Seed Libraries and Food Justice: Cultivating an Effective Legal and Policy Environment

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I. INTRODUCTION

Farmers markets and community gardens, among other urban agriculture initiatives, are accepted and successful components of local healthy food access policies.\(^1\) There is, however, no farmers market without a garden and no garden without a seed. It is that first piece—the seed—which has recently gained the attention of state legislatures in the context of legalizing seed libraries.\(^2\) A seed library functions similarly to a traditional lending library in that it distributes seeds to patrons who, at harvest time, allow some of the plants to go to seed.\(^3\) Then, the patrons return those seeds to the library’s collection for use by the next patron.\(^4\)

Although seed libraries fit nicely with these other healthy food access initiatives, the uncertain legal environment within which they operate render seed libraries an underused component of an overall policy solution. Furthermore, seed libraries, like farmers markets and community gardens, hold the promise of providing healthy food to low-income community members.\(^5\) Thus, this Article argues that after legislatures amend state seed laws to allow seed libraries to operate legally in those states in which they cannot already, then seed libraries should be incorporated as a component of local healthy food access policies.

Part II of this Article explains the basic concept of a seed library, including the functions that seed libraries perform. Part III sets forth the federal and state laws that impact seed libraries. Part IV provides an overview of the current policy environment surrounding local healthy food access initiatives. Part V sets out three case studies of communities in which seed libraries complement their healthy food access policies. Finally, Part VI offers policy recommendations regarding the incorporation of seed libraries into local healthy food access initiatives.

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2. See, e.g., CAL. AGRIC. CODE § 52451(f) (Deering 2017); 505 ILL. COMP. STAT. 110 / 2.121-5 (2017); 505 ILL. COMP. STAT. 110 / 7(b) (2017); MINN. STAT. § 21.87(a)(4) (2017); NEB. REV. STAT. § 81-2, 147.05(1)(d) (2017); Dan Kraker, Duluth Library’s Seed-Sharing Program Restocked, MPR NEWS (May 22, 2015), https://www.mprnews.org/story/2015/05/22/seed-library; Chris Peters, Omaha Lawmaker Wants to Rid Seed Libraries of Outlaw Status, OMAHA WORLD-HERALD (Feb. 24, 2015), http://www.omaha.com/news/legislature/omaha-lawmaker-wants-to-rid-seed-libraries-of-outlaw-status/article_d35f42b-c1ea-5fe6-909d-8c5cbdefab82.html.


4. Id.

5. See, e.g., Travis Grimler, Pine River to Have Seed Library with Goal of Cutting Food Poverty, PRAIRIE BUS. MAG. (Mar. 10, 2017), http://www.prairiebusinessmagazine.com/business/agriculture/4232333-pine-river-have-seed-library-goal-cutting-food-poverty (discussing the creation of a seed library “to combat food poverty”).
II. SEED LIBRARIES

A. The Basic Concept

Although humans have saved and exchanged seed for millennia, the most recent iteration of that ancient practice began in the 1980s: The seed bank movement. There are currently more than 1,400 seed banks around the world, all with the goal of collecting seed reserves and holding them as a backup system. In fact, it is said that “[s]eed banks constitute humanity’s agricultural memory.” The most famous and most comprehensive seed bank is the Svalbard Global Seed Vault, located deep in the Norwegian permafrost and home to more than 880,000 samples of seed from nearly every country in the world.

One variation of a seed bank that has gained considerable traction recently is a seed library. There are over 600 seed libraries in North America, and many in other parts of the globe. While seed libraries and seed banks essentially share the same goals, seeds in a seed bank are “locked away, not reproducing, waiting for plant scientists or a planetary food emergency to call them into action.” On the other hand, seed libraries “bring plants into circulation, town by town, encouraging local variety and even potentially developing new strains.” The basic concept of a seed library mirrors that of a traditional lending library: Donors give seeds to the library and patrons check-out those seeds to plant themselves. At harvest time, the patron allows some of the plants to go to seed, and, depending on the laws of the state, the patron may give those new seeds to the library for the next patron to use.

7. The Importance of Seed Banking, AG SCI. MAG. (Summer/Fall 2010), http://agsci.psu.edu/magazine/articles/2010/summer-fall/the-importance-of-seed-banking.
12. Hartnett, supra note 11; see also BANKING FOR THE FUTURE, supra note 11, at 4 (explaining that the seed library model allows seeds to evolve and encourages the maintenance of knowledge and culture surrounding caring for the seeds).
14. See id. Note, however, that in some states, there are restrictions on a patron’s ability to return seeds to the seed library. See 505 ILL. COMP. STAT. 110 / 2.121-5 (2017).
B. Functions

In the most comprehensive global scientific study of seed libraries and banks, researchers identified three key functions of seed libraries: “(i) [C]onservation of plant genetic resources; (ii) access and availability of diverse seeds and planting materials according to farmers’ needs and interests; and (iii) seed and food sovereignty.”¹⁵ The purposes of seed libraries differ, however, depending on whether they are located in a developed versus a developing country.¹⁶ Accordingly, these three key functions of seed libraries globally must be adapted to describe the three key roles of seed libraries in the United States: (1) Preservation, both of genetic resources and of local history; (2) advancement of seed and food sovereignty; and (3) promotion of gardening and access to healthy foods.¹⁷

1. Preservation

A key purpose of seed libraries is preservation, both of plant genetic resources and of local history.¹⁸ Historically, farmers managed biodiversity through planting, harvesting, and storing seeds; however, modern developments such as the commercialization of agriculture have disincentivized this practice.¹⁹ Accompanying the loss of these seed-saving practices is the loss of genetic variability. With the loss of genetic variability at the local level comes the loss of the local history and traditional knowledge associated with this genetic diversity: Gone are certain plants, as well as the stories of the plants’ origins and how to care for them.²⁰ Seed libraries can fill this gap.

a. Conserving Plant Genetic Resources

Before addressing the specific way in which seed libraries can contribute to increased genetic diversity in plants, it is important to understand the current backdrop regarding plant genetic resources. The United Nations Food and

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¹⁵. Ronnie Vernooy et al., The Roles of Community Seed Banks in Climate Change Adaptation, 27 DEV. IN PRAC. 316, 318 (2017).
¹⁶. BHUWON STHAPIT ET AL., COMMUNITY SEED BANKS: ORIGINS, EVOLUTION AND PROSPECTS 20 (Ronnie Vernooy et al. eds., first ed. 2015); Community Seed Banks, supra note 6.
²⁰. See BANKING FOR THE FUTURE, supra note 11, at 6; CGIAR, SOUTH AFRICA IMPLEMENTS, supra note 19; Jeanette L. Yasol-Naval, Environmental Stewardship and Community Seed Banking: An Analysis of Stewardship in Theory and on the Ground, 13 SOC. SCI. DILIMAN 1, 10 (2017).
Agriculture Organization reported that the world lost seventy-five percent of its crop diversity between 1900 and 2000. A subsequent study predicted that climate change will lead to an additional twenty-two percent loss of the wild relatives of food crops such as peanuts, potatoes, and beans by 2055. If “genetic variation holds the key to the ability of populations and species to persist,” then this news is sobering.

