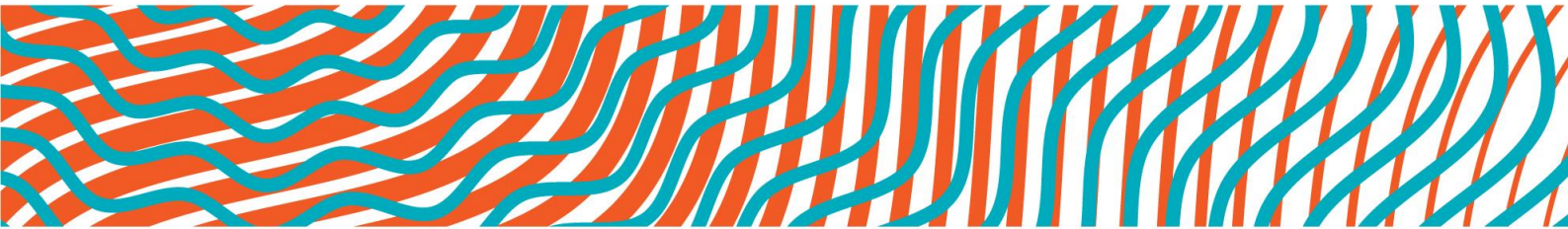


# transformative social innovation theory



## WP 4 | CASE STUDY

# Report: Transnational Seed Exchange Networks

Theme [ssh.2013.3.2-1] [Social Innovation- Empowering People, changing societies]  
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# transformative social innovation theory

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# 1 Introduction to transnational seed exchange networking

Seed exchange has existed as a social practice for thousands of years in different cultures, as a way to maintain genetic diversity and health of crops. It is only in the last forty years, beginning in the United States and spreading to Australia, Europe, India and elsewhere, with the revelation that such diversity has been rapidly decreasing due to industrialization of agriculture, that a new type of seed exchange networks has formed. These new networks, which are the primary focus of this study, are consciously aimed at changing social relations surrounding agriculture by preserving, recreating, and relearning knowledge about seeds and diversity, creating new practices and ways of organizing social networks surrounding seed exchange, and framing them as a different way of thinking about agricultural systems.

It is impossible in a short study to capture the richness and diversity of groups working with seed-saving globally (see figure below). Therefore this report has focused primarily on a few intersecting regional hubs of activity: the **Seed Savers Exchange (SSE)** in North America; the **Seed Saver Foundation (SSF)** established in Australia; the **Let's Liberate Diversity (LLD)** network (and a related but separate international networking effort coordinated by Arche Noah of Austria) within Europe; and **Navdanya**, led by the prominent Dr. Vandana Shiva, in India; as well as a few examples from Latin America and Africa, where seed-saving and exchange is a key part of work done by agroecology and organic movements. In Latin America the hub for this work is coordinated by the Latin American Agroecology Movement (MAELA), which holds a bi-annual seed meeting. In Africa the Alliance for Food Sovereignty in Africa (AFSA) is heavily involved in seed sovereignty campaigns in various countries, primarily surrounding the imminent legislative changes surrounding plant variety protection. Included also is the Open Source Seed Initiative (OSSI) from North America, which has developed an alternative open source model of breeders' rights for marketing seeds, to free the seed from world's commercial breeding, patenting and seed sales (see details in Annex).

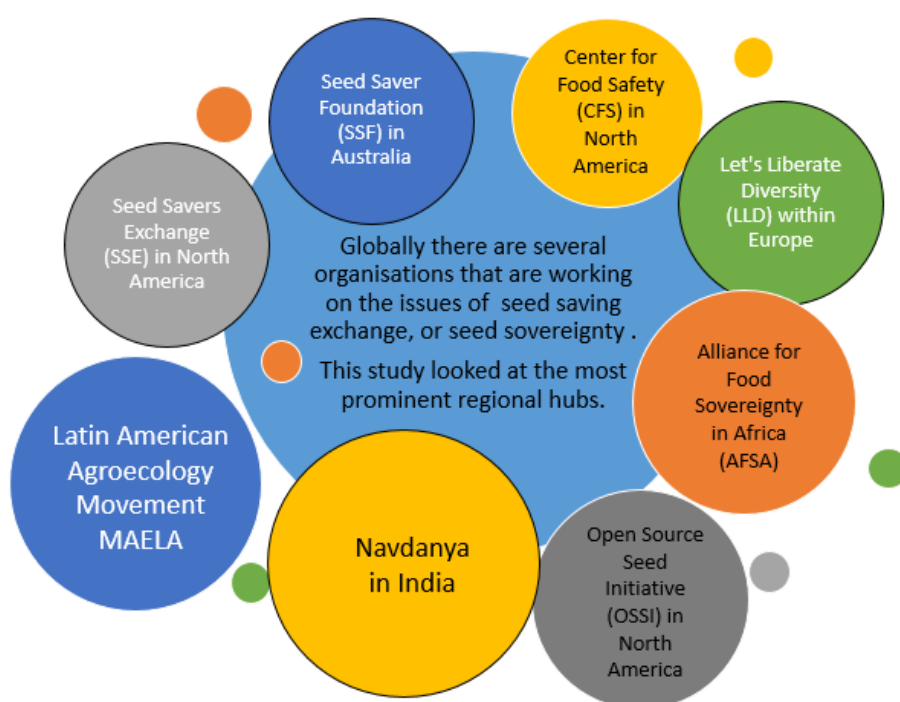


Figure 1: Intersecting regional hubs of seed networking. Source: authors.

## 1.1 Literature review

Studies of traditional seed networks focused on how both agrobiodiversity and social relations have emerged and been maintained in different societies through seed exchange, and on how farmer practices and diversity were transformed by the changes in social context arriving with modernization (see for example Brush 1992, 2004; Bellon 1996; Zimmerer 2003; Coomes 2010; Zeven 1999; Pautusso et al 2013). With the emergence of new, intentional, and dedicated seed exchange networks, there has been an important emergent shift in the literature as well. A new strand of literature since the 1990s has been documenting social innovation and social transformation in farmer seed networks, and their interactions with their social contexts, institutions, and legislative change (Carolan 2007; Ellen and Platten 2011; Thomas et al. 2011; Vernooij 2012, Coomes et al 2015).

In terms of social innovation, the literature has begun to document how farmers recreate knowledge and invent new knowledge categories (Nazarea 2005, 2006; Demeulenaere 2014); invent new practices or challenge dominant structures (Aistara 2014, Kloppenburg 2014); reframe agricultural issues (Demeulenaere 2014, DaVia 2012; Caillon and Degeorges 2007) and organize new or reorganize previous social networks (Aistara 2011, Demeulenaere 2014, Kloppenburg 2010; Aoki 2009). For example, Elise Demeulenaere (2014) has shown how the French peasant seeds network has created new concepts such as “peasant seeds” and opened new spaces of contestation through their work with scientists and other seed and social movements. In Latvia, a small group protesting a farm's accusation of illegal sale of seeds facilitated innovative openings in national legislation even in the face of restrictive European legislation (Aistara 2014). Elisa Da Via (2012) has iterated how seed networks at the European level have tried to position vibrant seed networks as the foundation of peasant autonomy and repeasantization. In Costa Rica, farmers used seed exchange not only to maintain biological diversity of seeds, but also to forge new ties of kinship and relatedness to other organic farmers (Aistara 2011). Virginia Nazarea (2005) has reported how seeds are used as embodiments and carriers of social memories, and how immigrants who bring seeds with them from their home places create an “out of place sense of place” through transporting seeds and planting them in their new environments. Amy Trauger (2015) has discussed how Navdanya in India position seed sovereignty as a form of civil disobedience. Finally, the Open Source Seed Initiative has gone beyond defensive stances against the corporate control of seeds or the reframing of seeds, to the proactive development of “open source seed” legal mechanisms, based on models coming from open source software, to allow farmers to repossess seeds by re-engineering the “master's tools” (Kloppenburg 2010, 2014).

Most of this literature to date has focused on individual country or movement case studies. Few studies, however, have looked at the interaction between seed movements as a transnational network. In this report we explore how and to what extent local, national, and regional seed initiatives are coalescing into a global seed network or movement. How do these groups network amongst themselves, what is the overall vision that unifies them globally? If a global movement does not exist at the moment, would a global movement be desirable, necessary or possible? And what types of social innovation and transformation are they bringing about, individually or collectively?

## 1.2 Case demarcation

While there are hundreds of local movements that are promoting the saving and exchange of seeds as a form of food sovereignty and an alternative to GMOs and corporate control of seed, there is not one organized and well-interconnected global seed network at present. Instead, there are several regional

hubs in North America, Europe, Australia, Latin America, Africa, and India. Only a few groups are working cross-regionally; many feel there are some elements of a common vision, but other issues on which their views and needs differ. Perhaps unlike with other global social issues, actors don't feel that they necessarily need a global network, because the foundation of any global network will still have to be strong movements at the local level. One reason for this is that seed networks are distinguished from many other social movements is the importance of the materiality of their work. The reproduction, maintenance, categorization and exchange of seeds as a form of preserving biodiversity takes precedence over all other matters, as will be detailed below.

Each of these groups has emerged and co-evolved in dialogue with the social context where it took root. Key elements of the social context include the industrialization of agriculture which has led to the decline of genetic diversity and the loss of heirloom seed varieties; the introduction of restrictive seed legislation that requires the registration of varieties (particularly in Europe); the granting of breeders' rights, patents, or other forms of intellectual property rights and patents on seeds; prohibitions or restrictions of seed exchange; the concentration of seeds into larger and larger seed companies; and the introduction of GMOs.

Key institutions that affect the work of seed networks transnationally are the FAO International Treaty on Plant Genetic Resources (ITPGR), which recognizes farmers' rights to save and exchange seeds, but leaves the implementation of this right up to states, and the Union on Protection of Plant Varieties (UPOV) convention which gets implemented through national laws (see details in Annex). National and regional laws are also important: in Europe the EU seed laws require registration of all seed varieties; in the US there are patent laws on seeds and state laws differ regarding the definition of seed sales.

This transnational seed network case study covers a time frame from the mid-1970s until today. It includes all the hubs mentioned above, but has a special emphasis on the working of the European Let's Liberate Diversity (LLD) network in the last decade, because this has been the most intense example of groups across countries attempting to transcend national movement identities and working styles to come to a common platform for action. Though there are some tensions among the actors at the European level, these may be very productive of social learning and the eventual co-evolution of these national and regional groups, allowing them to come together into a global seed movement.

**Table 1: Levels of seed exchange networking and actors of seed sovereignty.** Source: authors

international agreements	ITPGR, UPOV but no global umbrella organisation
regional hubs	platforms in North America, Europe, Australia, Latin America, Africa, and India that also initiate transnational networking and global campaigns particularly for legislative change
national level organisations	awareness raising, lobbying and monitoring of seed laws that structure access to seeds
local grassrooting, movement	community-based activities with multiple stakeholders (hobbyists, farmers, activists, gardeners, small seed companies, scientists, gene banks, bakers and chefs)

Transnational seed exchange networking is happening without a global umbrella organization or any coherent peak association network; networks are fragmented with regional focus. Seed swapping is not membership-based but event/campaign based activity and thus can mean different thing in different contexts – varied practices in the developing world and in the South, West or in the USA.

Local manifestations develop different grassroots models of transformation based on varied grounds: the seed swapping case in Hungary is Magház (<http://maghaz.hu/>) civic network for

agrobiodiversity, while in the UK Seedy Sunday Brighton (<http://www.seedysunday.org/>), UK's largest and oldest community seed swap network. Local manifestations do not have permanent or official membership-like links to the regional networks above. However, they are directly related to the seed sovereignty issue and could well represent the network and can be traced also in activist directories, seed savers listings.

### **1.3 Overview and structure of the report**

After presenting the case methodology (section 2) we will discuss the developments on the international level (section 3) and then focus on two local manifestations of seed exchange networking in the UK (section 4) and Hungary (section 5). In the synthesis (section 6) we will discuss the emergence, agency and dynamics of social innovation in seed exchange networking.

## 2 Methodology

### 2.1 Researchers relations to the case

From the start Hungarian local manifestation case researchers of ESSRG, Bálint Balázs and Györgyi Bela have been promoting small-scale agricultural and agro-ecological models through various projects. They had been involved in a cooperative research on alternative food networks ([EU FP7 FAAN project](#)), then organizing the Let's Liberate Diversity Forum in Hungary, held in February 2011 in Szeged and Budapest. Furthermore, ESSRG had organised a Parliamentary Open Day about Landraces and Genetic Diversity and therefore the case researchers have actively helped the creation of the network of European Seed Saving NGOs and CSOs to support Seed Sovereignty in Hungary. Case researchers previously undertook participatory, collaborative research on seed networks as part of the [Farmseed EuropeAid](#) project to promote best practices in sustainable agriculture and food sovereignty. Researchers initiated the Leonardo Grow project and previously also took part in the formulation of the National Biodiversity Strategy in Hungary, reviewing national legislation on agrobiodiversity. Case researcher Guntra Aistara has previously done research about farmer seed savers and seed exchanges in Costa Rica in 2006, and was active in a debate about seed legislation in Latvia, and co-organized the first seed exchange in Latvia in 2010, which has now been continued as an annual tradition.

In Brighton, the researcher at SPRU, Adrian Smith had no prior contact or involvement with Seedy Sunday. He has researched the history of organic food in the UK in the past (Smith 2006), as well as leading research into the regulation of genetically-modified cotton seeds in China and Argentina (van Zwanenberg, Ely, Smith, et al. 2011; van Zwanenberg, Ely & Smith 2011). Through PhD supervision and the work of colleagues looking at alternative food networks, he has developed knowledge and appreciation of the some of the broader issues relating to seed swapping and sovereignty.

Case researchers' disposition and sensitivity was self-reflective: 'sympathetic but critical' towards the initiatives. In terms of reciprocity the case researchers have long been involved in participatory research, particularly cooperative research on alternative agro-food and seed networks. In such interdisciplinary teams of researchers and local community members a balanced and helpful partnership is created on common interests and mutuality. The local key informants had been invited into TRANSIT as knowledgeable partners who are able to contribute to the common understanding of social innovation potentials and co-create new knowledge and action. Therefore, the whole research has been seeking to bring clearly defined benefits for the initiatives. The topic of research is evidently a normative choice as social innovation is fully political that brings to the table the issues of power, domination, empowerment, and equality as well.



## 2.2 Methods

### 2.2.1 Overall methodology

This report followed the questions in the methodological guidelines for the Batch II case studies and in the following it will detail each research question under three sub-headings: emergence of social innovation with respect to organisation, practice and seed exchange activities; social innovation dynamics; and agency of social innovation.

