

**BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI
Original Application No. 621 of 2025**

IN THE MATTER OF:

Suo Motu proceedings based on news item titled "Climate Change Imbalance in Fertilizer Use Impacts Soil' Organic Carbon: ICAR Study" Appearing in the Hindu Dated 10.11.2025.

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Date: 21.05.2026

Filed Through:



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BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI

Original Application No. 621/2025

In the matter of:

Suo Motu proceedings based on news item under the titled of: -

“Climate Change imbalance in fertilizer use impacts soil’s organic carbon:
ICAR study”

Reply by way of affidavit of Rajnarayan Kaushik, IAS,
Director General, Agriculture & Farmers Welfare,
Haryana, having my office at Krishi Bhawan, Sector-21,
Panchkula, Haryana,

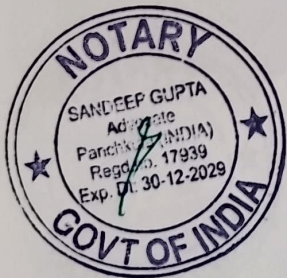
RESPECTFULLY SHOWETH

**I, the above-named deponent do hereby solemnly
affirm & state as under: -**

1. That the deponent is currently working as Director General, Agriculture & Farmers Welfare, Haryana, and as such is well conversant with the facts and records of the present matter.
2. That the deponent is filing present affidavit in compliance with the directions issued by this Hon’ble Tribunal dated 02.12.2025 in OA No. 621/2025 which speak thus: -

“1. This original application is registered suo motu on the basis of the news item titled “Climate Change imbalance in fertilizer use impacts soil’s organic carbon: ICAR study” appearing in The Hindu dated 10.11.2025.

2. *The news item is based on the study by ICAR, Indian Institute of Soil Sciences, Bhopal based on solid survey of 2,54,236 soil in 620 District covering 29 States, the report has been prepared. The study is of 6 years for 2017 published in England based International Journal Land Degradation and*



Development. The study has found that if organic carbon is low, then the deficiency of micro nutrient is high, and if the organic carbon is high, the deficiency is low. Based on the study an 'agri-ecological base' map has been prepared to assess the input of cropping system and the use of fertilizer on organic carbon. Scientists have prepared a map which can help in making policy decisions. It's found that whenever imbalanced fertilizer application was there, then the organic carbon contained in the soil had declined. Haryana, Punjab, and parts of Western Uttar Pradesh have intensified the fertiliser application, skewed towards urea and phosphorus. When applied scientifically, it had negative organic impact on soil. The study also indicates climate change also has impact on organic carbon. High temperature leads to decline in soil organic carbon. The above study has led to a policy paper on 'agri-ecological base map' which is used for policy decision on scientific use of fertilizer in order to maintain the soil carbon and health of soil. NGT has taken up matters, i.e., OA No. 10/2025 and OA No. 694/2023 relating to use of fertilizer and contamination of ground water.

3. The above matter indicates violation of the Environment Protection Act, 1986 and the Water (Prevention and Control of Pollution) Act, 1974.
4. The news item raises substantial issues relating to compliance with the environmental norms and implementation of the provisions of scheduled enactment.
5. Power of the Tribunal to take up the matter suo-motu has been recognized by the Hon'ble Supreme Court in the matter of "Municipal Corporation of



Greater Mumbai vs. Ankita Sinha & Ors." Reported in 2021 SCC Online SC 897.

6. Hence, we implead the following as respondents in the matter: -

(1) Ministry of Agriculture and Farmers Welfare, through its Secretary, Krishi Bhawan, New Delhi.

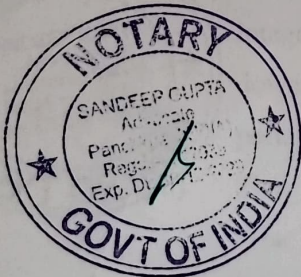
(2) Indian Council of Agriculture Research, through its Secretary, Krishi Bhawan, New Delhi 110001

(3) Ministry of Environment, Forest and Climate Change, through its Secretary, Indira Paryavaran Bhawan, Jorbagh Road, New Delhi.

(4) Department of Agriculture, Uttar Pradesh, Krishi Bhawan, Madan Mohan Malviya Marg Lucknow-226001.

(5) Department of Agriculture and Farmer Welfare- Haryana, Krishi Bhawan, Sector-21, Panchkula.

(6) Department of Agriculture Farmers Welfare- Punjab, Kheti Bhawan, Institutional Site No. 204, Phase 6 Mohali, Punjab.



7. Issue notice of the above respondents for filing their response/reply by way of affidavit before the Tribunal at least one week before the next date of hearing. If any respondent directly files the reply without routing it through his advocates, then the said respondent will remain virtually present to assist the Tribunal.