A benefit of seed libraries, as opposed to formal-sector conservation or plant-breeding efforts, is that they work to preserve underused species that may be left out by other efforts. In fact, in developed countries, this is one of the most important contributions of seed libraries. The impact of this can be felt strongly at the local level, where in addition to being better adapted to the location’s overall climate, local crop varieties tend to be more drought-resistant and have better nutritional value. Given the uncertainties of climate change, seeds that are amenable to harsher climates, such as drought-resistant seeds, may become even more valuable in the future.

b. Preserving Local History

In her article Kentucky Garden Stories: Planting Resistance, Professor Kate Black wrote of interviewing gardeners who, in an effort to keep traditions alive, expressed “a deep responsibility to grow as much food as they can.” Creighton Lee Calhoun picked up on this theme of agriculture as a vehicle for tradition in the preface to the book Old Southern Apples, where he explains his purpose for driving from old farm to old farm in search of forgotten and near-extinct varieties of apples: “[O]ur unique southern heritage is . . . also Bloody Butcher corn, Red Ripper peas, Ledmon watermelons, Greensboro peaches, upland cotton, Gold Dollar tobacco, and James grapes. These are living threads that lead directly back to three hundred years of the southern agrarian past.”

For instance, Calhoun tells about an elderly gentleman from the North Carolina mountains whose family stored apples in his childhood bedroom.
Apples, of course, could only be stored through the winter if kept in a cool place.\(^{31}\) When Calhoun questioned the man about how the apples could have been stored properly under his bed, the gentleman replied that “his room was so cold he had an inch of snow many mornings on his bed, the snow having sifted through cracks in the walls.”\(^{32}\) In addition to chronicling techniques for preserving apples, Calhoun recorded the history of the apples themselves, such as the Summer Banana apple, a variety prized by workers in the Marion County, South Carolina tobacco fields.\(^{33}\) In chasing apple varieties, he also chased stories, stories about how people ate, and how they lived.\(^{34}\)

This link between the soil and history is not unique to the American South. Recently, across the globe, the Palestinian Heirloom Seed Library opened in a West Bank village.\(^{35}\) While the library’s central purpose is to preserve heirloom seeds and biodiversity, the librarian partners this mission with an oral history project, recognizing, like Calhoun, the link between agriculture and stories.\(^{36}\) Out of that oral history project came, for instance, a story of a Palestinian woman who was exiled to Kuwait.\(^{37}\) Out of all of the possessions that she could have taken with her, she took orange seeds, which she then planted when she arrived in Kuwait.\(^{38}\)

2. Seed and Food Sovereignty

In addition to their preservation function, seed libraries also function as vehicles for seed and food sovereignty.\(^{39}\) Seed sovereignty is “the right of farmers to save, use, exchange, and sell their own seeds,” as opposed to corporations controlling the distribution of seeds.\(^{40}\) Seed sovereignty is premised on the idea that open-source seeds and biodiversity are a public good and should not be patented or owned.\(^{41}\) Beyond the idea of seeds and biodiversity as part of the commons, seed sovereignty is also premised on a concern with genetic modification of seed.\(^{42}\) Genetically modified crops faced criticism after they were

\(^{31}\) Id.

\(^{32}\) Id.

\(^{33}\) Id. at xvi, 147, 199 (noting, to be clear, that apples can only be duplicated by grafting or planting sprouts).

\(^{34}\) See also James R. Veteto, Deep Down in the Holler: Chasing Seeds and Stories in Southern Appalachia, J. ETHNOBIOLOGY & ETHNOMEDICINE 69, 70 (Sept. 2013) (describing a similar chase to Calhoun’s in his search for heirloom gardeners).


\(^{36}\) Id.

\(^{37}\) Id.

\(^{38}\) Id.

\(^{39}\) Vernooy et al., Roles of Community Seed Banks, supra note 15, at 318 (noting, however, that few seed banks “explicitly present their efforts as promoting seed and food sovereignty”).

\(^{40}\) Elizabeth Louis, Seed Sovereignty is a Just Fight But What Else Should We Consider?, U. OF HAW. CTR. FOR S. ASIAN STUD. (Jan. 14, 2013) http://www.hawaii.edu/csas/seed-sovereignty-is-a-just-fight-but-what-else-should-we-consider/.


\(^{42}\) Id.
first commercialized in the United States in the mid-1990s, due to potential environmental impacts, such as the possibility of biological pollution or herbicide-resistant weeds. Biological pollution concerns the “genes of GM crops [finding] their way into the genomes of wild species, conventional crops, and organic crops.”

Within that movement, seed libraries can serve the administrative purpose of middleman. For instance, a seed library in the Ivory Coast stocks seeds, including mucuna and neem seeds. The neem seeds serve as a fertilizer for gardens, while mucuna is a natural herbicide. Therefore, the seed library provides not only the seeds from which to grow the plants (thereby disconnecting seeds from corporate control) but also environmentally and culturally conscious methods of caring for the plants.

Like seed sovereignty, food sovereignty encourages self-sufficiency and alternatives to a corporate-controlled food system. The food sovereignty movement promotes “the right of each person, community, and nation to define its own agriculture and food policies and practices that will enable each entity to not just have food security, but also ensure that the food produced is environmentally sustainable, and socially just.”

The Navajo Nation has stated that political sovereignty cannot exist without food sovereignty. To that end, the Navajo Nation has developed the Diné Food Sovereignty plan, which makes the Diné people’s culture and values central to the development of its food policy. Instead of replicating U.S. food policies within the Navajo Nation, the Diné people will consider their own traditions and philosophies for ranching, farming, hunting, and gathering and will develop those standards into policies to govern the Navajo Nation.

43. Allison H. Scott, *Genetically Modified Crop Regulation: The Fraying of America’s Patchwork Farm Lands*, 26 V ILL. E NVTL. L.J. 145, 146, 149, 151 (2015) (explaining, on the other hand, that supporters of genetically-modified crops argue that they could help the environment and alleviate world hunger, and that no evidence supports the theory that they are harmful).

44. *Id.* at 151.


46. *Id.*


49. DINÉ POL’Y INST., *supra* note 47, at 63.

50. *Id.* at 64.

51. *Id.* at 64, 71; *see also* Navajo People – The Diné, NAVAJO PEOPLE, http://navajopeople.org/ (last visited Dec. 11, 2017) (explaining that the Navajo prefer to be called the “Diné”).
3. Promote Gardening and Access to Healthy Foods

The third function of seed libraries is to promote gardening and access to healthy foods.52 Researchers who study community gardens in North America have identified four key reasons people garden: (1) To grow culturally appropriate food; (2) to save money on food expenses; (3) to build community; and (4) to exercise.53 A seed library, by sparking an interest in gardening and by providing locally (and, depending on the seed library, culturally) appropriate seeds for a garden, can tap into those motivators. Furthermore, seed libraries are often linked with community gardening initiatives.54

One benefit of gardens is that they provide gardeners with access to crops reflective of their cultural backgrounds.55 For instance, a community garden in Toronto features crops that are culturally in tune: Entsai, bitter melon, Vietnamese celery, and sweet potato spinach.56 At its inception, however, that garden grew seedlings from the local garden center.57 Over time, community members, many of whom had agricultural experience from their home countries, decided to plant culturally apt crops instead.58 Another community garden in Toronto grows everything from hairy gourds to edible chrysanthemums, crops reflective of the diet of the community’s large Chinese population.59 For the gardeners in that community garden, a major motivator was to grow vegetables that are difficult to locate in nearby groceries.60 Thus, an advantage of seed libraries is that at least some are able to stock heirloom or hard-to-find seeds.61

