

GOVERNMENT OF INDIA
MINISTRY OF AGRICULTURE AND FARMERS WELFARE
DEPARTMENT OF AGRICULTURE AND FARMERS WELFARE

LOK SABHA
UNSTARRED QUESTION NO. 3664
TO BE ANSWERED ON THE 17TH DECEMBER, 2024

ORGANIC CARBON IN AGRICULTURAL LAND

3664. SHRI UTKARSH VERMA MADHUR:

Will the Minister of AGRICULTURE AND FARMERS WELFARE कृषि और किसान कल्याण मंत्री be pleased to state:

- (a) whether the presence of organic carbon in agricultural land is regularly checked and the time interval thereof;
- (b) the reasons for decrease in organic carbon in soil over the past two decades;
- (c) whether the Government proposes to take any action to increase the organic carbon availability in soil; and
- (d) if so, the details thereof?

ANSWER

THE MINISTER OF STATE FOR AGRICULTURE AND FARMERS WELFARE

कृषि एवं किसान कल्याण राज्य मंत्री (SHRI RAMNATH THAKUR)

(a): The presence of organic carbon in agricultural land is regularly checked through Soil Health Card (SHC). As per guidelines of the scheme, States to generate Soil Health Card once in a three years to address nutrient deficiencies in soil. Till date, 24.60 crore SHCs have been generated.

(b): The major reasons for decrease in organic carbon in soil are, (i) defective practices such as injudicious or excessive use of chemical fertiliser, frequent tillage / ploughing, stubble burning, overgrazing, and erosion; (ii) replacing perennial vegetation with monoculture crops and pastures and (iii) soil physicochemical properties such as soil bulk density, high gravel content, soil erosion and low soil water content / poor moisture conservation measures.

(c) & (d): To address the issue, Government is implementing Soil Health and Fertility Scheme to issue SHCs to farmers. SHC gives the details of organic carbon content in the soil and advisories are given to the farmers on Integrated Nutrient Management (INM) for judicious use of chemical fertilizers including secondary and micro nutrients along with organic manures & bio-fertilizers, for improving soil organic carbon and health.

Government is also promoting organic farming for improving soil organic carbon through Paramparagat Krishi Vikas Yojana (PKVY) in all the States/UTs and Mission Organic Value Chain Development for North Eastern Region (MOVCDNER). Assistance of Rs.15,000 per ha for a period of three years is provided to farmers through Direct Benefit Transfer for on-farm/off-farm organic inputs majorly bio-fertilizers under PKVY and MOVCDNER. Union Cabinet has also approved National Mission on Natural Farming (NMNF) on 25.11.2024 to promote farming practices such as biomass mulching, multi-cropping system, use of on-farm made natural farming bio-inputs for improving soil organic content, soil structure, nutrition, enhancing soil water holding capacity.

Indian Council of Agricultural Research (ICAR) has also developed several location specific bio-engineering measures to check soil erosion due to run-off of rainwater, sand dune stabilization and shelter belt technology to check wind erosion and reclamation technology for problem soils that enhances soil organic carbon. ICAR is implementing “Network Project on Organic Farming (NPOF)” with 20 centers in 16 States. Under this programme, ICAR has developed location specific organic farming packages for 68 cropping systems suitable for 16 States, which are demonstrated through various Central/ States schemes.
