Lindt COCOA FOUNDATION

EMPOWERING AGRICULTURAL DEVELOPMENT INNOVATORS

Project Factsheet

Project duration: October 2025 – March 2027
Implementation partner: Research Institute of Organic Agriculture (FiBL)
Further partners: To be appointed in Ghana, Ivory Coast, Peru, and Ecuador
Direct beneficiaries: Cocoa farmers, extensionists, and local partners in target countries
Focus areas covered: Sustainable cocoa production, ecosystem protection
Total budget: CHF 294'000 (100% contribution of Lindt Cocoa Foundation)

Soil Health Monitoring and Assessment Framework in Cocoa Farms

Ghana, Ivory Coast, Ecuador, Peru

Picture 1: Monitoring earthworms, an important soil health indicator, in soil from a cocoa production site in Bolivia (source: Colque/FiBL)

About the Lindt Cocoa Foundation:
The Lindt Cocoa Foundation was founded in 2013 and has the declared purpose of working to achieve social and ecological sustainability in the cultivation, production and processing of cocoa and other raw materials used in chocolate production.

Learn more:
www.lindtcocoafoundation.org

Declining soil health in cocoa farms threatens productivity, biodiversity, and the long-term sustainability of cocoa production. This project aims to equip farmers and extensionists in Ghana, Ivory Coast, Peru, and Ecuador with practical tools and knowledge to monitor and improve soil health, supporting resilient cocoa landscapes and rural livelihoods.

Background

Cocoa farming has intensified in recent years to boost production, but this has come at a cost—many cocoa farms now suffer from declining soil health, caused by poor farming practices and a lack of soil management. Soil health is crucial not only for growing cocoa but also for supporting biodiversity and protecting the environment. Most cocoa farmers and extensionists lack practical tools and training to monitor and assess soil health, leaving a

major gap in their ability to farm sustainably. Existing frameworks for soil health assessment are often too technical and not adapted to the realities of cocoa production, highlighting the urgent need for a tailored, accessible solution.

Project Objectives and activities

The primary objective of this project is to develop and test a scientifically robust yet practical framework for monitoring and assessing soil health in cocoa farms across Ghana, Ivory Coast, Peru, and Ecuador. The framework is designed to be accessible to both farmers and extensionists, enabling them to evaluate soil health using a combination of simple field observations and advanced laboratory analyses. By working with a diverse sample of 600 to 1,000 cocoa farms, the project will ensure that the framework is adaptable to different ecological zones and farming contexts.

To achieve this, FiBL will first identify and select relevant soil health indicators, drawing on scientific literature and expert consultations. These indicators will encompass physical, chemical, and biological properties of the soil, such as soil organic carbon, nutrient levels, water retention, and the presence of pesticide residues. The project will then design and implement a comprehensive soil sampling campaign, with trained field teams collecting samples according to standardized protocols. In addition to laboratory analyses, the project will pilot the use of field-based technologies to explore cost-effective methods for large-scale soil health assessment.

Expert workshops with national and international specialists will be held at key stages of the project. These workshops will guide the selection of soil health indicators, review preliminary results, and ensure the framework is scientifically robust and practical for cocoa farmers and extensionists.

Capacity building is a central component of the project. Local partners and field staff will receive training in soil sampling and assessment techniques, while farmers will be engaged through workshops and practical demonstrations. A structured survey will accompany the sampling campaign to gain a deeper understanding of farmers' knowledge, practices, and challenges related to soil health. The data collected will be analyzed to develop a Soil Health Index, which integrates multiple indicators into a single, interpretable score for each plot. This index will serve as a valuable tool for guiding farm management decisions and tracking improvements over time.

To ensure broad adoption and impact, FiBL will produce a detailed technical manual for extensionists and technicians, outlining the framework, indicators, sampling procedures, and interpretation methods. For farmers, the framework will be condensed into a simple leaflet and educational posters, highlighting indicators that can be assessed through direct observation and basic tools. All materials will be made freely available, and the project will leverage existing networks and platforms, to promote the framework and share results with stakeholders in the cocoa sector.

Alignment with the Lindt Cocoa Foundation's goals

The proposed project directly supports the Lindt Cocoa Foundation's commitment to ecosystem protection and regeneration. By equipping cocoa farmers and extensionists with the necessary tools and knowledge to maintain and restore soil health, the project contributes to the development of healthy landscapes, sustainable production practices, and the long-term well-being of cocoa-growing communities.