

COMMUNITY OF ORGANIZATIONS

CONNECTING FARMS AND MARKETS



BUILDING COOPERATIVE DIGITAL
INFRASTRUCTURE FOR AGROECOLOGY

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Pilot Project Summary



As a network of entities including non-profit, social enterprise, cooperative and market-oriented enterprises, we aim to stress-test the proposition that we can co-create a digital agroecosystem with a commons governance structure. **This project builds digital infrastructure for a just and regenerative food system — one where agroecological producers control their data, reach aligned buyers, and retain sovereignty in an increasingly extractive digital economy.**

Smallholder and regenerative farmers, many of whom practice progressive land stewardship without formal certification, are often invisible in online markets. Our pilot project changes that by enabling differentiated discovery pathways through trusted, federated and interoperable FMIS and e-commerce platforms. In this project we will enable organic certified producers to be verified and listed on Market Organic (MO); regenerative and agroecological producers will share claims-based profiles on Discover Regenerative (DR), including third-party endorsements and verifiable scores such as RegenScore.

LiteFarm acts as the farmer-facing FMIS interface for managing both certification and ecological attestation — allowing producers to document practices, upload organic credentials, and generate RegenScore profiles within a single environment. Combined with Open Food Network (OFN), which serves as the transactional layer and storefront engine, the system will enable seamless connection between farm-level evidence and digital sales visibility.

By linking LiteFarm, OFN, MO, and DR through interoperable, DFC-aligned APIs, the project allows producers to tell their story once and be discovered across multiple channels and sales desks. Critically, all data sharing is governed by a producer-controlled permissioning module — enabling visibility without compromising autonomy.

Through this project, LiteFarm users will be able publish certifications and ecological attestation on MO and DR from within the LiteFarm app, while MO and DR will link directly to OFN storefronts, creating real-world market linkages. In future phases, integrations with Shopify, WooCommerce, and Square POS will extend cooperative visibility into broader retail spaces — creating network effects without reinforcing enclosure. The result: shared infrastructure for regenerative commerce, built by and for the communities it serves.

Vision



We envision a federated, cooperative, and open digital ecosystem where land stewards can efficiently share trusted data once, syndicate it across platforms, and retain sovereignty over their markets, stories, and certifications. This project will reduce the need for multiple data re-entries, and the need for syncing data across multiple tools or channels, ensuring that farmers are able to not only better manage, but also derive meaningful insights from their farm practices.

Our proposed pilot project serves as a proof of concept, testing the technical and governance foundations for a federated agricultural technology commons. By connecting open-source, values-aligned tools through shared standards and governance, we are building not just technical infrastructure — but a digital commons where producers are not isolated users of proprietary software but rather owners and shapers of shared platforms.

Our model draws inspiration from federated cooperative economies — such as Japan’s Zen-Noh and Finland’s S-Group — but reimagines their principles for the digital era. Rather than building yet another marketplace, we are creating a shared sales and marketing ecosystem, powered by cooperative infrastructure that enables farmer-consumer connections through shared discovery engines and trust layers. This integration will enable agroecological producers to be found, verified, and supported — while retaining full sovereignty over their digital identities and data.

Our vision is not merely to integrate tools. It is to shift power and ownership: from platforms to producers, from extractive intermediaries to cooperative networks, and from market capture to mutual benefit. In doing so, we aim to make agroecology not only visible, but viable.

Participating Platforms & Project Partners



- **LiteFarm (LF)** – An open-source farm management system developed for diversified, agroecological and producers of all sizes including smallholders. LiteFarm serves as the primary farmer interface for managing certification and ecological attestation, supporting both organic certification workflows and RegenScore claims through an intuitive planning and recordkeeping environment.
- **Open Food Network (OFN)** – A global, open-source e-commerce infrastructure that powers food hubs, cooperatives, and direct-market farmers in more than 11 countries. OFN provides the transactional backbone for producers selling locally — including online storefronts, inventory management, payments, and logistics coordination.
- **Market Organic (MO)** – A federated discovery and trust platform for certified organic and values-aligned producers. MO acts as a cooperative marketing desk and aggregation layer—combining digital discovery with member-owned brokerage services to help producers negotiate better terms, establish forward contracts, and reach aligned buyers—all while retaining control of their existing systems and data.
- **Discover Regenerative (DR)** – An Australian-grown directory and claims platform for regenerative producers. Led by OFN, DR supports farms practicing ecological stewardship with or without certification, offering visibility through narrative, third-party endorsements, and tools like RegenScore. Built for global deployment, DR connects diverse producers to buyers seeking verified regenerative practices across a federated ecosystem.
- **Data Food Consortium (DFC)** – A collaborative, open-source standard for semantic and structural interoperability across food system platforms. DFC ensures that key data — from certifications to inventory — can move between tools without losing meaning or integrity. By aligning data models across systems like OFN, LiteFarm, and MO, DFC enables federation, reduces duplicative effort, and supports the development of decentralized, producer-controlled digital infrastructure.