### 2.2.2 Interviews

Selection of interviewees was based on the following considerations: (i) key informant of the case under study, (ii) key informant who has an influence beyond the case upon the unfolding of seed diversity movement in Hungary, (iii) good, mutual trust-based connection to the key informant.

Interview with the leading figure of Magház (Dorottya Kiss) (altogether approx. 3 hours). Formal interviews (following the interview guide) with leading figures of the bottom-up food sovereignty network (Andrea Szabadkai, Agnes Major, Ildikó Barany from Kislépték, also Coordinator of FAO IYFF) and Borbála Simonyi, farmer worked previously for the Protect the Future, an NGO promoting food sovereignty.

For the transnational movement case study, one focus group discussion (with representatives of four different European networks) and three personal interviews with representatives from three other organizations (one French and two African groups) were conducted and recorded at the “Sow your resistance” meeting organized by the French Peasant Seeds Network (RSP), held from September 24-26th, 2015. The interviews were complemented by informal discussions with participants from Iran, Guatemala, Mexico, and others, and by participant observation during the panels and workshops at the meeting. Two interviews with representatives of seed networks in Austria and the US were conducted by Guntra Aistara via skype in early October, and two with representatives from Australia and the US in early November. Additional information was gathered through personal communication with some movement leaders via email.

In the case of Seedy Sunday, interviews were held with current and former members of the organising committee: Alan Phillips, Helen Gibbs, Paul Skelly, Steve Bustin, Vanessa Tourle, Warren Carter, Viv Caisey, and Vic Benton.

### 2.2.3 Participant observation

Participant observation was conducted by Guntra Aistara at the “Sow your resistance” meeting in France, organized by the French Peasant Seeds Network (RSP), held from September 24-26th, 2015. Furthermore, the research also draws upon participant observation by Guntra Aistara at three LLD meetings in 2007 (Halle, Germany), 2011 (Szeged, Hungary), and 2012 (Strathpeffer, Scotland), and at two EU seed legislation workshops held by Arche Noah in Austria in March 2013, and February 2014.

Seedy Sunday is held each February, which was not within the time frame of this small study. Hence no participant observation was undertaken in UK.

#### 2.2.4 Document reviews

The transnational case study draws upon a literature review and self-descriptions of the movements provided on the internet and in personal communications.

Photos for the case study taken at LLD meeting in 2011 and 2013 can be accessed at:

- [https://plus.google.com/photos/117702232438739856738/albums/5578685174122200849?authkey=CL74kuz9h\\_6ZmQE#photos/117702232438739856738/albums/5578685174122200849?authkey=CL74kuz9h\\_6ZmQE](https://plus.google.com/photos/117702232438739856738/albums/5578685174122200849?authkey=CL74kuz9h_6ZmQE#photos/117702232438739856738/albums/5578685174122200849?authkey=CL74kuz9h_6ZmQE)
- <https://plus.google.com/photos/117702232438739856738/albums/5455585808397261793?authkey=CNrUieaMwLDufQ#photos/117702232438739856738/albums/5455585808397261793?authkey=CNrUieaMwLDufQ>

Access was provided to some internal documentation from Seedy Sunday, newsletters, and media reports.

### 3 Transnational seed exchange networking

There are at least four regional hubs of intersecting transnational seed exchange networks included in this study:

- the Seed Savers Exchange (SSE) in North America;
- the Seed Saver Foundation (SSF) in Australia;
- the Let's Liberate Diversity (LLD) network (and a related but separate international networking effort coordinated by Arche Noah of Austria) within Europe; and
- Navdanya, led by the prominent Dr. Vandana Shiva, in India.

In addition, numerous and diverse groups are active in the Global South, and seed-saving and exchange is a key part of work done by agroecology and organic movements, and groups opposing the imposition of intellectual property rights on seeds. For example, in Latin America MAELA held its most recent bi-annual seed meeting in July 2014 in Ecuador, entitled "For Peasant Agriculture, Self-determination and Free Circulation of Seeds," attended by representative of 19 different organizations and networks in Latin America (Maela 2014). In Africa the Alliance for Food Sovereignty in Africa (AFSA) is heavily involved in seed sovereignty campaigns in various countries, primarily surrounding the imminent legislative changes surrounding plant variety protection. A South-South Dialogue meeting held in Durban, South Africa on 27-29 November, 2015 resulted in the "Declaration on Plant Variety Protection and Seed Laws" signed by 23 organizations from Latin America, Africa and Asia. Within each hub, there are different modes of interaction and networking among groups.

In its own category is the Open Source Seed Initiative (OSSI), which was begun in 2012 in North America to develop an alternative open source model of breeders' rights for marketing seeds (described in more detail below). OSSI seeks to foster the development of other open source initiatives in other places, and have begun making connections in India and

Germany. The open source seed idea has the potential for a much more global reach, but OSSI regards itself as a resource to help others learn from their experience, rather than presenting their approach as a model to be reproduced.

While these hubs connect across regions at some international events, cooperation takes place for specific purposes and projects rather than for global networking *per se*. For example, many of the networks allow international members to join for the purpose of sharing seeds across borders. SSF has provided small grants to community seed-saving groups around the world. Within the European LLD network, the French member groups BEDE conducts projects with seed groups in French-speaking Africa. The primary group engaging in more virtual networking in addition to its on the ground activities is Navdanya. They started the Global Campaign for Seed Freedom, and ask groups to sign a pledge on the internet and share information about their own initiatives online. And while most networking happens among seed networks and among farmers and gardeners in different countries, some groups, such as ProSpecieRara (PSR) in Switzerland and OSSI and SSE also collaborate with small seed companies. Other groups, such as SSE also cooperate actively with scientists and gene banks, and some groups like the French Peasant Seeds network (RSP) have created collaborations with bakers and chefs.

One of the reasons for limited global networking is, as movement leaders in Europe noted, that the local and national networks are still in their maturation phase (though individual networks, such as RSP in France, already have strong internal structures), which means that many must first solidify their own identities and practices before joining more formally in a global movement. Another reason is that the social, economic and cultural context is quite different in each region, as will be explained below, resulting in quite different work programs and practices.

### 3.1 Emergence of Transnational seed exchange networking

Seed saving and exchange as locally-grounded customs for the maintenance of genetic diversity and social networks pre-date the foundation of any official new seed networks or organizations in many parts of the world (see Pautusso et al 2013 for a review of seed exchange networks). As the South-South Declaration of November 2015 states *“Peasants and indigenous peoples have always been the custodians and guardians of the collective knowledge embedded in the wide diversity of seed that has enabled the development of humankind as a species.”* Farmer seed saving and exchange in informal and family-based networks now coexists with official seed movements in much of the Global South. Yet while such customs still persist, it is their decline due to large-scale agricultural changes that have in part led to the founding of new seed networks. Thus, the foundation stories of the new seed exchange networks are steeped in narratives of the necessity to save seeds before they disappear due to large-scale agricultural change. For example, the South-South declaration states: *“today capitalist greed poses fundamental threats to the continued conservation, reproduction and use of the biological diversity nurtured for all this time.”*

The first new dedicated seed networks started in the US, Australia, and India and a few countries in Europe in the 1970s and 1980s, but only in the 2000s in much of Europe, Latin America, and Africa. The earliest networks started very informally. For example, SSE in the

United States began in 1975, when the founder, Diane Ott Whealy's grandfather passed down the seeds of two plant varieties her grandfathers' parents had brought with them from Bavaria when they immigrated to the US in the 1880s. This created a sense of responsibility for the seeds, and their story helped spark an awareness in others. People who read about this in a newsletter started sharing seeds more actively, and this network grew for a decade until it became a formal organization. SSE now has 13,000 members in all fifty US states and in 30 countries.

The SSF in Australia was founded by Michel and Jude Fanton, who had been developing their property in New South Wales according to permaculture principles since the late 1970s, encouraged by the founder of the permaculture movement, Bill Mollison. Based on their permaculture observations that in a difficult climate locally adapted seeds would work better than those from outside, they founded the SSF in 1986 and began collecting local seeds. This was also at the time that patents were being introduced in Australia, but the founders saw the Seed Savers' Foundation Network as a way of moving "beyond protest," and reclaiming peasant skills and sensibilities that had been lost. SSF was originally also modelled on the SSE in the US. Now SSF has decentralized to 100 local seed networks in Australia and also works with dozens of groups abroad, with whom they have made personal contacts through courses and seminars.

Navdanya, meaning "nine seeds" in Hindu, was founded in India in 1987. Vandana Shiva states on Navdanya's website that *"When I found [that] global corporations wanted to patent seeds, crops or life forms, I started Navdanya to protect biodiversity, defend farmers' rights and promote organic farming."* Navdanya has helped start 122 community seed banks across India.

The movements in Switzerland and Austria, where the movements began in the 1980s and 1990, are an exception to many other countries in the rest of Europe, where many of the national seed networks began in response to the GMO debates in the 2000s. But they were also exceptional because they were inspired by events in the US. In a publication to mark their 30-year anniversary, ProSpecieRara (PSR) tells the story that the Global 2000 Study commissioned in 1980 by the US President Carter caused a furore about the dangers of the increasing uniformity of our food sources due to increasing crop productivity and genetic erosion. In response, a group of members of the Swiss chapter of the World Wildlife Fund (WWF), led by Hans-Peter Grünenfelder, founded ProSpecieRara in 1982 as an association specifically dedicated to saving diversity of domesticated plants and animals (Pro Specie Rara 2012). PSR now has 10,500 donors and 3,500 active seed savers and breeders. In Austria, Arche Noah (meaning Noah's Ark) was founded by an American woman, Nancy Arrowsmith in 1990, bringing together two local seed networks in Austria. People started meeting informally in people's living rooms until, after a decade, they grew to a point where they had to decide whether to stay small or keep growing and professionalize. There were conflicting views but some of the members decided to formalize into Arche Noah, which has now grown to an organization of 13,000 members.

In other European countries, such as France, Spain, and Italy, seed networks started because of a fight against GMOs in the 2000s. In France in this also meant a conscious re-learning of old methods and of spreading knowledge among farmers who had already lost it. RSP now unites seventy different groups within France. In Latin America and Africa where seed exchange is still more common and many farmers still use many of their own seeds, the attention to seed sovereignty began when proposed changes in legislation, based on Western European models and the UPOV convention (which guarantee breeders' rights to protect varieties for 20 years, but do allow exceptions for research, unlike US patent laws), and the

arrival of transgenic crops, particularly maize, began to threaten both the traditions and the diversity of seeds still in use.

In Latin America there are strong seed networks in various countries, founded through the 1990s and 2000s, such as Brazil, Ecuador, Chile, Colombia, and others. There has been substantial resistance against changes in seed laws, and in several countries (Chile, Colombia, Guatemala) the so-called “Monsanto laws” have been rejected. Strong resistance has also taken place in Costa Rica, Argentina, Mexico, and Venezuela (GRAIN 2013). Similarly, in Africa, the current push to spread UPOV has prompted new seed sovereignty groups to spring up as a form of resistance.

In many cultures, wedding rituals and other community traditions have functioned as the means to hand seeds down to the next generation and maintain genetic diversity, though protection of diversity was rarely the explicit goal (see for example Elias et al. 2000; Emperaire and Peroni 2007; Pautusso et al.). With changing traditions, and the introduction of new crops, some of these rituals may be lost, and new modes of seed exchange are introduced through organizations. For example, at a workshop at the Sow your resistance meetings in France, representatives from Senegal, Mali and Benin told of their efforts to learn to reproduce seeds of non-traditional crops, like vegetable, that do not get handed down through traditional wedding ceremonies or other rituals. As consumers have been introduced to European vegetables, farmers in these countries must learn to save and reproduce seeds of these non-traditional plants, such as lettuce, carrots, etc. This has been facilitated by partnerships with European seed groups.

Each individual movement has its own aim and mission, but common elements echoed across many of these national and regional groups include: *the protection of agricultural biodiversity, cultural heritage, and the skills and knowledge that sustain it; creation of seed banks or other means of ensuring access to seeds; facilitating exchange of seeds and knowledge among farmers (and in many cases with the scientific community); and the promotion of legislation at all levels that promotes all of the above.*

While participants of different networks are aware of the differences between them, they also note elements of commonality: *“We share a vision of diversity, with free access to genetic resources, and no constraints to do our work in the field,”* said one European participant. An Italian representative added that the shared vision includes *“freedom to try new ways of saving and exchanging seeds - to be in control over the evolutionary process. The drivers may be different - based in ecological versus traditional knowledge, but the goal is the same.”* A French representative explained that there is an unconscious transformation of the human being that happens at the same time as the interaction with the seed, which is also means of acting rather than only reacting: *“The seeds are a noble material with sacred value. Everybody has the need or wish to be in contact with seeds - and through the contact you express your inner feeling. Seeds become the embodiment of spirit. You are accompanying the seed - and what results is an expression of harmony.”* This element of co-habitation and harmony with other species is a very important element of social innovation in seed networks.

Cooperation across national and regional borders occurs as necessitated by changes in the social context, particularly as regards legislation, as will be described below. The European networks have been trying for several years to create a common European platform for lobbying on European legislative change, but have encountered some disagreements as will be outlined in the social dynamics section. In other cases, the networks carry out their daily work on a local level, but communicate with other groups transnationally.

