

II. Executive Summary

*PA Flax Square Yard Project flax
Image Credits: Fiona Barrett*

Flax is an increasingly popular fiber used widely to make everything from linen for apparel and home textiles, to composites for industrial use. While fiber flax was once widely grown in North America, its production plummeted with the introduction of the cotton gin which vaulted cotton into popularity¹ and the introduction of synthetic fibers production after WWII.² Today, only oilseed flax for food and feed is produced at scale on this continent.

NALA is working with organizations, farmers, and companies in the US and Canada to revive the fiber flax crop's production in North America from the start, helping guide both farming and processing practices.

With this report, NALA is creating a baseline for the flax-to-linen industry in North America, documenting the current landscape of flax fiber production and processing as well as outlining challenges and opportunities. We also hope the report will inspire action from farmers, researchers, policymakers, funders, organizations, and brands to revive the domestic production and processing of this crop.

Key findings of this report include:

- Standards are in place or being developed that address chain of custody as well as sustainable production and processing practices. Certification to such standards will be key to substantiate claims and provide verification traceability from the field to the finished product. (Section IV)
- Production of fiber flax is very limited, with less than 200 acres (~80 hectares (ha)) of fiber flax grown in North America as of 2024, according to a 2025 NALA survey (Section V).
- Researchers at several US universities are conducting variety trials to test and develop production practices as well as the viability and quality of the resulting fiber. (Section IV)
- Flax-to-linen has deep historical roots in North America, but the infrastructure was lost with the development of the cotton and synthetic fiber sectors and needs to be built from the foundation up. Virtually all flax fiber production and processing equipment is having to be replaced or reinvented. (Sections IV and V)



Flax fiber prior to processing
Image credit: Adobe Stock

- At this time, Canada has one set of specialized harvesting equipment (puller/turner/baler) and the US has two sets. Neither country has commercial-scale fiber flax processing capability post-harvest, though there will be considerable growth in the next three years as three scutching mills and a refining operation come online. There is one commercial weaving mill. (Section V)
- Key challenges to fiber flax production include lack of available seed; agricultural research into both appropriate varieties and production practices; harvesting, breaking/scutching/hackling and spinning equipment; skilled labor and expertise; transportation and logistics; and private and public investment. All these barriers also serve as opportunities as the flax fiber sector expands to emulate production in areas of the world with a more advanced infrastructure. (Section V)
- There is a wide variety of markets for both long-line and tow (short) flax fibers. While long-line fibers earn higher prices, tow fibers are a complementary market, enabling companies to use the whole plant for different applications. (Section VI)

These findings reflect an urgent opportunity for North America to lead the renaissance of fiber flax production. With coordinated support, flax fiber can deliver a natural alternative to synthetic fibers while providing jobs and creating resilient local economies. Interest in flax fiber is expanding quickly. We urge farmers, industry, institutions, and government alike to support the production and processing of this natural fiber crop with research, grants, and collaborative partnerships that strengthen the entire flax fiber supply chain.

We also invite everyone in the flax fiber sectors to work together and with NALA to revitalize the North American rural economies, with investment and infrastructure being essential to progress.