- **RegenScore** – A flexible, evidence-based scoring framework for regenerative agriculture. RegenScore allows producers to demonstrate ecological outcomes — such as soil health, biodiversity, or land stewardship — through a mix of data, narrative, and verification. Scores are digitally portable and can be embedded into directories like DR and MO, helping buyers and institutions identify and reward regenerative practice in a transparent and scalable way.
- **COSSAF (Catalyst for Open Software & Systems in Ag & Food)** – A coordination and execution initiative, COSSAF brings together technical partners, ecosystem builders, and domain experts to support collaborative projects across ag-tech, data governance, and digital public goods. As part of future phases of this project, COSSAF will lead industry engagement through its Supply Chain of the Future initiative, connecting aligned stakeholders and surfacing use cases that advance adoption of open, farmer-led infrastructure.
- **SADIE (Smart Asynchronous Data In Escrow) @ Qlever** – Technical partners advancing cryptographic tools for secure claims attestation, digital identity, and certification verification. Their infrastructure enables producers to share verifiable ecological and certification data — including RegenScore, organic credentials, and practice-based claims — while preserving privacy and control. In this project, SADIE will explore the use of zero-knowledge proofs and escrow-based data sharing to support trusted claims propagation across federated marketplaces.

Project Plan



2 Year Vision (Phases 1-3)

We are building a federated, farmer-first digital infrastructure to connect agroecological producers with values-aligned buyers — without compromising data sovereignty, transparency, or trust. As LiteFarm, OFN, and Discover Regenerative deepen their alignment with Market Organic's cooperative principles, we are laying the foundation for a digital sales and marketing cooperative that includes — but is not limited to — certified organic farms. This structure will create new market access pathways for regenerative and agroecological producers who may not pursue formal certification but who are actively stewarding soil, water, and community health.

We envision an international network of interoperable, open-source tools, owned by producers and anchored in regional needs. Through shared infrastructure, cooperative brokerage services, and unified discovery layers, this network will reduce marketing costs, support forward contracting, and allow producers to negotiate from a position of collective strength — all while retaining ownership of core infrastructure and control over their digital identities.

Phase 1 | Foundation & Interoperability | \$150,000*

May 2025 – August 2025 (4 months)

As a first enabling step toward the realization of this shared vision, this interoperability project builds core infrastructure by linking four core platforms — LiteFarm, Open Food Network (OFN), Market Organic (MO), and Discover Regenerative (DR) — through open standards and interoperable APIs based on the Data Food Consortium (DFC) specification. Phase 1 focuses on enabling producers to syndicate verified farm and certification data from LiteFarm and OFN to Market Organic and Discover Regenerative. Farmers enter their information once — whether it's for organic certification, RegenScore, or narrative claims — and automatically publish verified profiles across discovery tools like MO and DR.

- **Certified organic farms** are validated through Certified Organic credentials and listed on Market Organic, where their profiles can link directly to active storefronts.
- **Regenerative and agroecological producers** can publish claims-based profiles on Discover Regenerative, including narrative, and third-party endorsements.