8. List on 26.02.2026."

3. That in this regard it is respectfully submitted that the office of answering deponent is implementing multiple schemes launched by

the Government and interventions aimed at improving soil health, balanced nutrient management, reduction of chemical fertiliser misuse, promotion of organic/natural farming and sustainable agriculture.

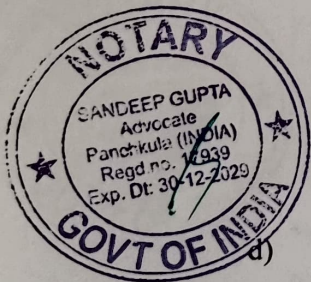
4. That following are the schemes launched & initiatives taken for Soil Health and judicious use of fertilisers by the Government/office of deponent: -

I. Soil Health Card Scheme

- a) That a scheme namely Soil Health Card is being implemented by the office of deponent with an aim of issuing Soil Health Cards to all farmers once every few years, strengthening soil testing laboratories by providing facilities for testing all essential soil parameters and elements, diagnosing soil fertility-related deficiencies, and developing district-wise soil test-based nutrient management strategies so as to enhance the efficiency, judicious use, and balanced application of nutrients for sustainable agricultural productivity.
- b) Since, the inception of the Soil Health Card (SHC) Scheme during 2015-16, the Department has collected 48,10,707 soil samples from grid and individual acre of land. Out of these, 1,07,98,093 soil health cards have been issued.
- c) In the Soil Health Card (SHC), advisory is issued regarding the kind and quantity of the fertilizer needed for soil. Since, physical soil cards might not be very convenient to store safely, the State has integrated Soil Health Card delivery with whatsapp. A provision to download soil health card any time from the Meri Fasal Mera Byora portal is being explored also.

d) That the State Government has launched programme namely "Har Khet Swasth Khet" with an aim to test every acre of cultivated land of Haryana. More than 70 lakh soil samples have been collected, analysed and the report of all these soil samples have been provided to the farmers.

M.



II. Integration of IFMS with MFMB for Regulated Fertiliser Distribution

That the Department has taken an innovative and forward-looking step by integrating the Integrated Fertilizer Management System (IFMS) of GoI with Meri Fasal Mera Byora (MFMB) portal of State Govt. with effect from 8th October, 2025. This landmark digital reform has enabled fertilizer distribution to be aligned with actual cropped area.

As a result, significant improvements have been observed in transparency, targeting and monitoring of fertilizer distribution, leading to prevention of diversion, pilferage, reduction in excess consumption and improved fertilizer use efficiency.

From the date of implementation of the integration i.e., 08.10.2025 till 17.04.2026, State has recorded the following reductions as compared to the corresponding period of the previous year which also resulted in substantial savings in fertilizer and its subsidy:-

Fertilizer	Saved (in MT)	Rate of subsidy Per MT (in Rs.)	Savings on subsidy (in Crore Rs.)
Urea	52,263	41,211	215.38
DAP	2,017	29,805	6.01
NPK	39,993	19,730	78.91
SSP	25,887	7,408	19.18
TSP	6,778	22,062	14.95
Total	1,26,938	1,20,216	334.43

The proposal of per acre entitlement of Urea and DAP is under consideration of State Govt. to promote balance use fertilizer. This regulatory framework is designed to curb the indiscriminate overuse of chemical fertilizer and to improve soil health.

III. Natural Farming Scheme of State and Centre

- a) That the State of Haryana is implementing a Natural Farming Scheme from 2022-23 to improve the soil health and reduce the use of chemical fertilizer. During the year 2025-26, more than 10,500 acre has been brought under the Natural farming in the State.

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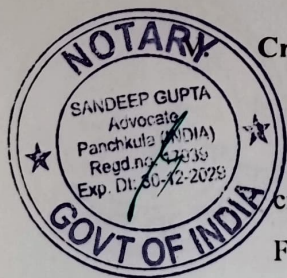
- b) That regular trainings, exposure visits and on-field technical support are being provided to farmers to ensure sustainability and scalability.
- c) That under the Natural Farming Scheme, the State provides financial assistance of ₹30,000/- per indigenous (desi) cow.
- d) A subsidy of ₹3000/farmer for four drum @ ₹750/drum is provided to prepare Jeevamrit, Beejamrit and Ghanjeevamrit are being prepared and utilised at farm level, leading to improvement in soil microbial activity and organic carbon content.
- e) Under the National Mission on Natural Farming (NMNF), Gurukul, Kurukshetra is functioning as a Natural Farming Training Centre to impart training to farmers as well as officers of the Department.
- f) Demonstrations on an area of 2,988 acres were conducted under the National Mission on Natural Farming (NMNF) during the year 2025-26.

