



Celebrating a Decade of Soil Health Cards

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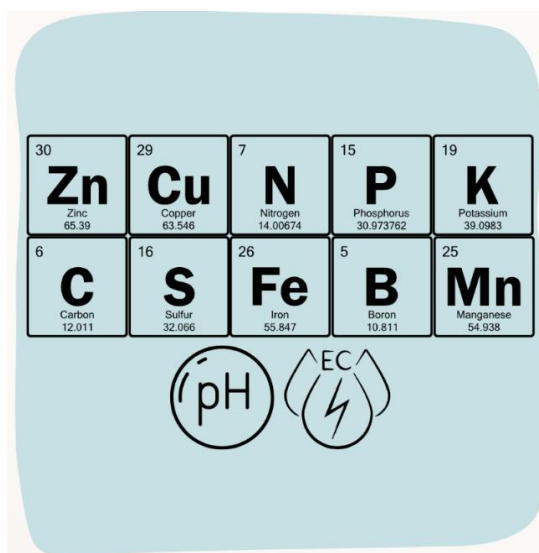
(Ministry of Agriculture and Farmer's Welfare)

19th February, 2025

Introduction

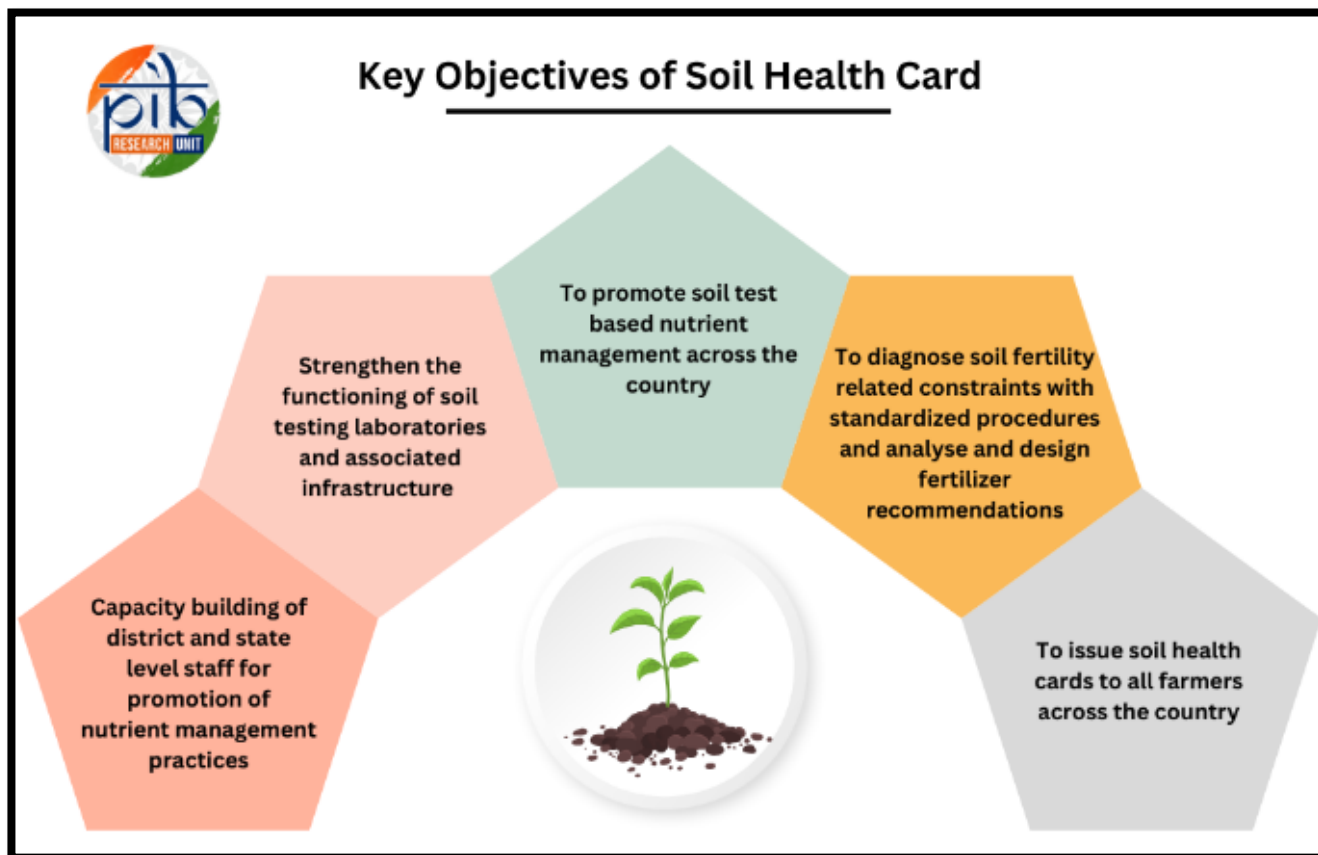
The **Soil Health Card Scheme** was introduced by Prime Minister Shri Narendra Modi on **19th February, 2015** at **Suratgarh, Rajasthan**. The scheme was launched to assist State Governments to issue soil health cards to all farmers in the country. Soil health card provides information to farmers on nutrient status of their soil along with recommendation on appropriate dosage of nutrients to be applied for improving soil health and its fertility.