All profiles can link back to a producer's storefront — closing the loop from discovery to transaction and eliminating redundant data entry across platforms. In practice, this means:

- Producers can create and manage their profiles and claims data through LiteFarm
- Their data is securely syndicated across MO, DR, and OFN using DFC-aligned APIs
- Buyers can search verified directories and click through to transact directly on OFN
- Producers retain full control of visibility and consent settings via a dedicated admin panel

To achieve this, DFC-aligned APIs will be created along with a DFC aligned permissioning module to ensure secure, granular data sharing based on producer consent. The system will expose core enterprise metadata from LiteFarm via a public endpoint, including:

- Farm name and location
- Certification type and certifier
- NOP ID and/or digital certificate
- RegenScore ID and trust anchor
- Attestation & discovery preferences

This data will flow into MO and DR directories from LiteFarm and link back to OFN storefronts. Producers will manage consent via the DFC data permissioning module. Optional modules including publishing crop plans, harvest forecasts, and further ecological claims to MO and DFC will be explored later, contingent on budget.

During Phase 1, we plan to test this federated infrastructure with 10+ farms across USA and Canada (MO), and Australia (MO and DR). Meanwhile, MO will begin piloting cooperative brokerage services for sales desks, aggregation, and contracting with regional partners. Longer term (e.g. Phase 2 and 3), market linkages and conversion opportunities for agroecological farms will be intensified via creation of Shopify, Square, and WooCommerce plugins.

Jenny the Organic Farmer

Jenny signs up on LiteFarm and chooses to share her data with Market Organic. Her certification is verified, her photo and profile can appear on MO and/or DR. A buyer finds her listing, clicks through to her OFN storefront, and places an order. Jenny never had to re-enter her data, and she chose exactly what to share, where.

Discover Regenerative

DISCOVER
REGENERATIVE

powered by
OPEN FOOD
NETWORK

Reach more regenerative-minded customers.
Showcase your regenerative credentials, farming practices and more through a profile listing on our website. Helping customers find your regenerative produce and connect with producers of interest.

Terms of sharing

Discover Regenerative would like to:

✓

Promote you in their directory

✓

Access images related to your listing

✓

Access and read your profile data

✓

Access and read certification data

[Read our full terms here](#)

Three-Phase Roadmap Summary



Phase 1 | Foundation & Interoperability | \$150,000*

May 2025 – August 2025 (4 months)

- Implement DFC-compliant Open APIs across LiteFarm, OFN, MO, and DR
- Implement DFC-compliant data-permissioning module
- Publish verified organic and regenerative profiles from LiteFarm and OFN to MO and DR
- Connect MO and DR discovery profiles to OFN storefronts to create market opportunities
- Deploy/Test MVP with 10+ farms across USA, Canada, and Australia
- Pilot cooperative brokerage services for sales desks, aggregation, and contracting

Budget Details Phase 1

OFN	- Overall Project Management. Budgeting, Reporting, Stakeholder Communication, Fundraising - DFC Alignment, OIDC authentication, data routing and permissioning, data governance alignment - Backend and database development - Co-create wireframes across teams; UI/UX Design - Advise on UX flows and technical feasibility	\$49,500
LiteFarm	- Technical Project Management, Software development, MVP and user journeys - UI/UX (Design for end-to-end project implementation for MVP 2+) - LiteFarm front and back-end programming, API and database permissioning - Co-create wireframes across teams; UI/UX Design - QA and Full-Stack engineers	\$53,500
Market Organic	- Cooperatives and Outreach Project Management, Documentation and Fundraising - Ensure best practices for PKI primitives - Backend and database engineering (DFC, OIDC, OAuth, GraphQL) - Co-create wireframes across teams; UI/UX Design	\$32,000
GOAT	Financial Administration, Fiscal Hosting	\$15,000
	Total	\$150,000*
	Current request: 11th Hour Foundation, May 2025	\$75,000
	Future request: Ag Tech Community Fund	\$75,000

* NB: Per our March 2025 discussion with Samuel Oslund, LiteFarm, Open Food Network (OFN), and Market Organic (MO) will pursue 11th Hour Project funding for the execution of Phase 1 in two stages. At Samuel's request, the consortium will submit an initial application in April 2025 for \$75,000 USD as a Project Support Grant, with OFN Canada serving as the lead applicant and OFN USA as fiscal host. This submission is made on behalf of the collaborative partners: LiteFarm, Market Organic, and the international Open Food Network project. A second application for an additional \$75,000 USD is planned for later in 2025, to coincide with the anticipated launch of the 11th Hour Project's Ag Tech Community Fund. All parties to this agreement understand that the full scope of work outlined in Phase 1 will require a total budget of \$150,000 USD to execute in full.

