Soil Health Cards: 26.09 Crore Cards, 8,313 Labs and the Gaps in the Data

Agriculture / Resource Management / Federalism | News context: Lok Sabha reply on the Soil Health Card scheme, 21 July 2026 | Published: 18 October 2026

Background and Context

According to the reply, under the "Soil Health and Fertility Scheme" the government helps States issue Soil Health Cards (SHC) to farmers. The cards promote Integrated Nutrient Management (INM), that is, balanced use of organic manure and bio-fertilisers along with chemical fertilisers. According to the reply, soil samples are analysed on parameters such as pH, electrical conductivity, organic carbon, nitrogen, phosphorus, potassium, sulphur and zinc, copper, iron, manganese and boron, and a diagnostic assessment of fields is done periodically so that the SHC is issued "at least once in three years".

Why in the News

On 21 July 2026, the Minister of State for Agriculture and Farmers Welfare, Shri Ramnath Thakur, replied to Lok Sabha Unstarred Question 360 of Shri B. Y. Raghavendra. The question asked about the achievements of the scheme, State-wise analysed soil samples and cards issued (including district-wise details of Karnataka and funds released to Karnataka), laboratories established and "operationalised", efforts for balanced fertiliser use, and steps to increase the testing infrastructure in rainfed, hilly and Malnad regions. The reply has four annexures.

Key Concept: Samples, Cards and Laboratories Are Three Separate Counts

The number of analysed samples and issued cards is different, and the reply itself gives the reason: from 2014-15 to 2018-19 there was a "grid system" (a grid of 2.5 hectares in irrigated areas and 10 hectares in unirrigated areas), in which, on the basis of one sample, cards were issued to all farmers in the grid; from 2019-20 this system was removed and field-based cards began. So the number of cards being more than the samples is not by itself an anomaly. The number of laboratories is a separate count of four types (static, mobile, mini, village-level).

Key Facts and Figures

National figures (text of the reply)	26.09 crore cards "generated/distributed as on date" since 2014-15; in all 8,313 laboratories: 1,267 static, 168 mobile, 6,197 mini and 681 village-level; Rs 2,153.04 crore released under the scheme since inception.
Training and awareness (text of the reply)	1,30,627 farmer trainings, 7.17 lakh demonstrations and 7,425 farmer fairs/campaigns; advice through ATMA and Krishi Vigyan Kendras (KVK); school soil health programme; through the digital SHC portal.
Total of Annexure-I (source: SHC portal)	Samples analysed 8,46,05,893; cards issued 26,09,25,492 (33 State/Union Territory rows). Most cards: Uttar Pradesh 4,09,61,769; Maharashtra 2,83,84,256; Madhya Pradesh 2,11,64,819; Rajasthan 2,02,72,888; Karnataka 1,87,10,391.
Total of Annexure-III (laboratories)	Static 1,267, mobile 168, mini 6,197, village-level 681, total 8,313. Most: Telangana 2,094, Andhra Pradesh 1,404, Jharkhand 1,329, Madhya Pradesh 688, Karnataka 395.
Karnataka, Annexures-II and IV (source: State government)	In 31 districts samples analysed 45,28,048, cards issued 1,87,10,391 and Central-share funds released Rs 9,432.35 lakh. Laboratories 395 (291 village-level static, 56 SAU/KVK static, 30 static of the agriculture department, 7 horticulture, 6 mini, 3 cooperative static, 1 mobile, 1 sericulture).

Checking the Figures: What Matches and What Is Unresolved

What matches (our calculation): The sum of the rows of Karnataka's 31 districts matches the totals of analysed samples (45,28,048), cards (1,87,10,391) and funds (Rs 9,432.35 lakh), and Karnataka's row in Annexure-I (45,28,048 and 1,87,10,391) matches the total of Annexure-II. In Annexure-III, the sum of the four types in each State's row matches its "total", and Karnataka's 395 matches the 395 of Annexure-IV.

What is unresolved: Annexure-I: The sum of the 33 rows of Annexure-I by our calculation is 8,47,64,246 in samples and 26,16,92,385 in cards, whereas the printed totals are 8,46,05,893 and 26,09,25,492: a difference of 1,58,353 and 7,66,893 respectively. The text of the reply also says 26.09 crore cards, that is, it matches the printed total. The reply does not say which row or total is correct.

What is unresolved: Annexure-III: In the 33 rows of Annexure-III the sum of static laboratories by our calculation is 1,268 and of total laboratories 8,314, whereas the printed totals are 1,267 and 8,313: a difference of one. The sums of mobile (168), mini (6,197) and village-level (681) match the printed total.