The Soil Health Card Portal (www.soilhealth.dac.gov.in) facilitates generation of Soil Health Cards for the benefit of farmers in uniform and standardized format across country in all major languages and 5 dialects.



The Soil Health Card contains status of the soil with respect to 12 parameters, namely **N,P,K, S (Macro-nutrients)**; **Zn, Fe, Cu, Mn, Bo (Micro - nutrients)** ; and **pH (Acidity or Basicity), EC (Electrical Conductivity) and OC (Organic Carbon)**.

Based on this, the card will also indicate fertilizer recommendations and soil amendment required for the farm. Soil Samples are taken generally two times in a year, after harvesting of Rabi and Kharif Crop respectively or when there is no standing crop in the field.



The **Guideline of Village Level Soil Testing Labs (VLSTLs)** was issued in June 2023. VLSTLs can be set up by individual entrepreneurs i.e. rural youth and community based entrepreneurs, including Self Help Groups (SHGs), Schools, Agriculture Universities etc. The beneficiary/village level entrepreneur should be a youth whose age should not be below 18 years and should not be more than 27 years. Self Help Groups, Farmers Producers Organisation (FPO) can also be enrolled as VLSTL.

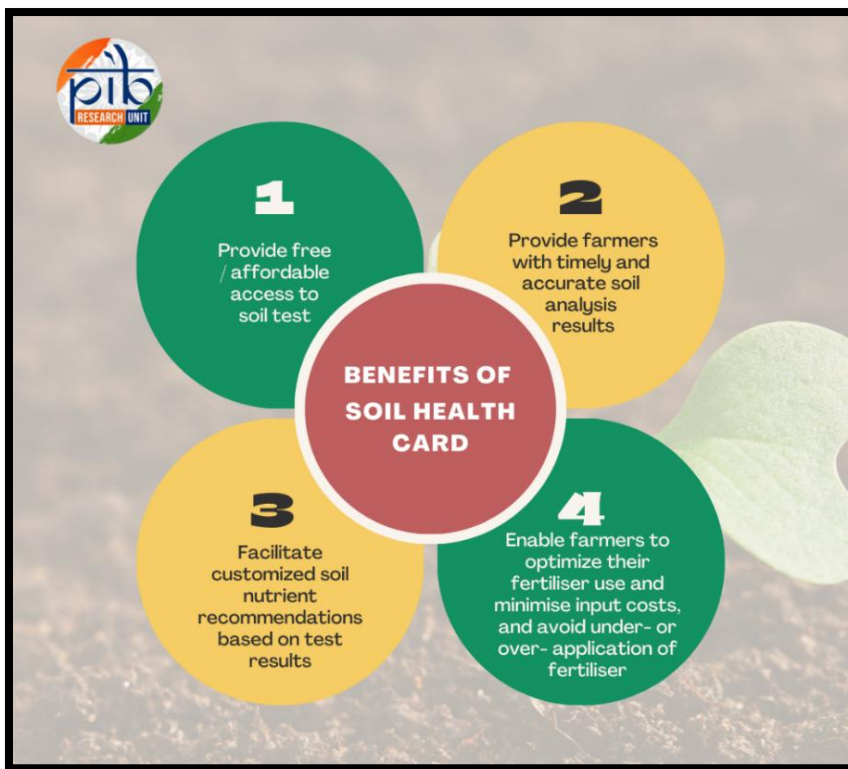
As of February 2025, **665** Village-level Soil Testing Labs have been established in 17 States.

