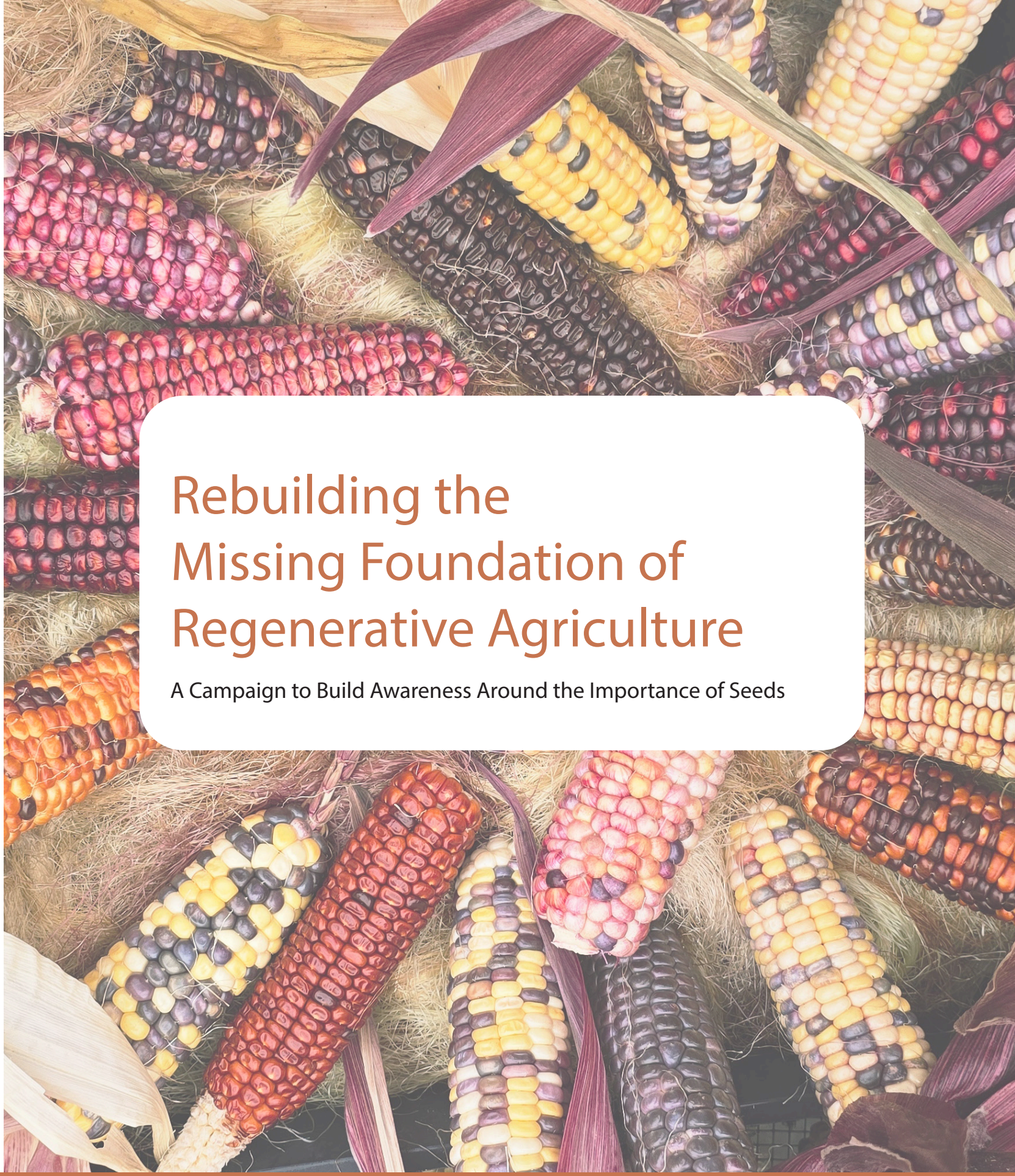

Rebuilding the Missing Foundation of Regenerative Agriculture

A Campaign to Build Awareness Around the Importance of Seeds

The Local Seeds Coalition

December 2025

Summary

Key findings from national interviews and the case for a coordinated campaign to elevate the role of seeds in our food system

Diverse and open-source seed genetics are fundamental to a resilient food system. Regionally grown seeds are essential to the success of regenerative farmers, and right now, those seeds are at risk. The Local Seeds Coalition is undertaking a coordinated campaign to rebuild recognition of regionally adapted seeds as essential infrastructure for food system resilience and biodiversity.