Another motivator for gardening is that it builds community and can eliminate barriers between people.62 A community garden can remove “such bars to participation as high cost, language barriers, or educational achievement, which may otherwise divide residents.”63 Thus, by partnering with a community garden, a seed library contributes to community-building by providing a space for residents to collaborate and build relationships.64 Furthermore, this com-

52. See Hartnett, supra note 11; MOUNTAINTIMES.COM, supra note 17; Seed Saving, BERRY U., supra note 17; What’s a Seed Library?, SEED LIBRARIES, http://seedlibraries.net (last visited Jan. 20, 2018).
55. See Barker, supra note 47, at 307, 319–20 (describing certain garden plots in Toronto as “reflect[ing] the landscape memories of their gardeners”).
56. Id. at 320.
57. Id. at 319.
58. Id. at 320.
59. Id. at 313.
60. Id. at 313.
61. See DINÉ POL’Y INST., supra note 47, at 78; Watauga County Public Library Launching ‘Seed Library’, supra note 17.
63. Id.
64. See, e.g., id.; Food Bank Plots, CITY OF BLUE ISLAND, http://www.blueisland.org/residents/community-gardens/food-bank-plots (last visited Sept. 4, 2017); Slowik, supra note 54.
munity-building function of gardening can be leveraged to provide nutrition education.65 For instance, in a related setting, research shows that interactions in a farmers market created opportunities to share farming suggestions and cooking tips.66

III. LEGAL LANDSCAPE

Seed libraries in the United States operate in a “legal grey area.”67 But this “grey area” is not unique to the United States.68 Globally, “[t]he development of an enabling policy and legal environment is most likely the greatest challenge that most community seed banks face.”69 Part of the reason for this legal uncertainty in the United States is that there are slight variations in the wording of different states’ seed laws.70 For instance, some states specifically exempt non-commercial seed sharing.71 Consequently, the legality of seed libraries must be explored first at the federal level and then on a state-by-state basis.

A. Federal Laws Related to Seed

1. Plant Variety Protection Act

The Plant Variety Protection Act became effective in 1970 and was amended in 1994.72 Its purpose is “to encourage the development of new non-hybrid varieties”73 and offers protection to plant varieties that are new, distinct, uniform, and stable.74 During the term of plant variety protection, the breeder has the right to prevent others from selling, reproducing, importing, exporting, or using the variety.75 The Act includes exemptions for research and for farmers’ right to save seeds, under certain conditions.76

65. See, e.g., Kassandra A. Alia et al., Identifying Emergent Social Networks at a Federally Qualified Health Center-Based Farmers’ Market, 53 AM. J. COMMUNITY PSYCHOL. 335, 340–41 (2014).
66. Id.
68. Id.; Vernooy et al., Multiple Functions, supra note 17, at 650.
69. BANKING FOR THE FUTURE, supra note 11, at 16; see also Vernooy et al., Multiple Functions, supra note 17, at 650.
70. See CAL. AGRIC. CODE § 52451(f) (Deering 2017); 505 ILL. COMP. STAT. 110 / 7(b) (2017); 505 ILL. COMP. STAT. 110 / 7(b) (2017); MINN. STAT. § 21.87(a)(4) (2017); NEB. REV. STAT. § 81-2, 147.05(1)(d) (2017).
71. See, e.g., 505 ILL. COMP. STAT. 110 / 7(b) (exempting non-commercial seed sharing).
74. 7 U.S.C. § 2402(a) (2012).
2. Federal Seed Act

In 1939, Congress passed the Federal Seed Act. The Federal Seed Act regulates interstate and foreign commerce in seeds by establishing labeling requirements for seeds with the goal of preventing the misrepresentation of seeds in interstate commerce. Representations, including labels and advertisements, that a seed is a certified seed will be deemed false unless a seed certifying agency verified that the seed complied with its rules, regulations, and standards and the seed has an official label issued by that agency that states that the seed is a specific kind or variety or member of a certain class.

The Act also carries a record-keeping requirement for anyone transporting or delivering for transportation in interstate commerce vegetable or agricultural seeds. The Act requires those persons to maintain and make available for inspection records regarding the origin, treatment, and germination of both types of seeds, as well as records of the purity of agricultural seeds and records regarding the variety of vegetable seeds. The Act is designed to protect farmers, in that

[I]f the farmer receives the wrong seed, or defective seed, the farmer may not discover the error until it is too late to replant. If this occurs, the loss to the farmer includes, in addition to the cost of the seed, the value of the lost crop. Similarly, if the farmer plants seed that is contaminated with undesirable weed seeds, it may take years and countless dollars to eventually rid the farm of the infestation.


Patent law also bears on seeds and seed sharing. Specifically, a utility patent may be granted to anyone who “invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof.” Due to the Plant Variety Protection Act’s exemptions, utility patents became more attractive to plant breeders. In the 1980 case Diamond v. Chakrabarty, the Supreme Court held that “a live, human-made micro-organism is patentable subject matter” under 35 U.S.C. § 101. In 2001,

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81. Id.
the Supreme Court made clear in *J.E.M. AG Supply, Inc. v. Pioneer Hi-Bred International, Inc.*, that utility patents could be issued for plants.  

### B. State Seed Laws and the Recommended Uniform State Seed Law

In 1897, the State of Maine passed the first comprehensive state seed law.  

Previously, states had passed laws related to seeds, such as prohibiting the sale of weed-containing grass seed or prohibiting the sale of milkweed. By 1941, all forty-eight states had passed seed laws. Because each state’s seed law can vary in its wording and coverage, an additional goal of the Federal Seed Act was to promote uniform state seed laws.

One group working to ensure uniformity in state seed laws is the Association of American Seed Control Officials (“AASCO”), an organization made up of seed regulatory officials from the United States and Canada. The AASCO meets each year to discuss seed law enforcement, learn of new seed industry developments, and update the Recommended Uniform State Seed Law.

The Recommended Uniform State Seed Law is a model state seed law. Its roots go back to 1915, when the Association of Official Seed Analysts developed a set of principles to guide state seed law development. Two years later, those principles were turned into a uniform law, as the American Seed Trade Association felt that a model of proposed legislation would be more helpful to state legislatures. In 1940, the year after the Federal Seed Act’s passage, the USDA issued a Suggested Uniform State Seed Law based on the one developed by the American Seed Trade Association and the Association of Official Seed Analysts.

After lobbying from seed-sharing advocates, the uniform law was amended recently to include an exemption, with certain restrictions and requirements, for non-commercial seed sharing.

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88. *Id.* (noting that although Maine’s was the first state seed law, Connecticut passed a law prohibiting the sale of certain weed-containing grass seed in 1821).
89. *Id.*
95. *Id.*
96. *Id.*
97. *ASS’N OF AM. SEED CONTROL OFFICIALS, supra* note 93 at 10. The model law defines non-commercial seed sharing as meaning “that no monetary consideration or compensation may be transferred in return for receiving seeds. Additionally, anyone distributing seeds under the rules of this
The wording of a state seed law can dictate whether a seed library can operate legally in that state. If the seed law does not distinguish between commercial and non-commercial seed distribution, then the seed library would have the same labeling and testing requirements of a commercial seed company. Even in states where a seed library’s operations may be permissible under the state’s seed law, adoption of the model law makes it clear. So far, five states have passed legislation allowing the operation of seed libraries.

