Current State
La Frailesca, Chiapas

Inadequate agricultural practices being used
- Soil tillage (tractor, plow, etc.).
- Removal of crop residues (for pasture or burning).
- No replacement of extracted nutrients.
- Overuse of pesticides.

The situation has worsened especially due to climate change
- Extended drought
- More hot days
- Intensified rains

All of these factors impact crop production

Impacts on soil
- Loss of fertility and productive capacity
- Decreased soil organic matter
- Increased soil compaction
- Increased soil acidity
- Loss of soil biodiversity
- Lower water infiltration and water holding capacity

This affects productivity and profitability per hectare

Soil Restoration
Our Proposal

Phase 1

One-time use of deep soil tillage and lime application

Targeted fertilization: Limited use of chemical fertilizers

Soil Health Practices
- Maintain permanent soil cover
- Minimal tillage
- Crop rotation
- Use of green manures
- No grazing
- No burning

Phase 2

Incorporation of organic matter, through crop residues and agroforestry systems

Use of soil and water conservation infrastructure, like terracing

Reduction in the use of chemical inputs (fertilizers, pesticides and herbicides)

Recovery of soil biodiversity
Benefits
This approach results in the following benefits:

- Increase the productivity, profitability and wellbeing of farmers
- Restore organic matter and soil health
- Reduce the emission of greenhouse gases and sequester carbon in soils and trees.
- Restore the water infiltration capacity of soils: recharge aquifers, increase water availability in the dry season and reduce flooding in the rainy season
- Resilience to climate change: Develop the capacity to adapt to climate-related challenges

RESTORATION & CONSERVATION
OF SOILS IN CHIAPAS, MEXICO

WIN FOR NATURE
WIN FOR AGRICULTURE AND LIVESTOCK
WIN FOR PEOPLE

TRANSITIONING TO A PROSPEROUS, SUSTAINABLE AND RESILIENT CHIAPAS