly well suited and popular.

Seed libraries also occasionally include seeds from trees, shrubs, and wild plants, as well as certain exotic seeds. From time to time, smaller exchanges of seedlings, cuttings, surplus perennials or houseplants are organised.

What to watch out for?

Hybrid seeds and seeds that have been dressed or collected from chemically treated plants do not belong in a seed library. Avoid varieties for which there is a plant breeding right holder. Seeds of invasive or protected species or seeds of plants regulated by law (marijuana) are not permitted in a seed library.

You must not offer a seed library the seeds of varieties for which there is a registered holder of plant breeding rights unless you have the consent of that holder to do so. There are legal penalties for breaking this rule. Holders of plant breeding rights who discover their varieties under the same name in a seed library could claim compensation for loss of earnings.



Chapter 4



How to set up a seed library

Create a seed library

One way to create the library is to take a cardboard box and fashion it into a container in the shape you want. While the final look is up to you, it is worth bearing in mind the practicality of incorporating several compartments so that you have some way of sorting the seed packets. Those who are more dexterous can make a seed library out of wood or other materials, or perhaps use an old cabinet, etc. You can let your imagine run riot. Decorate your seed library, and add the “Semínkovna” name and the initiative’s logo.

Who can set up a seed library

Anyone can start a seed library, no matter their age, education or other factors. Experience has shown that children can also be involved in setting up a seed library. Don’t be afraid to include them in the whole process.



Find a good spot

It is important to position your seed library in a place that is publicly accessible. This is usually a library, but you might also consider a clubhouse, community centre, eco-centre, information centre, café... Anywhere you think the target group – gardeners – might frequent. Wherever you put it, you will need the permission of the operator of your chosen site. A seed library may even be made available just to a closed community of people (such as a primary or nursery school).





Get your seeds

An empty box will not appeal to anyone. You need to source the first seeds you are going to offer in your seed library. It is a good idea to keep seeds in paper sachets and label them properly. The name of the plant species and, where appropriate, the variety, and the place and date of harvest should always be indicated. For more information on this subject, see Chapter 3.

Set some rules

Every seed library should have its rules of use prominently displayed at all times. Besides the general information, you can add your own conditions. For example, you can limit the number of packets that people are allowed to take, ask them to opt in to your email database, etc. Specify the form in which you will accept seeds into your seed library (it is a good idea for them to be already packaged and labelled, as this will save you time).

Bear in mind that you cannot charge any fees to people for using the seed library.





Build your team

Right from the start, try not to do everything on your own. Recruit volunteers and organise sessions where a group of you can pack the seeds and make other preparations. Don't lose sight of the fact that the seed library probably wouldn't work without you. With this in mind, you need to conserve your energy so that this activity remains a fun experience and doesn't exhaust you too much. Don't be afraid to ask for help.

Get in touch with retirement homes, schools, preschools, family clubs, etc., as an opportunity to work together and get the help you need. I am confident that this is a way to attract enthusiastic new users of your seed library, who will take loving care of it with you.

Celebrate

Celebrate the opening of your seed library and invite people from your village or town to the launch event. Don't be shy about asking the local media to come along, too. Don't leave anything to chance – spread the word on social media, through leaflets, press releases, etc.

During the event, show the seed library to those who are interested, and explain how it works and what it is used for. But be realistic – start by targeting a smaller group. Find people who are no strangers to environmentalism, tend their own garden or have somewhere else to cultivate seeds, are already keen gardeners, or even produce seeds themselves.

What might you include in your official launch?

- Project presentation
- Seed production workshop
- Film screening
- Entertainment for children
- Discussion
- Seed exchange
- Hold a seed collection for your seed library





The path to success

Allow for the fact that it will take some time before people learn to use the seed library properly, i.e. not only to take seeds from it, but also to return them. The experience reported by individual libraries shows that the more dedicated you are to the seed library, the better it will work. For a seed library to be viable and successful in the long term, it needs two basic ingredients:

- the person who set it up must have the right personality;
- it must be backed by a community of supporters.

It is not a good idea to leave a seed library to its own devices. It should be given care and attention over the years. Engage the community, organise events, talk to contributors, share know-how, hold harvest celebrations and seed exchanges... In short, build a community around the seed library, because that's one of the reasons it was created: to bring people together.