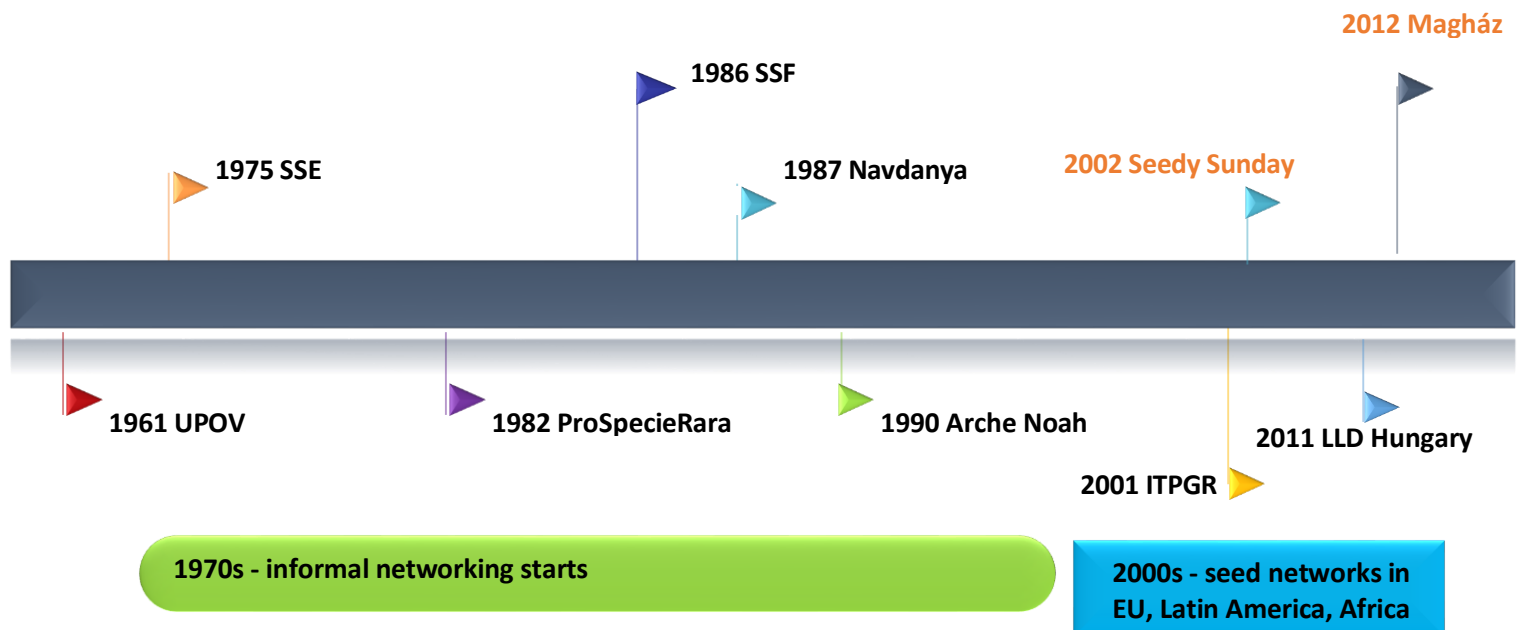


Figure 2: Timeline of seed exchange networking. Source: authors.

### Seed Exchange and Social Innovation

Seed exchange networks are socially innovative in that seeds become the intermediaries that change social relations across time and space. According to Chilvers and Longhurst (2015), social innovation is made up of the *four dimensions of knowing, doing, framing, and organizing*. The various seed networks studied at the transnational level have many socially innovative aspects to their work that cut across these categories.

The most important social innovation comes in the connection between material exchange of seeds and the social exchange of knowledge and values through which the networks are built. The primary activity of almost all of the seed networks that operate at local, national, or international levels is the exchange of seeds. Seed exchanges are differently organized in various locales - sometimes via mail order catalogues and the internet<sup>1</sup>, as in the case of SSE, sometimes through informal personal networks, as at the beginning stages of most of these organizations, and sometimes as public events, as at the bi-annual LLD meetings in Europe.

The exchange of seeds is not only a material exchange but also a way of making intimate connections to people and remaking social relations. The crafting of social and spiritual networks through material exchanges is an ancient tradition much studied by anthropologists (for example Malinowski 1920, Mauss 1954, Strathern 1991, etc.). But what is

<sup>1</sup> Seed exchange Facebook groups:

- 1, FREE Seed Exchange platform ([www.heirloomseedswap.com](http://www.heirloomseedswap.com)) was founded in 2010 to help people exchange seeds with other seed savers for free. The Facebook page for discussion: <https://www.facebook.com/FREE-Seed-Exchange-110511575633035>;
- 2, Seed Swap public group: <https://www.facebook.com/groups/156817207790258>;
- 3, Seed Savers Exchange dedicated to save America's heirloom seeds: <https://www.facebook.com/seedsaversx>;
- 4, Heirloom and Organic Seed Exchange Public Group is a network of people that are interested in heirloom gardening: <https://www.facebook.com/groups/196898680337736/>;
- 5, Seed exchange public group to trade and barter garden seeds: <https://www.facebook.com/groups/429641927080942/>

new here is the conscious sharing of seeds and knowledge across borders and outside of the localities where the seeds have gained their histories and meanings in the first place. One French representative explained that when receiving seeds from someone from another country, even if the seed may not be easy to adapt to local conditions, what matters is the intention and the value carried by the seed: *“The value is sacred - they bring with them energy from other countries... then our work starts with this seed, to adapt it. But the spirit in this [sharing of the seed] is very strong.”*

Finally, seed exchanges are publicly framed and performed both as convivial social events and as political campaigns. For example, in Costa Rica, prior to a referendum about joining the CAFTA free trade agreement with the United States, seed exchanges and agroecology were framed as alternatives to neoliberalism and free trade (Aistara 2011).

Thus, seed exchanges embody all four dimensions of social innovation (*knowing, doing, framing, and organizing*), by collecting and sharing knowledge about rare seed varieties, engaging in the practice of exchange, organizing exchanges to best meet the needs of the local context, and framing them discursively as social and political acts rather than only as agricultural practices. Seed exchanges, held both at the local, regional, and international levels, are quintessential examples of what Schatzki (2002) has called “configurations” that integrate all of the four elements. It is also a type of social innovation that can be dispersed and expanded to other contexts, as had happened in Eastern Europe. For example, formalized public seed exchanges became a part of the practice of Hungarian, Latvian, and other eastern European participants after they participated in such events at the European LLD conferences. As one Latvian participant explained after her first experience at the LLD meeting organized in Szeged, Hungary, in 2010: *“What these people are doing existed only in my wildest dreams! But for them it is just part of what they do as their daily work.”* Since then she has organized at least one annual seed exchange for gardeners, organic farmers and permaculture activists in Latvia, and is now starting the first seed library in the country (similarly to the local manifestation in Hungary detailed in the report at section 5).

The OSSI initiative stands out as an example of innovation across all four realms as well. The creation of a new legal form of “open source seeds” creates an alternative form of recognizing breeders' work, while simultaneously sharing the benefits from that work. Breeders and seed companies who register their seeds with the OSSI logo sign a pledge, which guarantees that they will never place a patent or other form of intellectual property restriction on that seed. This means everyone is free to use the seed - and all of that seed's progeny - how he or she wishes, and that no one is able to place such protection on that variety, or any other variety that is derived from it later. The result is, as described by one of the co-founders, *“mechanisms that provide 'benefit sharing' to breeders without restricting farmers' or breeders' rights to do whatever they like with the seed.”* As he explained,

*“OSSI's objective is to continuously enlarge the pool of crop varieties that are 'OSSI-Pledged' that is, freely available for use and improvement by farmers, gardeners and plant scientists without encumbrances. To that end, OSSI recruits breeders who commit to distributing one or more of their cultivars or breeding populations under the OSSI Pledge. Those cultivars are sold through seed companies that in turn market the seed in accordance with the OSSI Pledge. That seed is also branded with the OSSI trademarks.”*

This creates a niche market not only for “freed seed” as an ethically marketed product, much like fair trade, organic and other alternative foods have worked. This also involves an important framing device of “freed seed,” which differs from free seeds, in that it forms a

protective commons. The freedom of the seed in turn creates a restriction on placing restrictions on more seeds in the future.

Other innovations take place in the more technical and legal realms of giving people access to seeds and to information about seeds, even from afar. SSE in the US is developing online tools to allow anyone to search for a seed variety online and find out where it is available. This enables online seed exchange, but also the monitoring of heirloom seeds. As the SSE representative explained, “the marketplace is poor at maintaining diversity,” and gene banks in the US do not readily give access to seeds to individuals, therefore they have developed a new model for themselves, envisioning themselves as a hybrid form between a gene bank and a gardeners' members' organization. This then is a combination of innovation in the realms of both knowing and organizing.

Seed networks in the US have also innovated a new organizational form, that of a seed library. It works similar to a lending library for books, and is indeed sometimes housed within and managed by public libraries. Patrons “borrow” a packet of seeds, plant and reproduce them, and “return” them to the library at the end of the season.

Seeds have also been used innovatively as a political tool as a form of framing campaigns for legislative change. In a campaign to influence European lawmakers, coordinated by Arche Noah from Austria, rather than just sending politicians responsible for EU seed legislation emails to express concern over the proposed regulations, Arche Noah encouraged farmers, gardeners, and activists from all over Europe to send seeds to the politicians, with a plea to help save them. As the Arche Noah representative observed, “*The politicians felt troubled because they couldn't just throw them away like you can delete an email. Mr. Silvestris, the rapporteur for the seed legislation thanked people for the seeds and said he would plant them.*” This brought a sense of responsibility and awareness to politicians that the seeds are alive, and should be planted and protected.

In a related political vein, Amy Trauger (2015) has shown how Vandana Shiva and the Navdanya seed movement in India have framed seed-saving as ‘satyagraha’ (‘insistence on truth’) that is civil disobedience in the Gandhian tradition, which they define as “*a fight for truth based on non-cooperation with unjust regimes*” (Trauger 2015: 114). Nevertheless, Trauger notes that there are internal contradictions because Navdanya restricts which seeds should be saved to ones that can be used in the marketing of organic foods, rather than allowing local communities to decide which seeds are useful for them.

In summary, seed networks at the global level have been most innovative in the realm of doing, knowing, and framing, but have so far been organizing more at the national and regional levels and not at the global level. The desirable pathway of organising on the global level is contested within the movement. This also means that seed networks may at this point still be seen as SI-clusters that cooperate across networks at various points rather than a fully integrated transnational network.

### 3.2 TSI dynamics

Following the methodological guidelines to these case studies (Wittmayer et al, 2015), next we explore the dynamics of transformative social innovation by looking at changes in the societal framework conditions, important institutions, dominant discourses. We will present the plurality of relations to social, political and economic contexts, and the broader policy



landscape of seed networking. This points to some potentials for innovation towards transformative social change.

A key trend in the social context that has been relevant for all the networks is the industrialization of agriculture with the associated decline in agricultural biodiversity. Key institutions that affect the work of seed networks transnationally are the FAO International Treaty on Plant Genetic Resources (ITPGR), the Union on Protection of Plant Varieties (UPOV) convention and its implementation through national laws, and the introduction of GMOs. At the national and regional levels in Europe an important part of the social context has been the EU seed laws which require registration of all seed varieties; in the US to some extent these have been patent laws and state laws regarding the definition of seed sales. Because most of the networks still work primarily at the national level, the most important aspects of the social context are national laws that structure farmers' and gardeners' access to seeds. The way networks relate to these institutions has differed, however.

Strikingly, while in Europe GMOs, and now new methods of genetic engineering, are still seen as some of the main threats that seed movements are fighting, in the US, GMOs seem to be more accepted as part of the landscape. The representative from SSE commented that they are surrounded by GMOs on 400 and 500 acre farms. Ironically, the fact that GMOs and industrial agriculture seem so entrenched in the US maybe actually allows more freedom for seed-savers' groups to continue their work because they are in comparison too small to be considered a threat. The SSE representative noted that the Department of Agriculture sometimes didn't even realize there were other types of agriculture that might be affected by policies – from a legislative standpoint, seed savers were not even on the radar. This gave their work even a bit of an underground character. At the same time, he emphasized that is important that they pick which battles to fight. SSE has not been involved in fights on patent issues, though they see themselves as the antithesis of the patent movement. They prefer not to put their resources into policy and legal arguments but rather “just focus on what we do” in their day to day operations with seeds.

Nevertheless, there was one recent policy battle where SSE did play a key role. Each state in the US has its own seed laws, and in some states where SSE members had initiated seed libraries, such as Nebraska, Pennsylvania, and Minnesota, laws did not distinguish between commercial and non-commercial seed exchange. This meant that *“up until recently it was violating the law every time you exchanged seeds.”* The Duluth, Minnesota, seed library was shut down for violating these laws. There was an efficient campaign by several local organizations and negotiations with the Department of Agriculture and the Seed Industry to propose wording for a change in the seed law to allow exceptions for certain types of non-commercial groups. The change passed within a few months. Similar successful campaigns have taken place in other states. It is noteworthy, however, that while these changes mark an end to the immediate conflict, they have little effect on the broader industrial agricultural landscape.

In Europe, the central issue that has both drawn groups together and exposed their internal differences is the overhaul of EU seed legislation. On the books since the 1960s, the laws promote high yielding varieties at the expense of genetic diversity by requiring that all varieties be registered in the European Common Catalogue. At a seed legislation workshop in Austria in 2013 one member of Arche Noah explained that they oppose the seed laws not only for practical reasons, but also on an ideological basis, because they stem from the logic of purity that began during the authoritarian regimes before WWII and have continued since. Similar purity laws were not made in US where hybridization has been considered better.

The proposed revision to EU seed legislation in 2013 became a key space of negotiation or “issue space” (Whatmore 2009) around which European seed networks were forced to try to reconcile their differences in framing seed politics: this became a question of whether seeds are free and should be considered part of the commons, or rather common property that should be governed by strict rules. Such rules would allow space for seed networks to continue their operations but place restrictions on large companies that may want to infringe on that space. Embedded in this issue are understandings of the concept of seed variety, and assumptions about the relationship between markets and the state.

At a workshop about the LLD network held in France in September 2015, one French representative explained that there were three main reasons why the LLD coordination could not come to an agreement on the legislation. The first was the complexity of the laws under discussion which “*no more than five people understand at the European level.*” The second was the differences among the movements: farmer, seed-saver, and gardener organizations do not see seeds in the same way. Farmers are fighting for farmers' rights, while gardeners want interesting varieties and seed-savers' primary goal is biodiversity. The third main reason was in the socio-economic context, in terms of relations to the government and the seed industries.

As participants of the European LLD network described to me, there is a division between farmers and gardeners in the network, which approximately follows a North-South split within Europe. The organizations in the North (Germany, Austria, Switzerland) work more with gardeners and seed savers, who protect vegetable and fruit varieties. The networks in the South (France, Italy, Spain) still work with more small farmers who grow different grains, often at the population level, in order to select plants resistant to certain conditions, and at times to select new varieties. Yet for farmers, the agricultural system from which the seed emerges is more important than the variety itself.

This split results in several key differences in how they view the social context and its transformation. The groups in the North of Europe work more with gardeners who try to reproduce and maintain varieties as they exist, but adapt them minimally to local conditions. Therefore, they need detailed descriptions of the plants. They have more interest in working together with small seed companies that also reproduce heirloom varieties, and thus have more trust in markets and trade in general. Some of the organizations fund part of their operations through the sale of heirloom seed varieties; therefore, exceptions in rules that make room only for small niche markets are at times too restrictive. They want fewer regulations in order to be able to operate freely.

Groups in the South of Europe, in contrast, have less trust in the markets, and are more interested in having stricter rules, as they are less likely to sell much of their seed, and want to hinder larger corporate players from having access to the genetic materials with which they work. In fact, in Southern Europe the emphasis is more on protecting entire farming systems. Farmers who are interested in exchanging seeds can see in each other's fields which grains they want because of how they have behaved under certain conditions. They get some seeds and propagate them, but care more about the growing conditions. They don't need detailed descriptions because they have basic knowledge about each other's fields already and just need to exchange a bit of info. These farmers are interested in adapting the seeds to their fields and letting them evolve, but not so interested in the sale of seeds.

