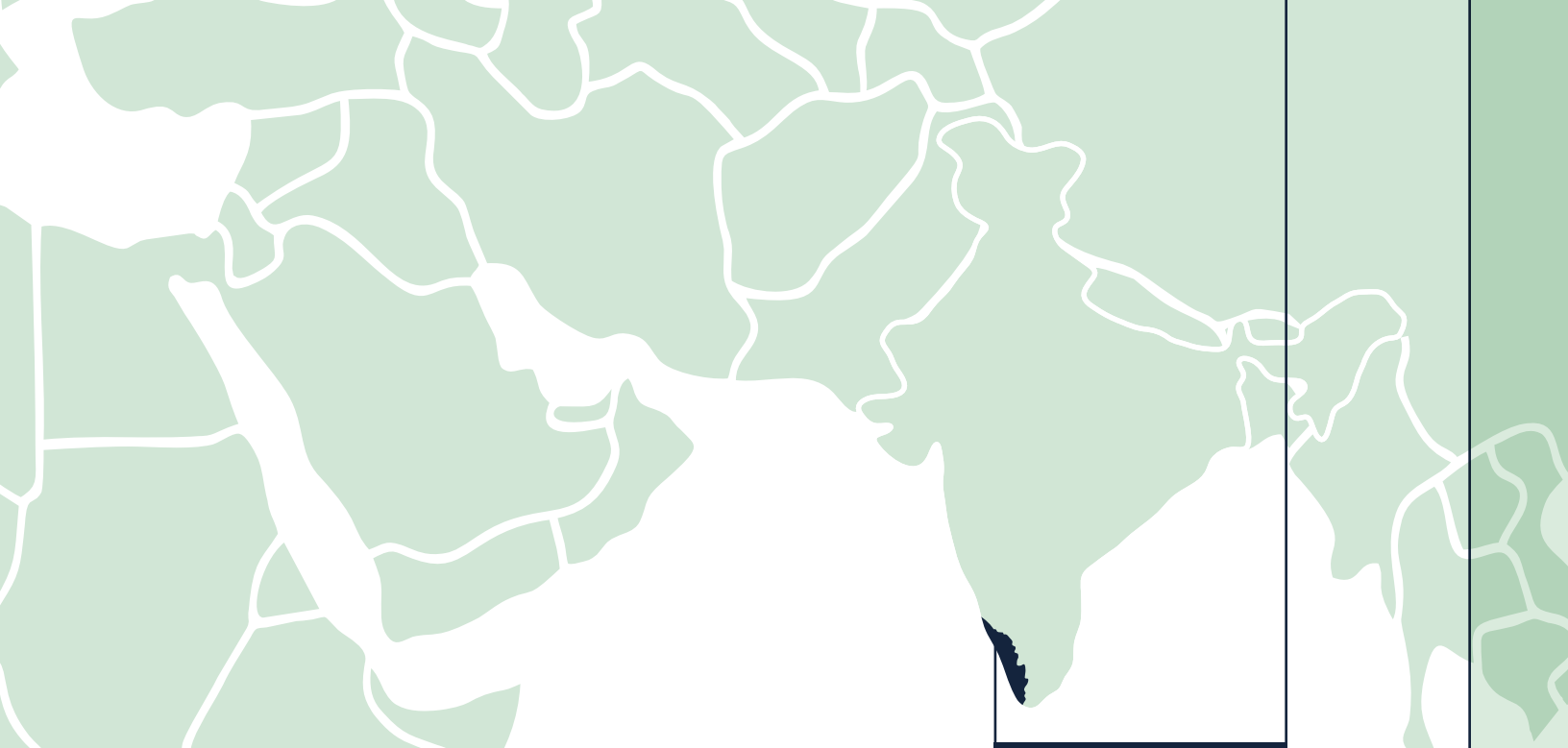


CASE STUDY

The State of Kerala's Scheme for Soil Health Management and Productivity Improvement

Problem:

Overuse of synthetic fertilizers has led to a decrease in soil health and a decline in agricultural productivity

Solution:

- Expands sustainable production of targeted crops
- Restores soil fertility and productivity at the individual farm level