 SECTION 2B. Label and educational requirements for Non-Commercial Seed Sharing. (A) Each container of agricultural, vegetable, and flower seeds distributed for sowing purposes in a noncommercial setting shall bear thereon or have attached thereto in a conspicuous place a plainly written or printed label or tag in the English language, conveying the following information: (a) The name of the species or commonly accepted name of kind or kind and variety of each agricultural seed component present. Hybrids shall be labeled as hybrids. (b) A word or statement indicating if the seed has been treated. And, if treated, must be labeled in accordance with applicable state and federal laws. (c) Some form of reference identification that provides traceability. Retention of posterity file samples are not required. (d) Name and city or address of the non-commercial seed sharing entity. (e) The calendar month and year the seed was donated. (f) The seed shall be free of foreign material, other than coatings or treatments, including germination medium, mulch, fertilizer, pre- planted containers, mats, tapes, or other planting devices. (g) No distributed container shall hold more than eight (8) ounces of agricultural seed or four (4) ounces of vegetable or flower seed. (h) Germination and purity analysis is not required, however if a germination or purity percentage is noted on the label, it must be noted whether or not the analysis was performed according to the AOSA rules for testing seed. (B) At each location involved with non-commercial seed sharing a legible and visible sign shall state that the seeds being distributed may not meet germination or varietal purity standards prescribed by the state seed law. The sign must also state that patented seed or varieties protected by the Plant Variety Protection Act will not be accepted or distributed without permission of the certificate holder. Id. at 10.

See also Jordyn Ashley Bishop, Help Save the Seeds: A Call to Action for Local Governments to Introduce Legislation to Protect Community Seed Sharing, Libraries, and Exchanges, 9 HASTINGS SCI. & TECH. L.J. 113, 133 (2017); Cat Johnson, SELC and Shareable Kickoff Campaign to Save Seed Sharing in the U.S., SHAREABLE (Jan. 12, 2015), https://www.shareable.net/blog/selc-and-shareable-kickoff-campaign-to-save-seed-sharing-in-the-us. The Save Seed Sharing campaign “is designed to educate people about seed sharing issues, support seed sharing communities, and reform overzealous seed laws.” To accomplish those goals, the organization makes policy recommendations, has an online petition campaign, and makes state seed law details publicly-available on its website. Id. It is a partnership between the Sustainable Economies Law Center, Shareable, Richmond Grows, Seed Matters, and the Seed Savers Exchange, among others. Id.
1. Minnesota

In 2015, Minnesota became the first state to pass legislation to exempt seed libraries and other non-commercial uses from its formal seed testing and labeling requirements. Specifically, the Minnesota Seed Law exempts the “interpersonal sharing of seed for home, educational, charitable, or personal noncommercial use” from its seed labeling requirements. Since then, new seed libraries have opened throughout the state.

The amendment to the Minnesota Seed Law came after a seed inspector from the Minnesota Department of Agriculture informed the Duluth (Minnesota) Public Library in 2014 that its seed-sharing program likely violated the Minnesota Seed Law. Language in the then-existing statute treated freely distributing or exchanging seeds the same way as selling seeds. Selling seeds triggered a labeling and testing requirement that would be difficult to implement in the small-scale seed library operation. As an official with the Department of Agriculture explained, to have a sufficient sample size, labs typically test around 400 seeds. Because library patrons generally only return several dozen seeds, having a test sample of 400 would be nearly impossible.

The seed library maintained its operations using commercial seed until the state’s seed law could be changed. Meanwhile, the library joined with other organizations in Minnesota to bring awareness to the seed law. The city councils of Duluth, Minneapolis, and St. Paul all passed resolutions requesting the state to amend the law. Furthermore, Seed Savers Exchange and the Sustainable Economies Law Center provided support for the effort, as did Duluth’s state senator, Roger Reinert. The effort also included discussions between the Duluth Seed Library, the Department of Agriculture, and trade

101. See Kraker, supra note 2.
102. MINN. STAT. § 21.82-83 (2017); MINN. STAT. § 21.87(a)(4) (2017).
105. See id.
106. Id.
107. Id.
108. Id.
110. Id.
111. Id.
112. Id.
associations who represented big seed companies. Finally, in April 2015, the House and Senate’s Agriculture committees passed the exemption for seed libraries, which was signed by the governor.

2. Nebraska

In 2015, Nebraska also adopted an amendment to its seed law to allow for seed libraries. The Nebraska Seed Law now defines “seed library” and specifies that “[s]ale does not mean the donation, exchange, or other transfer of seeds to or from a seed library or among members of, or participants in, a seed library.”

The senator who sponsored the bill explained that the Nebraska Seed Law intended to regulate seed companies and that the “old legislation didn’t foresee” seed libraries. Prior to the bill’s passage, at least three seed libraries operated in Nebraska, but librarians hesitated to launch new ones because of the uncertain legal environment.

3. Iowa

In 2015, Iowa amended its state seed regulations to permit seed libraries. An Iowa library district or Iowa library board is eligible to form a seed library under the revised regulation. An emergency feeding organization or food bank is also eligible to form a seed library, as long as the organization is recognized by the Iowa department of revenue. A qualified seed library is not subject to labeling or testing requirements, but the seed library is subject to permitting. The permits are free, but do require annual renewals.

4. Illinois

The Illinois General Assembly enacted Public Act 099-0827 which became effective on August 16, 2016. The Act created a distinction in the state’s Seed

[113. Id.]
[114. MINN. STAT. § 21.87 (2017).]
[115. NEB. REV. STAT. § 81-2, 147.05(1)(d) (2017).]
[116. NEB. REV. STAT. § 81-2, 147.01(28) (2017).]
[117. Peters, supra note 2.]
[118. Id.]
[119. IOWA ADMIN. CODE r. 21-40.16(199) (2017).]
[120. Id.]
[121. Id.]
[122. Id. (describing the seed library must meet certain additional requirements, such as distributing pesticide-free seed, distributing seed for planting in Iowa, and ensuring that each seed library patrons receives no more than two pounds of seeds per year).]
Law between commercial seed operations and non-commercial seed sharing and exempted non-commercial seed sharers from the law’s labeling requirements.\(^{125}\) The Act states that non-commercial means that “no monetary consideration or compensation is transferred in return for receiving seeds.”\(^{126}\) The Act further clarifies that non-commercial seed sharing “does not include seed sharing in which the person participating in the seed sharing expects or creates the expectation that seeds must be returned in exchange for receiving seeds or when the distribution of seed is given as compensation for work or services rendered.”\(^{127}\) In other words, while a seed library in Illinois may dole out seeds, the seed library cannot ask the patron to return seeds after harvest time.\(^{128}\)