The disagreements around these issues were not completely resolved, as the LLD coordination and other European groups did not come to a common negotiating platform with the EU. Nevertheless, most of the European groups did come together to sign a common declaration (Vienna Declaration 2013) because they realized the importance of

sending one clear message to politicians. Eventually, the regulation proposal draft was withdrawn, hailed as the result of a successful campaign by Arche Noah and other groups. This means that these issues will re-emerge in the coming years and create new opportunities for co-evolution of the groups' common perspective and strategies. There is a sense that if they are able to find a common position this will be a key step towards consolidating the European movement. Yet even if they do not, the acknowledgement of the diversity within the movement and the at times difficult dialogues can also be seen as ways of making new knowledge and practices.

It is also worth mentioning that not all groups in Europe think it is worth negotiating on the EU seed laws. Other groups like Kokopelli in France work against laws by challenging them and breaking them. Kokopelli was sued by the seed company Graines Baurmaux for unfair competition because of the group's practice of selling heirloom seeds in 2008. Kokopelli appealed to the European Court of Justice, and for a moment it seemed this case would unsettle the hegemony of the laws. In January 2012 the Advocate General of the Court, Juliane Kokott, issued an opinion that the current vegetable seed marketing directive "is invalid as it breaches the principle of proportionality, the freedom to conduct a business ... the free movement of goods ... and the principle of equal treatment" (Kokott 2012). Nevertheless, the final ruling in July 2012 did not concur (Court of Justice of the European Union 2012).

Others interviewed in the US and Australia commented that perhaps European networks were spending too much energy negotiating the laws rather than focusing on their work. The Australian SSF representatives exclaimed that they are very lucky that Australia doesn't have such draconian laws as Europe, but suggested that European groups' efforts may also be better placed promoting self-governance rather than investing energy in debating the EU regulations. They also saw the division between purity and diversity in a more nuanced way, saying that both gardeners and farmers are constantly doing both: maintaining varieties and letting them adapt. And while they have themselves written books about how to maintain purity, the SSF representatives said they have learned from their work with farmers in other parts of the world that farmers often care less about purity themselves, and don't mind plants crossing in their gardens. They concluded that the concern for purity was itself more based on commercial necessity than on farmer and gardener needs. Thus, the difference between purity and diversity within plant varieties and how the various seed groups relate to them can itself be taken as a metaphor for how they relate to the social contexts in which they work.

Finally, the relationship to governments and state agencies is very different in each place. In France there are personal connections between some government representatives and seed networks, yet there is more opposition on the official level. In Austria, the situation is the opposite, where the government was overtly supportive in the press, yet not always following such support with actions in reality. SSE has a cooperative and non-combatant relation with Agricultural divisions of the US government. The relations to the government also depend on how the seed issue is positioned politically. In France, interviewees explained that seeds are a left issue. In Guatemala, they have to be separated from party politics altogether and can be neither left nor right because politics are so divisive. The Australian representatives stated that they have received support from the government for some of their overseas projects, but they are "neither a radical protest group nor a lobby group." They tend to approach issues from other angles than typically political ones - such as framing the issue of seed diversity from health and nutrition perspectives rather than positioning it as a corporate conspiracy.

This last point highlights the diversity of discursive framings seeds has in the various socio-political contexts where different groups operate. In many places, the top discourses were food sovereignty and seed sovereignty, and access to seed, but there were also important regional variations. In countries like Senegal and Mali, seed issues were positioned as one aspect of much broader rural development issues related to agroecology and pesticide use rather than an isolated issue. In the UK, seeds were tied to issues of access to land, while elsewhere in Europe, seed issues were framed as an alternative to GMOs and opposition to corporate industrial mono-cultures. In Eastern Europe, they are still a symbol of a previous way of life and for autonomy and self-sufficiency through the garden. In Colombia, management of seeds and of agricultural land was also a way of forging self-government and autonomy in war zones. This plurality of framings reflects the diversity of meanings of seeds in different social contexts, yet also the great scope of potential they carry for innovation towards transformative social change.

### 3.3 Agency in (T)SI

In the following we present collective and autonomous actions of transnational seed exchange networks that are intended to create change in the world. Following the definition of Chilvers and Longhurst (2015) we understand agency as an emerging phenomenon, a relational effect of the configurations within and between different collectives.

The various groups interviewed had different ideas about how change happens. Within the European LLD network, there were also (at least) two distinct ideas of how change happens. One French representative explained that *“You can't have a global movement without a common political movement – and there are two ways to build a global movement.”* The first one is find someone to manage a campaign, put a declaration on the internet, and invite others to sign on if they agree. This method is faster, he said, but not sustainable. One example would be The Global Seed Freedom Campaign managed by Navdanya. *“The second way is to start from the grassroots in particular territories. We tried to build LLD this way.”* Each country organizes in its own way, but the groups exchange farmer-to-farmer to share experiences. Another French participant emphasized that his means working on consensus across different cultures, but that can't be done quickly.

While representatives from Austria were involved in preliminary discussions about the LLD network, they were reluctant to join a formal network they feared would be too bureaucratic, and felt that too much time was spent on internal discussions of political process. Instead, Arche Noah hired a campaign co-ordinator who worked on organizing people to react to the EU's legislative changes. It was a more informal approach, based on bringing people together to react to concrete legislative proposals. Rather than assuming that the legislation was too complicated to understand, Arche Noah organized several legislation workshops to bring together people from different European countries and EU accession countries. The workshops started from the basics, explaining the European legislative process, the problems with current legislation, and the proposals on the table. They then discussed possible national-level and European-level ways of organizing campaigns and common messages to the European commissioners and European Parliament.

The difference between the LLD and Arche Noah perspectives shows a difference in ideas of knowledge-sharing. But as a Swiss representative of PSR observed, there was also a difference in communication strategy. While successful campaigns like that of Arche Noah concentrated on one central message and kept repeating it, the LLD approach was more to

explain the complexity of issues that led to the main position, with the risk that the central message could get lost.

Regarding the differences in position among European groups, a representative from Arche Noah said, *“Content-wise essentially there is not [such] a difference - the differences are for cultural reasons.”* The different agrarian histories and starting points in terms of how friendly or unfriendly the national structure is leads to different conclusions about the proposed legislation, and how it will improve or worsen the situation. *“I had underestimated that at the beginning - how the life experience that people bring with them will influence legal interpretations and strategies.”* She also pointed out that Eastern Europe has different needs than Western Europe. Due to political histories, in the East groups preferred to stay more informal and underground rather than more institutionalized, therefore they were even hard to track down in order to make new connections. There are also language and communication problems among regions despite global trends of the expanding use of English.

Both the SSF in Australia and OSSI are involved in seeking to make larger changes in society through creating interpersonal networks, often connecting with former students and seminar participants who went on to create their own nodes of the movement in other places. The SSF seek to *“educate the public with intensive media presence on why and how to save seeds. Through maintaining these contacts, the networks grew, and more ideas were shared. The SSF has concentrated over the last 30 years on improving skills of seed saving among the Australian gardening public through talks, garden demonstrations, courses, publication of a manual on seed saving, films and web clips.”*

The OSSI representative emphasized the need for everyone to listen and respect one another across differences in opinion, and the ability to be flexible and change strategies when that was necessary to maintain cooperation with allies. OSSI initially designed a legal license to protect open source seeds, but found that there was too much reluctance and distrust surrounding legal documents in the Global South and among alternative agriculture organizations in the Global North. They also found that use of a license was excessively bureaucratic and practically unworkable for seeds. Accordingly, they abandoned the license in favour of a softer approach, the pledge, which though it may not be legally binding, still sends a strong moral and ethical message. He stressed the need to keep everyone together in moving towards the broader goals of agroecology, sharing seeds, food and seed sovereignty, without defining too strictly what that means: *“There are no maps, just a compass. Work with everyone moving in approximately the same direction. Be tolerant, listen to them, and work with them.”*

Strategies among various regional hubs change together with the circumstances, ranging from promoting to blocking legislative changes, to creating innovative new property rights arrangements that forego existing models, such as OSSI, to creating hybrid forms of in situ and ex situ seed management, such as SSE. Internal governance varies greatly among different networks, and since there is no one transnational network, there is no one system of governance transnationally. It is at the intersections of many different movements that such issues must be debated and discussed, as seen with the European legislation example above.

Groups also try to innovate in how they raise funds. The RSP in France organized the September international seed meeting *“Sow your resistance”* in an Emmaus village, which itself is an interesting example of recycling other people's trash in order to sell it again, thus raising money for social projects. In part the meeting was also funded by a rock concert used as fundraiser for both the village and the RSP event. Many groups have membership fees, which then include a certain amount seeds. Some receive at least part of their funds from selling seeds. The SSN in Australia has kept costs low by managing their network out of a

home office, and have financed a large part of their work through the sales of various books about seed saving. European groups have also cooperated with researchers where they have been able to take advantage of European funding programs, or EEA Grants. Several EU level projects have helped facilitate actor-networks and learning partnerships: the LLD events, Leonardo GROW project, Farmseed EuropeAid project, FP7 and H2020 projects (FAAN, DIERSIFOOD). SSF in Australia also worked through governmental foreign cooperation funds to visit seed savers' groups in other places. Funding decisions also pose moral dilemmas, however. Trauger (2015) has critiqued Navdanya's acceptance of corporate funding as inconsistent with the goals of food sovereignty.

Regardless of the strategies used and internal governance structures, several actors expressed their sense of empowerment at having achieved change, or simply through the interactions with other like-minded individuals. In the US, SSE was satisfied at having changed the seed laws in several states that allowed seed libraries to continue their work, and in Austria there was a – temporary - relief that the proposed overhaul of the EU seed laws had been halted. The representative of OSSI said *“OSSI is rocking; we now have over 250 freed seed, OSSI-Pledged varieties from 24 breeders available from 24 seed companies.”* It was a long process, but the move from an idea to actual seeds on the market with the OSSI pledge was a sign of their accomplishments.

Meanwhile a couple of French bicyclists who were initiating a cycling trip all over Europe and Asia, bringing a mobile seed library with them, to share and collect seeds everywhere they went, had a very personalized, yet relational, sense of agency. They felt that they had the potential to change the world with every interaction. One of them told that every interaction is similar to a plant producing millions of seeds - many of them may not fall into fertile ground and grow, but you never know which ones will grow into beautiful plants.

The Arche Noah representative concluded that, *“I would say that all in all, the work we have been doing makes us feel more empowered. What makes me feel confident: results are achievable when cooperation happens successfully. I am not pessimistic at all, but feel like a learner. I feel we all have to learn how to make cooperation happen even better and more inclusive. I think it is a challenge to function well with little resources, on a voluntary basis, with sometimes no common language: the spoken one and the 'societal' one. Also, one needs to be pragmatic and realistic on how deep cooperation can go, and also have the courage to not insist on cooperation where it turns out fruitless, and agree to disagree without regrets and reproaches.”*

**Table 2: Different configurations of agency in seed exchange networks**

	pathway a (expert-driven)	pathway b (community-driven)
modes of organisation, governance logics	formal lobby organisation, policy orientation, focus on legal issues	interpersonal, informal engagement with society, focus on exchange and conviviality, sense of empowerment
modes of activity: technologies, practices	global organisation to encompass all initiatives, global campaigns through ICT tools, income generating activities, professional fund raising	context dependent localised initiatives, local grassroots, leisure based volunteering
knowledge-sharing, learning	scientifically sound and complex message to different stakeholders	single and clear central message to the whole society
visions, commitments	common goals and network elements	intersections and internal differences, agree to disagree

If we understand agency as emergent phenomena that are “fundamentally distributed, and a relational effect of the configurations within and between different collectives” (Chilvers and Longhurst 2015), and path-making, rather than path-dependent (Garud and Karnoe 2010), we can see that the intersection of divergent approaches and efforts may have the most possibility for social innovation and making new paths, rather than following old ones.

### **3.4 Summary, synthesis, conclusion**

In conclusion, the seed networks at the transnational level are as diverse as the seeds they save and manage. They have different self-definitions, modes of organization, strategies and framings within their different social contexts. They are unified however in a value system surrounding seeds and biodiversity, agroecological systems, and the desire to facilitate equitable access to seeds now and in the future. Seed exchange is a process where the materiality of the seed is the intermediary that unites people, ideas and networks, and serves as a means to redefine social relationships and create new modes of learning, doing, framing, and organizing. Disagreements about certain elements can serve as a reminder that innovation happens if no one is dominant in the process, but only if groups are aware of the context-dependencies, and willing to go through the uncomfortable stages of negotiation.

It is important to remember, however, that social learning is a long-term interactive adaptation process. The leader of an agroecology and seed movement in Mexico told a story of how they manage social learning as part of their indigenous youth education project. Every year a group of youths from different communities are selected to participate, but inevitably after a few months of living together, they found themselves in a state of conflict. He stressed that it is important that they learn how to work out the conflicts for themselves, as this is also a part of the agroecology learning system, and unless they can resolve the social aspects they will not resolve the agroecological and seed issues either. This can serve as a reminder for conflicts such as the LLD group. The fact that they have already identified their differences can be the first step to moving past them, and seeing themselves in a process of adaptation, just as seed varieties must adapt to a new climate to survive.

## 4 Local Initiative in UK: Seedy Sunday

### 4.1 Introduction

Seedy Sunday is the biggest and longest running community seed-swapping event in Britain. Since 2002, volunteers have organised and held Seedy Sundays in Brighton on the first Sunday each February (the first one was on a Saturday). The date coincides with Imbolc: a Gaelic festival celebrating the beginning of Spring. People involved in Seedy Sunday speak repeatedly of its celebratory, convivial and carnival atmosphere, as a gathering of people, new friends and old, emerging out of the depths of winter, and coming together to look forwards to new growth, literally and metaphorically.

The seed was sown when founder Andrea attended the Seedy Saturday seed-swapping event, organised by Dan Jason of Saltspring Springs on Vancouver Island. She had moved to Canada after her involvement in roads protests and activism in the UK in the 1990s. As Andrea wrote later,

‘The [Canadian] event was about promoting and protecting biodiversity and one of the amazing things was the social diversity, as people of different ages and class excitedly discussed what they had found or had to swap. As a result, that year we only needed to buy two packets of seed for an abundant allotment full of diverse and delicious crops. In fact, the day was so inspiring we decided to import the idea to England’ (Seedy Sunday 2003 leaflet)

On her return to the UK, Andrea set to work using skills honed running protest camps to organise friends, contacts, and materials to make an event happen in Brighton. Importantly, she also got help from Brighton & Hove Organic Gardeners’ Group (BHOGG) and the Moulsecoomb Forest Garden, an association of experienced growers sympathetic to the issues expressed through seed swapping. The motivations for the event, then as now, were stated in the leaflet for the second event:

- Promoting biodiversity by increasing it in the garden and on into the local food chain
- Saving heritage crops from extinction
- Connecting with local community food projects and allotments
- Increasing local food security by involving more people in growing their own food
- Take control of food production from the hands of the few in agribusiness and into the hands of the many

This founding ethos, blending community, biodiversity, education, support and activism has remained in Seedy Sunday as it has grown and developed. Other events have spread around the UK, with up to fifty according to the Heritage Seed Library. Prospective organisers of seed swaps elsewhere have visited Seedy Sunday and learnt from their model. Attendance at Seedy Sunday has grown from around 300-400 at the first event, with around 1,800 by 2010, and over 3,000 now. Although no systematic survey of attendance and participation exists, a small questionnaire conducted in 2008, and observations from committee members suggest a



diverse age range coming to the event (with the 30 to 50 range most present), and good gender balance (also amongst volunteers and the committee). The event has moved to bigger venues four times.

