



Agroforestry: Strengthening farmer climate resilience, food security, and income



Oumou Kone, first year moringa farmer in Kirina, Mali

About myAgro

myAgro is an award-winning, nonprofit social enterprise helping smallholder farmers in West Africa move out of poverty. myAgro's mobile technology platform provides farmers a convenient way to save money in small increments toward purchasing high-quality seeds, fertilizer, and agricultural training. With myAgro, farmers grow 2.5x more food on average, making them food secure, increasing their income, and ensuring their farms and families are resilient amid the worst impacts of climate change.

What is Agroforestry?

In simple terms, agroforestry is the integration of trees on farm landscapes. The UN Food and Agriculture Organization emphasizes that the practice is especially important for smallholder farmers because it “diversifies and sustains production, providing increased social, economic, and environmental benefits.”¹

¹ [UN FAO](#)

Agroforestry at myAgro

During our initial pilot in 2022, farmers demonstrated a strong interest in growing trees. In 2023, we continued research with farmers to identify and test additional tree varieties that can be offered regularly in myAgro packages. We are bringing the program to scale in order to partner with a total of 100,000 farmers, planting 500,000 trees by December 2024.

TREE GOODWILL PROGRAM

In Mali, we are offering a tree goodwill program. Through our mobile layaway platform, farmers can enroll for packages of 10 tree seedlings and agroforestry training. The seedlings are germinated, grown, and delivered to farmers from myAgro village-level nurseries serving as mother units, which are supported by regional master nurseries.

This localized nursery model ensures farmers receive high-quality seedlings and improves tree survival rates.

Additionally, the nurseries generate additional income for nursery managers, who are recruited and trained from among myAgro's Village Entrepreneurs. myAgro also provides climate-smart agriculture training in each village about how to integrate agroforestry on farms to improve harvests and income. Topics covered include land selection and preparation, plant spacing and intercropping, organic composting, tree care, and post-harvest handling of fruits and other tree products. In the case of moringa trees, myAgro also provides farmers with local market connections so that farmers have a guaranteed buyer for their harvests.

Benefits of Agroforestry

In addition to farmer interest, myAgro is expanding agroforestry because of the ways this practice strengthens farmer climate resilience – thereby increasing their food security and income. Specifically, agroforestry contributes to:



Improved soil health. Trees improve soil health, which increases the yields of intercropped food plants. Fallen tree leaves add organic matter to the soil, increasing its nutrients. Meanwhile, tree roots redistribute both water and nutrients throughout the soil, and provide structure that prevents erosion from wind and rain.



Improved food security. Because trees support the healthy growth of intercropped food plants, they contribute to improved yields. Trees themselves provide multiple harvests per year (such as fruit or moringa) which boosts nutrition and dietary diversity for farmers and their households.



Crop protection. Tree canopy provides a buffer against strong wind or rains that may damage crops. Trees can also be planted as a “living fence” to shield crops from livestock and pests.



Improved Income. Trees help to diversify farmer income so that if one crop fails, they can rely on income from other products. Farmers also experience a “lean season” right before the rainy season crop harvest, when their food stores and income from the previous year are often spent; because many trees yield multiple harvests per year, agroforestry product sales can help to smooth household income year-round.



Carbon sequestration. As trees mature, they absorb carbon dioxide and contribute to climate mitigation.



“I am delighted with the sale of my moringa... The myAgro field agents visited my farm, and I also received calls [from the call center] asking about the progress of my plants and advice on how to take care of them. This boosted my motivation and eventually made me have a good profit... I always advise other people to enroll in myAgro packages as they will receive a lot of benefits, such as training and increased productivity.”

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