School Soil Health Programme

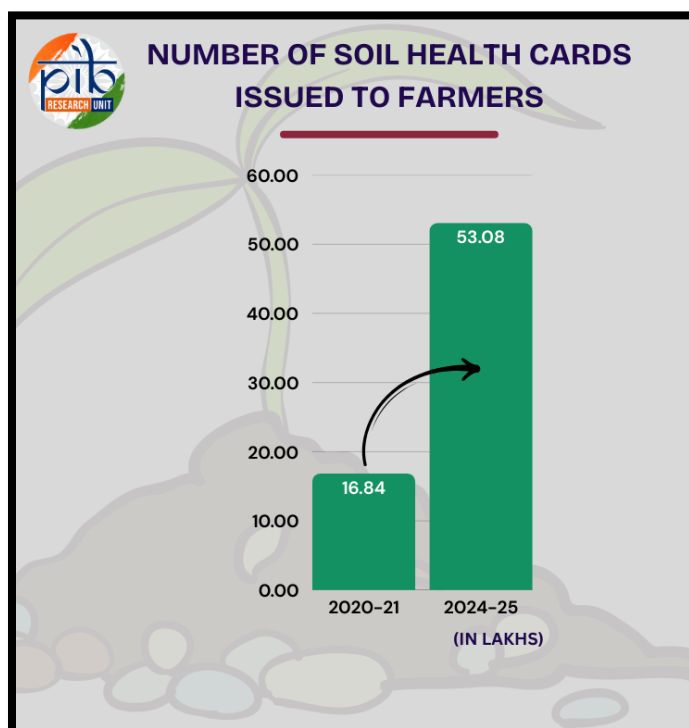
A pilot project on **School Soil Health Programme** has been undertaken by Department of Agriculture and Farmers Welfare in (DA&FW) collaboration with Department of School Education & Literacy (DSE&L), Indian Council of Agricultural Research (ICAR) and State Governments in **20 schools** (10 Kendriya Vidyalaya & 10 Navodaya Vidyalaya) in rural areas. The aim is to make students aware about soil health for sustainable agriculture practices. 20 soil health labs were set up in these schools. Modules for students from class VI to XII and teachers were developed and disseminated. Under the programme, soil samples were collected by School Students and soil testing were also done by students and SHCs

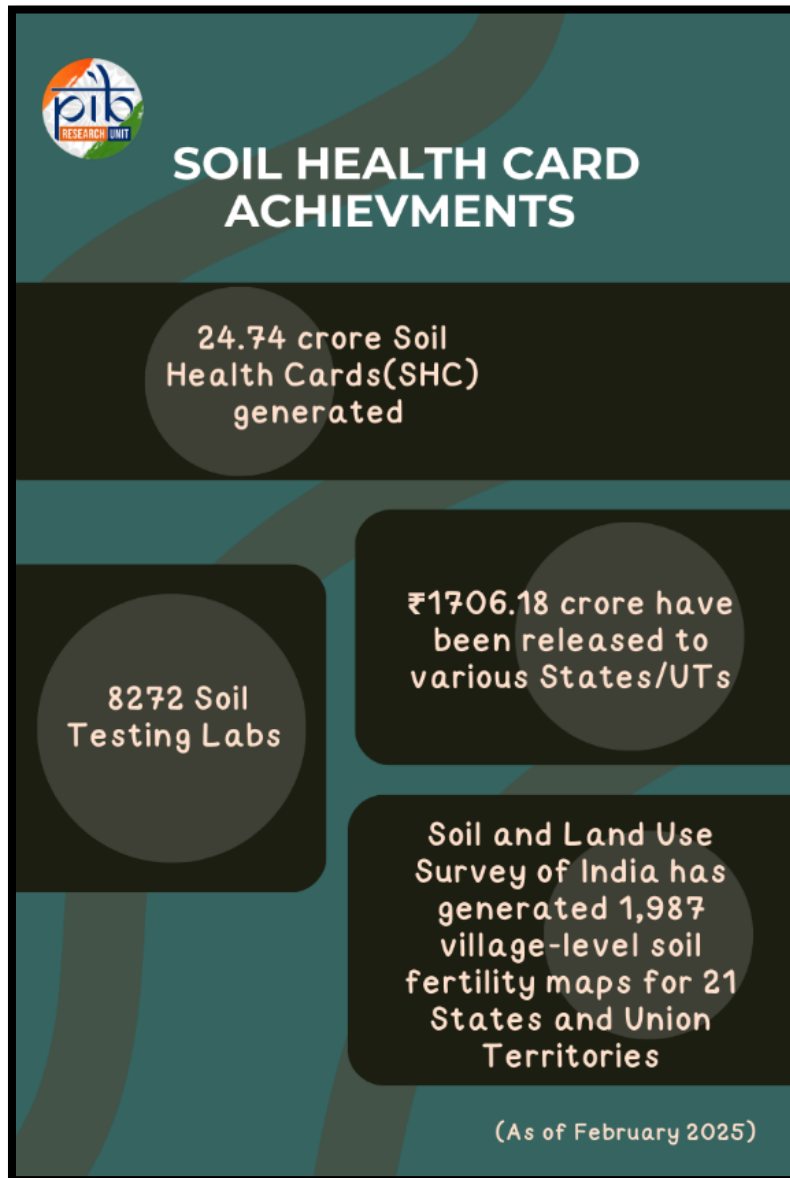
were generated Students also educated farmers about the recommendation of Soil health card for judicious use of fertilizer and crop recommendation.