Right from the outset, links were made not just locally, but nationally and internationally too. The first Seedy Sunday was supported by the National Heritage Seed Library; a relationship that was to persist and develop. Sponsorship has always come from local wholefoods co-operative Infinity Foods, and early events benefitted from a grant from the National Lottery Awards for All fund. However, since then the event has largely been self-financing through a small entrance fee and thanks to being run entirely by volunteers.

Each Seedy Sunday event has included a programme of speakers discussing topics consistent with the aims of the event. Seedy Sunday has always been committed to organic growing methods and protecting biodiversity. Organisations committed to biodiversity and localised food systems and environmentally sustainability have stalls at the event (around 50 in 2015). Workshops and demonstrations in seed saving and how to sow seeds are also provided at the event. As such, Seedy Sunday events attempt to welcome people into the wider issues through seed swapping events that cater not just to the experienced gardener, but to the novice also; and which has attracted participants from farther afield in Sussex and nationally.

## 4.2 Emergence of Seedy Sunday in Brighton

Seed swapping has always existed: practiced by growers globally. Often, it is a very informal activity. Growers, perhaps whose allotments, land, or gardens neighbour one another, or who know one another, share seeds saved from their crops. Seed swapping has been part of the conviviality and culture of growing.

However, such activity has taken on a political significance with developments and debate in industrial food systems. Specific to seeds, a handful of large industrial firms dominate seed markets, and whose commercial decisions shape seed availability and diversity. The advent of genetically modified seed, with its logic of intellectual property, and design for pesticide and herbicide tolerance has exacerbated concerns about ownership, control and the enclosure of seed heritage and loss of diversity in food systems. Whilst smaller seed companies operate to promote heritage seeds, international regulations require vendors of seeds to apply for licenses, which is costly.

As an early Seedy Sunday organizer put it:

“Saving seeds might not seem much of a revolutionary act, but in a world increasingly dominated by corporate power, swapping my Lazy Housewife French beans for some exotic yellow tomato seed really does feel like you're sticking two green fingers up to those who control the world's food chain” (Warren Carter, Seedy Sunday leaflet, 2005).

Fran Saunders, a key organiser in Seedy Sunday for many years, explained how, "EU laws make it extremely costly for growers to sell unregistered seeds. By swapping them, we're able

to get around those laws and keep Britain's plant life varied and diverse.” (*Evening Argus*, 28 January 2011).

At the same time as being of subversive interest, the idea for Seedy Sunday also tapped into resurgent popularity in growing, allotment holding, local and organic food, and food culture. Seed swapping could be a fun and sociable activity; quite apart from growing awareness and concern for the social, environmental and economic harm caused by global agribusiness.

So the timing was ripe for Seed Swapping. A variety of growing and food initiatives were already emerging in Brighton with the aim of making people more aware and active, such as community allotments, food partnerships, local food boxes, growing campaigns, work with schools, and to which Seedy Sunday contributed. And, as former committee member Warren Carter put it in 2006, ‘It’s such a simple idea, and as gardeners we all love to swap with our neighbours’ (Seedy Sunday leaflet, 2006). Seedy Sunday has always been as much about education, awareness, and community-building, as it has been about the seed-swapping activity at its core.

#### 4.2.1 Organising the seed swap

The basic practice is that people bring seeds they have saved and labelled to the event. They can swap them for other packets of seeds displayed at seed-swapping tables. People without seeds to offer can nevertheless take seeds home in exchange for a donation of £0.50. In this way, seed registration law is circumvented. However, as we will see later, reforms proposed by the European Commission (in 2012) to tighten seed regulation, would have outlawed such seed swapping. Seedy Sunday became involved in an international campaign that led to the EU Parliament voting down the proposal in March 2014.

Early Seedy Sunday events were run by a group of volunteers who largely knew one another from earlier activities, campaigns, and networks. Connections were drawn upon from eco-protest activism, but also links to interested individuals through the free rave scene, and Brighton’s anarchist networks, and to people involved in gardening and community growing. What emerged was a broad coalition of individuals with diverse interests meeting around the idea and varied possibilities of seed swapping. All shared an increasing interest in community growing. Whilst some of these connections brought political motivations and energy to the events, there were also important links to longer-standing associations of growers. Early involvement from Brighton & Hove Organic Gardeners’ Group (BHOGG), for example, as well as gradual recognition of the potential of community growing amongst the local allotments federation, helped connect the idea of an organized seed-swapping event to various growing associations in the city.

Organisation was, and is, concentrated in publicizing and providing the facilities for the day. The committee volunteers take various responsibilities, including collecting and packing an initial supply of seeds for the swapping tables (replenished and added to by visitors on the day), inviting speakers, organizing stall holders, arranging the café, and music and decorations of the venue, taking entrance fees, and so on. Other volunteer helpers set up the event at the

venue, with the running of activities on the day, and packing up afterwards. Recruiting, briefing and supporting these volunteers was an important function for the committee.

The event covers its costs through an entrance fee (kept low - £3 in 2015, children free), and charging some organisations for stalls at the event. At the 2015 event there were 47 organisations with stalls. Each event has cooking demonstrations from a community chef, children's activities, café and music.

For many years, the overall coordination was held together by a handful of individuals. However, as the event grew, so organization and activities became more demanding, to the point where dedication alone was insufficient to hold everything together. There were (sometimes difficult) changes to the organization of the committee. Delegated responsibilities were made clearer, greater training of volunteers was provided, clearer arrangements were made for running the day, the space was organized better, and sign-posted more clearly, and so forth. The committee made use of facilitated away days to help them through these decisions.

Development has involved people drawing on their experience, sometimes in other voluntary activities, and sometimes from their work and professional backgrounds. Such diversity has brought dynamism and synergies, but it has also introduced tensions, and sometimes a need for reconciliation between strongly held viewpoints and commitments. Whilst some people continue to be involved after many years, there is also a deliberate attempt to refresh the committee, and ensure chairing revolves regularly. A new constitution limits membership for five years, so there is a continual need for thinking about replenishing the committee. As such, Seedy Sunday has evolved into a professional, though not corporate, event, run by well-organised and dedicated volunteers. Today, there is a committee of 9 people and 55 volunteers on the day.

#### 4.2.2 Seed saving and swapping practice

Whilst some growers at Seedy Sunday are very skilled in saving seeds, and take pride in the varieties they are able to cultivate and share, Seedy Sunday has always recognised the needs of newcomers, and been encouraging rather than exacting in its approach. As early event materials put it:

“Being a gardener will produce success as well as failures, and this counts for seed saving as well as growing crops. Last year I had some odd results from some of the seeds I picked up at last year's event. Some melons turned out to be green peppers, some of my broad yellow ripple tomatoes were pear shaped and not yellow ripple at all, while others I spoke to, told of strange looking cucurbits that were neither squash nor marrow.

It's worth remembering as we try and grow all our weird and wonderful varieties not to expect germination rates anywhere near as high as those from commercially bought seed. Still, there are a few basic rules to stick to, to try and bring success:

- Start saving seed from easy stuff that won't cross pollinate and give you mutant marrows. Plants like French beans, tomatoes and peas, are relatively easy (as opposed to broad and runner beans, marrows and pumpkins that are very promiscuous and will cross pollinate)
- Make sure the seeds are properly dry before you store them in a cool, dark place
- Label properly – writing down the variety and year
- Get yourself a decent book”  
(Warren Carter, Seedy Sunday leaflet, 2005)

Events include workshops and advice on seed swapping. On their website, Seedy Sunday have posted guides to seed saving. The signs for seed swapping tables, such as where to go for tomatoes, or seed potatoes, or flowers, and so forth, has had to become more visible and clear over the years. The volume of people means congestion has to be managed, and some order sought in the display and sharing of seed packets. However, as numbers of visitors has grown, so the challenges of ensuring good quality seed swapping in high quantities have become apparent.

Saving seed properly requires considerable knowledge and skill, and to high standard, particularly with promiscuous varieties of plants. The soils and locations of cropping, and information about the conditions of crops, become important. Techniques for introducing pollinating insects, and isolating some varieties, become important. As the event has grown in popularity, and the quantities of seed brought has multiplied, so the question of quality of seed has become an issue for some committee members and experienced growers. Good knowledge and information about saved seed is important for the purposes of biodiversity. However, the large seed-swapping event is not necessarily the best venue for ensuring such tracing happens. Indeed, some Seedy Sunday volunteers are also involved in smaller Seed Circles, where the skills and knowledge is easier to acquire and validate in relation to, say, preserving heritage varieties. Links have been forged with the Heritage Seed Library, and who have a system for Seed Guardians for identifying and breeding heritage varieties.

“The art of seed saving can be a tricky business and here at Seedy Sunday we aim to offer help and support to nurture your burgeoning talents” (Seed Sunday leaflet, 2007). The Seedy Sunday event includes expert savers and swappers. But it is also recognized that the aim is to welcome newcomers, and make it easy for people to swap seeds, whilst recognizing the risks that one might get either a surprise or disappointing harvest. Some interviewees for this study spoke of increased respect and appreciation for growers skilled in these practices, even if they had not attained those skills themselves. One interviewee estimated that around ten per cent of attendees at the event were really committed and proficient seed savers. So, whilst some people do become active seed swappers through Seedy Sunday, those who do not nevertheless indicate signs of greater recognition of important features of a sustainable food culture.

An aspect to seed swapping attractive to some is the swapping of stories about the plants being swapped, or how one came across the seeds. Seeds, and subsequent plants, might have been given by friends, or during a visit somewhere, or have a history or story attached to them. Such associations are an important part of the culture being cultivated in seed swapping.

“When someone gives me a seed for something, and they don't know what variety it is, I call it after the person who gave it to me. I say, that's Dianne's seed, and it becomes Dianne's tomato. Because she didn't know what kind of tomato it was, but she knew it was a good one. So that naming and that culture is quite a fluid thing, and probably makes it harder to trace certain varieties of things, but it is a rich part of it. It personalises it. It makes it accessible. It makes it ordinary. I think when you buy all these F1 seeds and they're made in a laboratory, they've got weird names that sound like cars or something like that, or like a paint chart. And I think it is remote to your own personal experience. These old seeds have got names of people or places that you can look up. I still grow a bean called Hutterite Soup, and I know who the Hutterites were, and that they were a sect, and that they moved from Austria to Dakota and Montana. And I keep growing it because it is a fantastic bean to grow and great for saving ... it is a lovely creamy bean. So it is not just any old haricot bean. It is a Hutterite. The one the Hutterites kept, because it was special to them. I get that specialness. I get what they were on about. And you're keeping that. You're keeping that alive as well – ideas about cultural diversity.”

(Interview with former committee member, 16/09/2015)

You can write about these stories, research them on-line (e.g. at [seedsavers.org](http://seedsavers.org)). Make connections locally, with people and places, but also internationally. Participants in Seedy Sunday may find time to exchange such stories and associations, though as the event has grown in size, so ideas for linking to more familiar seed swapping opportunities, such as Seed Circles, might develop.

“Seedy Sunday is essentially about protecting and saving endangered species of plants and thereby enriching our local ecology and food culture – a summer bowl of Bunyards Matchless lettuce, Brandy wine tomatoes and Lazy Housewife bean fires our imaginations as well as our taste buds” (Seedy Sunday leaflet, 2007).

So Seedy Sunday also opens up for people a wider world of seed swapping, and where online fora (such as #seedswap) can facilitate seeds exchanged through the post. Seedy Sunday has a Facebook page and over a thousand followers on Twitter (@seedysundaybton). These platforms help keep people in touch throughout the year, as well as extending reach nationally and internationally. People are encouraged to post pictures and stories about what they have grown, and to let others know what seeds they are saving. Such social media, where people can post or film their seed stories, and map the details of their cultivation in terms of local soils and climate, might at the same time facilitate swaps at a larger-scale, and validate or rate the swappers. As in other emerging areas of peer-to-peer, platform enabled activity, digital media for seed swapping could be combined with physical gatherings to some effect; connecting the hand-by-hand intimacy and deep local knowledge of seed swapping, with a scale of activity that diffuses the activity widely and challenges commercial incumbents.

### 4.2.3 Awareness and campaigns

“Seedy Sunday is about our community being environmentally sensitive and preserving our heritage. We make no apology for undermining the high costs charged by the few major seed companies ... Part of our campaign is to break down the near monopoly of multinational seed companies ... We also want to preserve our local heritage. For centuries small holders and rural families grew their own food year after year. They bred the best local varieties and saved the best seeds for the next year. It saved money and ensured local seeds lead to higher yields, good tastes and healthy organic crops. We need this more than ever today”

(Alan Phillips, Chair of organising committee, Seedy Sunday leaflet 2012).

Whilst being a fun occasion, and one where seeds and stories can be swapped, Seedy Sunday is nevertheless also serious in its intent. Raising awareness about sustainability issues in growing, food and local diversity has always been an aim. At the first event were speakers from the International Society for Ecology and Culture (now known as Local Futures), and a video link with Vandana Shiva. Talks cover the breadth of issues associated with seed swapping, from local resilience to biodiversity and multinational corporations.

Events have always included a mix of practical guidance, about how to save seed, sow seed, and grow successfully, and talks on more political issues associated with seed swapping, such as control of food systems. As the event has grown so TV personalities associated with gardening and food have participated in the talks, as well as activists and growers sharing their insights. The event has been reported in the national press. In 2013 Seedy Sunday hosted BBC Radio 4's popular Gardener's Question Time programme (which for over 65 years has live broadcast a panel of expert and celebratory gardeners answering questions from a live audience, and which according to industry monitor RAJAR had in 2014 a listening audience of 1.9 million).

