

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL

PRINCIPAL BENCH, NEW DELHI

Original Application No. 618/2025

IN THE MATTER OF:

The Research Article titled as "Transforming food land and water system to combat climate crisis in Ladakh India" appearing in Current Science Volume 129 Number 8 dated 25.10.2025.

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| 1. | Reply on behalf of respondent no. 3 (Ministry of Agriculture and Farmers' Welfare) | |

Respondent No. 3

Filed by

Through

New Delhi
Dated 20/02/2026


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अवर सचिव/Under Secretary
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कृषि एवं किसान कल्याण मंत्रालय/Min. Agriculture & Farmers Welfare
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कृषि भवन, नई दिल्ली/Krishi Bhawan, New Delhi-110001

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**REPLY BY WAY OF AFFIDAVIT ON BEHALF OF RESPONDENT NO.
3 i.e. MINISTRY OF AGRICULTURE AND FARMERS' WELFARE**

It Most Respectfully Showeth:-

1. That the present reply is being filed by Respondent No. 3 i.e. **Ministry of Agriculture and Farmers' Welfare (MoAFW)** through Sh_Chandra Shekhar Prasad S/o.Sh. Madan Mohan Prasad Presently working as Under Secretary, Department of Agriculture and Farmers' Welfare (DA&FW), Krishi Bhawan, New Delhi - 110001, Government of India, who is duly authorized and competent to file the present reply on behalf of the answering respondent no. 3.
2. That I am, in my aforementioned official capacity, well conversant with the facts and circumstances of the present case, based on the records and documents available with the department. As such, I am competent and authorized to swear and file the present affidavit reply on behalf of the Respondent No. 3 Ministry of Agriculture and Farmers' Welfare (hereinafter referred to as “answering respondent”).


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3. The present Original Application has been registered suo motu by the Hon'ble National Green Tribunal on the basis of a news article titled **“Transforming food, land and water systems to combat climate crisis in Ladakh, India” published in *Current Science* on 25.10.2025.** The application highlights environmental concerns arising from climate change, rapid urbanisation, tourism pressure, water scarcity, glacier retreat, and ecological degradation in the fragile Himalayan cold desert ecosystem of Ladakh. The issues raised indicate non-compliance with various environmental laws, including the Environment (Protection) Act, 1986 and other allied enactments, and call for effective enforcement, remedial measures, and climate-resilient policies to ensure sustainable development and ecological balance in the region.

PARA-WISE REPLY

4. That upon perusal of the Original Application, it is respectfully submitted that under the **Soil Health & Fertility** component of the PM Rashtriya Krishi Vikas Yojana (PM-RKVY), the Government has been promoting judicious and balanced use of fertilizers, including secondary and micronutrients, in conjunction with organic manures and bio-fertilizers. The Soil Health Card (SHC) Scheme has been under implementation since 2014-15 to ensure improvement of soil fertility, productivity, and sustainability of agriculture.
5. That under the said scheme, activities such as establishment and strengthening of soil testing laboratories, quality control laboratories for fertilizers and bio-fertilizers, farmer training and demonstrations, promotion of micronutrients, and reclamation of problem soils are being undertaken in a systematic manner.
6. That the soil samples are processed strictly as per standard scientific procedures and are analyzed for parameters including pH, Electrical

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Conductivity, Organic Carbon, available Nitrogen, Phosphorus, Potassium, Sulphur, and micronutrients such as Zinc, Copper, Iron, Manganese and Boron.

7. That the soil samples are collected and analyzed as per prescribed scientific protocols for parameters including pH, Electrical Conductivity, Organic Carbon, available Nitrogen, Phosphorus, Potassium, Sulphur, and micronutrients such as Zinc, Copper, Iron, Manganese and Boron.
8. That Soil Health Cards (SHCs) are issued to farmers providing detailed information on soil nutrient status along with crop-wise fertilizer and soil amendment recommendations, including balanced use of chemical fertilizers, organic manures and bio-fertilizers.
9. That the diagnostic soil health assessment of farmer fields is undertaken periodically and Soil Health Cards are issued at least once in every three years.
10. That since inception, an amount of Rs. 1,970 crores have been released under the scheme and approximately 25.68 crore Soil Health Cards have been generated and distributed across the country.
11. That a total of **8,313 Soil Testing Laboratories** have been established across the country, comprising **1,267 Static Soil Testing Labs, 168 Mobile Soil Testing Labs, 6,197 Mini Soil Testing Labs, and 681 Village-level Soil Testing Labs**. In addition, **1,020 school mini soil laboratories** have also been established under the School Soil Health Programme.
12. That **1,037 existing Soil Testing Laboratories** have been strengthened with modern digital equipment such as **Inductively Coupled Plasma Spectrophotometer (ICP)** and **Atomic Absorption Spectrophotometer (AAS)** under the scheme.