What is not comparable: Karnataka's Rs 9,432.35 lakh (Rs 94.32 crore) is the "GOI share" in Annexure-II, whereas the national Rs 2,153.04 crore in the text is "released so far since

inception"; by our calculation Karnataka's share is about 4.4%, but the reply does not say both are on the same basis. The cards-per-sample figure (national 3.08, our calculation) is not a rate of re-testing because of the grid system. Release of State funds and the result of testing are separate.

Importance: Testing Infrastructure, Cards and Balanced Fertiliser

Nature of the infrastructure (our calculation): Of the 8,313 laboratories, 6,197 (about 74.5%) are mini, and of these 4,678 (about 75.5%) are in only three rows (Telangana 2,050, Andhra Pradesh 1,328, Jharkhand 1,300). Static laboratories are about 15.2% of the total. The reply gives no reason for this uneven pattern.

Cards and their use: From the reply's arrangement of "at least once in three years" and the total number of cards since 2014-15, it cannot be concluded how many farmers got a card how many times, how many farmers changed fertiliser use on the cards' recommendations, or how soil health fared; the reply has only the figures of issuing cards.

Karnataka's details: In Karnataka, 291 of 395 are village-level static laboratories (37 in Belagavi). The ratio of cards to samples across districts is very different: in Belagavi 10,35,690 cards on 66,841 samples, but in Bengaluru Urban 1,72,246 cards on 2,95,714 samples and funds of Rs 1,978.20 lakh. The reply gives no reasons for these differences.

Challenges and What Is Not in the Reply

Asked, but not found: Question (c) asked about laboratories established and "operationalised"; the annexures give only the number of established laboratories, not how many are operational. Question (e) asked about special steps for rainfed, hilly and Malnad regions; the reply only says that farmers, including those in these regions of Karnataka, can take the benefit of the scheme, and does not separately give region-specific steps or the number of mobile/digital tests for Karnataka (the annexure has only 1 mobile laboratory).

Unresolved points: The difference between the Annexure-I total and the row-sum; the difference of one in Annexure-III; the date of "as on date"; whether Karnataka's funds are on the same basis as the national funds; and outcome indicators (fertiliser use, soil condition).

What we have not read: We read in full the official PDF of Lok Sabha Unstarred Question 360 (the reply and all four annexures). The SHC portal, the scheme guidelines and any independent evaluation were not read.

Way Forward

Take this as the dated government information of the reply of 21 July 2026; to confirm the Annexure-I total, the operational status of the laboratories and outcome indicators, the

SHC portal or further official replies will have to be seen.

Difference in Concept

Keep four things separate: (1) analysed samples and issued cards (different because of the grid system); (2) established and operational laboratories; (3) issuing cards and the outcome of fertiliser use or soil health; (4) the figures of the reply and our calculation.

Mains Perspective

GS-III: Agriculture, resource management and fertilisers; GS-II: Federalism and implementation of government schemes.

To see the fertiliser side of the picture - the State-wise availability of urea/DAP/MOP and the question of 'balanced nutrients versus soil health' - read: Availability of fertiliser: the State-wise Kharif position as of 21 July 2026.

UPSC CSE Mains Style: Original Practice Question

What can and cannot be said about the implementation of the Soil Health Card scheme from the figures of cards, samples and laboratories? What additional indicators would be needed to assess the scheme's impact on balanced fertiliser use?

(Answer in 150 words) | 10 marks

Answer Outline

Introduction: The scheme, INM and the aim of the card.

Main Body: National figures (26.09 crore cards, 8,313 laboratories, Rs 2,153.04 crore, figures of the reply); the difference of samples and cards due to the grid system; the nature of the laboratories (mini 74.5%, our calculation) and the Karnataka example; the differences in the sums of the annexures; established versus operational; the required indicators (change in fertiliser use, soil condition, operational status of laboratories).

Conclusion: Card distribution and the setting up of laboratories show implementation, not the effect of balanced fertiliser use; assess the impact through indicators of operational laboratories, changes in fertiliser use and soil condition.

Sources

- Lok Sabha Unstarred Question 360 and reply, 21.07.2026 (official PDF of Parliament; Annexures I to IV)

Source: The official text of Lok Sabha Unstarred Question 360 and Annexures I to IV were read in full. The SHC portal and the scheme guidelines were not read.

Remember: According to the Lok Sabha reply, 26.09 crore Soil Health Cards have been issued since 2014-15 and 8,313 laboratories are established (6,197 mini), but the sum of the rows of Annexure-I is 7,66,893 more than the printed total in cards (our calculation), Annexure-III has a difference of one laboratory, and the number of operational laboratories is not in the reply.