The Local Seeds Coalition has invested hundreds of volunteer hours to conduct extensive interviews and surveys across 29 US states, Mexico and Canada. We heard a consistent call to action: seeds have become invisible to many farmers and the eating public and thus we must reestablish the awareness of seeds' critical importance to resilient food production.

Across the country, small regional seed companies, nonprofits, Indigenous seed keepers, seed librarians, and independent growers are working to protect and adapt the seeds of our local and regional food systems.

We estimate first year costs for development and deployment of the Local Seeds campaign to be $100,000, most of which is allocated for professional services, digital campaigns, and printed materials rather than paid staff.

The following proposal reports on findings from interviews, written survey responses, coalition gatherings, and advisory committee meetings with representatives from national seed organizations held in 2025.

A rooftop urban farm in Oakland, CA. The use of commercial seeds developed for conventional row crop production presents challenges for this foggy, windy, and shallow growing.

Tomato variety trials testing disease resistance and other traits at the Organic Seed Alliance farm in Humboldt County, CA

Why Seeds,Why Now?

Why regional seed adaptation is central to climate and economic resilience, and why public awareness is urgently needed now

When COVID disrupted the supply chains and extreme weather events intensified, Americans experienced that unforeseen global events could lead to empty grocery shelves and price spikes. It was then that we began to understand the fragility of their food production and access to it. In response to perceived shortages, millions of Americans planted gardens, many for the first time. However, for many, these gardens didn't increase their food security.

Growers often begin with dreams of lush, productive harvests. By the end of the season, many of the harvests fail, pests take over, and fruits refuse to grow or ripen. Countless new growers conclude that they are the problem. Studies of community gardening programs show that first-year turnover can reach up to half of all participants, often because beginners feel unsuccessful or discouraged.[1]

But the problem often lies with the seeds rather than the growers. Many seeds available on the commercial market were bred in distant regions, and growing them in a new place subjects them to unfamiliar pests, climate stresses, and soil conditions. Because these varieties are not selected for local, organic, ecotypes, or regional stressors, they often require additional fertilizers, pesticides, irrigation, and plastic to perform well.[2]

Defining Local and Regional Seed Systems

What do we mean by "local" and "regional"?

Local and regional seeds are grown and selected over time in a particular place to perform well under the real conditions of that place. "Local" refers to a microclimate; "regional" refers to a broader ecological area where growing conditions are similar. The issue is ecological fit, not arbitrary lines on a map.

A healthy seed system includes many roles: farmers who save seed for key crops; regional seed companies; farmer-owned cooperatives; Indigenous and cultural seed keepers; farmer-breeders and researchers; university-based public plant breeders and researchers; and home gardeners who help varieties adapt at small scales. Together, they form a distributed, resilient network of stewardship.

1 A. W. Beavers et al., "Supporting New Gardeners: Perspectives of Gardeners and Garden Leaders," *Journal of Agriculture, Food Systems, and Community Development (2024).*

2 Organic Seed Alliance, *State of Organic Seed (2022).*
See also: Mitch Lies, "Organic Seed Use Lags in U.S. Farming," *Farm Progress*, March 21, 2025.

In the hills near Acapulco, Hurricane Otis flattened entire fields. Farmers have been saving seed from shorter, more wind-resilient maize plants that can withstand the increasing storms. *Photo: Marcos Cortez Bacilio*

A farmer in Guerrero, Mexico examines her corn harvest. She will select seeds from the best cobs to share and replant. *Photo: Marcos Cortez Bacilio*

Globalization and International Sourcing and Collaboration

Local seed work depends on and benefits from global collaboration, cultural exchange, and the movement of seed varieties across borders. Cmmunities across the planet rely on seeds first grown in other places, making international cooperation and sourcing imperative. Local and regional seed work is embedded in an interdependent global network to snsure seed diversity is protected and adapted by the hands of many diverse peoples and cultures.