The Illinois Department of Agriculture initially opposed the seed library exemption, arguing seed libraries and exchanges should have a mechanism in place for tracing the seeds.\(^{129}\) Specifically, the Department raised the concern of the risk of spreading of noxious weeds and the ability of record-keeping to allow the Department to trace any outbreak back to its source.\(^{130}\) In response, the legislature included a provision requiring the seed librarian or seed swap event organizer to “adopt labeling or record-keeping standards to identify the year, species or common name, and source of any non-commercially packaged seed” and “make this information available to the Department upon request in the course of any investigation” of Seed Law violations.\(^{131}\)

5. California

In September 2016, California became the most recent state to pass seed-sharing legislation, the Seed Exchange Democracy Act.\(^{132}\) The Act amended California’s Food and Agricultural Code to exempt “[s]eed distributed or received by noncommercial seed sharing activity.”\(^{133}\) In support of this exemption, the bill noted that “[n]oncommercial seed sharing activity contributes significant value to the health of our communities and to the resilience of our food system.”\(^{134}\)

The Act was a departure from California’s previous stance on seed sharing.\(^{135}\) As opposed to the revised version allowing an exemption for non-

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127. Id.
128. See id.
130. See id.; Seed Sharing, supra note 125.
131. 505 ILL. COMP. STAT. 110 / 7(b) (2017).
133. CAL. AGRIC. CODE § 52451(f) (Deering 2017).
134. Id. § 52288(c) (Deering 2017).
commercial seed sharing, the notes to the former version of the statute explain that the only exemptions from the California Seed Law’s labeling requirements were for the “occasional sale of seed grain by the producer of the seed grain to his neighbor for use by the purchaser within the county of production.” The law defines “neighbor” for the purposes of labeling requirements as someone who lives not more than three miles away. Thus, without this 2016 amendment, seed libraries could not legally exist in California.

6. Pennsylvania

Pennsylvania has taken a different approach, legalizing seed libraries first via a protocol and then by Department of Agriculture pronouncement. In April 2015, the Cumberland County (Pennsylvania) Library System founded the Simpson Seed Library. The seed library lent seeds to patrons with the expectation that patrons would then return replacement seeds to the library after harvest time. In the eyes of the Pennsylvania Department of Agriculture, the “return” aspect of the program violated the state’s Seed Act.

Unlike the legislative fixes in other states, the Pennsylvania Department of Agriculture issued a Seed Library Protocol in July 2014 to resolve the issue and to provide space in which the seed library could operate. Under the protocol, the library had to make two key changes. First, the library had to start each year with fresh seeds instead of requesting that members return seeds to the library. Those seeds needed to be labeled. The second change shifted the library’s role from distributor to facilitator. That change allowed the library to organize seed swaps to encourage patrons to swap seeds instead of the library collecting and redistributing seeds. As part of the seed swap, the library would encourage patrons to plant those seeds in the next growing season and then bring seed back to the next year’s seed swap.

137. CAL. AGRIC. CODE § 52452(d) (Deering 2017).
141. Id.
142. See PA. DEP’T OF AGRIC. BUREAU OF PLANT INDUSTRY, supra note 138.
143. Id. supra note 138.
144. See Creason, supra note 140.
145. See PA. DEP’T OF AGRIC. BUREAU OF PLANT INDUSTRY, supra note 138.
146. Id.
147. Id.
Although issuance of the protocol gave seed libraries in Pennsylvania guidance by which they could operate, advocates for seed libraries still viewed the Pennsylvania Seed Law as misapplied to seed libraries.\textsuperscript{148} In 2015, the Pennsylvania Department of Agriculture clarified that Pennsylvania’s seed law does not apply to seed libraries.\textsuperscript{149}

IV. LOCAL ACCESS TO HEALTHY FOOD POLICY ENVIRONMENT

This Part explores the overall policy environment related to food justice. Part V profiles communities that have successfully incorporated seed libraries as components of healthy food access policies.

A food environment is “the collective physical, economic, policy and sociocultural surroundings, opportunities and conditions that influence people’s food and beverage choices and nutritional status.”\textsuperscript{150} As expected, unhealthy food environments, characterized by cheap, energy-dense, nutrient-poor foods, foster unhealthy diets, whereas healthy food environments foster healthy diets.\textsuperscript{151} Thus, there is increased interest in policymakers in developing food environment interventions, and “[n]ovel approaches for curtailing obesity disparities are desperately needed."\textsuperscript{152} In addition to a health issue, it is also a social justice issue.\textsuperscript{153}

Although it cannot solve the obesity epidemic single-handedly, access to affordable, nutritious food is a key part of the solution.\textsuperscript{154} In considering the impact of local efforts to provide access to healthy food, three key factors emerge: (1) Price (with a consideration of quality); (2) proximity (or available transportation); and (3) cultural appropriateness.\textsuperscript{155}

The first factor that impacts healthy food access is price.\textsuperscript{156} A healthy diet costs about $1.48 more per person per day, or just over $2,000 for a family of four per year, than an unhealthy diet.\textsuperscript{157} Generally, rising prices cause consumers
to purchase less of a food, whereas falling prices cause consumers to purchase more of a specific food. For instance, a study of low-income consumers in a Detroit food desert revealed that a customer’s fruit consumption increased with either a higher income or a lower fruit price. A consumer’s decision to purchase a specific food is also impacted by the price differential; thus, the difference in price between healthy and non-healthy options could impact the consumer’s decision to purchase the non-healthy option instead. However, the impact of price on healthy food access is also evident from the opposite perspective. For instance, a program in Massachusetts provided coupons to lower-income women and children and the elderly to purchase produce at an outdoor farmers market, resulting in a thirty percent increase in fruit and vegetable purchases.

The second factor that impacts healthy food access is proximity: “[W]here one lives is strongly associated with one’s ability to access and ultimately consume healthy foods.” Six to nine percent of households in the United States lack access to healthy food. Further, almost thirty million Americans in low-income areas live more than a mile away from a supermarket. If healthy food is not available in one’s community and transportation to another community is not available, then one is forced to eat unhealthy foods.

The third factor that impacts healthy food access is culture. The influence of culture can be seen in both what is deemed culturally appropriate to eat and in cultural influences for why people eat what they do.

In some cultures, diet consists almost entirely of meat and fish—no produce allowed! Some Native American tribes ate diets comprised mainly of seeds, roots, and nuts. In Europe and North America, meat comes mostly from beef, pork, lamb and chicken, but in other cultures, snakes, monkeys, anteaters, mice and rats are all acceptable protein sources. South American Indians eat monkeys, iguanas, grubs, bees and head lice; Aboriginals of Australia eat lots of insects.

Beyond that, “[f]ood consumption also carries cultural identity and when people are told that they need to change what and how they eat, some piece of their cultural identity gets chipped away and discarded.” For instance, an Iranian woman reported that, because of health issues, she should not eat rice; however, she explained that she could not stop eating rice because it was a habit.
and, without it, her stomach would not feel full. Relatively, people from working class backgrounds can struggle to reduce their meat consumption because a lack of meat at a meal often meant an inability to afford it.

