MN Continuous Living Cover Value Chain Development Fund Proposal

> **Proposed Investment:** $9M fund managed by MDA providing business capitalization grants to continuous living cover (CLC) value-chain enterprises for equipment, infrastructure, business and market development.

A **Continuous Living Cover (CLC) Value-Chain Development Fund (VCDF)** is needed to accelerate new CLC agricultural industries in Minnesota around crops that are ready to be piloted, launched, and initially scaled. These new industries build on decades of university and grassroots R&D to develop new CLC crops and cropping systems for MN. Examples include Kernza® Perennial Grain, regenerative poultry, camelina, pennycress, hazelnuts, elderberry, and others. These new crops protect soil, water, biodiversity, and climate while also creating new economic and community development opportunities for Minnesota. Significant value-chain development is needed to support expanded production of these crops and begin realizing their benefits at scale. Private entrepreneurship and investment will drive this scaling. Public investment through a **CLC VCDF** is also needed to seed and accelerate growth of CLC industries in MN, delivering significant public benefits to Minnesotans. This investment will further solidify Minnesota as a national and international leader in 21st century agricultural innovation.

Economic Benefits for Minnesota
- Position MN at the center of 21st century agriculture
- Ensure MN investments in CLC basic research progress to beneficial economic outcomes for MN
- Reduce inputs, diversify markets, and boost profits for growers via expanded opportunities to grow CLC crops

Social Benefits for Minnesota
- Growth opportunities for small and mid-size businesses
- Opportunity for marginalized producers to expand participation in MN agriculture
- Create resilient supply chains through new and expanded regional processing infrastructure

Environmental Benefits for Minnesota
- Example: Significantly reduced (+95%) nutrient leaching from Kernza® compared to annual row crops
- Stop and reverse degradation and stop erosion of MN's agricultural foundation: soil
- Critical support for biodiversity, pollinators, habitat
- Significant environmental benefits of CLC crops will only result from widespread production, which require robust value chains and markets.

Example investment: $1.5M to scale existing Kernza® processing facility to 2000 lb/day:
- $ 400,000 …………. Equipment
- $ 200,000 …………. Facility
- $ 300,000 …………. Production & Product R&D
- $ 300,000 …………. Marketing
- $ 300,000 …………. Cashflow

IMPACT: Doubling of current MN Kernza® acreage, resulting over three years in lower input costs (330k less N applied), reduced N leaching (270k lbs. less N loss), 24k tons of topsoil erosion prevented, $13M in retail sales.

NOTE: Details of piloting, launching, and scaling investments needed for CLC crop value chains available upon request.

> "As an immigrant seeking to contribute to Minnesota's agriculture landscape, I operate from an indigenous perspective, one that sees the whole promise that the ecosystems offer. Perennial cropping systems native to this landscape have given me and a whole community of us an opportunity to practice ancestral ways, contribute innovation and economic advantages while delivering abundant food, clean water and a beautified landscape that all of us and our wild relatives can enjoy. This program furthers our aspirations as ecosystem stewards in full alignment with the overall need for building a climate-resilient and competitive agriculture system."
> *-Reginaldo Haslett-Marroquin, Executive Director*
> *Regenerative Agriculture Alliance*

> "We have a unique opportunity to reimagine our agricultural system into one that works better for our farmers, environment, and state. Without state investment, bootstrapped businesses will take longer to grow, limiting CLC's growth and impact. To achieve our shared goals, entrepreneurs need to be supported to scale the supply chains that are bringing these new crops to market."
> *-Christopher Abbott, President*
> *Perennial Pantry*