The Hidden Costs of Ignoring Seed Origins

Many regenerative growers invest in soil health, carbon sequestration, and regenerative practices, but overlook the genetic foundation of the food system. When seeds become an afterthought, here's what happens:

- **Environmental mismatch:** Seeds bred for distant bioregions often require more water, fertility, pest management, and plastic, increasing input use and undermining regenerative practices.[3]
- **Economic crisis:** Due to commodification, globalized sourcing, and race-to-the-bottom labor economics, economically producing regional seeds for sale is difficult.
- **Climate urgency:** Centralized breeding systems can't keep pace with shifts in weather patterns.
- **Supply chain fragility:** Growers become overly dependent on commercial seed sources, with four multinational firms[4] accounting for half to two-thirds of the global commercial seed market.
- **Outsourced knowledge and uniformity:** Important, region-specific skills are lost.

Together, these trends threaten the continuity of cultural knowledge, ecological resilience, food security, and regional self-determination.

Reviving Local Seed Stewardship

A network of local seed systems focused on regional production can offer a practical solution. In fact, local communities can save their own seed, and localized seed production enables regions to meet their own needs when global systems falter. For thousands of years before commercial seed markets existed, Indigenous peoples across the Americas and around the world cultivated, selected, and shared seeds in ways that sustained both land and community. Many of the crops the world depends on today (including corn, beans, squash, chilies, potatoes, and others) were shaped through generations of Indigenous stewardship.

These communities continue that work today, maintaining varieties, stories, and cultivation practices that remain vital to regional resilience-despite the history of displacement, forced assimilation, and ongoing pressure from commercial agriculture. Any effort to rebuild local and regional seed systems must stand on this long continuum of care and acknowledge the knowledge, labor, and persistence of the Indigenous seed keepers who have carried these traditions forward despite centuries of disruption.

The infrastructure for regionally adapted seeds still exists, not only with Indigenous seed keepers but also with seed libraries, community growers, small seed companies, and farmers who steward their own seeds. But their activities aren't economically viable and often depend on volunteer labor and passion.

3 Michel Pimbert, "Introduction: Thinking About Seeds," in *Seeds and Food Security* (Springer, 2022). This discusses how industrial varieties bred for uniform conditions are often ill adapted to local environments and thus jeopardize performance in varied ecotypes.
Available at: link.springer.com/chapter/10.1007/978-3-030-89405-4_1.

4 ETC Group, Global Seed Industry Concentration (2020).
See also: Phil Howard, "Visualizing Consolidation in the Seed Industry,"philhoward.net/seed-digital.

The Challenges Facing Regional Seed Systems

Across 96 oral interviews with seed librarians, farmers, educators, Indigenous seed keepers, and national organizations, a consistent pattern emerged. While the challenges appeared diverse (economic barriers, land constraints, volunteer burnout, limited infrastructure) many seed worker interviewees pointed to a shared underlying dynamic: Seed work remains largely invisible to the broader public.

Although public awareness cannot replace structural solutions such as land access or infrastructure investment, interviewees repeatedly suggested that public understanding affects whether those solutions will be seen, supported, and prioritized.

Seeds Are Invisible

Several interviewees noted that members of the public, whether buying seeds, produce, or plant-derived products, do not know where or how seeds are grown, or why local adaptation matters. One educator put it: "Eaters of food, they don't care about seeds or that good-quality food requires good-quality seeds." Others noted that gardeners often choose seeds based on catalog photography or novelty rather than suitability for their region.

Even brands that emphasize organic or ethical sourcing rarely mention seed origins, leaving consumers with few cues that seed source matters. This lack of visibility also influences farmers' decisions. Many who grow for local markets have not encountered consistent buyer interest in locally produced or regionally adapted seed. As one interviewee summarized: "Growers will care when buyers care." Without a clear demand signal, farmers continue sourcing seed from large, well-known distributors.