Committee members of Seedy Sunday are aware of international campaigning networks, including seed swapping. There are no formal links, and the event happens independent of those networks. Nevertheless, some members do take a keen interest, and have attended meetings nationally and in Europe to participate in seed related meetings on behalf of the group. Links are also evident with key national organisations, such as the National Heritage Seed Library, and Kew Gardens' Millennium Seed Library. These connections between organisations and grassroots are important, and valued by these national bodies. When, for example, mobilization was necessary to oppose European reforms to seed law, and which would have outlawed swapping, Seedy Sunday was able to mobilise people and link to national and international campaigns.

One committee member described Seedy Sunday's awareness and mobilizing activities as 'soft campaigning': facilitating other groups, providing space, and connections. The following two sections interpret Seedy Sunday in the light of the TRANSIT research project interest in the dynamics of development, and the social agency generated by the initiative.

### 4.3 Seedy Sunday dynamics

In contrast to the preceding sections, which were more descriptive of Seedy Sunday, this section is more interpretative and analytical.

As the preceding section explained, Seedy Sunday emerged in response to concerns about industrial agriculture and the particular consequences this was having over diversity and concentration in the seeds sector. The central dynamic to Seedy Sunday's response to this concern is a community dynamic. It was community networks that have enabled the initiative to flourish, and it is through building community that the initiative has sustained. Seedy Sunday is a convergence point for community networks. Perhaps this is its most significant consequence: whether introducing people to seed swapping and associated sustainability practices, or a conduit for people to find and join local groups, or raising awareness and mobilising petitions, letter writing, and grassroots support for campaigns. Seedy Sunday did not land as a social innovation ready to fix a local social issue. It emerged out of community work and contributes to community development.

As such, it was the dynamism of local community networks that made this social innovation happen. The circumstances were right, and Seedy Sunday could reinforce those circumstances. But also, Seedy Sunday was made and developed by people able to draw upon their own skills, or those of others, and to support in the development of skills amongst volunteers. Whether it was Andrea and her activist friends, or members with a background in working with charities and NGOs, or with professionally acquired media skills and contacts. However, there was an awful lot of care work required to bring people together and keep the event happening. By care work I mean the, sometimes underappreciated, effort needed to negotiate different opinions, making sure people feel respected and listened to, and recognise the value everyone brings to the organisation of the event, but also negotiating the different aspirations for the event and conflicts over its direction. Hard work is needed to ensure the future of the event keeps drawing in wide and active community participation.

There is also something about seed swapping that is suited to this kind of community dynamic. Seed swapping is a discrete practice that brings together enthusiastic and curious people, but it also, importantly, mobilises different groups, concerns and developments much bigger than the swapping practice itself. It is a practice that encourages and underpins wider growing practices, from the significance of saving seed to the importance of cultivating food sustainably. It is a chance to reflect on those growing practices, discuss their social meaning, try something different, feel part of a community of growers, feel connected to food culture, and doing something positive towards improving food systems. And even in a dense urban setting like Brighton, there are opportunities for people to have a go at growing.

The significance of this annual event as a connective dynamic should not be underestimated. These collective, calendar events are important in the development and sustenance of communities and cultures. They help maintain cohesion by expressing shared values.

Seedy Sunday remains a volunteer organisation. There have been debates in the past about whether to constitute it differently, and perhaps pay a staff member, but there were concerns about how this would alter the dynamic and characteristics of the group and its event. It is

healthy to reflect, and to wonder where, if anywhere, to go next with the development of Seedy Sunday. It has developed a robust, volunteer organisation, and is an established event.

There are the perennial challenges of keeping energy and motivation going with a volunteer organisation, and managing succession whilst retaining organisational memory and focus. Recognising what Seedy Sunday does well and achieves already is one way this might be done. Investigating and promoting some of the connections, awareness, and inspiring personal stories Seedy Sunday can underscore its importance and pride amongst participants. It is already an important initiative – part of the infrastructure for sustainable food in the city - that need not seek expanded or new dynamics. It merits support for that reason alone. Nevertheless, connecting people to growing associations, or helping them start their own associations, may make sense in terms of turning the inspiration and motivation created by involvement in Seedy Sunday. Encouraging (seeding) spin-off activities rather than expanding Seedy Sunday itself might be one way to balance between growth and innovation and sustaining a valued event. Preparing for the event each February involves an intensive three months of voluntary activity. Collectively, there is limited energy to take on further initiatives, even if individuals are keen to progress ideas.

There are issues to work continually at. Assuring seed quality is one issue. Although, as written above, a large event might be quite a challenging setting for introducing the more exacting standards of seed circles. Seedy Sunday needs, instead, to be situated within a wider community setting. This large event can be a stepping-stone for encouraging people into deeper involvements in seed swapping, but also to other aspects of community growing, or other sustainable food initiatives in the city.

#### **4.4 The social agency of Seedy Sunday**

Following the definition of social agency provided in the methodological guidelines to these case studies (Wittmayer et al, 2015; Annex II), social agency is understood here as the ability of people to act collectively, operate autonomously, and make a difference in the world. In contrast to the preceding sections, which were more descriptive of Seedy Sunday, this section is more interpretative and analytical. Seedy Sunday develops considerable social agency, in the sense that it encourages and helps people to take back some control over an element of their lives, which is the cultivation of food and plants. It also encourages people to explore the issues at the heart of food production and local biodiversity, and to become changed people through the knowledge and skills acquired. And, whilst Seedy Sunday is unlikely to attain the social agency to overturn industrial food systems, it can contribute to successful campaigns to stop harmful seed legislation, and is part of a sustainable food movement that challenges the legitimacy of dominant systems of food production and consumption.

The interesting point here is how more powerful social agency builds up through an event that raises social issues but which, at heart, celebrates convivial and fun activity. The personal rewards in seed swapping, such as cheaper, more interesting seeds, that also connects to critical public issues and questions about the governance and conduct of the food industry.



Different kinds of social agency become evident. Some are discussed explicitly at Seedy Sunday; others arise implicitly through involvement in its organisation. Obvious kinds of social agency are the ability to save seed, share seed, and grow food. Acquiring skills, appreciating the art and science of seed saving and cultivation. There is also the social agency of developing a community, and the know-how and experience involved. Finally, and more implicitly, there is the social agency to mobilise support for 'political' campaigns and pressure for change. Here the kind of agency being created is about being able to raise awareness and commitments amongst people. Knowing how to do this diplomatically; how to present an issue, respecting the diversity of personal and social motivations in associating with Seed Swapping, when not to push too hard, and when to be a critical voice.

## 4.5 Conclusions

Seedy Sunday was introduced and created within a Brighton milieu. Interviewees referred to Brighton as a factor in the success of this initiative, such as, well, this is Brighton isn't it? Here they signify a part of the population whose values and activities are oriented to things green and counter-cultural, to making things happen, and where there are social networks to draw upon. It is this milieu that helped elect the first Green Party MP in the country, and the first local council led by that party. However, such a milieu is situated in a wider context that has opened to these values, and where a wide range of people visit Seedy Sunday, and are opening seed swaps in villages, towns and cities elsewhere.

In follow-up research it will be important to study the development and consequences of seed swapping in other locations, where conditions are different. Studying in depth the ramifications of participating in Seedy Sunday, what people bring, and how they connect afterwards, would provide useful evidence for this social innovation. In this case, however, it seems clear that it was prior social agency that made Seedy Sunday possible initially, and the event has subsequently reinforced that social agency and developed it further. Social innovation appears a result of strong community development, and if done well, can help contribute to further community development.

## 5 Local Initiative in Hungary: Magház

### 5.1 Introduction

The history of Magház (Seed house) started in 2011 when the political significance of the seed issue along with local organic food and culinary heritage first reached the public attention around the 5<sup>th</sup> Let's Liberate Diversity conference in Szeged, Hungary. Next to the conference a community seed-swapping was organized by volunteers - one of the first seed swaps in Hungary.

This conference provided the opportunity for the first time for volunteer 'agrobiodiversity savers' to get together and start meaningful conversation about the state-of-the-art of seed exchange issues in Hungary. In the next year, 2012, a small group of activists had the opportunity to participate in different international agrobiodiversity and food sovereignty meetings in Europe. Founders also attended international seed networking meetings in Europe, such as e.g. Let's Liberate Diversity Forum in Basel. Such events had a big impact on them, was broadening their view and giving more enthusiasm for founding the Magház Community Network for Agrobiodiversity. One year later the Bese Nature Conservation Society joined Magház, and since then this NGO is giving the official background and the most support for the informal Magház group.

The founders' group consists of 5 active and dedicated individuals who share work around the network. They gained their skills to organise and manage projects through their involvement in gardening, nature conservation, food-self provisioning and community agriculture. Further experiences have been gained in green NGOs, voluntary activities, professional work as young farmers and conservationists. The main support the group come from Bese Nature Conservation Society and an EU Leonardo project, GROW initiated by ESSRG for sharing experiences in agrobiodiversity issues. Bese and ESSRG also cooperate in an agro-ecological project in the South-Borsod area in Hungary (Sustainable South-Borsod Project 2012-2016).

Practically the initiative would like to preserve gardens 'instead of lawn and thuja' ('*kertek legyenek a tuják és a gyep helyén*') as they put it in the website ([www.maghaz.hu](http://www.maghaz.hu)). More generally they pursue in situ maintenance of agricultural genetic diversity to help adaptation of farmers to vulnerabilities of the changing climate and market. Beyond farmers the network is open to everyone with an interest in food self-provisioning, home gardeners, hobby gardeners, and invites them into community-building around seed saving and swapping. At the heart of the network is cultivation of trust based relations: '*One needs fertile soil for seed swapping. The one who exchanges their seed also gives away the present of an entire year and shares the belief in the future*' ("*biztos talajra van szüksége még ahhoz is, hogy az egyik ember egy apró magot átnyújtson egy másik embernek. Az az ember, aki magot ad a másinak, nem csak egy magot ad át, hanem egész éves munkájának a jutalmát és egyben egész jövőnkbe vetett hitvallását osztja meg*") (Website of [www.maghaz.hu](http://www.maghaz.hu)). The credo also highlights the transformative potential that is from the start embedded in the seed itself (see figure below): '*The seed encapsulates all necessary knowledge for life. You can learn about the best environment where the seed can germinate, the old traditions of its production, the agro-techniques, the tricks of gardening, and sowing the seed. When you harvest you learn how it*

was used in old days as fresh ingredient and different processed forms. When you want to save the seed you can rely on the peasant breeders' simplicity and the practicalities of maintenance'. (A magba bele van zárva az élethez minden szükséges tudás. Megtudhatod tőle, hogy milyen feltételek között érzi jól magát, hogyan termesztették régen, kapcsolódik hozzá az egész agrotechnika, megtanulhatod a kertészkedés fortélyait, ha elveted a magokat. Ha pedig leszüreteled a termést, megtudhatod, hogyan készítették el régen, mire volt alkalmas az a fajta a friss felhasználástól egészen a feldolgozás különböző formájáig. Ha magot is akarsz fogni belőle, megtanulhatod a paraszti nemesítés szempontjainak egyszerűségét és a mag kinyerésének, kezelésének, tárolásának praktikáit.) (Website of [www.mag haz.hu](http://www.mag haz.hu)).

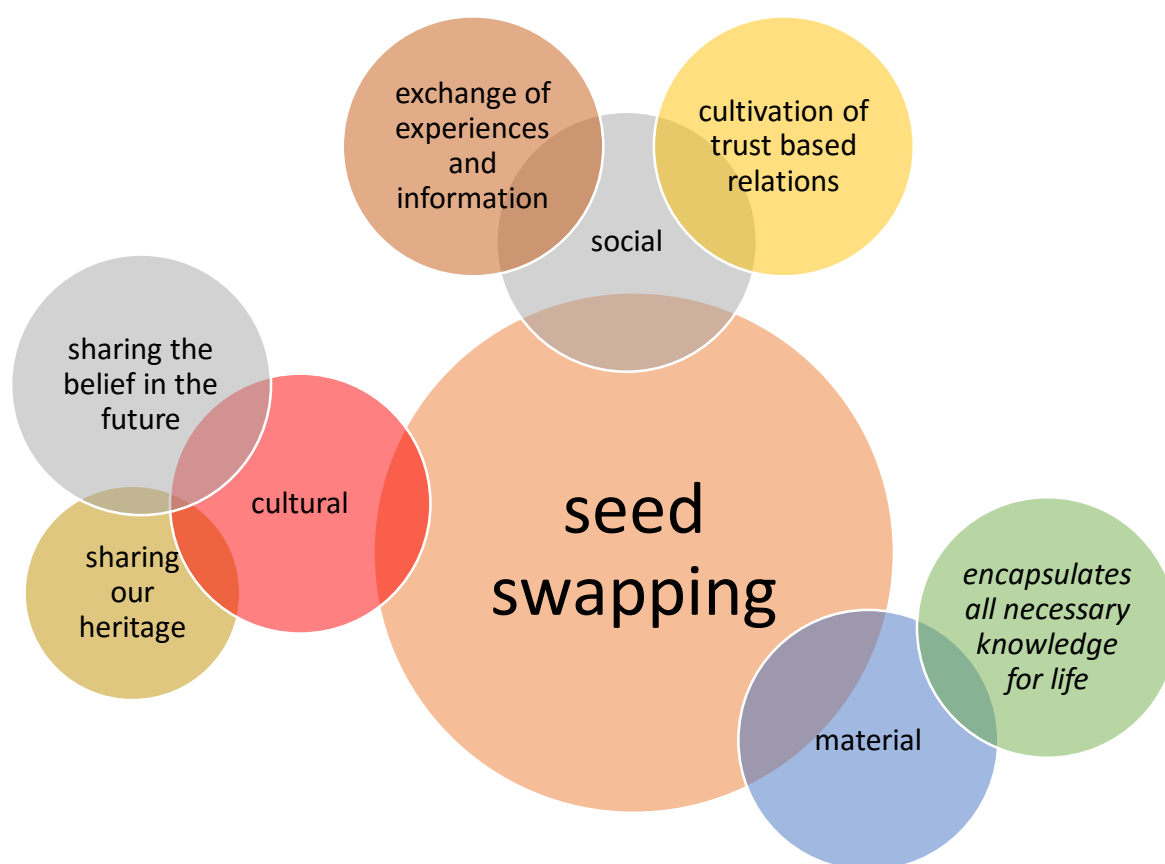


Figure 3: Aspects of seed swapping. Source: authors.

As a main value they emphasize the conviviality of a good life and the experience of perfectness. The founding ethos of the group is anchored in grassroots community dynamic around agrobiodiversity by reaching out informally to different local community networks that converge around seed swapping. The main targets are to conserve agricultural genetic diversity in situ, popularizing ancient and heirloom varieties and landraces, disseminate the techniques to maintain varieties in home gardening and small scale farming, promote ecological gardening and food production. The emerging grassroots community dynamic helps to sustain the initiative. In turn Magház supports the coordination of the fluid networks of dispersed and decentralized seed swapping events.