As such, it might be a good idea to organise an event – no matter how small – at least twice a year and keep reminding people why you started the seed library, what it is for and how they can get involved. It is also very important to offer basic information on home seed production. This will give people the courage to take up the activity and increase the chances that seeds will eventually be returned to the seed library.

Chapter 5



Making a seed library work

Mission and name

Once you start thinking about setting up a seed library, it's a good idea to focus on the specific mission it will serve. Will it primarily play an informative role, spreading awareness about dwindling biodiversity, or will it mainly – or only – offer seeds? Or will it become an add-on to your library, diversifying its existing services? What seeds will it carry? Will you manage it in a hands-on role, or will it be self-service? How can you tell if the seed library is doing its job? It is advisable to find answers to these and other questions at the beginning, jot them down, and keep them in mind for the future. They can help you to reach out to other people, recruit volunteers, find a suitable host site, etc.

In the Czech Republic, a seed library is known by the trademarked name "Semínkovna", which is used exclusively in connection with the seed library initiative. That name is also incorporated into the logo. Everyone setting up a library is asked to use that name and the uniform logo. If the initiative is to gain traction and publicity, it is vital to be consistent in its branding and visual identity.





Registering a seed library

Once you have prepared your seed library, found a location, and are ready to open it, you need to register it in the database. Registered seed libraries are listed on the initiative's website and appear on Google and Mapotic maps. You will also be able to promote your library on the initiative's social media accounts.

To register, simply email the following information to the contact address:

- the address where the seed library is located, including the postcode;
- the region in which the town or village is situated;
- a link to the website (showing the opening hours and other details), if available;
- if you wish, your seed library's contact details (phone, email);
- the date of establishment of your seed library;
- at least two photographs (min. 1 Mb) and consent to use them in the promotion of the initiative.

As part of the registration process, the initiative administrator will provide you with the logo, leaflets and articles related to the initiative that you can use to publicise and promote the new site.



Budget

One of the first issues concerns the budget needed to get the seed library off the ground. My response stems from practical experience. The biggest item tends to be the actual seeds. You don't have to buy them right away to start your seed library. Instead, try to work with what you can get from your own garden, family, friends, colleagues or neighbours. It may be useful to organise a "seed collection" from people in the community, which can be combined with an introduction to the initiative. You can also ask seed libraries that are already established for help – some of them have a surplus of seeds and are happy to share.

Whatever approach you take, remember that the seeds should not be dressed and should be sourced from healthy, chemically untreated plants. It is advisable to freeze legume seeds as a precautionary measure (store them hermetically sealed in the freezer for about a week) in order to prevent weevil infestation. Seeds from non-hybrid varieties, ideally those that have thrived in the local area for a long time, are ideal for a seed library.

Another expense in setting up the seed library itself could be the purchase of a wooden box, cabinet, etc. However, even this is not entirely necessary. Make use of the resources available to you. An ordinary cardboard box is perfectly adequate.

You will also need packets, labels and other seed packing materials. All this can be made, for example, from old newspapers, magazines, etc.

In any event, you have to take into account the time needed to prepare the packets of seeds, to interact with seed library visitors, and to organise events, courses or lectures related to the seed library.

Examples of good practice

Although many people in the Czech Republic enjoy gardening, very few of them have any experience of home seed production when they first visit a seed library. This is why many seed libraries, when they are starting out, find that users tend to take seeds from them, without then returning them. How quickly this situation can be resolved depends on how quickly the community comes to grip at least with the basic practices and theory of seed production, and whether the seed library is able to find locals who are already active seed producers and establish long-term cooperation with them. Their contributions will then help cover the gaps in demand created by those who do not (yet) return the seeds.