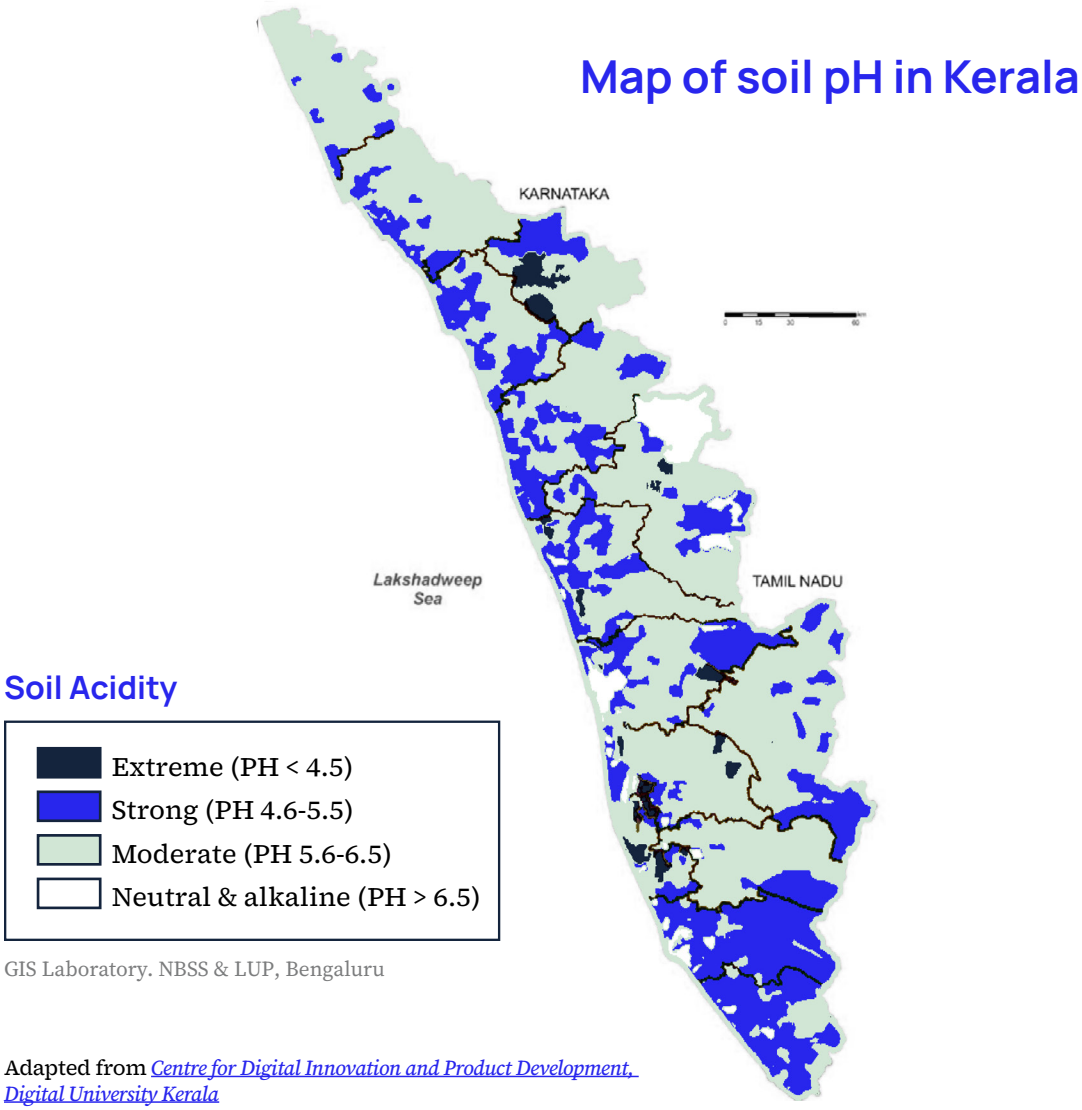
Key Actors:

State and district-level committees, departments, and cooperatives | Farmers

crsi

Kerala's Scheme for Soil Health Management and Productivity Improvement is a soil health program specific to the state of Kerala that promotes sustainable agricultural production.[1] Kerala's soil health program is managed at the state level by the Additional Director (Crop Production), with district-level oversight by the Principal Agricultural Officers and Deputy Directors.

Kerala initiated its soil testing program in 1957, primarily to raise awareness about fertilizer use and increase crop yields, with an initial emphasis on major nutrients. At present, the Department of Agriculture operates 14 district soil testing laboratories and nine mobile soil testing laboratories. Significant agronomic benefits have been observed, resulting in as much as a 15% increase in farmer profit.



Adapted from *Centre for Digital Innovation and Product Development, Digital University Kerala*

[1] Annual Plan 2025-26 Scheme for Soil Health Management and Productivity Improvement



Munnar, Kerala, India
Jebakumar Samuel via pexels

Approximately 88% of the soils in Kerala are considered acidic, and 69% are classified as very strongly to moderately acidic. As a result, liming is a major component of the scheme. The subsidy covers 75% of the total lime cost, capped at Rs. 5,400 per hectare (approximately $56 USD at the time of writing), including both feedstock and application, with a focus on rice paddies. The general recommendation is 600 kg per hectare of dolomite or powdered limestone, although the amount is dependent upon the results of a soil test. If a farmer's soil test indicates a need for more than 600 kg per hectare, the farmer pays the additional cost. Farmers already receiving a liming subsidy from any other subsidies are explicitly excluded.

Before liming materials are distributed, Agricultural Officers are required to test and ensure their quality. The effectiveness of liming materials is measured through their Neutralizing Value (NV), and materials with an NV below 60% are excluded. Prices are scaled to match the NV.

The Primary Agricultural Cooperative Banks/Societies coordinate distribution to farmers, in place of a direct cash transfer. The 2025-26 allocation for the liming subsidy is Rs. 2,365.24 lakh (approximately $2,470,000 USD at the time of writing), to reach 43,800 hectares across all 14 districts. A separate Rs. 10 lakh (approximately $10,400 USD at the time of writing) is earmarked for transportation and handling.

The Kerala Scheme for Soil Health Management and Productivity Improvement is an example of a subnational program that complements the National Food Security and Nutrition Mission by providing additional support for soil health management practices that reflect local needs.

This case study was informed through correspondence with Srishti Singh, Lead - Policy & Research, Carbon Removal India Alliance (CRIA).