Economic Pressures and Risk Shape Farmer Decisions

Farmers consistently acknowledged the potential benefits of regionally adapted seed. One interviewee noted, "All the farmers here are so aware of the benefits of regionally adapted seeds, the importance of seed saving. They really want to do it." Yet most rely on a small number of national suppliers. An informal poll[5] of 21 farmers at three markets in Mendocino and Humboldt Counties found that 18 named the same East Coast based seed company as their primary source.

5 Internal poll conducted by the research team in 2025 across three farmers markets in Mendocino and Humboldt Counties.

Interviewees described farming as a low-margin, high-risk enterprise. As Bevin Cohen, author and founder of the Michigan Seed Library Network, observed, "They're working on such a slim margin on everything that they're doing that convincing them to do anything more is a very difficult sell." With so little room for failure, farmers are inclined to choose seed from large seed companies because they are more confident that it will germinate well and yield uniform products. Even the additional labor and inputs required to grow non-locally adapted seed do not change this perception.

Volunteer Capacity and Burnout

The work of maintaining regionally adapted varieties, sharing seed locally, and supporting community seed programs depends heavily on volunteer labor. Seed librarians described growing seed on their own time and donating it to library collections. One seed company operator explained, "We don't make money at selling seeds. It's just not lucrative. … It's passion rather than profit."

Interviewees also highlighted how inequities in land access and proximity to supportive communities affect their ability to participate in seed work. One seedkeeper stewarding seeds culturally relevant to the Black community shared the tension between affordability and community connection: "We want to be around other Black people… but the closer you are to an urban area, the more expensive it is."

> **"It seems to be [farmers] are working on such a slim margin on everything that they're doing that convincing them to do anything more is a very difficult sell."**
>
> **Bevin Cohen**
> Author and founder of the Michigan Seed Library Network

> “The language and the seeds are your heritage... And if you don’t have those anymore, you’re out there lost, trying to figure it out.”
>
> **Dianna Henry**
> Author and Indigenous Seed Keeper

CHALLENGES FOR INDIGENOUS SEED KEEPERS

Indigenous seed keepers carry responsibilities that extend beyond stewarding seeds. Amy June Breesman of Local Contexts described working on tools to help researchers and institutions acknowledge whose intellectual property they're borrowing when developing new crops or adapting varieties to new regions, and she explained that Indigenous communities are often expected to both protect cultural knowledge from misuse and teach outside organizations how to engage respectfully.

Indigenous seed keepers work to reconnect seeds with their cultural and geographic origins, but institutional seed collections often complicate this effort. Records in systems like the USDA GRIN Gene Bank database contain inaccuracies that make identification difficult. "When I've gone into GRIN, it might say that something was collected in Kansas, but who was there when? Where did that person get the seed? Because so often the names are either not recorded or incorrect," said Amy June, noting that tribal names are frequently switched, and you need to account for when things were collected, where reservation boundaries were at the time, and the effects of forced relocations. Wojapi TwoBulls of the Ponca Tribe of Nebraska confirmed this through her experience of seeking out the squash varieties her ancestors grew for thousands of years. She had little success, either from her tribal mentors or online gene banks.

For Stephen McComber, a First Nations Mohawk seed keeper near Montreal, the priority is active stewardship. "We need to keep these seeds going so our people can continue to grow our own food," he said, emphasizing that this work serves future generations and that his role includes being a resource for younger people who will carry it forward.

The context of historical trauma shapes how Indigenous seed keepers approach their work and decide what to share publicly. Dianna Henry, who grew up in a family where Indigenous identity had been hidden, described returning to seeds as an act of cultural recovery: "The language and the seeds are your heritage. It's like the heritage, the songs and the language and the ceremonies are who you really are. And if you don't have those anymore, you're out there lost, trying to figure it out."

THE BROADER CONTEXT

When the role of seed in food security, climate adaptation, and cultural continuity is not widely recognized, the work is harder to resource, sustain, or integrate into regional planning.