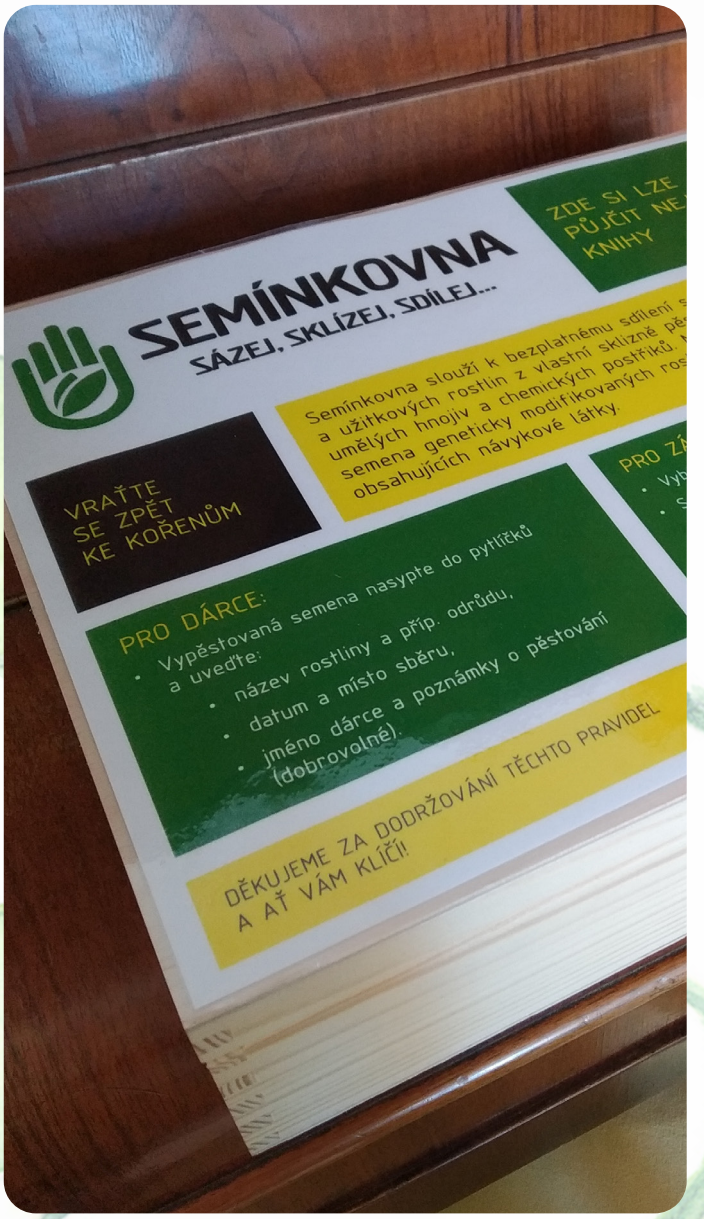
Experience in the Czech Republic has shown that the more active a seed library is in this respect, the sooner the seeds start to return.

In many cases, however, the founders are the only long-term source of seeds, which sometimes culminates in the closure of the library. Successful seed libraries are usually able to stabilise imbalances in the supply and demand of seeds within one to three years. The most successful ones – those that manage to build up a broad network of contributors – have a surplus of seeds and often act as a kind of backstop for those just starting out.

Ideally, seed libraries should become a source of seeds specific to their particular region. It is also important to listen to and note any reports you hear about these seeds, the experiences people have had growing them, and to read up on the origins of seeds. All this can help to enlarge the community of people built around the seed library.

Graphics – the look of the seed library, a common visual style

For a project like this, it is important to have a connecting link that, ideally, will present a unified visual style. While the look and concept of a seed library is entirely up to the founder, the name and logo are the same for all locations. The logo appears at the library and on flyers, posters and other related materials.



Website and social media

There is a common website for the Czech seed library network, where visitors can find basic information and a list of active seed libraries, broken down by region. The site includes a blog and a page with advertising and invitations to current events, where information about events in individual locations can be posted.

The Semínkovna initiative and the Semínkovna, z. s. association also maintain a social media presence (Facebook, Instagram and LinkedIn). Some seed libraries have their own online presentations, usually on the website of their host organisation, and are also active on social media and/or have their own Facebook group.

Seed packaging and labelling

You can package seeds in paper packets (ready-made or folded from old newspapers and magazines). Plastic pouches, preferably with some sort of seal (such as a zip), can also be used. The paper packets can be variously decorated, which is a great way of involving children.

The packets should always be properly labelled and described. Clearly specify the type of crop and, where appropriate, the variety, the year and place of harvest, information on the biology (climbing/non-climbing), the method of cultivation (pre-sowing/direct sowing) and any other details that may be useful for sowing the seeds or during cultivation. If a variety comes with an interesting story, share it.

Some seed libraries keep a database of seeds on offer and some even have their own seed catalogue. However, it is not essential.

Education

If seed libraries are to work, they need to incorporate an educational agenda. This is why it can be very useful to organise seed production training from time to time for those who have little or no experience.