Phase 2 | Expansion & Value Demonstration | \$600,000

September 2025 – April 2026 (8 months)

- Extend onboarding to 100+ farms / cooperatives across multiple regions, through preexisting partnerships with members associations, conferences, networks, etc
- Enable product-level data sharing (inventory, availability, attributes)
- Fully integrate RegenScore metadata and discovery filters into MO and DR
- Develop interfaces for sourcing by claim, geography, and certification
- Deploy shared, permissioned analytics for tracking visibility and engagement
- Launch universal onboarding and referral systems across all platforms
- Continue and scale blended capital fundraising strategy
- COSSAF to support industry engagement through the Supply Chain of the Future initiative

Key Features Implemented in Phases 1 and 2

- **DFC-Compliant Open APIs** Seamless, standards-based data exchange between LiteFarm, OFN, Market Organic, and Discover Regenerative.
- **API Endpoints Publish** trusted farm metadata (e.g., name, location, logo, certification, RegenScore) in a consistent, verified format.
- **Data Permissioning Module** Built on DFC's open-source data sharing framework, allowing farmers to control what's shared and with whom — down to the field or product level.
- **Automated Profile Publishing** Certified and regenerative farms are automatically listed on MO and DR, based on consented producer-permissioned data.
- **Storefront Integration** Discovery profiles on MO and DR link directly to the producer's live OFN storefront — closing the loop between trust and transaction.
- **Crop Plan Sharing (Optional)** Producers can choose to share seasonal availability, varieties, and regenerative attributes with MO and DR via structured crop plan data.
- **RegenScore & Digital Certificates** Structured ecological claims and verifiable credentials issued through integrations with RegenScore, Sadie, and Qlever.
- **Federated & Modular** Each platform retains autonomy while contributing to a shared, cooperatively governed and open standard based infrastructure.

Phase 3 | Scale for Impact | \$1,200,000

May 2026 – April 2027 (12 months)

- Connect OFN, MO, and DR open APIs with Shopify, Square POS, and WooCommerce for broader market access
- Onboard new certifiers, regenerative networks, and discovery partners
- Align DFC with GS1 and ISO standards for traceability and interoperability, ensuring global compatibility while supporting local food systems.
- Pilot zero-knowledge claims attestation tools with SADIE for secure, privacy-preserving verification of farm practices and certifications.

