

U.S. Natural Climate Solutions Accelerator

Round 2 Finalist: Savanna Institute

Initiative: The Alley Cropping Partnership Platform Initiative

NCS Pathway: Alley Cropping

Location: Illinois, Wisconsin, Minnesota, Iowa

The Alley Cropping Partnership Platform Initiative will work to catalyze widespread adoption of alley cropping as an NCS pathway, by using a platform approach to align, facilitate, and de-risk partnerships between farm managers, tree farmers, crop farmers, landowners, and appropriate capital. The platform approach aims to facilitate the process for alley cropping partnership formation, bundling of projects into investment portfolios, and marketing of ecosystem services.

How it works: The Initiative will establish large-scale alley cropping demonstrations via partnerships on four row crop farms, strategically located to anchor new clusters of farms to facilitate scaling throughout the region. Alley crop adoption has been limited due to the focus on landowner-operators as individuals. Most individuals lack the combination of knowledge, time, capital, and support structure needed to successfully implement alley cropping. Landowners who are considered to have suitable acreage for alley-cropping and who agree to long-term leases, will have access to a team to facilitate partnerships with farmers and investors. Designed according to the roles and interests of farmers, landowners, and investors, the program will aim to develop respective terms of step-wise engagement and value propositions via adaptable protocols, templates, and repeatable processes. The team will connect and provide clear terms of engagement for partners, bundle partnerships as appropriate, and ensure that monitoring of environmental and agronomic performances aligns with relevant markets and incentive programs. The program will expand and formalize efforts into a brokerage platform linked with a backstopping service and an investment portfolio.

Scaling/Replication: Alley cropping is suitable for cropland across individual, institutional, investor, and public landowners with appropriate, long-term land tenure agreements. The team has developed a partnership-building strategy and tested it in six pilots in Illinois and Wisconsin. The most direct impact will be made via new alley-cropping partnerships in Illinois, Wisconsin, Minnesota, and Iowa. The initiative would like to further expand throughout the 227 million acres of cropland in the 12-state Midwest region, by adapting, streamlining, and scaling the initiative to establish alley cropping potentially on 53 million acres in the areas where alley cropping is projected to economically outperform row crop monocultures.

Education/Training: The initiative plans to make use of its existing networks and training offerings to funnel landowners and potential partners to the platform. Savanna Institute's landowner education and recruitment program has developed a streamlined stepwise engagement process with 11,000 absentee landowners in Illinois via a 20-county pilot. Its farm managers' education program engages farmers from initial interest to intensive training. The crop development program improves tree crops, supply chains, and market access for agroforestry-grown farm products and environmental services. In addition, the investor education program works to make agroforestry more understandable and align projects with appropriate capital.

NCS Pathway: Alley Cropping integrates trees within crops, recognized as a powerful NCS pathway in need of further development, especially in the U.S. This initiative works in the corn-belt – one of the nation's most intensively farmed regions and one with vast potential for alley cropping. In addition, as the initiative accelerates alley cropping, the team plans to enhance linked Savanna Institute work on silvopasture, windbreaks, and riparian buffers – other agroforestry practices that improve both farm profitability and carbon sequestration.

Carbon Sequestration: The team estimates that scaling alley cropping to 50 million acres over 30 years can sequester 1,074 million tCO₂e.