In the future, Semínkovna, z. s. has plans to offer complementary online courses that can be accessed from home.

Some public libraries place related literature next to the seed boxes to make it easier for visitors to find the information they need.

The seed library should educate children as well as adults. There are schools and preschools in the Czech Republic where seed libraries have become part of the curriculum. This always depends on the mindset of the teachers and their enthusiasm for the subject, and on whether a school has the space for its own beds where plants can be grown. Children can be involved in growing and producing the seeds themselves, and also in creating and decorating seed sachets and packets.

Seed libraries can also offer fun family workshops. This is an opportunity to create art from seeds, discover plants, learn how to produce seeds from a simple crop (e.g. peas), and have a go at seed bombs, seed paper, seed baking, etc.



Chapter 6



Legislation in the Czech Republic

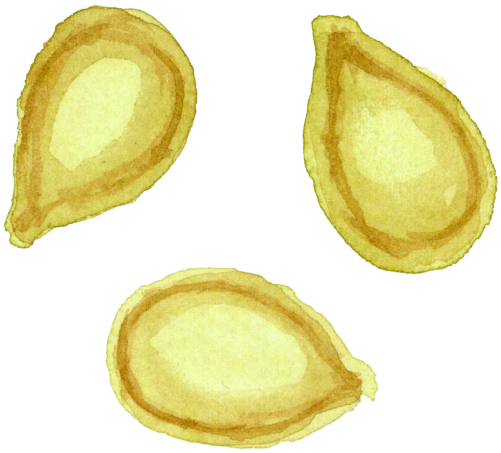
Czech legislation is among the most stringent in the EU when it comes to seeds and seedlings. However, from a legislative point of view, seed libraries do not break any applicable laws as long as they stick to lending seeds free of charge to individuals.

- Seeds **obtained from a seed library must not then be used commercially**.
- Seed libraries **must not offer seeds of varieties for which there is a registered holder of plant breeding rights**, unless they have that holder's permission to do so. There are legal penalties for breaking this rule. Holders of plant breeding rights who discover their varieties under the same name in a seed library could claim compensation for loss of earnings. The current European catalogue of registered varieties can be found here: cpvo.europa.eu/en/applications-and-examinations/cpvo-varieties-database
- Seeds **must not be "loaned" to individuals engaging in business or to legal entities**, as this would constitute seed marketing, which is subject to the current Seeds and Seedlings Act.
- The Plant Health Care Act does not restrict the activities of seed libraries either when it comes to exchanges between private individuals.
- From **a phytosanitary standpoint, the risks to users are low**, as plant seeds in such "negligible" quantities are low-risk material for the spread of harmful organisms.
- The provisions of phytosanitary regulations on compulsory systematic plant health checks and the obligation to provide seeds with a plant passport do not apply to seeds shared in seed libraries.

Source: Tisková zpráva z roku 2016: Svobodné sdílení semínek v semínkovnách z pohledu platné legislativy (ÚKZÚZ)



Chapter 7



FAQs and answers

What do I get out of it?

The seeds in seed libraries are freely available to everyone at no charge. Seeds cannot be offered for payment.

If I borrow a carrot seed, am I expected to retorn carrot seeds?

You are not usually expected to return the exact same type of seed that you borrowed. It depends not only on your seed-producing abilities and skills, but also on local climatic or other conditions beyond your control. So don't worry if your attempts at seed production are not successful. This may happen, especially if you are new to seed production or have chosen a species that is difficult to extract seeds from. If you manage to get seeds from a different crop, herb or annual, feel free to bring them in.

What do I do if my seed production failes?

No big deal, these things happen. If you have not been able to produce seeds from what you have borrowed, bring in other seeds that you have a surplus of (that are home-produced, not from retail packets). Every donation is a boost to a seed library. You might make someone else happy by handing in seeds of "ordinary" dill or marigold.

What if I don't know how to do this?

No matter. Choose simpler crops to start with (tomatoes, beans, peas, lettuce, etc.). Learn about how to produce seeds from the crop before you begin!

With seed production, it is not so much about quantity, but more about quality if you want to ensure a successful harvest in the years to come.

Watch out when producing seeds from courgettes, pumpkins, etc. These crops love to crossbreed and you would not be happy if you crossed a hokkaido variety with an ornamental pumpkin that has a less palatable flesh and a hard skin... If you want to avoid disappointment, first consult the recommended literature for instructions on how to produce seeds from a particular crop.