It is clear from the healthy food access research that “a comprehensive approach is the key to achieving the greatest impacts,” The local economy, development resources, community leadership and support, political will, and other factors determine what is possible and viable. Popular strategies for community food security tend to include local agriculture. Some examples include expanding farmers markets, promoting community gardening, and encouraging urban agriculture. As another example, researchers conducted a study from 2011–2013 to document how food banks in the United States utilized practices of gleaning, gardening, and farming. The findings suggested that

[F]ood banks’ gleaning, gardening, and farming programs are alternately challenging and reinforcing longstanding patterns of food relief. Most of the local produce obtained through these programs effectively constitutes additional commodity surplus. This enables some food banks to distribute more diverse and nutritionally healthier foods as well as increase the total quantity of food distributed. These programs change food banks’ relationships with their suppliers, but not so much with the recipients of their food. Most gleaning, gardening, and farming programs perpetuate food banks’ reliance on middle class volunteers and charitable donations. However, some food banks are playing new and expanded roles in building community food security and promoting food justice, especially through programs that invest in building poor people’s capacity to garden and farm (and cook) themselves. This represents a significant departure from most food banks’ traditional missions, operations, and politics. It suggests various ways that hunger relief systems have the potential to promote community food security more broadly.

Thus, communities should consider the latter advice when developing a strategy for healthy food access.

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169. POLICYLINK, supra note 1, at 19.
170. Id. at 7.
172. POLICYLINK, supra note 1, at 7.
173. Vitiello et al., supra note 171, at 420.
174. Id. at 420, 425 (emphasis added) (describing an organization that plants community orchards, allows people to harvest and preserve their own food, and hosts workshops on caring for fruit trees).
V. LOCAL ACCESS TO HEALTHY FOOD POLICY ENVIRONMENT: CASE STUDIES

The following three case studies demonstrate how seed libraries can contribute to food-secure communities, in cities, suburbs, and small towns.

A. Toronto, Ontario

The push to create the Toronto Seed Library began in 2012, initiated by university students and members of Occupy Gardens Toronto. The first Toronto Seed Library event, an unpermitted seed swap at a City Hall library branch, reflected its roots in the Occupy Gardens movement. That event aside, the approach of the Toronto Seed Library has been to “work within the existing system . . . to create something that could be sustained and win popular support.” By 2014, the Toronto Seed Library already had fourteen branches. The Library now has over twenty branches. In its first four years of operation, it has dispensed over 100,000 seed packets. Of those packets dispensed, the Library experiences a fifteen to twenty percent return rate of replacement seed. The Library also includes an outreach and educational component. In its first two years, the Toronto Seed Library hosted fifty community events, including workshops and webinars.

While the Toronto Seed Library was started by private citizens, it is easy to see how it complements other city initiatives. Toronto has a policy environment that is favorable to urban agriculture and that promotes food security. As early

178. TORONTO SEED LIBR., supra note 175; See also STHAPIT ET AL., supra note 16, at 88–93 (describing the Toronto Seed Library’s beginnings, operations, and goals). The City of Toronto has a sophisticated and well-developed food policy. See, e.g., infra notes 179–81. Although Toronto’s seed library operates under Canadian law, the case study demonstrates how a well-organized seed library can contribute to the food environment in a major world city.
180. Id.
182. TORONTO SEED LIBR., supra note 175.
as 1991, the city established the Toronto Food Policy Council (“TFPC” or “The Council”). In 2008, the city approved the development of a Toronto Food Strategy, with the goal of creating a “healthier and more sustainable food system.” The food system envisioned by the city becomes clear in the Food Strategy team’s 2010 Report, which establishes the following goals: (1) “Support food friendly neighbourhoods”; (2) “[m]ake food a centerpiece of Toronto’s new green economy”; (3) “[e]liminate hunger in Toronto”; (4) “[c]onnected city and countryside through food”; (5) “[e]mpower residents with food skills and information”; and (6) “[u]rged federal and provincial governments to establish health-focused food policies.”

The city’s Poverty Reduction Strategy also reflects a commitment to urban agriculture: One of its nineteen recommendations for reducing poverty in Toronto is to “[i]ncrease access to affordable, nutritious and culturally appropriate food.” To that end, the city endorsed GrowTO, an urban agriculture plan set forth by the TFPC. GrowTO, set forth in 2012, recognized the benefits of gardening, from the money saved from individuals growing their own food and from reduced healthcare costs, to increased neighborhood cohesion, and to improving the environment.

In addition, the Council recognized that almost half of Toronto residents were foreign-born, bringing with them diverse knowledge and new crops, which are a vital component of Toronto’s urban agriculture profile. The Council made clear that “policies are indeed the backbone and framework that either support or hinder urban agriculture.” Specifically, the Council noted the impact of municipal and provincial policies, and this impact was reflected in the Council’s four immediate goals. The Council urged the city to develop an urban agriculture program, to create city policies supportive of urban agriculture, to incentivize (monetarily or otherwise) urban agriculture initiatives, and to create a website highlighting the benefits of and resources available for urban agriculture.

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185. Food Strategy Background, supra note 183.

186. Id.

187. TO PROSPERITY, supra note 183, at 29.

188. Id. at 30.


190. Id. at 4.

191. Id. at 19.

192. Id. at 19–20.

193. Id. at 20.
B. Blue Island, Illinois

Blue Island, Illinois is located about fifteen miles from downtown Chicago.\textsuperscript{194} In 2014, the Friends of the Library, along with gardener and community activist Anna Stange, established the Blue Island Seed Lending Library.\textsuperscript{195} With support from the Blue Island Library and the local park district, the seed library started strong: More than 200 people attended its first seed swap event.\textsuperscript{196}

Blue Island contains several food deserts.\textsuperscript{197} Residents of those persistently poor areas must travel more than one mile to the nearest supermarket.\textsuperscript{198} In response to this, the seed library also partners with the Blue Island Park District, which constructed raised beds at local community gardens.\textsuperscript{199} These raised beds are available to anyone with either thirty dollars or a subsidy.\textsuperscript{200} This addresses the seed library’s mission to “make it affordable for people to grow their own healthy food.”\textsuperscript{201} It makes sense that individuals who are most impacted by a food desert are the same individuals who may not be able to afford to rent garden space and to purchase seeds; thus, this project fills that gap. Blue Island also reserves portions of its community gardens for volunteers to grow food for the local food pantry.\textsuperscript{202}

C. Orangeburg, South Carolina

In 2015, the Orangeburg County Library in South Carolina opened its seed library.\textsuperscript{203} Master Gardeners, Friends of the Library, and the local Clemson University Extension Service supported the seed library’s opening.\textsuperscript{204} The Library houses its seed collection in a repurposed card catalog and markets the seed exchange via red and white planters placed around the main entrance.\textsuperscript{205}

\begin{thebibliography}{99}
\bibitem{1} Transportation and Transit, CITY OF BLUE ISLAND, http://www.blueisland.org/about/transpor-
tation (last visited Sept. 4, 2017).
\bibitem{2} Charlotte Dove, Blue Island Seed Lending Library, SAVING OUR SEEDS, https://seeddiversity.
\bibitem{3} Id.
\bibitem{4} Go to the Atlas, U.S. DEP’T OF AGRIC., ECON. RES. SERV., https://www.ers.usda.gov/data-
products/food-access-research-atlas/go-to-the-atlas/ (last visited Jan. 20, 2018). “A food desert is a low-
icome census tract where either a substantial number or share of residents has low access to a
supermarket or large grocery store.” Food Desert Locator, U.S. DEP’T OF AGRIC. FOOD & NUTRITION
\bibitem{5} BENJAMIN F. EVANS ET AL., FOOD ACCESS AND HEALTH IN COOK COUNTY, ILLINOIS (2012),
\bibitem{6} Slowik, supra note 54.
\bibitem{7} Id.
\bibitem{8} CITY OF BLUE ISLAND, supra note 64; Slowik, supra note 54.
\bibitem{9} Minnie Miller, Digging In: Seed Saving Savvy, TIMES & DEMOCRAT (Mar. 18, 2015), http://
\bibitem{10} Orangeburg County Library Seed Exchange, S.C. LIBR. ASS’N, http://www.scla.org/assets/
\bibitem{11} Minnie Miller, Seed Exchange Today at OCL, TIMES & DEMOCRAT (Mar. 3, 2015), http://
\end{thebibliography}
Patrons may “check-out” the planters, which resemble mini-barns. The whole purpose of the seed library is to draw upon the area’s rich agricultural history to reconnect patrons and community members with their agrarian roots. The county library also offers related programming, such as monthly garden talks.