Technical Architecture & Data Flow

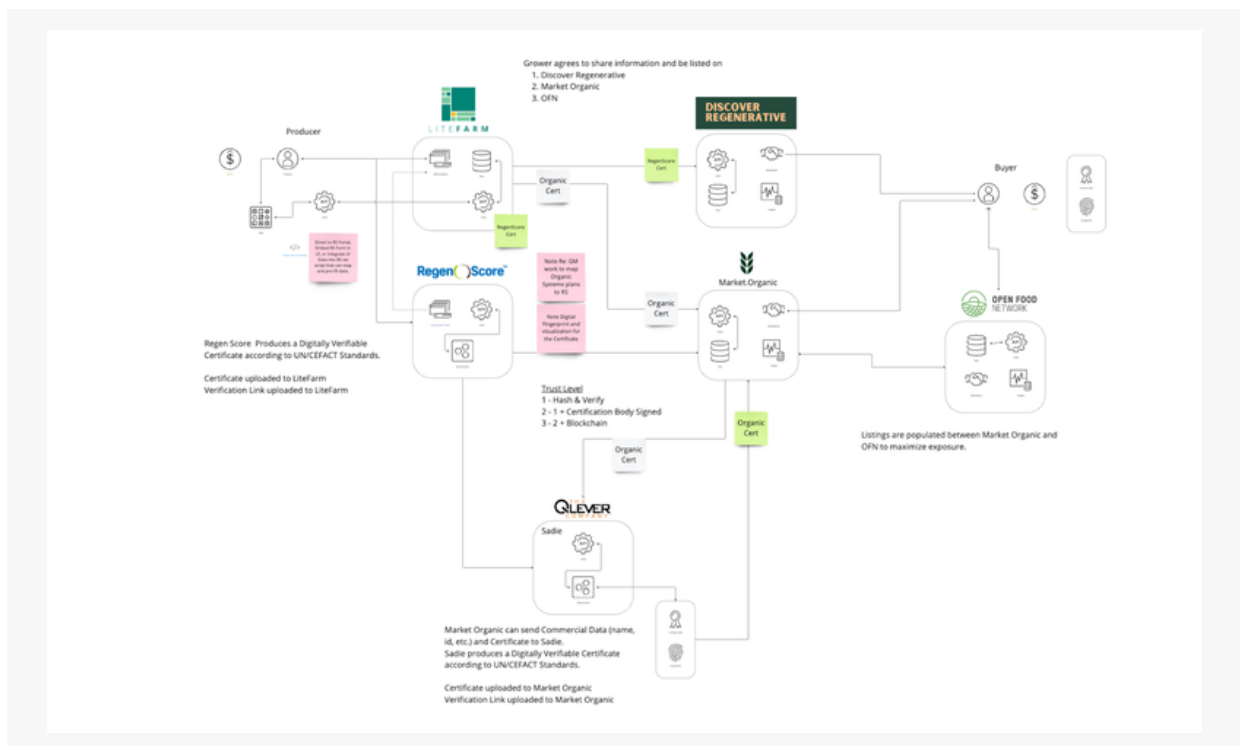


FIGURE 2: VALUE FLOW FROM FARM TO BUYER
ACROSS FEDERATED, DFC-ALIGNED INFRASTRUCTURE (PHASE 3)

Key Metrics



Phases 1 and 2

These metrics will be used to measure and report on early adoption, market linkage, and trust-building outcomes across the federated ecosystem — and are structured to support fundraising, impact reporting, and investor due diligence.

Adoption & Activation

- **% of new LiteFarm users opting into DR/MO**
 - Indicates uptake of the discovery network among new agroecological producers.
- **% of users completing DR/MO profiles (organic or regenerative)**
 - Measures user engagement and profile completeness across verification pathways.
- **% of new users selecting or submitting claims data or certifications**
 - Captures adoption of claims-based and certification-linked trust layers.

Existing User Engagement

- **% of existing OFN or LiteFarm users activating discovery profiles**
 - Tracks backfill adoption across the current user base.
- **Total active DR/MO profiles linked to OFN storefronts**
 - Quantifies the number of producers with full discovery-to-transaction pipelines enabled.

Market Linkage & Trust Signals

- **Referral traffic from DR and MO to OFN storefronts**
 - Demonstrates discovery-driven buyer engagement and platform integration.
- **Click-through rate on “What is RegenScore?”**
 - Measures buyer and stakeholder interest in ecological attestation mechanisms.
- **Trust anchor metadata utilized (e.g., RegenScore, NOP ID, third-party endorsements)**
 - Tracks the diversity of verification pathways used in active profiles.
- **# sales facilitated through federated network**

Business Model & Value Streams



Our cooperative business model is built around federated ownership, interoperability, and non-extractive economics. It supports revenue generation across a shared infrastructure while preserving producer control and public-interest alignment.

Rather than monetizing through lock-in or proprietary licensing, the system creates value through discovery, trust, and shared tooling — enabling stakeholders to benefit from a common ecosystem while retaining autonomy.

Stakeholder	Value Received	Revenue Potential
Farmers	Increased market visibility, trust signals, reduced admin burden, and data control	Tiered SaaS tools, cooperative syndication, marketplace referrals, cooperative dividends
Buyers	Verified sourcing, traceability, and streamlined discovery	Premium search, sourcing tools, data dashboards, referral fees
Directories & Sales Desks (MO, DR)	Auto-populated profiles, trust-anchored marketing, network effects	Federation membership, co-marketing, discovery API integrations
Certifiers & Trust Anchors	Greater visibility, automated claim sharing, and cross-platform presence	API integrations, white-label verification services
Ecosystem Partners & Developers	Reusable open components, shared infrastructure, governance participation	Platform integrations, service revenue
Funders & Public Sector	Verified, non-proprietary digital infrastructure for regenerative transition	Philanthropic support, data commons partnerships, public contracting

The model is designed to remain modular and extensible — supporting new discovery layers, POS integrations, trust anchors, and region-specific configurations without requiring centralization or enclosure. This approach ensures that producers — not platforms — remain at the center of value creation.