How do I prepare seeds for the seed library?

It is a good idea to package the seeds in a suitable way (you can use paper bags, recycle envelopes, fold up paper from old newspapers, etc., and plastic zip lock bags are also useful...). Most importantly, label and describe the packets correctly. You just need to **specify the species, variety, year and place of harvest**. If you have the inclination and time, include the characteristics of the variety, the growing process, and any other information you think might be useful.

Chapter 8



Seed Patron - 2024 pilot year

Seed Patron (Patron semínek) is an activation adoption scheme aimed at supporting the network of seed libraries and banks. Inspired by the One Seed, One Community scheme successfully tested in the US, the scheme is being piloted in the Czech Republic's network of seed libraries in 2024. This year, Seed Patron is financially supported by the OSF Foundation as part of the Stronger Roots initiative. The project, under the umbrella of the association Semínkovna, z. s., involves 20 of the 150 seed libraries in the Czech Republic.

Seed Patron, an innovative scheme based on America's successful One Seed, One Community concept, is intended to galvanise avid gardeners and inspire them to get involved in preserving valuable non-hybrid and locally adapted varieties. In doing so, they will make a positive contribution to protecting the diversity needed for garden crops. The scheme hopes to show that this is not rocket science. Producing seeds for crops such as peas and beans is fairly easy and even children can manage it.

Seed Patron brings people within the community together as they cultivate a particular variety. This practice not only results in the sharing of seeds, but also encourages people to pass on their valuable individual experiences. As they do so, they form new or strengthen existing interpersonal relationships. Seed Patron is about more than growing plants; it's about fostering a vibrant community.

One of the problems commonly encountered in seed production is that individual gardens lack the space to grow enough plants in a way that will sufficiently preserve their genetic diversity. Seed Patron intends to show that every garden, however small, matters. Even very modest gardens can play a key role in conserving precious biodiversity. Sharing and growing a particular variety across a community not only increases its genetic diversity, but also makes it more adaptable to diverse local conditions. This is why the cultivation and preservation of a single variety by many gardeners is a core aspect of this project.

Seed Patron – grow, share, protect



Choosing a crop

Peas or beans are best suited to the Seed Patron scheme. The main reasons for this are:

They are so easy to grow that even small children can master the process.

They are self-pollinating species.

Unlike tomatoes and lettuce, their life cycle is relatively short, which increases the motivation to produce their seeds and the drive to "see things through to the end", even for beginners.

Some people find it more interesting to work with larger seeds, as handling them promotes the development of fine motor skills and has a soothing effect.

It is easier to clean these seeds than it is with lettuce or tomatoes.

Some bean seeds are amazingly varied and colourful. This is another aspect that people may find interesting and fascinating.

Some pea varieties bear eye-catching and decorative flowers, and young peas are a tempting treat for children.



Project schedule

March 2024

The seed library/bank chose a variety suitable for the region and within the ability of its community members. Ideally, it would have opted for a variety that is in some way linked to the region. If this was not possible, a crop suited to the region's local conditions would have been considered. Another factor was whether community members had their own garden or just a small garden bed or a balcony. Smaller varieties of pea can also be grown in raised beds or larger containers. Beans can be planted to climb up a support.

News of the upcoming project was shared in the community. Leaflets and "how-to" guides were made available to those interested in the scheme. Arrangements could also be made to offer a basic seed set.

Sachets of seeds were prepared. The recommended packet size was 20 seeds. If there were enough seeds and the community included more experienced growers with large enough gardens, three levels of seed packets could be put together:

- Care to Seed Share: 20 seeds – store some for yourself and a neighbour,
- Grow and Row: 40 seeds – grow a row for yourself and others to benefit the community,
- Bed of Beans: 100 seeds – grow a bean bed for an even better result.

Seeds could also be packed directly for the launch party in pre-prepared sachets with information and instructions. This helped to free up a lot of spare time.

A list of participants and their email addresses was drawn up. In order to take part, participants needed to provide an email address so that they can be encouraged during the programme with reminders of sowing dates and other information on cultivating their crop, etc.

April–May 2024

Launch parties were held, at which those interested in joining the scheme were given sachets of seeds and growing instructions.

