

157

Team Members: Danner, Brandon
Teacher Name: K. Dora Sultan

Green Heart Action Plan Clean The Earth Healthy Soil

Problem Definition/Problem Statement

Widespread soil degradation, leading to reduced food security, water scarcity, increased pollution, desertification, and health risks. Also it can cause widespread famine, increased floods, poor human health (due to nutrient-deficient food and contaminated water), loss of biodiversity, and worsened climate change as soil loses its ability to store carbon.

Root Cause of the Problem

Unsustainable human practices like intensive tillage, excessive chemical use (pesticides, synthetic fertilizer), and monoculture farming.

● Climate Resilience: Healthy soil acts as a massive carbon sink sequestering three times more carbon than the Earth's atmosphere and helping mitigate global warming. It also functions as a "sponge", absorbing water to prevent flooding and retaining moisture to buffer against drought.

Impact & Equity

- 1- A diverse group of decision-makers ranging from federal policy leaders to local technical advisors
- 2- Implement Core Soil Health Principles
- 3- Leverage Financial & Technical Incentives

Our 3-5 Step Plan for Change

A diverse group of decision-makers ranging from federal policy leaders to local technical advisors

Who are decision makers we need to reach



To successfully transform soil into a healthy ecosystem, a person needs a combination of scientific baseline data, organic amendments, and a long-term management strategy.

What help we need to be successful

How we will measure our success
We will measure our success by happiness and fulfillment.

Proposed solution
Solution for no healthy soil is to add organic matter to restore the soil food web.

List at least three credible resources that support your problem statement

- Science Buddies - Soil Science Projects
- Soil4kids (By the soil science societies of America)
- USDA NRCS - S.K. Marm's Soil Secrets
- Google
- School work