Magház funders have also connections with the agricultural ministry and also received support from the government for particular initiatives. As for the main support the group also relies on formal links locally and nationally; but also gained international experience in EU and Swiss projects. However, it seems that they tend not to rely on international links in awareness raising activities, neither on local celeb gardeners, bloggers. Through these contacts the group can maintain the information flow around agrobiodiversity issues. In the recent years several workshops have been organised to promote seed saving and how to sow seeds under the auspices of such networking. The communication heavily relies on online engagement as they seek to connect practices through Facebook groups and events. The Magház website helps networking of actors who are mostly home gardeners.

## 5.2 Emergence of Magház

The organisers explain the emergence as a re-valorisation of seed diversity that started with a backlog: *'In Western Europe more and more organizations work for agrobiodiversity which are successful and reach high awareness, in Hungary the value of local traditional varieties only recently has been recognized again'* (Interview with founders). Magház organised itself to fill this empty niche around re-valorisation of agrobiodiversity and to connect interested growers, home gardeners, small scale farmers who are active in the informal activity of seed swapping.

The agrobiodiversity debate is about ownership and control of genetic material and the availability of seed in the informal and the formal seed markets that provides food systems diversity. The work of Magház clearly contributes, also benefits and reinforces the increasing interest in food relocalisation, local, organic, community based agriculture.

### 5.2.1 Organization

More than 200 people registered on the website of Magház since the end of 2014, when the first series of seed swap events had been organised (see Table 3 on seed swapping events below). The organisers would like to further develop the community building function of the initiative to invite more members. However, it all seems that the structure of the network is not yet defined exactly. Only recently the group decided to create a formal profile. The core group of founders deliberate and decide on the main goals and next steps together.

Registered members of Magház can make use of the website and get special newsletter, seeds, reduction on seed saving courses, etc. Magház also supports them in organising their own seed swaps through the host organizations (particularly Bese Society).

Bese Society had similar activities regionally in the South Borsod area in Hungary. Magház in this sense extended the perspectives, impact and activities of previously sporadic initiatives

and provided a novel framework for shared goals: in the spirit of 'We enjoy working together' as a founding member explained.

Organisation and outreach are the most important challenges at the moment. The initiative is targeting not only hobby gardeners but also small-scale farmers who are most active in developing community agriculture and joining short food supply chains.

A broader aim is to help organic seed production in Hungary which is regarded as one of the most important priorities of the organic sector in Hungary. Finally, the Magház initiative is also building a network on seed legislation thanks to a recent Leonardo project (GROW) that helped creating a knowledge and practice network in Europe around seed biodiversity issues.

The network founder underlined *'good connections with Hungarian local groups in similar topics (fruit gardening, permaculture, etc.) and other European seed networks, especially the Arche Noah (A), EcoRuralis (Ro), Reseau Semences Paysannes (Fr) and the new section (Magvetők) of Civitas Foundation (Ro).'*

The most important benefit from international relations comes from sharing experiences (and seeds) especially about the organisation of events with positive community impact. A seed swapping event also exemplifies how unique community feelings turn into a sociable activity that is not so frequent in today's Hungary. Typically issue-driven green NGOs have rather alarming sustainability campaigns promoting behaviour change for mostly an abstract and global problem incomprehensible for local community groups. It is also interesting in this respect that Magház do not emphasize the problem of multinational seed corporations.

The most active actors around the network are gardeners, activists, and volunteers who are saving their unregistered seeds. Outreach to small scale farmers is also channelled through the [Kislépték](#) NGO (National Association of Interest Representations for Small-scale producers and service providers) for small scale family farming and other sustainable food movement actors.

Members are mainly linked through internet and the website of Magház and later will be mobilised in local groups. As explained by the founder *'in the future our aim is that they get to know each other personally in meetings, seed swaps, training courses and share knowledge and seeds in their small area'*. The role of Magház is that of a supporter-coordinator: *'The network is always there to support these small local initiatives'*.

The events have gained some minimal funding from the CAP TA funds (circa 50 thousand HUF or 160 euro per event). During the seed swaps people bring seeds they have saved, labelled and packed appropriately to the event. The event only displays unregistered seeds as required by the seed law. Furthermore, to keep the seed registration law people at seed swapping events offer seed always in exchange and money is almost completely excluded from the transaction, only occasional donations are possible. Magház can rely on a broad coalition of seed swapping organisers: events are organized by local volunteer gardening and community groups, municipalities, schools that often provide their facilities, decoration, tables, cooking, etc. Magház can best help organisers in arrangements for running the seed swapping and inviting speakers and supporting local volunteers.

## 5.2.2 Practice of seed saving and swapping

Seed swapping events are small-scale local events organised by volunteers with the help of municipalities and local groups in various settings. Participants can distribute seeds of free pollination varieties for free or exchange without monetary transaction. Seed swaps are typically small scale convivial events featuring gardening practicalities, tasting of seasonal food, local varieties, exchange of leaflets, etc. Magház maintains a website to facilitate such seed exchange. It promotes cooperation of seed savers and the idea of sharing of non-licensed genetic material (non-hybrid, non-GM, open pollinated varieties) for free. As explained by the founders: *'On the website and generally on seed swaps it's not allowed to share hybrid, GMO and farmer's rights protected seeds and preferably no seeds from the National Variety List'*.

Table 3: Seed swapping organised in 2015 in various villages, towns and cities in Hungary

Date	Place	Organisation hosting the event
27 Febr	Dóc	Bergengóc Social Cooperative <a href="https://www.facebook.com/events/819064881486057">https://www.facebook.com/events/819064881486057</a>
28 Febr	Budapest (Buda)	Grofie Green Wall SME <a href="https://www.facebook.com/budaimagborze">https://www.facebook.com/budaimagborze</a>
6 March	Miskolc	Bese Association <a href="https://www.facebook.com/events/368941846611718">https://www.facebook.com/events/368941846611718</a>
7 March	Szeged	Vackor Conservation Association <a href="https://www.facebook.com/events/346679708851920">https://www.facebook.com/events/346679708851920</a>
7 March	Csíkszereda	Héthatár Transylvanian Farmers Portal <a href="http://www.7hatar.ro/miert-ne-hagyja-ki-a-csiki-magborzet/">http://www.7hatar.ro/miert-ne-hagyja-ki-a-csiki-magborzet/</a>
11 March	Budapest- Corvinus	Horticultural Students Association, Corvinus University Budapest <a href="https://www.facebook.com/events/453612784786878/">https://www.facebook.com/events/453612784786878/</a>
14 March	Szabadka	Local Exchange Trade System in Subotica <a href="https://www.facebook.com/events/449544178526534">https://www.facebook.com/events/449544178526534</a>
14 March	Albertirsa	Valeyrac Exotics edible gardening in Hungary <a href="http://valeyracexotics.tumblr.com/">http://valeyracexotics.tumblr.com/</a>
21 March	Szentes	Közösségi Tér - Dózsa Ház Community organisation <a href="http://www.permaforum.hu/plakatok/Magb%C3%B6rze2015.pdf">http://www.permaforum.hu/plakatok/Magb%C3%B6rze2015.pdf</a>
21 March	Orfalu	Fűszertár Füveskert és Teaház Community organisation <a href="http://www.kisleptek.hu/ma_files/gocsej.JPG">http://www.kisleptek.hu/ma_files/gocsej.JPG</a>
21 March	Bóly	Bóly Youth House

As a primary role in maintaining this practice Magház organises some publicity and knowledge sharing around seed swaps regarded as events for 'tasting agrobiodiversity':

*'We share knowledge about seed saving, storage and growing on our website, during seed swaps there is always a workshop on this topic and there are seed saving and organic gardening courses through the year organized by our members and other NGOs. We*

*continuously collect information about these meetings, seed swaps and courses and advertise them in an event calendar on our website.'*

So the primary role for Magház is quality information provision about seeds, seed exchange, laws, events, that are shared with other NGOs mostly through the internet and personal friendly relations. The seed issue is strongly linked to several aspects of food self-provisioning, community agriculture as well and Magház consciously builds on these relations to develop a community. Many new entrants in this field use the seed swapping events to seek advice, exchange stories and get hands on training in saving, cultivating, germinating storing, labelling packets, sharing seeds and keeping good quality. Newcomers in seed swapping often get inspiration from seed saver Facebook groups that display some typical questions they have on special and rare varieties, cross pollination, etc. Essentials of Magház founders' expertise is published in a beginners' guide to seed saving ([Magfogási Praktikum](#)) and exemplified by the professional links with the Agro-botanical Institute that has a program of in situ conservation for breeding local landraces and varieties.

### 5.2.3 Awareness and campaigns

Magház founders participated in the civic seed legislation lobbying on the European level that successfully opposed the European reforms to seed law. Still they see their position relatively fortunate: *'In Hungary the seed law is quite permissive, essentially seed swapping is not outlawed; so we do not need lobby activities'*.

As for the main problem affecting seed exchange Magház identified a new global trend of growing interest for traditional and special varieties. As they put it, however *'there is lack of scientific base about varieties and seed saving and variety maintenance'*. Therefore, Magház is leading a role in changing attitudes towards increasing awareness on maintaining agrobiodiversity. They emphasize not only farmers' right for seed but also that agrobiodiversity can be maintained by all people (gardeners and seed-savers): *'We would like to make these varieties more used in gardens and more popular among customers'* (Interview with founder).

The tiny and dedicated team of Magház is trying to affect change in the seed issue by *'sharing seeds and knowledge personally and on the website ([www.maghaz.hu](http://www.maghaz.hu)) and via social media'*. Seed swapping is regarded as an emerging field where they consider themselves as pioneers in creating momentum for maintaining seed diversity and offering profession guidance for participants: *'We are a new initiative, so we do not have big successes and failures yet. We just started to feel that the problem is the lack of time and the lack of volunteers. ... We have good connections to other organizations and governmental institutions, but we are not a well-known network yet, so we do not have so many contacts'*.



### 5.3 Dynamics

The main dynamic of Magház's development is connected to dedicated, talented and enthusiastic individual volunteers who desperately seek to reach out to community networks to maintain agro-biodiversity or halt the decline in agro-biodiversity. The industrialisation in agriculture, the decline of agro-biodiversity and the national seed laws are considered as main hindrances to farmers' and gardeners' access to seeds beyond high yielding commercial varieties. Magház gradually created its profile as a national level civic contact point for seed diversity issues by inviting and mobilizing more and more local community groups. As an initiative it emerged from the coordination of such participative engagement, grassroots and the need for space for social innovation for saving agrobiodiversity. Magház members already realised the tough going organisational tasks that would be needed to connect the sporadic grassroots initiatives.

The framework of the volunteer organisation Magház often relies on financial and administrative support from the Bese Association to organise events, trainings, seek funding for launching new agrobiodiversity-related activities. Magház members have good personal connections to some government representatives and Magház members are also represented in the national committee of the International Year of Family Farmers IYFF+10 that aims to improve public policies in favour of family farming.

For the moment, the multiple foci on farmers' rights, protection of landrace varieties and seed diversity at the same time is taking much energy. Seed sovereignty in Central and Eastern Europe is often unintentionally associated with food self-sufficiency through the garden and Magház is actively promoting this association. The most prominent activity in the dynamics is the intensive campaign on seed diversity and seed saving issues. Provisioning an online infrastructure for seed exchange is also creating new social dynamics in this arena.

### 5.4 Agency

The social agency generated by the initiative results in an informal and autonomous network of dedicated individuals who create difference in seed diversity on a voluntary basis. The agency as an emerging phenomenon is only partly related to the content that is the seed diversity issue. Partly the agency is on the local communities where the events, workshops, trainings are organised. The uniqueness in the Magház initiative is their scientifically sound and complex holistic understanding of agro-biodiversity.

The initiative is actively creating a learning system, a web of interactions among like-minded individuals. Magház cultivates the know-how of saving and sowing seed, in situ seed management, supplying sustainable food, so in this way they show an example for self-sufficiency and cultivating seed communities. The awareness raising and mobilisation activities of Magház consciously build on the beneficial (permissive) aspects of seed legislation. Magház emphasizes multiple positive and reinforcing features of the seed diversity: food self-provisioning, biodiversity, health and nutrition.

Also it combines an invitational internet campaign activity with local grassroots and interpersonal knowledge-sharing, and skill development. By bringing together local groups and initiate knowledge sharing on seed issues they emphasize conviviality and inclusiveness of their work. A sense of empowerment or at least confidence is achieved through the interactions with like-minded individuals. Larger changes in society are envisioned through



such interpersonal transformative experiences. Similarly, they also highlight the need to make new connections and combine forces of the informal, underground seed groups with the more institutionalized, or market oriented or politically motivated initiatives.

## 5.5 Conclusions

In conclusion, Magház presents several aspects of social innovation - in its self-definition, mode of organization, and framings. It sparked out of several previous initiatives around seed diversity to fit changing social contexts and created a social agency that reflects the most deeply valued needs of the seed saver and exchange networks. It creates the momentum for seed swapping through developing links of people, ideas and networks. Seed swapping events create new means to redefine social relationships and reinforce new modes of learning, doing, framing, and organizing.

## 6 Synthesis

In this report on the transnational seed exchange networks and the two sub-reports on local manifestations in Hungary and UK we have shown that seed saving and exchange as a practice does not require a membership based transnational service organisation but rather community based informal networking and movement type of organisation. No surprise, seed exchange is most often promoted with the idea of self-reliance and alternative food provisioning.

Seed exchange is per se a subversive act, and as a main narrative of change trust-based relations is the most prominent and often used concept. The practice of seed exchange creates a vision of a society that is built on sharing, personal trust and collaboration. Seed saving and exchange creates a distinctive counter-cultural context in its local manifestations: initiatives facilitate sharing of seeds and thoughts through creating new encounters and display material and spiritual experiences in informal convivial events. Concerns about agrobiodiversity loss, global food supply, resource depletion seem to be important but not dominant shared understandings in seed saving and exchange networks.

Seed exchange is an explicitly value-driven practice; nobody is doing it for profit. However, it does not exclude market exchange if it is clearly built on trust and cooperation. In some seed networks there is a distinctive place for farmers' cooperatives and also for small market actors, such as seed companies. Many initiatives are gaining considerable public sources for organising seed exchange events.

Seed exchange events promote the idea of practice-based learning in non-formal settings. Some seed initiatives also engage in project-based learning: training activities can be financed from rural development projects and EU funding. Seed networks also shape a new understanding of production and consumption that is anchored in localisation, prosumerism, and an alternative of global supply systems.

The research also pointed out interesting future research themes for social innovation: comparison of seed swapping practices in various local contexts, personal histories of organisers on the transnational as well as on the local levels.