The enthusiasm for this seed library and its mini-gardens seems incongruous with Orangeburg County’s vegetable consumption. In the United States, 22.6% of adults consume less than one serving of vegetables daily. In comparison, in South Carolina, 27.3% of adults consume less than one serving of vegetables daily. However, in Orangeburg County, 32.6% of adults consume less than one serving of vegetables daily.

Orangeburg is home to the Right Choice, Fresh Start Farmers Market, a produce-only market that operates in the parking lot of a federally qualified health center. The idea for the market, organized through a community-university partnership, came from research that linked health outcomes with fresh produce access. The Market’s partner health clinic saw about 300 more patients each month.

Further erasing barriers to healthy food is the incentive program implemented at the market: “[F]or the first $5 a person used of their SNAP or other nutrition assistance program benefits to purchase produce, they could receive an additional $5 to support additional produce purchases.” Four times as many SNAP dollars were spent at the farmers market after the incentive program was implemented. The Market has also offered nutrition classes at local churches.
The outreach arm of South Carolina State University has also partnered with the South Carolina Department of Health and Environmental Control to offer a six-week cooking course.\textsuperscript{220} As part of the course, participants visited a local grocery store to purchase nutritious ingredients on a ten-dollar budget.\textsuperscript{221} With the guidance of a nutritionist and a chef, “[p]articipants learned how to develop strategies and economical techniques for healthy meals.”\textsuperscript{222}

\section*{VI. POLICY RECOMMENDATIONS}

In response to an assessment of “the impact of a new government-subsidized supermarket in a high-need area,” one commentator on the assessment noted that “‘[i]ncreasing access to fresh food does not guarantee that people have, let alone the time and knowledge, to take advantage of it.’”\textsuperscript{223} But research shows that a comprehensive approach to food justice, incorporating a variety of strategies, can help.\textsuperscript{224} Farmers markets and community gardens have been successful because they address the price problem and because they often come with education and community-building initiatives.\textsuperscript{225} It makes sense, then, that a seed library is a natural way to extend that success, especially when paired with educational programming and access to a gardening plot. In other words, a seed library helps to eliminate the cost barrier that can prevent customers from purchasing healthy foods in grocery stores. Also, the location of the seed library and of the associated community gardens is important, since proximity is a factor in people choosing healthy food options.\textsuperscript{226}

Furthermore, because seed libraries require an investment of time and energy, they create buy-in: If a gardener spends months convincing a vegetable to grow, then that gardener is more likely to eat that vegetable once it is mature. At a harvest celebration dinner in a semi-rural Kentucky city for a community garden grown by Boys and Girls Club members, “faculty were surprised, mystified, and a tad horrified to hear a mother scolding her child as she reached for a ripe cherry tomato. As she pushed the fruit out of her child’s hand, she exclaimed, ‘[d]on’t eat that; it’s nasty!’”\textsuperscript{227} Thereafter, the Boys and Girls Club’s executive director organized a game in which the children ate the vegetables that

\textsuperscript{220}. Michael Fairwell, \textit{Cooking Matters: Class Teaches How to Prepare Healthy Food}, \textit{TIMES \\& DEMOCRAT} (May 31, 2016), http://thetandd.com/news/local/cooking-matters-class-teaches-how-to-prepare-healthy-food/article_bfa5b06-0506-5d0a-a6c1-b9409e6a5a.html; \textit{Extension, S.C. STATE UNIV.}, http://www.scsu.edu/1890/extension.aspx (last visited July 1, 2017) (explaining that the 1890 Research and Extension is the outreach arm of South Carolina State University, whose programs provide learning opportunities to limited-resource clients to improve their level and quality of living).

\textsuperscript{221}. \textit{Id.}

\textsuperscript{222}. \textit{Id.}

\textsuperscript{223}. Wright, supra note 157, at 176; Brian Elbel et al., \textit{Assessment of a Government-Subsidized Supermarket in a High-Need Area on Household Food Availability and Children’s Dietary Intakes}, \textit{18 PUB. HEALTH NUTRITION} 2881, 2881 (2015).

\textsuperscript{224}. See POLICYLINK, supra note 1, at 19.

\textsuperscript{225}. See Alia, supra note 65, at 340–41; DINÊ POL’Y INST., supra note 47, at 75–76.

\textsuperscript{226}. Freedman, supra note 162, at 391.

\textsuperscript{227}. Gayle Mallinger & Molly Kerby, \textit{The Harvest is the Best Teacher: A Narrative on Food Insecurity and Community Gardening with Children and Adolescents}, \textit{20 REFLECTIONS: NARRATIVES PROF’L HELPING} 70, 70, 74 (2016).
they grew. 228 This anecdote highlights that, in the time spent cultivating produce, the gardener can also build connections within the gardening community and learn about nutrition and other food-related topics. 229 Thus, beyond just providing produce, these seed library and community gardening initiatives can encourage healthy eating generally. In addition, seed libraries can carry seeds that are culturally appropriate and may not be available commercially. 230

One overarching policy recommendation is to connect the work that a seed library does in a U.S. community with the work that seed libraries do around the world. For instance, one seed librarian described the work of a seed library as “whimsical” and, indeed, there are elements of fancy and creativity in repurposing a card catalog into a seed library. 231 However, seed libraries in communities around the United States are also doing work to protect against climate change, preserve biodiversity, and provide a food source for low-income neighbors. 232 Thus, both seed librarians and policymakers should appreciate seed libraries’ true importance.

Legislators must recognize that important work, as well, and adopt the Recommended Uniform State Seed Law or otherwise create an exemption for non-commercial seed sharing under a state’s seed law. 233 Another recommendation would be for state Departments of Agriculture to follow the Pennsylvania model and proactively issue guidance for prospective seed librarians and for those seed librarians who currently operate in that “legal grey area.” 234 These suggestions serve two functions. First, they take away some risk in operating a seed library. Second, enacting a new statute, amending an existing statute, or issuing a protocol or other guidance raises awareness of seed libraries.