IV Green Manuring

Haryana Govt is implementing a scheme for distribution of dhaincha seeds in order to promote Green Manuring, as it boosts soil organic matter by incorporating fresh plant tissue that decomposes into humus, improving soil structure and water retention. Under this scheme an assistance of Rs. 1000/acre is provided to the farmer for sowing of dhaincha seeds. During the year 2025-26, dhaincha crop was sown in 14,232 acre for which subsidy of Rs. 1.42 Crore was provided.

Crop Residue Management

The practice of burning of crop residue after harvesting of crops not only creates pollution but also deteriorates the Soil health. For prevention and control of stubble burning, crop residue management machines are provided on subsidy to the farmers for in-situ management of crop residue. Most of the farmers hire these machines and incurs additional cost. In order to compensate these farmers, and to improve soil health and organic matter, Haryana Govt is providing operational charges @ Rs. 1200/- per acre for in-situ management.



During the year 2025-26, online applications are invited from farmers at the time of registration on MFMB portal for availing benefit of incentive @ Rs. 1200/- per acre. The incentive amount is released to the farmers who do not burn crop residue.

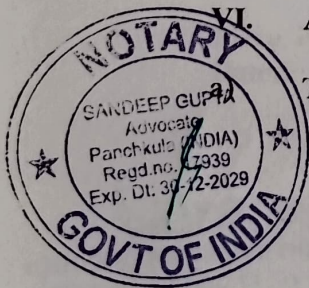
During the current year 2025-26 under in-situ management a total of 3.67 lakh farmers managed 22.99 lakh acres of paddy area and were provided Rs. 275.91 Crore. Haryana is the only State in the country which is providing this type of incentive to the farmers.

Retaining and tilling paddy straw directly back into the field significantly boosts the Soil Organic Carbon (SOC) and overall soil organic matter. *In-situ* incorporation ensures this considerable volume of carbon is sequestered back into the soil, building a rich base of long-term organic biomass. The physical addition of chopped paddy straw provides an abundant energy source for beneficial native soil microorganisms. *In-situ* management recycles substantial amounts of essential plant nutrients naturally locked in the straw. Every tonne of recycled paddy residue returns important nitrogen, phosphorus, potassium (K), and sulphur directly to the field, organically supplementing soil biomass and directly lowering the required need of chemical fertilizers for the succeeding crop.

VI. Awareness, Capacity Building and Monitoring

That the office of answering deponent has conducted:

- Thousands of farmer awareness camps annually
 - District and block-level trainings on balanced fertilisation and INM
 - Field demonstrations on soil health restoration
- b) That fertiliser consumption data is periodically analysed at State and district levels to identify trends of imbalance and to issue corrective advisories.
5. That the Government of Haryana and the office of answering deponent i.e. Department of Agriculture & Farmers Welfare, Haryana is committed to environmental protection, soil



conservation, prevention of groundwater contamination and compliance with the provisions of the Environment (Protection) Act, 1986 and Water (Prevention and Control of Pollution) Act, 1974. However, the office of answering deponent submits on oath that all the necessary steps, in accordance with applicable rules and instructions of the Government, will be taken for compliance of directions issued, if any, by this Hon'ble Tribunal.

VERIFICATION

Deponent

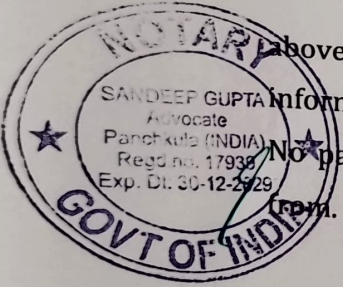
M.

(Rajnarayan Kaushik)
Director General, Agriculture
and Farmers Welfare Department
Haryana, Panchkula

Place: Panchkula
Dated: 20 MAY 2026

VERIFICATION:

Verified that the contents mentioned in para no. 1 to 5 of the above reply by way of affidavit are true and correct based on the information derived from official record, which I believe to be correct. No part of it is false and nothing material has been concealed there from.



Contents of the affidavit/CPA/affidavit/Instrument read over/ explained to Deponent/ Declarant / Executant in his/her language who seemed perfectly understood the same and has admitted to be correct.

Deponent

M.

(Rajnarayan Kaushik)
Director General, Agriculture
and Farmers Welfare Department
Haryana, Panchkula

Place: Panchkula
Dated: 20 MAY 2026

Sandeep 298647885958
Identify deponents H/S/No/ I/they
has/have signed in my presence

Attested as Identified

SANDEEP GUPTA
Notary, PANCHKULA (Haryana)

20 MAY 2026