### 6.1 Emergence of Social innovation (SI)

Seed saving and exchange as locally-grounded customs for the maintenance of genetic diversity and social networks pre-date the foundation of any official new seed networks or organizations in many parts of the world. In many cultures, wedding rituals and other community traditions have functioned as the means to hand seeds down to the next generation and maintain genetic diversity, though protection of diversity was rarely the explicit goal. The first new dedicated seed networks started in the US, Australia, and India and a few countries in Europe in the 1970s and 1980s, but only in the 2000s in much of Europe, Latin America, and Africa. SSE in the United States began in 1975, SSF in Australia was founded in 1986, Navdanya was founded in India in 1987. The movements in Switzerland and Austria, where the movements began in the 1980s and 1990, are an exception to many other countries in the rest of Europe, where many of the national seed networks began in response to the GMO debates in the 2000s. In Latin America there are strong seed networks in various

countries, founded through the 1990s and 2000s, such as Brazil, Ecuador, Chile, Colombia, and others.

Each individual movement has its own aim and mission, but common elements echoed across many of these national and regional groups include: *the protection of agricultural biodiversity, cultural heritage, and the skills and knowledge that sustain it; creation of seed banks or other means of ensuring access to seeds; facilitating exchange of seeds and knowledge among farmers (and in many cases with the scientific community); and the promotion of legislation at all levels that promotes all of the above.* Cooperation across national and regional borders occurs as necessitated by changes in the social context, particularly as regards legislation.

Social innovativeness of new seed exchange networks lies in the fact that

- sharing of seeds creates co-habitation and harmony with other species
- the material exchange of seeds entails the interpersonal sharing of knowledge and values through which social relations are built and reinforced
- exchange of seeds happens across borders, create alternation outside of the localities where the seeds have gained their histories and meanings in the first place
- seeds become the intermediaries that change social relations across time and space
- seed exchanges are publicly framed and performed both as convivial social events and as political campaigns
- seed exchanges can be dispersed and expanded to other contexts
- successful events emerge as a result of community development, and can also reinforce successful community development.

Seed networks have been most innovative in the realm of doing, knowing, and framing, but have so far been organizing more at the national and regional levels and not at the global level. The desirable pathway of organising on the global level is contested within the movement. This also means that seed networks may at this point still be seen as SI-clusters that cooperate across networks in various configurations rather than a fully integrated transnational network.

## 6.2 TSI dynamics

The most prominent element of the social context for seed exchange networks is the seed legislation that promotes high yielding varieties at the expense of genetic diversity, and the compulsory registration of all seed varieties which limits access to seeds. The proposed revision to EU seed legislation in 2013 became a key space of negotiation or “issue space” (Whatmore 2009) around which European seed networks were forced to try to reconcile their differences in framing seed politics: this became a question of whether seeds are free and should be considered part of the commons, or rather common property that should be governed by strict rules.

The complexity of the seed laws, the differences in the standpoints of farmer, seed-saver, and gardener organizations, the changing socio-economic contexts create diversity within the global seed movement. The plurality of framings reflects the diversity of meanings of seeds in different social contexts, yet also the great scope of potential they carry for innovation towards transformative social change.

Seed exchange initiatives in Hungary and UK highlight the social innovations dynamics generated at local and national level. Both initiatives build on a positive vision of society which creates alternative values for doing, organizing, framing and knowing. As a primary contribution to transformative change Seedy Sunday and Magház go beyond the dissatisfaction with the existing conditions and organise seed exchange events as experimental and empowering arenas where farmers, hobbyists, practitioners gather to create new social relations.

### 6.3 Agency in (T)SI

Agency is regarded as an emerging phenomenon, a relational effect of the configurations within and between different approaches. On the transnational and local levels divergent configurations of agency have been created. The intersection of divergent efforts may have the most possibility for social innovation and making new pathways.

As for organising a possibility for social innovation lies with the focus on legal issues through formal lobby organisation that can also create empowering participative engagements with society. New ways of doing emerged not only in practice of seed exchange but also in professionalised transnational organisations that encompass many initiatives and grassrootsing of context-sensitive local initiatives relying on leisure based volunteering. New ways of knowing emerged in sharing and collecting knowledge about seed varieties, creating scientifically sound and complex messages to different stakeholders or single, clear central message to the whole society. New ways of framing begun in positioning seed exchanges discursively as social and political acts rather than only as agricultural practices, and in the active focus on seed legislation that also gives space for internal differences.

Local seed exchange initiatives primarily develop social agency by encouraging people to regain their autonomy in cultivation of food and plants. Beyond the actual seed saving and exchange agency emerges as creating a new community by sharing the know-how and experience. Local seed initiatives successfully contribute to find the way around harmful seed legislation and create alternatives, gain support for seed legislation campaigns.

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**8 Annex**



## A. List of key informant interviews

Inter-viewee ID	Position	Name	Date(s)	Interviewer(s)	Relevant for cases
1	Seedy Sunday member	Alan Phillips	14 Sept 2015	Adrian Smith	Seedy Sunday
2	Seedy Sunday ex-chair	Steve Bustin	15 Sept 2015	Adrian Smith	Seedy Sunday
3	Seedy Sunday member	Paul Kelly	15 Sept 2015	Adrian Smith	Seedy Sunday
4	leaders of Kislépték, an NGO on small scale farming, Hungary	Andrea Szabadkai	11 Sept 2015	Bálint Balázs	Magház
5	Seed Savers Foundation, Australia	Jude Fanton	Nov 2015	Guntra Aistara	Seed Savers Foundation
6	Open Seed Source Initiative	Jack Kloppenburg	Nov 2015	Guntra Aistara	Open Seed Source Initiative
7	Magház, Hungary	Dorottya Kiss	29 Sept 2015	Bálint Balázs	Magház
8	ex-member of Protect the Future, an NGO promoting seed sovereignty, Hungary	Bori Simonyi	14 Sept 2015	Bálint Balázs	Magház
9	ex-member of Protect the Future, an NGO promoting seed sovereignty, Hungary	Csilla Kiss	14 Sept 2015	Bálint Balázs	Magház
10	Seed Savers' Exchange, US	John Torgrimson	19 October	Guntra Aistara	Seed Savers' Exchange

## B. List of meetings and events attended

Table

Meeting and events attended as part of data collection, dialogues, etc.	Purpose of attending	Date and duration	Attending from the research group
Focus group discussion with Guy Kastler, Andrea Ferrante, Bela Bartha, Riccardo Francolini, Phillipe Cantinaud	data collection at Sow your resistance” meeting organized by the French Peasant Seeds Network (RSP)	September 24-26th, 2015	Guntra Aistara
interview Seedy Sunday organising committee members Helen Gibbs, Paul Skelly, Vanessa Tourle, Warren Carter, Viv Caisey, and Vic Benton	meeting with members	Sept 2015	Adrian Smith
meeting leaders of Kislépték, an NGO on small scale farming, Hungary	meeting with Andrea Szabadkai, Agnes Major, Ildikó Barany	Oct 2015	Bálint Balázs
skype with Iga Niznik, Arche Noah	data collection at Arche Noah	7 Oct, 2015	Guntra Aistara
discussions with Antonio Gonzales, Guatemala; Alvaro Sagado, Mexico; Francisca Diouf, ASPSP Senegal; Bob Brac, BEDE, France; Alimata Traore, Mali	data collection at Sow your resistance” meeting	24-26 September, 2015	Guntra Aistara

## C. Organizations and institutions included in transnational seed network study

The **International Treaty on Plant Genetic Resources for Food and Agriculture (IT PGRFA)**, known as the International Seed Treaty, is an international agreement approved in 2001, aiming at guaranteeing food security through the conservation, exchange and sustainable use of the world's plant genetic resources for food and agriculture (PGRFA), as well as the fair and

equitable benefit sharing arising from its use. It also recognises Farmers' Rights, subject to national laws to: a) the protection of traditional knowledge relevant to plant genetic resources for food and agriculture; b) the right to equitably participate in sharing benefits arising from the utilisation of plant genetic resources for food and agriculture; and c) the right to participate in making decisions, at the national level, on matters related to the conservation and sustainable use of plant genetic resources for food and agriculture.

The **International Union for the Protection of New Varieties of Plants (UPOV)** is an intergovernmental organization established in 1961 to protect new varieties of plants by an intellectual property right. By codifying intellectual property for plant breeders, UPOV aims to encourage the development of new varieties of plants for the benefit of society. For plant breeders' rights to be granted, the new variety must meet four criteria under the rules established by UPOV (novelty, distinctness, uniformity, and stability).

### **Open Source Seed Initiative (United States)**

#### *Mission:*

The Open Source Seed Initiative (OSSI) is dedicated to maintaining fair and open access to plant genetic resources worldwide.

#### *Vision:*

The Open Source Seed Initiative (OSSI) seeks to enhance the broadest possible awareness and understanding of the critical issue of access to plant genetic resources. OSSI is engaged in education and outreach that promotes sharing rather than restricting access to germplasm, revitalizing public plant breeding, integrating the skills and capacities of farmers with those of plant scientists, recognizing the work of plant breeders of all kinds, and supporting a diversified and decentralized seed industry. A key tool for achieving these goals is development of a pledge to preserve the unencumbered exchange of plant germplasm for breeding purposes and the right of farmers to save and replant seed. OSSI is committed to building a branded, ethical framework that farmers, breeders, and communities may freely choose to employ in order to ensure the availability of their lines to this and future generations.

### **Seed Savers' Exchange (United States)**

Our mission is to conserve and promote America's culturally diverse but endangered garden and food crop heritage for future generations by collecting, growing, and sharing heirloom seeds and plants.

### **Seed Savers Foundation (Australia)**

#### *Aims*

To develop and promote:

Educational programmes for the preservation of open-pollinated (non-hybrid) seeds and the genetic diversity of plant varieties; Non-profit seed exchange programmes; Agricultural and horticultural programmes with particular emphasis on the propagation of open-pollinated plant varieties; Preservation gardens for open-pollinated plant varieties; Seed banks for non-hybrid plant varieties; Scientific research relating to the above matters, either alone or in conjunction with a public university or other institution.

To Provide:

Financial and educational assistance to community development projects – local and overseas; and Open-pollinated seed stock to individuals, groups and communities.

### **ProSpecieRara (Switzerland)**

Mission: Established for the cultural-historical and genetic diversity of Plants and Animals

Aims: To protect endangered animal breeds and plant varieties from extinction.

### **Arche Noah (Austria)**

Aim: Preserving and Developing the Diversity of Cultivated Plants.

Biodiversity is a Source of Life for us and for Future Generations.

### **Peasant Seeds Network (France)**

“La préservation de la biodiversité est un enjeu majeur de notre siècle” du développement et de la mise en réseau des initiatives favorisant la biodiversité dans les fermes et les jardins, de la sensibilisation du grand public sur les enjeux liés à la production et à la commercialisation des semences, d'une reconnaissance par la réglementation, les institutions et les laboratoires de recherche des semences paysannes. Les membres du Réseau s'engagent dans des actions de collecte, de sauvegarde, de sélection, de multiplication, de valorisation par la transformation et de diffusion des semences de blés, maïs, potagères, plantes fourragères, d'arbres fruitiers, de plantes aromatiques et médicinales... Ces actions peuvent être soutenues.

### **Red de Semillas (Spain)**

tiene como objetivo primordial el facilitar y promover el uso, producción, mantenimiento y conservación de la biodiversidad agrícola en las fincas de lo agricultores y en los platos de los consumidores debido a la grave pérdida de recursos genéticos que asola a la agricultura y ganadería

### **Rete Semi Rurali (Italy)**

è stata fondata nel novembre 2007 per ricordare a tutti che la biodiversità agricola va conservata, valorizzata e sviluppata nelle campagne di tutto il mondo e dagli agricoltori, prima di tutto.

### **Dachverband Kulturpflanzen un Nutztiervielfalt (Germany)**

The diversity of crops and livestock represents our live cultural heritage. It does not only assure the fundament of humanity's food supply, but also the ecological equilibrium of our cultural landscapes. Due mainly to the uniformity of industrial agriculture, this agrobiodiversity, as well as the knowledge and skills required for its maintenance and use, have largely been lost. The umbrella organisation for crop and livestock diversity aims to counteract the progressive loss of biodiversity in agriculture.

### **EcoRuralis (Romania)**

Eco Ruralis was founded in April of 2009 in Cluj-Napoca by small farmers from several regions of the country. It is a grassroots association made up of small farmers who practice organic and traditional farming based on environmentally-conscious principles.

Eco Ruralis stands for farmers' rights to practice non-industrialized sustainable agriculture. This includes the right to use, multiply and distribute traditional seeds, the pursuit of strict biosafety regulations (without genetically-modified organisms); the preservation of food sovereignty in Romania; and respect for consumer health.

*Vision:*

We envision a society that is environmentally sustainable, economically fair and socially just where peasants are the central part of our food system.

*Mission:*

Our mission is to support agroecology and promote small-scale family farming as the dominant, preferable method of agriculture in Romania. We will aid the capacity of peasants to collectively defend themselves against unfair and unequal actions taken by corporations and governments. We wish to actively support a movement of young farmers that will preserve traditional farming practices and assert their control over food production and land rights.

**Campaign for Seed-Sovereignty (Germany, Austria, France and Suisse)**

The Campaign for Seed-Sovereignty is an initiative of the [European Civic Forum](#) and the German „[BUKO-Campaign against biopiracy](#)” and is connecting seed activists and farmers in Germany, Austria, France and Suisse. It is working together with like-minded organizations and individuals in these and other European countries.

**Let's Liberate Diversity (European Coordination for 10 networks from France, Spain, Italy, Scotland, Germany, Switzerland, Romania, Luxemburg)**

The main focuses of EC-LLD are:

The promotion and development of farmers' seeds on farms and gardens; The exchange and dissemination of knowledge and expertise associated with farmers' seeds, their use and promotion; The collection, translation and dissemination of existing information; Training and stocktaking; Experimentation and research; The advocacy of a legislation framework favourable to farmers' rights as well as gardeners' and small seed companies' rights over agricultural biodiversity.

**Navdanya (India)**

Aims: Conserving seed is conserving biodiversity, conserving knowledge of the seed and its utilization, conserving culture, conserving sustainability

**Global Movement for Seed Freedom (Started by Navdanya)**

A network of individuals and organisations committed to align our thoughts and actions with the laws of Gaia, Pachamama, Vasundhara, Mother Earth... We protect the biodiversity of the planet by defending of the freedom of the seed to evolve in integrity, self-organisation, and diversity

Others:

Guardianes de Semillas, 2002, Andean seeds, Ecuador & Colombia

Farmers' groups having been fighting seed laws in Brazil since the 1990s

(<http://www.agriculturesnetwork.org/magazines/global/cultivating-diversity/changing-seed-politics>)

Colombia 1994 (<http://semillas.org.co/es/quienes-somos>)

Ecuador 2002