During these kick-off meetings, Seed Patron was introduced, with instructions on how to handle the seeds in order to increase the likelihood of a return. The aim of the scheme is for participants to bring or send back at least the same quantity of seeds that they received – and preferably more. Naturally, they are allowed to keep some for themselves and for their families and friends.

Participants were encouraged to write a diary (also produced as part of the scheme) and share their experiences on social media with the hashtags **#patronseminek** and **#seminkovna**. Communities were free to hold competitions for best Seed Patron, Social Media Darling, etc.

Participants who returned seeds by the deadline (the closing event) received a certificate of successful confirming that they had successfully completed the scheme and could take pride in the title of **Seed Patron**.

A special winner of the competitions held was also chosen.

Individuals and teams were invited to participate.

April–October 2024

E-mail support

- Introductory email – Starting out
- Second email – Planting: reminder of planting dates
- Third email – Reminder of how to grow the crop and produce seeds, what to expect along the way, and information about upcoming seed production courses. It is helpful for the Seed Patron scheme to include classes for those who feel they need a little more support and for those who want to learn how to produce seeds for other crops – **Seed Production Masterclass**.
- Fourth email – Harvest and announcement of the date of the big closing party
- Fifth email - Celebration and details of the big closing party, information on the drop-off of seeds at the seed bank, and on the subsequent dispatch of certificates.



September–October 2024

Closing celebration

It is definitely advisable to find some time to celebrate. One example of a good date is 16 October, World Food Day. Another possibility would be harvest festivals, which can be attended and to which the celebration of this scheme can be added.

The scheme's aim is for participants to learn how to grow a crop correctly and successfully, and to produce seeds from it. They are also encouraged to keep cultivating their crop in the future. This is obviously a great achievement and deserves recognition and praise. That is why it is a good idea to acknowledge this commitment at the closing event.

The seeds collected during the closing event were weighed and an official announcement was made as to how many had been collected compared to the quantity issued at the beginning. Next year, the ideal scenario is to involve even more patrons, with contributions to the seed bank or swaps with another seed bank, etc.



If the scheme doesn't yield a crop somewhere, it doesn't matter. This can also be a useful sign. It might mean that a particular variety is not suitable at the site and another one needs to be chosen. Or greater encouragement and work with the volunteers involved may be needed. But at least you made your presence felt and the event drew attention to your other activities.

Raising the participation rate

In order to take part, those interested should provide email addresses so that they can be sent messages of encouragement and reminders of sowing dates and other information on cultivating their crop. Participants will also be able to ask questions about anything they are unsure of. This will enable them to receive support during the growing season and pave the way for a community of people dedicated to seed production and seed saving. Semínkovna, z. s. provides necessary support and assistance when needed.

Several ways to recruit participants for the scheme:

