- Soil and Land Use Survey of India (SLUSI) is preparing digital soil fertility maps through geospatial techniques using Soil Health Card (SHC) data.
- SLUSI functions under the Department of Agriculture and Farmers Welfare.

Key Points:

- Soil fertility maps have been prepared for 351 villages in 34 districts of Maharashtra.
- Soil fertility maps provide detailed spatial information about the nutrient composition and health of the soil.
    - It helps farmers in judicious use of fertilizers and soil amendments, reducing the risk of over-application or under-application.
- It helps farmers financially, as they are able to maximize their returns with fewer inputs, increasing overall profitability.

Soil Fertility Mapping:

- It helps farmers and land managers understand the health and productivity of their soil.
- This map shows the levels of various nutrients in the soil, such as nitrogen, phosphorus, and potassium.
- It also shows soil pH, organic matter, and other important properties.
- It uses geospatial technologies, including remote sensing and AI-based tools.
- The SHC soil sampling point is geo-coded using GPS, giving the sample a unique QR code.
- This QR code is retained during analysis in soil testing laboratories.

Soil Health Card (SHC):

- The Soil Health Card Scheme was launched by the Government of India on 19 February 2015.

- The scheme aims to provide information to farmers about the soil quality and nutrient status of their land, so that they can make balanced use of fertilizers and other resources.
- Soil Health Cards are prepared under the Soil Health and Fertility Scheme of the Government of India.
    - This scheme adopts various measures to improve soil health and productivity.