Bafedu Farmers' Regenerative Agriculture Project, Sierra Leone

Development Stage

Concept — Fundraising — Implementation — Operation — Scaling

The Bafedu Farmers' Regenerative Agriculture Project (RAP) aims to transform over 650 hectares of degraded farmland in the Soa chiefdom, Sierra Leone, into a productive regenerative agroforestry system. By integrating vegetables, soybeans, cattle, and landscape restoration, the project will improve soil health, enhance biodiversity, and increase food security for rural households. Building on RAP's successful 5 hectare rice seedling farm, which supplied seedlings for 200 hectares of rice cultivation, the initiative will now establish a new 5 hectare agroforestry demonstration farm in collaboration with reNature. This site will serve as the first regenerative training hub in the region, equipping farmers with the skills and knowledge to scale sustainable practices across the entire chiefdom. Over five years, the project will restore land capacity, alleviate hunger, and inspire surrounding chiefdoms to transition towards regenerative agriculture.

LOCATION:
Bafedu, Eastern Province, Sierra Leone

SIZE OF POTENTIAL AREA:
650 ha

COMMODITY:
Rice (main), Vegetables, Soybeans, Cattle

INDUSTRY:
Food

GOAL:
Improve food security, soil health, and livelihoods through scalable regenerative agroforestry practices.

MAIN FOCUS:
Establish model farms, train farmers, restore ecosystems, increase crop diversity, and strengthen community resilience and economic stability.

Finance & Planning

€120,000	Solomon Musa
Investment	Initiator

Assignment & Impact

Number of expected beneficiaries

The project will directly engage more than 300 household farmers and indirectly benefit over 40,000 community members through improved food security, training, and resilient farming systems.

Development Challenge

In the Soa chiefdom, traditional farming practices combined with the pressures of climate change have led to soil degradation, biodiversity loss, and declining productivity. Farmers struggle with food insecurity and limited income opportunities, while abandoned land overrun by elephant grass continues to expand. Without technical support or financial access, communities are locked in a cycle of low yields and poverty, with little capacity to adapt to droughts, floods, or shifting seasons.

Intervention

Together with RAP, reNature will establish Model Farms that act as training and demonstration hubs for regenerative agriculture. These farms will showcase diversified agroforestry systems integrating vegetables, soybeans, livestock, and landscape restoration. By providing hands on learning and continuous support, the project will enable over 300 farmers to replicate these practices across 650 hectares of farmland. This transformation will restore soil health, stabilize yields, and build food and income security for the wider community.

40,000

Community Members

80% More

Biodiversity

Objective

Restore degraded farmland into resilient agroforestry systems that increase food security, improve farmer livelihoods, and enhance ecosystem health across the Soa chiefdom.

Inspirational Impact

By establishing regenerative Model Farms, RAP and reNature aim to show local farmers what is possible when sustainable practices are prioritized. Farmers will gain hands on experience in agroforestry, crop diversification, and soil restoration, inspiring them to adopt these methods on their own land. The project will serve as a living example of how communities can take control of their food systems while restoring degraded land. Over time, these demonstration sites will encourage surrounding chiefdoms to transition toward regenerative agriculture, fostering knowledge sharing and long-term cultural change in farming practices.

Environmental Impact

Conventional cotton production consumes large amounts of water and depletes soil, leaving fields dry, compacted, and vulnerable. In Banikoara, TRACUB will reverse these effects through regenerative methods. By rebuilding soil organic matter, the land can retain 20-30% more water within 3 years, reducing drought vulnerability and supporting healthier crops. Forest islands and crop diversification are expected to boost on farm biodiversity by 40-50% in the short term and up to 80% long term as ecosystems stabilize. What once exhausted the land will instead regenerate it, transforming cotton into part of the climate and biodiversity solution.

Social Impact

The project will strengthen community cohesion by uniting over 300 farmers in collaborative training and knowledge sharing. Farmers will gain practical skills, technical guidance, and confidence to implement regenerative practices, improving livelihoods and ensuring food security. Access to training, demonstration sites, and ongoing support will empower farmers, particularly youth and women, to actively participate in farming leadership.

The resulting networks will increase resilience, provide economic stability, and promote a culture of sustainable agriculture throughout the Soa chiefdom.

Economic Impact

The establishment of Model Farms and the scaling of regenerative practices across 650 hectares will diversify income streams for local farmers. By integrating vegetables, soybeans, and cattle, communities will reduce dependency on single crops, lower input costs, and increase resilience to climate shocks. Healthier soils and restored ecosystems will improve productivity and yields, while training and support will enable farmers to access higher value markets. Over time, the project will strengthen the local economy by creating stable, climate resilient livelihoods, reducing poverty, and generating new opportunities for youth and women in agribusiness.

Impact Metrics

Outcome Metrics

1. Farmers trained in regenerative agroforestry and diversified crop livestock systems.
2. Increased adoption of regenerative practices across 650 hectares.
3. Improvement in soil quality, organic matter, and water retention.
4. Higher crop yields and diversified income streams for participating households.
5. Increase in on farm biodiversity through trees, cover crops, and multi species integration.
6. Greater participation of women and youth in farming and agribusiness activities.

Evaluation Method

1. Baseline and endline soil health assessments using soil sampling and analysis.
2. Farmer surveys on practices, yields, income, and adoption of regenerative methods, using FAO TAPE.
3. Monitoring of biodiversity indicators such as tree cover, pollinators, and crop diversity.
4. Periodic farm visits and training reports to track progress and knowledge uptake.
5. Documentation of economic impact through income tracking and market access assessments.