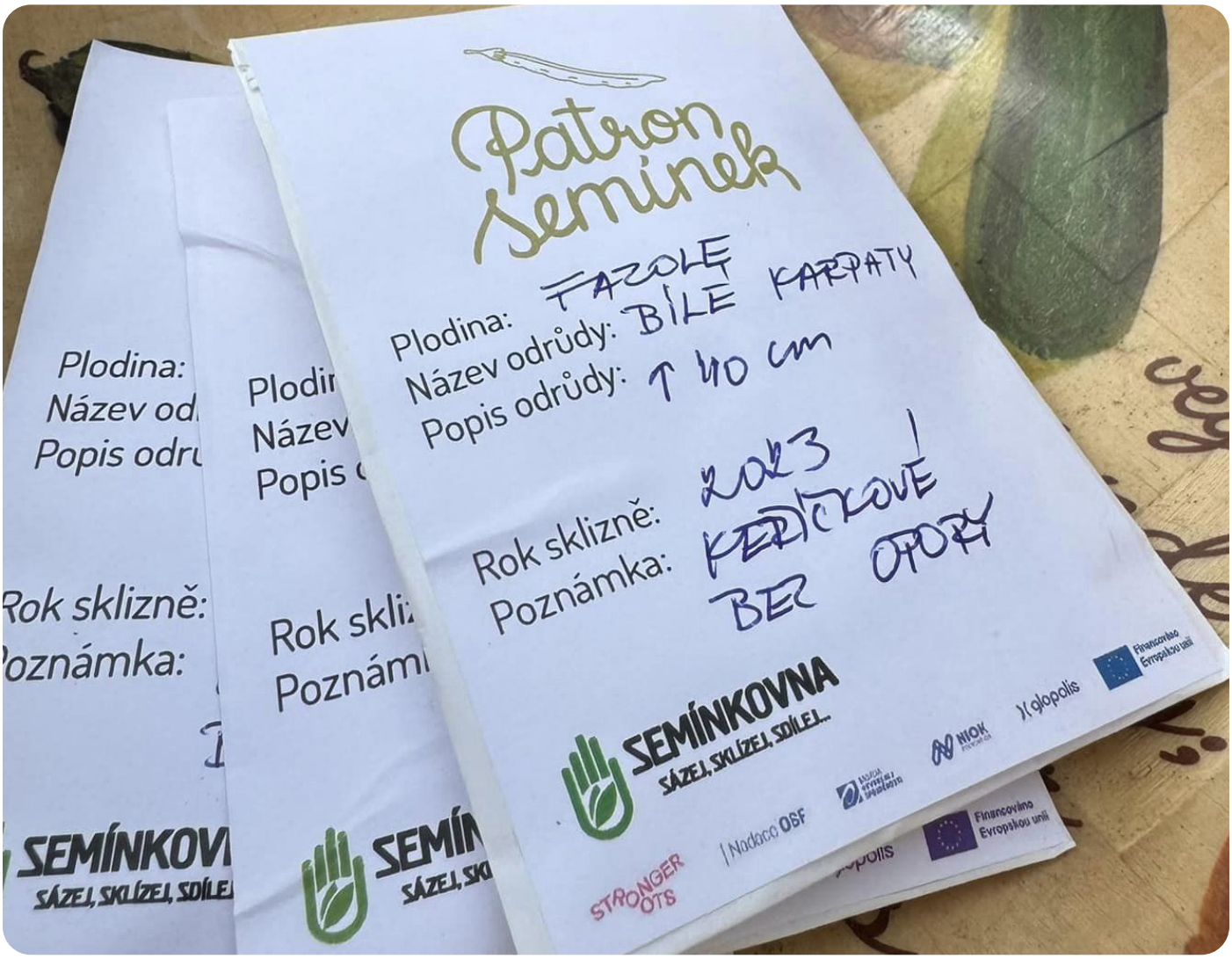
- Visit farmers' markets and other community events and hand out leaflets.
- Have a few sachets in your seed bank bearing the special Seed Patron label and a sign-up sheet for people interested in enrolling.
- Create an online registration form and share it via social media. This will enable you to reach out to a wider pool of people.
- Approach individuals and institutions (schools, nurseries, care homes, etc.) that have larger plots of land and see if any of them would be able to get involved and grow a large number of plants – a "bed" or a "row" to support the community. If you do find larger-scale growers like this, you can design signs for them to post on their

property to inform the community about their involvement in the Seed Patron scheme and promote it.
- Organise a public talk or other similar social event.
- Write an article for the local news-paper/FB group, announce the launch of the scheme on local radio.

Support from Semínkovna, z. s.

Funded as part of the Stronger Roots project

- Common Seed Patron logo
- Certificate for participants – available online
- Email support for participants, email and live support (Zoom meetings)
- Online training (on seed production, community support, the scheme, seed bank management, etc.)
- Leaflets, instructions, crop diary – available online
- Klára Hrdá (Seed Patron, seed production), Eliška Havla (community support), Jana Čápová (project management and event design) participated in the opening and closing events at five selected locations
- Seed provision (limited capacity)
- Opportunity to hold an online meeting on the scheme or just to share experiences



Chapter 9



United through Seeds

Launching Czech-Moldovan Seed Libraries in Moldova

Project implementation 11/2022 – 7/2023

United through Seeds: Launching Czech-Moldovan Seed Libraries in Moldova is a project aimed at leveraging the Czech experience in building the seed library and bank network founded in the Czech Republic in 2015 by Klára Hrdá, a botanist and plant lover (Semínkovna, z. s.). The Moldovan organisation Grădina Moldovei is a project partner.

Moldova is an agrarian country with a rich history. Seed production in subsistence agriculture is a tradition that has quietly and sometimes invisibly persisted to this day. However, many local and traditional varieties have gradually been lost, mainly due to the promotion and advocacy of commercial varieties designed for mass production. Even so, the seeds of local varieties have been kept safe in the hands of local small family farmers and peasants, usually women.

