

 Kenya

Western Kenya Soil Carbon Project

Expanding the use of sustainable agricultural practices with smallholder farmers

<p>Carbon Removals</p>  <p>94,000t CO₂ e p.a.</p>	<p>Project Technology</p>  <p>AFOLU: Soil</p>	<p>Project Standard</p> 
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Smallholder farmers in Kenya historically grow maize, cassava and sweet potato crops, which are regional food staples. Unsustainable agricultural practices however, such as continuous cropping, and the inadequate use of fertilizers have resulted in declining soil fertility and low crop yields. This not only negatively affects local communities' livelihoods and food security, but also the environment. When soil is poorly managed, it releases a significant amount of stored organic carbon into the air. The Sustainable Agricultural Land Management (SALM) practices supported by this project will bring higher crop yields and more enterprise to these farmers.

The Western Kenya Soil Project supports more than 30,000 smallholder farmers in rural Kenya, specifically the Bungoma, Siaya, and Kakamega counties. The project includes technology packages such as conservation agriculture (e.g., composting, vermiculture, crop covers, reduced tillage), soil and water conservation (terracing), integrated soil fertility management, integrated pest management (push-pull technology) and agroforestry and tree nursery establishment. Collectively, these activities improve soil quality, enhance crops yields and reduce greenhouse gas emissions over time. By integrating these technology packages, the farmers ensure their agricultural and income permanence, which further fosters their organized collective and enterprise development ambitions.

 **info** 

about project standards and technologies:
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Supported Sustainable Development Goals

	
	
	
	





Sustainable Development

Beyond removing carbon emissions, all our climate protection projects generate multiple additional benefits for people and the environment. These projects support the United Nations Sustainable Development Goals.



Beyond the climate change mitigation contributions, the project expects to see an increase in income for participating farmers. Farmers may join at any time during the project period and support money-saving potential.



Diversification and increase in staple food crops and focus on climate resilient crops will lead to higher nutritional variety and value for families. SALM can up to triple the harvest amounts of maize and beans and lower the use of synthetic fertilizers.



Central to the project aims is the full integration of women-run farms through training and organizational development with the SALM technique. An expected 50-60% of farms will be woman-led.



Participating farmers are contracted to collaborate with established farmer groups to facilitate training, knowledge transfer, and adoption of SALM practices. Farmers are expected to have a steady stream of income due to sustainable farming activities.



By providing ongoing extension support, the project incentivizes farmers to adopt SALM measures / technology packages, contributing to climate change mitigation and not displacing land use. Already over 30,000 farms are involved.



Conservatively estimated, an annual removal of 3.0 t CO₂e per ha will result from the project. These removals are directly related to the total project area involving 32,000 ha. The project integrates technological innovations with activity-based digital monitoring system with mobile phone access. This monitoring will ensure that the climate action advances can be tracked and duplicated for future project sites.



Improved soil health and increased water retention capacity will reduce stress caused by droughts, crop terracing will decrease erosion, and push-pull technology as well as reduction in pesticide usage will intensify and protect local biodiversity, including bee populations.



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