Fundraising Strategy



This initiative follows a dual-track fundraising strategy, leveraging each partner's strengths and networks to combine philanthropic infrastructure funding with impact-aligned investment. This approach ensures robust technical development, cooperative governance, and long-term ecosystem sustainability.

Track 1: Member and Investment-Led Growth (Market Organic Lead)

Target: \$1–1.5MM over 12–24 months

Lead: Market Organic

Market Organic is leading a fundraising round round to accelerate the development of federated sales and discovery infrastructure for certified organic and regenerative producers. The model combines digital tools with cooperative brokerage services, enabling smallholder farmers to access markets while retaining control of their digital identities.

Key pitch themes for investors:

- Demand for certified and regenerative supply chain transparency
- “Discovery layer + cooperative brokerage” model as public-good infrastructure
- Monetization through verified discovery, analytics, and buyer services
- Network defensibility via open APIs, trust anchors, and producer governance

Use of funds:

- Core infrastructure development across MO, DR, LiteFarm, and OFN
- UX design and integration with Shopify, Square, and WooCommerce
- Legal structuring and governance implementation for federation
- Pilots of cooperative sales and digital brokerage functions

Track 2: Philanthropic Infrastructure & Ecosystem Enablement (OFN Lead)

Target: \$0.6- \$1MM over 12–24 months

Lead: OFN in partnership with the Macdoch Foundation and Open Future Coalition

Open Food Network will lead the philanthropic funding strategy to support shared infrastructure, technical interoperability, and inclusive governance. This track will be executed in partnership with the Macdoch Foundation and the Open Future Coalition, leveraging Open Future's Open Impact Platform — a collaborative infrastructure for sharing impact data, surfacing alignment, and coordinating funding across networks of regenerative and climate justice actors.

Through this partnership, the project will integrate with the Open Impact data layer to support interoperable metrics, collaborative evaluation, and mutual visibility across funders, producers, and technology partners. The goal is to embed this project within a broader ecosystem of digital public goods — creating reusable tooling and protocols for climate-aligned agricultural transformation.

Key pitch themes for philanthropic funders:

- Shared infrastructure for the digital public goods layer of regenerative ag and values based supply
- Integration with Open Future Coalition's Open Impact platform for aligned metrics, shared tracking, and data transparency
- Open governance and tooling that enable inclusive participation from underserved producers
- Democratized alternatives to proprietary ag-tech and extractive marketplaces

Use of funds:

- Development and deployment of open APIs and DFC-aligned data standards
- Integration with the Open Impact platform for shared KPIs, trust frameworks, and discovery
- Producer-centric onboarding and multilingual user flows
- Open-source governance tools, documentation, and licensing frameworks
- Community infrastructure to support federated growth and long-term stewardship

Governance & Execution



The project is governed by a multi-layer structure that reflects the diversity of stakeholders and domains involved:

- A Steering & Decision-Making Committee meets weekly to guide priorities and resolve cross-functional issues. Members include leads from OFN, LiteFarm, Market Organic, and aligned contributors.
- Technical Workstreams are led by product leads from LiteFarm and OFN, with development teams executing platform-level integration.
- A Commercial Workstream focuses on adoption and revenue strategy, with Market Organic and external partners coordinating market development.

This structure enables decentralized execution with aligned oversight, helping the project balance agility, accountability, and long-term sustainability.