"Thanks to this project, we have managed to attract a lot of public attention to the issue of seeds, the way they are produced, and the people who conserve them. They contacted us as we were starting to build our Moldovan network. This project has enabled us to gradually establish a large community of enthusiasts and, as a result, a network of seed libraries in Moldova. The whole exercise holds symbolic meaning for us because it has helped to revive the authenticity of Moldovan culture, which is very much tied to the land, agriculture and nature," explains **Ana Benoliel Coutinho** from **Grădina Moldovei**.

Ultimately, the project led to the creation of 20 new seed libraries across Moldova. All founders received the theoretical and practical training they needed, as well as a basic set of seeds to start their own seed library in their town or village. The project was very popular and enthusiastically received by all the founders. They see how important it is to raise public awareness of the importance of locally adapted seeds and traditional seed production practices.

"The seed library project may focus on one of the smallest parts of nature, but in my opinion it is really meaningful and yields a great deal of knowledge. As a seed preserver, I see the project as an important step towards reviving and building communities where good, healthy food becomes a priority. Hopefully the project will spark the process of educating new generations and fostering a healthier lifestyle. It shows others that small-scale farmers practising agroecology or permaculture can be economically sustainable. All this can have a profound effect on the overall development of the country. And it is happening in harmony with nature, not against it," says **Tatiana Semcov**, a family farmer from the village of Batîr (Cimişlia region) and one of the new founders of seed libraries in Moldova, about the project.

The project, implemented by the Czech Semínkovna association and the Moldovan Grădina Moldovei organisation with a Challenge Fund grant, had a significant impact that went beyond simply implementing the project and sharing experiences with seed libraries from the Czech Republic. It offered an opportunity to think about the whole concept in the context of another country, bearing in mind its unique conditions and approach.

The project was funded by the Challenge Fund: Czech Solutions for SDGs to Effectively Drive Innovation and Change in the Region 2022–2023.



Contents

Introduction 6

Seed libraries 8

- What is a seed library? 9
- What is a seed bank? 10
- How does a seed library work? 10
- What role do seed libraries play? 10
- History of seed libraries 14
  - USA 14
  - France 14
- Seed libraries (semínkovny) in the Czech Republic 16
  - How did the Semínkovna initiative come about? 16
  - The Semínkovna initiative today 17
- Seed production 18
- What is seed production? 19
- Why produce your own seeds in this day and age? 20
  - You save money 20
  - You preserve heritage 20
  - You can experiment and get creative 21
  - You know what you are growing in your own natural garden 21
  - You protect biodiversity 21
  - You are independent 21
- The importance of indigenous local varieties and their conservation 22
- Hybrid varieties 23

Seeds suited to a seed library 24

- What seeds to go for? 25

Where can I find them? 25
Where to begin? 26
What to watch out for? 27
How to set up a seed library 28
Create a seed library 29
Who can set up a seed library 29
Find a good spot 30
Get your seeds 30
Set some rules 31
Build your team 31
Celebrate 32
The path to success 33
Making a seed library work 34
Mission and name 35
Registering a seed library 36
Budget 37
Examples of good practice 37
Graphics – the look of the seed library, a common visual style 38
Website and social media 38
Seed packaging and labelling 38
Education 39
Legislation in the Czech Republic 40
FAQs and answers 42
Seed Patron – 2024 pilot year 44
United through Seeds: Launching Czech-Moldovan Seed Libraries in Moldova 50

Information about the association Semínkovna, z.s.
ID: 05212642
Contacts
Phone: +420 773 474 606
E-mail: seminkovnazs@gmail.com
Website: Seminkovna.cz (seminkovny.com)

Seeds in our hands
Methodology of seed libraries based on experience with the functioning of the citizen initiative Semínkovna in the Czech Republic in the years 2015–2024

Author: Klára Hrdá
Czech language proofreading: PhDr. Markéta Teuchnerová
Translation into English: SPĚVÁČEK překladatelská agentura s.r.o.
Published by the association Semínkovna, z.s.

within the framework of the Challenge Fund Grant project “Bridging Cultures Through Seeds - Czech Seed Library Inspiration Spreads to Georgia” the project of creating a network of seed libraries in Georgia.

Released: September 2024
First edition
Illustration, graphic design, processing and typesetting: Anna Petříková
Photo: Archive of the Semínkovna association, Archive of Klára Hrdá, Anna Grosmanová
Copyright: Seminkovna, z.s.