Awareness alone cannot resolve issues like land access or the need for infrastructure investment. However, interviewees repeatedly suggested that stronger public understanding could help create conditions in which regional seed efforts are better supported through market demand and funding opportunities.

Build Demand for Regional Seeds

Our plan for rebuilding the relationship between food and seeds

Millions of Americans grow food, yet most have no way to know where or how their seeds were produced.

That lack of visibility limits communities' ability to build secure, regionally adapted seed supply chains and makes it harder for small seed producers to earn a living wage. It also means growers often rely on seed that is not well matched to their climate, which can contribute to higher environmental and economic risks and, over time, to the loss of crop diversity. Today, seed origin is rarely highlighted in seed catalogs, seed libraries, farmers' markets, or in the broader food system.

This proposal addresses that gap through a two-part approach: first, creating shared labels and clear language to identify where seeds are grown, and then launching a coordinated awareness campaign to help growers and the public understand, recognize, and use that shared language.

1. Create shared labels and language that identify growing regions

For thousands of years, farmers, gardeners, and Indigenous seed keepers have selected and stewarded seeds that respond to the specific conditions of their regions. That long continuity of place-based seed work is why seed origin remains essential today: where a seed is grown shapes how well it performs, and making that information visible is a first step toward helping communities rebuild regionally adapted seed systems and ensuring that small seed producers are recognized and fairly compensated for their work.

To support that visibility, we propose a **simple icon system,** similar to familiar catalog indicators like "OP," "F1," or "Organic," that identifies the region where a seed lot was produced. These icons can appear in catalogs, on websites, and on packets in any country, forming a shared visual language that helps growers easily understand where their seed comes from. The system defaults to ecoregions but allows flexibility for watersheds, bioregions, counties, or community-defined regions when needed, ensuring it fits varied cultural and national contexts.

Seeds being shared at a seed exchange in Guererro, Mexico

The goal is straightforward: any person, anywhere, should be able to look at a seed packet and know what regions and conditions the seed was adapted for.

In turn, buyers gain access to seeds better suited to local growing challenges, and sellers benefit from recognition for offering regionally grounded, clearly identified seed.

2. Market that language through a coordinated national awareness campaign

Partner organizations will have access to consistent messaging and open-source materials to help growers understand why regional seed matters and how to find it. Project materials will include videos, print pieces, social media content, and adaptable icons to make sure that the new language becomes recognizable, trusted, and easy to use.

Anticipated Impact: Systemic Change

This campaign addresses a critical gap in sustainable farming by transforming how seeds are bought and sold. The changes create a reinforcing cycle: as demand grows for regional and culturally significant seeds, more farmers can earn viable incomes producing them. This economic stability preserves specialized knowledge and cultural traditions that might otherwise be lost.

By the third year, we anticipate measurable shifts across three interconnected areas:

Economic Resilience: Participating seed companies will see a 20% increase in gross sales, enabling 100 growers to add seed production as a viable income stream. Eighty percent of US regions will have at least one accessible regional seed source, and 20% of farmers will shift from national to regional suppliers. This localization will cut average seed transport distances by 20%.

Climate and Environmental: Health Each target region will gain 10 newly documented climate-adapted varieties. Farmers using these regionally adapted seeds will experience 10% fewer crop failures and reduce water and pest management inputs by 10%. Crop diversity will increase by 10% per region, directly strengthening biodiversity and food system resilience.

Knowledge & Culture: Regional seed circulation through seed libraries will grow by 20%, and 25 historically significant varieties will be returned to their regions of origin. An expanding network of K-12 and community education programs will support this cultural reconnection, while a growing database documents the ten-thousand-year history of where our food crops were first domesticated and by whom.

Impact on Local Communities: This national campaign functions as infrastructure that delivers resources directly to grassroots efforts. Volunteer-run community hubs receive professional-grade marketing tools that make seed origins instantly clear. Farmers gain the consistent demand needed to justify seed production. Home gardeners who might have quit after crop failures now have access to locally adapted varieties that actually thrive in their conditions, building real food security from the ground up.
production.