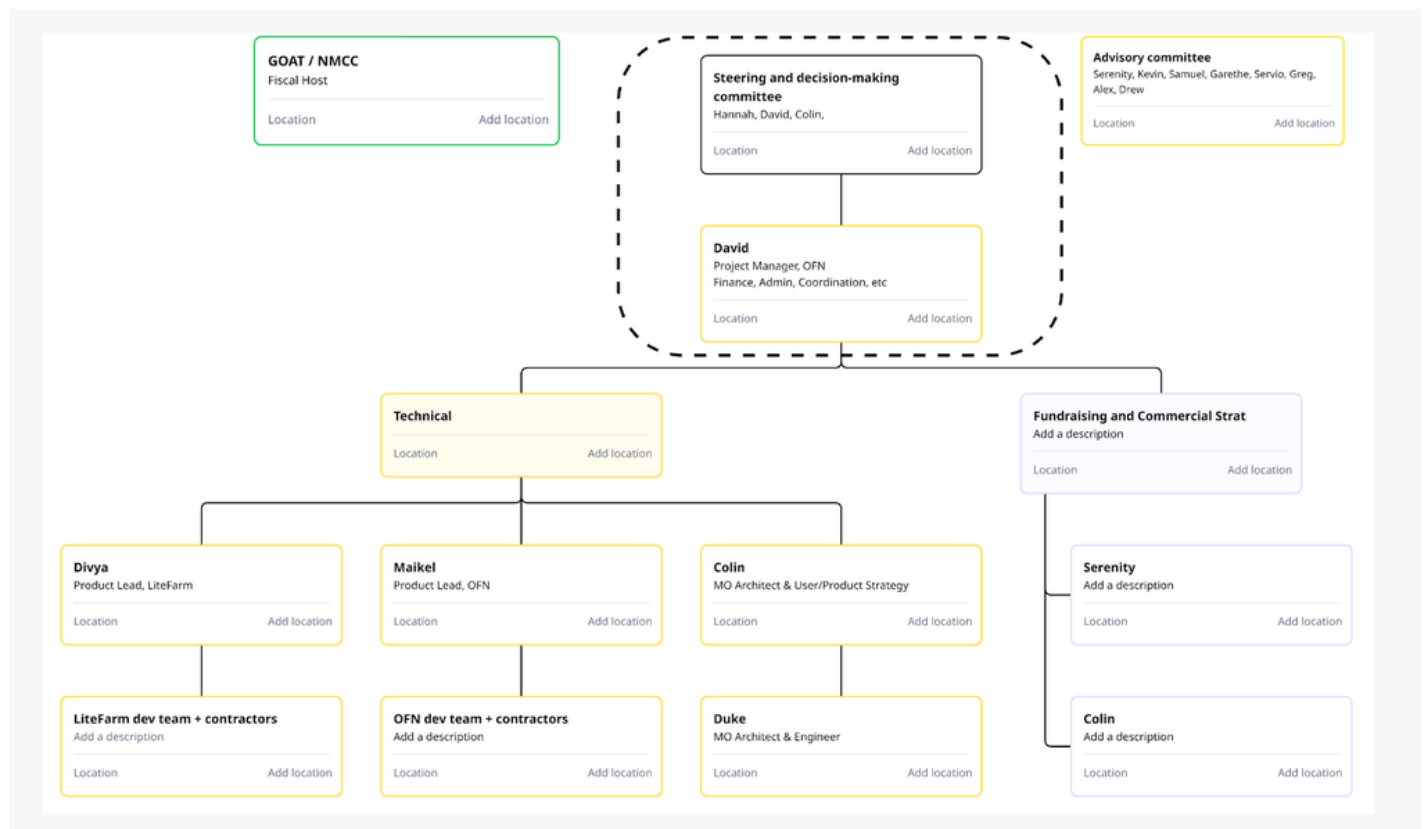


FIGURE 3: PROJECT ORG CHART AND GOVERNANCE STRUCTURE (PHASE 1)

Call to Action



Smallholder and agroecological producers are already regenerating land and community. But without shared, values-aligned infrastructure, they remain invisible in digital markets — and locked out of the tools that shape modern food systems.

We are building a federated, cooperatively governed digital ecosystem: one that gives producers sovereignty over their data, visibility across trusted directories, and access to new markets through shared brokerage and discovery services. From certification-linked visibility to claims-based participation, producers can be found, trusted, and supported — all while retaining ownership of their digital identity and earning a direct ownership stake in the value they help create.

This is more than a software project. It is the foundation for a digital sales and marketing cooperative — one that mirrors the principles of agroecology: decentralization, transparency, solidarity, and equity.

With strong alignment already in place between LiteFarm, Open Food Network, Discover Regenerative, and Market Organic, we're now ready to scale. Over the next 12–24 months, this infrastructure will reach 100+ farms, integrate with major POS platforms, and pilot cooperative brokerage services rooted in regional governance.

We are now seeking philanthropic partners to support this public-interest infrastructure — and ensure that those regenerating the land also shape the systems that sustain their livelihoods.

Let's build the digital cooperative economy that agroecology needs.