

# Soil Health Card Scheme

## [UPSC Notes]

### What is Soil Health Card Scheme?

Soil Health Card Scheme is a government initiative promoted by the Department of Agriculture & Cooperation under the Ministry of Agriculture and Farmers' Welfare.

- Under the scheme, village-level soil testing labs will be established by the Women Self Help Groups, youth having knowledge of agriculture, FPOs, etc.
- The Soil Health Card Scheme will give each farmer soil nutrient status, and help them to decide the dosage of fertilizers and application of soil amendments that are required to enhance the soil health in the long run.
- Currently, this scheme is being implemented in all States and Union Territories.
- Additionally, Soil Health Card Scheme gives an analysis of soil composition by the state govt, once every three years. It will help to take remedial measures to increase the overall soil nutrients.

### Soil Health Card

The Health Card is a printing report that the farmers will get for each of their holdings.

- Soil Health Card contains the status of the soil with respect to 12 parameters such as pH, Boron (B), Iron (Fe), Organic Carbon (OC), Nitrogen (N), Phosphorus (P), Electrical Conductivity (EC), Sulphur (S), Zinc (Zn), Potassium (K), Manganese (Mn) and Copper (Cu) of farm holdings.
- Based on these parameters, the Soil Health Card will suggest fertilizer recommendations and soil amendments needed for the farm.
- This card gives a detailed report of soil fertility status that affects the productivity of crops.

## Features of Soil Health Card Scheme

The primary goal is to add as many farmers under this Soil Health Card Scheme. This scheme will cover all the parts of the country.

- With the help of the Soil Health Card, farmers will get a detailed analysis of their soil and can take certain measures to enhance the overall quality of the soil.
- A farmer will get access to the card once every 3 years,
- The state government will collect the samples and Soil samples will be taken with the help of GPS tools and revenue maps.
- The state government will involve the youth in local science and agriculture colleges.
- Soil samples will be drawn two times annually when the harvesting of the Rabi and Kharif crops is completed.

## Benefits of Soil Health Card Scheme

The major benefit of this scheme is that it will monitor the soil and give them a detailed soil health card report to decide which crop would be best suited for their soil.

- With the scheme, the soil will be monitored once every 3 years and keep farmers updated about the changes in the soil's nature and other associated factors with it.
- The government has employed experts in this field who will help the farmers to follow the right easy to enhance the soil quality.
- With the available data, it would be easier for the farmers to plan things for the long run. They can also study what works better for their soil.
- The same person will carry out the soil analysis which will improve the Soil Health Card Scheme's effectiveness.
- Farmers will get a clear picture of the nutrients missing in their soil which will be helpful when making decisions regarding crop investment. It will increase the crop yield as well.
- The Soil Health Card Scheme was brought to action to figure out the type of soil and provide ways to improve the soil quality. It is believed that even if the soil has some limitations there are measures a farmer can take to get the most out of it.
- Soil Health Card Scheme also creates job opportunities for the youth.

## Concerns With Soil Health Card Scheme

The challenges with the Soil Health Card Scheme are as follows:

- Not having soil testing infrastructure is one of the major challenges.
- Moisture retention and microbial activity are important factors but they are not listed in the Soil Health Card report.
- The soil health card puts more emphasis on the chemical nutrient indicators. It only adds the soil color among the physical and biological properties.
- Lack of connectivity among the farmers and agricultural extension officers.
- Many farmers are not able to understand the content and that's why they are unable to follow the given practice.
- The number of soil samples per unit area is not on the basis of soil variability.

## What is the Need for Soil Health Card Scheme?

Nowadays, farmers are dependent on the fertilizer industry to boost their productivity but it would create a negative impact on the soil quality in the long run. Due rapid use of fertilizers, the negative nutrient balance is increasing,

- The nutrient deficiency in India is in the order of, 95, 94, 48, 25, 41, 20, 14, 8, and 6% for N, P, K, S, Zn, B, Fe, Mn, and Cu respectively.
- The farmers don't know which types of crops they need to grow to get the maximum yield and in that case, the Soil Health Card Scheme comes to the rescue.
- Lack of nutrients lowers the fertilizer response and crop productivity
- Farmers don't know the quality and type of their soil and this scheme would help them figure out these important things.
- The farmers will be able to improve the soil condition and work accordingly.

## Soil Health Card Scheme- Way Forward

The awareness campaigns for Soil Health Card distribution need to be arranged before the sowing season. It will guide the farmers to practice the recommended crop choice and fertilizers.

- A specialized body is required at both state and central levels for the monitoring and management of services provided by various agencies.
- The demonstration of the Soil Health Card Scheme is required on an experimental basis in each block.