Gardeners often quit because they blame themselves for crop failures caused by unadapted seeds. The campaign helps them identify locally adapted varieties to increase their success rates and tangible food security

Global Collaboration: The project will make the labels and guidelines available internationally through the Strengthening International Seed Networks initiative and the International Federation of Organic Agriculture Movements (IFOAM), drawing on successful messaging from other countries and contributing to the global movement for food and seed sovereignty.

Team

The Local Seeds Coalition has established a steering committee as a developing feature of pooling resources and common purposes among seed communities and nonprofits. This committee will enhance collaboration and ensure effective progress towards shared goals. The collective efforts of the committee will leverage its diversity of expertise in promoting sustainable agriculture. The evolving team includes representatives from leading national and international nonprofits:

1. Labeling System Development and Standards

- **Amy June Breesman, Local Contexts.** Develops Indigenous-led labels for seed stewardship and community governance (existing).
- **Edmund Frost, Seed Worker Organizing.** Advise on regional guidelines.
- **Bonetta Adeeb, Ujamaa Seeds.** Provides guidance on culturally relevant seed labels, seed-to-table integration,and equitable outreach/support for BIPOC seed growers and seed companies.
- **Molly Travis, Organic Seed Alliance.** Provides guidance on ecological framing for regional labels.

2. Awareness and Engagement

- **Rebecca Newburn, Seed Library Network.** Leads seed library implementation; label translation.
- **Michael Bollinger, Seed Savers Exchange.** Provides guidance on commercial-scale adoption of labels.
- **Hélène Bourre, Vergers du Monde.** Creates awareness materials (social media and a book).
- **Gabriele Maneo, Strengthening International Seed Networks.** Coordinates alignment with international seed sovereignty networks and asset mapping.
- **Alan Lewis and Kia Ruiz, IFOAM North America Board of Directors.** Business advisors.

3. Mapping & Regional Seed Infrastructure

- **David Gould, IFOAM Seeds Platform.** Contributes to process facilitation, map development; aligns mapping and standards with international organic frameworks.
- **Bill Braun, Freed Seed Federation.** Coordinates organizational resource mapping and communication.
- **Steph Hughes & Melody Reese, Community Seed Network.** Will coordinate the development of a consumer-facing regional seed company map.
- **Michelle Dang, SeedChange & Bauta Family Initiative.** Project Role: Provides guidance on farmer and youth engagement and alignment with Canadian seed networks.

4. Project coordination and fundraising

- **Chanda Robinson Banks, Ujamaa Seeds.** Strategic framing, proposal development, and advisement on community-powered governance structures.
- **Julia Dakin, Melanie Levy, Anna Mieritz, and Miguel Olvera, Going to Seed.** Anna advises on design for campaign materials; Julia and Melanie lead fundraising and grant writing, and Miguel supports administrative and volunteer coordination.

Timeline

Year 1: Build Shared Infrastructure

- Facilitating conversations in a safe venue for seed organizations to reach an agreement on shared language that respects current, cultural, and ancestral seed stewards.
- Create a visual language for seed origins: Simple icons identifying growing regions and the cultural history of the crop.
- Customizable and professionally designed outreach material for social media, farmers' market signage, seed library posters, and email outreach.
- Regional Reference Maps, to define regions and cultural history, a partner directory of participating organizations, and a map of regional seed companies.

Year 2: Scale and Expand

Long-term sustainability will be achieved through a 'pay-it-forward' structure, where commercial users of the label contribute sliding-scale membership dues to support the continued coordination and promotion of the campaign.

- A food system visibility campaign to include restaurants, food hubs, and institutional buyers will extend seed visibility throughout the food system.

Materials will be available in a central hub to participating organizations that agree to the transparency criteria and are listed in the directory. Access to project materials will be granted to partners who agree to the basic use guidelines.

This approach mirrors other awareness campaigns like Slow Food, Fair Trade, Creative Commons

Budget

With $25,000 already committed by an individual donor for 2026, the campaign seeks $75,000. While the requested cash budget is lean, this initiative is powered by significant in-kind capital.