As of 2024, **1020 schools** are implementing the School Soil Health Programme, with **1000 soil testing labs** set up and **125,972** students enrolled.



Soil Health Card scheme has been merged in **Rashtriya Krishi Vikas Yojana (RKVY)** scheme as one of its components under the name '**Soil Health & Fertility**' from the year 2022-23.





Technological Advancements

SHC Mobile App-

To further ease the process of obtaining easy access to the Soil Health Card, the Government of India in 2023 made technological interventions in the New Soil Health Card Scheme. The Soil Health Card portal was revamped and integrated with a Geographic Information System (GIS) system so that all the test results are captured and seen on a map. To make the implementation/monitoring of the scheme smooth and to facilitate farmers an easy access to his soil health card, the mobile application has been made robust with the additional features such as:

- Restrict the sample collection region for the Village Level Entrepreneur/Operator collecting the soil samples
- Auto selection of the latitude and longitude of the location

- Generation of a QR code to link with the sample and test results of all samples directly on the portal from the geo-mapped labs, without any manual intervention.

This application provides the graphical information of all over the India and also shows multiple layers State Boundary, District Boundary, Taluka Boundary, Panchayat Boundary and Cadastral Boundary.

The new system was rolled out in April 2023 and samples are now being collected through the mobile application. Soil Health Cards are now generated on this revamped portal.

For digitizing the Soil Health Cards, Web based work flow application Soil Health Card portal has been designed and developed by National Informatics Centre (NIC).

Application Process

SOIL HEALTH CARD

The scheme is applicable for all farmers in India



STEP 1

Farmer approaches a District Agriculture Officer / Block Agriculture Officer for soil testing and generation of a SHC

STEP 2

The concerned officer initiates the process for the concerned farmer wherein they assess whether the applicant's district / village falls under State Annual Action Plan for generation of SHC



STEP 3

Agent visits the farmer and collects farmer details, land details and geo-tags the land through mobile app and takes a sample of the soil for testing

STEP 4
The soil is tested on set parameters and a Soil Health report is generated for the farmer's land



STEP 5

The report contains results as well as recommendations on suitable crops for the soil type, and the quantity and type of fertiliser to be used

Conclusion

The Soil Health Card Scheme has transformed agricultural practices in India over the past decade. Since 2015, it has empowered farmers with crucial information on soil nutrient status and optimal fertilizer use, promoting sustainable farming and improved crop productivity. Initiatives like the School Soil Health Programme have expanded soil health awareness among students and local communities. With a robust mobile app, the process of obtaining a Soil Health Card has enhanced accessibility, efficiency, and transparency. As the scheme evolves, it continues to play a vital role in fostering sustainable agricultural development and safeguarding India's soil health for future generations.

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