The Illinois, Nebraska, Minnesota, Iowa, and California statutes and the Pennsylvania model demonstrate the various forms that state action can take. In Illinois, the Act requires that seed libraries have a mechanism for tracing the seeds. 235 The Recommended Uniform State Seed Law also requires “[s]ome form of reference identification that provides traceability.” 236 This provision is important, as it would allow the Department of Agriculture to locate the source of

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228. Id.
229. Id.
230. See K. Heather Devine, Vermont Food Access and the “Right to Food”: Using the Human Right to Food to Address Hunger in Vermont, 41 VT. L. REV. 177, 185-86 (2016) (writing that “[f]ood access is not adequate if the people cannot access food that conforms to their cultural traditions.”).
231. Hartnett, supra note 11.
232. ILL. COMP. STAT. 505/110 / 7(b) (2017)
233. ASS’N OF AM. SEED CONTROL OFFICIALS, supra note 93 at 10.
235. See, e.g., Bishop, supra note 97 (calling for local governments to enact legislation to protect seed libraries).
237. ILL. COMP. STAT. 505 110 / 7(b) (2017)
238. ASS’N OF AM. SEED CONTROL OFFICIALS, supra note 93 at 10.
a noxious weed outbreak and prevent its spread. Therefore, states should include the provision from the model law in any future legislation or protocols. Statutes also vary on whether seed libraries are allowed to accept returned seed. For instance, the Recommended Uniform State Seed Law provides that seed libraries “may not expect, or create the expectation, that seeds must be returned in exchange for receiving seed”; however, it does not explicitly prohibit a seed library from accepting seed from a patron. In contrast, the 2014 Pennsylvania protocol required that seed libraries start with fresh seeds each year before the Department of Agriculture updated its position to clarify that the Seed Law did not apply to seed libraries. Seed libraries are exempted altogether from the Nebraska seed law. If one function of seed libraries is to conserve plant species, then legislatures need to consider whether this can be accomplished without seed libraries accepting seed. This is especially relevant if the goal is to promote biodiversity and preserve locally adapted varieties, then the Nebraska model would provide the most open route to do this. Regardless, states should allow some mechanism by which people can share seeds.

There is another reason that state seed laws should permit seed libraries to accept returned seed, as well. One article, in discussing food banks, explains that the model has been for food banks to rely on middle class volunteers and charity; however, it describes that some food banks have moved to a new model of building capacity in food bank patrons. The same principle applies to seed libraries. Instead of just supplying hand-outs of seeds, a seed library that accepts return seeds can accept those from high-, middle-, or low-income patrons. Everyone can contribute harvested seed to the seed library and thereby, regardless of income level, be an equal player in promoting community food security.

Creating an environment in which seed libraries can legally operate is a solid first step, as “[t]he development of an enabling policy and legal environment is most likely the greatest challenge that most community seed banks face.” Based on the experiences of current seed libraries, however, the success of a seed library requires more than a law.


238. ASS’N OF AM. SEED CONTROL OFFICIALS, supra note 93 at 4.

239. See SEED LIBRARY PROTOCOL, supra note 234; Ag Secretary Promotes Seed Libraries as Valuable, supra note 4.

240. NEB. REV. STAT. § 81-2, 147.01(28) (2017).

241. See Vernooy et al., Roles of Community Seed Banks, supra note 15, at 649; DIVERSIFOOD, supra note 6.

242. Hartnett, supra note 11; See BANKING FOR THE FUTURE, supra note 11, at 4.

243. See Vitiello et al., From Commodity Surplus, supra note 171, at 420, 425 (describing an organization that plants community orchards, allows people to harvest and preserve their own food, and hosts workshops on caring for fruit trees).

244. Vernooy et al., Roles of Community Seed Banks, supra note 15, at 650.
One unique aspect of seed libraries in the United States is that many are housed in traditional lending libraries. This makes practical sense, as the seed library can be open whenever the library is open and can use the existing infrastructure. Hosting seed libraries could also help book libraries stay relevant. Both promote community enrichment, information-sharing, and literacy, whether related to words or botany.

Because traditional librarians may be drawn to starting a seed library for a variety of reasons, seed librarians should appreciate the broad potential that seed libraries have for preservation, seed and food sovereignty, and promotion of access to healthy foods. A survey of seed librarians revealed that 79.7% of respondents thought people in their communities lacked food security. Of the survey respondents who perceived food insecurity in their communities, 81.3% felt that the seed library had the potential to help, but only 46.5% felt that the seed library was contributing to a food-secure community. Asked whether the seed library pursued low-income families as patrons, one librarian said, “No, but now that you’ve given me the idea I will!” In contrast, however, Richmond Grows seed library explains its “intention to grow more local seed for the benefit of the community” by “focusing on preserving varieties that have cultural significance or are rare or unusual while increasing food security and local resilience.” Still, the survey shows that opportunities exist and community policymakers should remain attuned to those opportunities to allow all community members to access nutritious foods.

A follow-up policy recommendation is to educate seed librarians on the laws related to seed libraries. For instance, the Recommended Uniform State Seed Law recommends seed libraries display a sign that states that “patented seed or varieties protected by the Plant Variety Protection Act will not be accepted or distributed without permission of the certificate holder.” Thus, the seed librarian needs to understand the intellectual property protections for seeds as well as the requirements of the Federal Seed Act.

As stated above, the seed library must be supported by other urban agriculture initiatives, oral history projects, or educational programming. As an example of robust programming, the Mountain View Public Library in California supports its seed library by plant exchanges, crop swaps, and lectures by master seeds library users.


[246] See, e.g., Richmond Grows, supra note 232.


[250] Id. at 47–48.

[251] Id. at 52.

[252] Richmond Grows, supra note 232.

[253] Ass’n of Am. Seed Control Officials, supra note 93, at 10.

gardeners and other gardening experts. One speaker discussed seed saving, while another presented on starting plants from seeds and on kitchen gardens. Supra note 248. Seed library supporters also toured a nearby fire station’s garden and are considering creating school gardens and gardening programs for kids. In Oregon, Grow Portland is creating a special collection of seeds that have unique ties to the Portland area, such as those that have great adaptability to local conditions, those that immigrants brought to the area, or those that have links to important local history. Grow Portland is also interested in interviewing gardeners about those special seeds. Similarly, Blue Ridge Women in Agriculture in North Carolina supports its seed library with an oral history project. See STAPIT ET AL., supra note 16, at 30 (explaining that the materials and equipment needed for a seed library are often low-cost).

Since many people do not own or have access to land to plant their seeds, policymakers should consider adding community gardens on open public land. Seed libraries should also teach patrons best practices for container gardening, a method appropriate for apartment balconies or front steps. In addition, seed libraries should consider providing low-income patrons with the materials necessary for container gardening. Certainly, seed libraries are not a standalone solution for food injustice; however, they can function as a low-cost arrow in the quiver of communities that want to create programming, enthusiasm, and support for healthy food access.

VII. CONCLUSION

Around the world, seed libraries function as defenders against climate change, preservers of biodiversity, collectors of stories and local knowledge, and providers of food. However, the wording of state seed laws has stymied their spread within the United States. Beyond just legalizing their operations, however, policymakers must come to understand a seed library’s potential, especially to promote food justice. As demonstrated by successes in Orangeburg, Toronto, and Blue Island, seed libraries can join farmers markets and community gardens as components of a broader strategy to promote access to healthy foods.

255. Weak, supra note 248.
256. Id.
258. Id.
260. See STAPIT ET AL., supra note 16, at 30 (explaining that the materials and equipment needed for a seed library are often low-cost).