- **Materials and Messaging Creation ($30,000)**
  Develops the campaign foundation of tested messages, adaptable brand guidelines, digital assets, creative direction, and shared visual language, including regional seed labels, videos, posters. The distribution of these materials is absorbed by our coalition partners.
- **Developing Labeling and Set of Criteria/Standards ($25,000)** Creates a flexible, scalable labeling system that can be adapted internationally to show where seeds are grown and recognize communities who have stewarded varieties. Develops criteria and frameworks for regional production labels and cultural acknowledgment systems that work across different contexts and can be customized to community-defined regions. Convenes a community of advisors for guidance on materials, outreach, and implementation.
- **Coalition Coordination ($30,000)**
  Supports part-time staff for a year to run quarterly coalition calls, maintain partner communications, manage volunteers, pursue funding opportunities, and coordinate with international seed networks.
- **Online directory and maps ($20,000)**
  For creating a global directory and interactive map, covering the technical work and data setup.
- **Evaluation ($5000)** Supports the creation of a Year 1 Impact Report, aggregating web analytics and qualitative feedback from our 70+ coalition partners.

About the Local Seeds Coalition

The Local Seeds Coalition is fiscally sponsored by IFOAM North America, a duly recognized Regional Body of the International Federation of Organic Agriculture Movements. Our mission is to raise public awareness of the role seeds play in our food systems, and to support a thriving, community-powered movement that centers local, regionally adapted, and culturally meaningful seeds.

This proposal synthesizes findings from 93 interviews conducted across 29 US states and 8 countries, plus 44 written responses, two coalition gatherings, and three advisory committee meetings with representatives from national seed organizations. Seven trained volunteer interviewers used standardized questions, and a team of six volunteer analysts reviewed the data using the Condens research platform. The advisory committee reviewed preliminary findings, and we opened feedback windows for coalition members to contribute their perspectives. Through this process, we refined themes and co-created recommendations based on what we heard.

Ideas were contributed by everyone involved in the process, with special thanks to our 2025 team who carried it out:

- **Toby Cain**, the coalition convener and strategist.
- **Miguel Olvera,** our volunteer coordinator, who contributed design and facilitation for presentations, reports and proposals.
- **Melanie Levy** spent countless hours on research analysis and training other volunteers
- **Anna Mieritz** planned and facilitated several meetings.
- **Julia Dakin,** project coordinator and administrative support.

Writing Acknowledgements: The proposal was written with help from Chanda Robinson Banks, Julia Dakin, Michelle Dang, David Gould, Edmund Frost, and Mike Bollinger and others. It was edited by Masha Zager and Alan Lewis, with design and formatting by Miguel Olvera. Regional and cultural labeling was inspired by Seed Worker Organizing, Molly Travis, and Amy June of Local Contexts.

Interviewers: Thank you to Anna Mieritz, Gregg Mueller, Janna Mintz, Toby Cain, Julia Dakin, Katie Filar, Michelle Dang and Miguel Olvera who interviewed 96 people.

About the Photographer: Marcos Cortez Bacilio trains farmers in Guerrero, Mexico, to reclaim Indigenous corn varieties through ancestral selection techniques. Follow his work on Facebook https://www.facebook.com/marcos.bacil

Thank you to our generous funder, Katie Wheeler!

How to Support This Project

We are making a long-term commitment to ensure regional seed stewardship is visible and viable so communities can rebuild and protect sources of well-adapted seeds while recognizing and fairly rewarding seed providers for their work.

This visibility campaign is key to strengthening the foundations of a community and food ecosystem in which transparency, resilience, and equitable participation are honored.

All contributions are tax deductible through our non-profit fiscal sponsor, IFOAM-North America, a tax-exempt 501(c)3 entity founded in 2018.

VISIT LOCALSEEDS.ORG

to learn more and make a donation

We invite you to strengthen seed systems in your own community: seek out regional seed sources, learn to save one crop, or support your local seed library with seeds, time, or donations.

Photo: Marcos Cortez Bacilio

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