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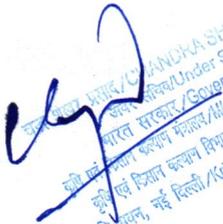
13 That in the Ladakh, since 2014-15 Soil Health & Fertility scheme of PM RKVY, 4997 Soil Health Cards (SHCs) have been generated/ issued to the farmers and during the current financial year of 2025-26, 450 SHCs have been generated against the target of 900 SHCs. A fund of Rs.0.95 crore has been released for implementation of various components of the Scheme. Out of 03 sanctioned Static Soil Testing Labs (STLs), 02 Static STLs have established and 12 Village Level STLs have also been sanctioned. 348 Demonstration & trainings and 108 Farmers trainings have also been organized for awareness of the scheme, 1200 hectare area under the promotion of micronutrients and 25 hectare area reclamation of soil have also been covered under the scheme. Under School Soil Health Programme of Soil Health & Fertility scheme of PM RKVY, 17 Schools (Kendriya Vidyalaya, Navodaya Vidyalaya and PM-SHRI Schools have been registered. In these schools, 513 students have also been registered.

14 That the Soil Health Card Portal is equipped with real-time nutrient management systems and crop advisory services. Soil samples are collected through a mobile application capturing accurate geo-coordinates, and real-time updates relating to sample collection and generation of Soil Health Cards are uploaded on the portal. Farmers are able to directly download their Soil Health Cards and access crop-wise fertilizer recommendations.

15 That the awareness among farmers is generated through extensive training programmes, demonstrations and interaction activities conducted by State Governments. A total of **93,781 farmers' trainings, 6.80 lakh demonstrations, and 7,425 farmers' melas/campaigns** have been organized across the country. Furthermore, the School Soil Health Programme involves students in soil testing activities and dissemination of advisories, thereby strengthening awareness at the grassroots level.


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- 16 That the advisory services based on soil test results are provided to farmers to promote judicious input use for improving soil health and productivity. Digital platforms, including the Soil Health Card Portal and mobile applications, are utilized for generation of SHCs and dissemination of soil health-related information.
- 17 That an area of **13,51,166 hectares** has been covered under Promotion and Distribution of Micronutrients under the scheme.
- 18 That a study titled “**Soil Testing Infrastructure for Faster Delivery of SHC in India**” was conducted by the National Productivity Council (NPC), New Delhi, in 2017 covering **76 districts in 19 States**, including **170 soil testing laboratories and 1,700 farmers**. The study revealed a **reduction of 8–10% in chemical fertilizer usage** and an overall **increase of 5–6% in crop yield** due to application of fertilizers and micronutrients as per SHC recommendations.
- 19 That an impact study of the Soil Health & Fertility Scheme conducted by the National Institute of Agricultural Extension Management (MANAGE), Hyderabad, in November 2017 reported that **62.8% of farmers** used fertilizers as per SHC recommendations. The cost of cultivation reduced by **4–10% per acre**, and crop yields increased for a majority of crops. Paddy farmers reduced urea usage by **9%** and DAP/SSP by **7%**, while potassium usage increased by **20%**, resulting in reduced cost of cultivation.
- 20 Since 2014-15, 4997 Soil Health Cards (SHCs) have been generated in the State till date. During 2024-25, State has generated 1898 soil samples against the target of 5000 SHCs. During 2025-26, state has generated 450 soil samples against the target of 900 SHCs.


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- 21 That in respect of Organic Farming, the organic farming is promoted as a sustainable agricultural production system that enhances agro-ecosystem health, biodiversity, biological cycles and soil biological activity. The use of chemical fertilizers, pesticides and hormones is prohibited, and crop production is based on dung manure, vermicompost, green manure and bio-fertilizers, with botanical and biodiversity-based pest management practices.
- 22 That the Government promotes organic farming through **Paramparagat Krishi Vikas Yojana (PKVY)** and **Mission Organic Value Chain Development for North Eastern Region (MOVCDNER)**. PKVY is implemented in all States/UTs except North Eastern States, while MOVCDNER is implemented in the North Eastern States since 2015-16.
- 23 That under PKVY, assistance of **₹31,500 per hectare over three years** is provided, out of which **₹15,000 per hectare** is provided to farmers through Direct Benefit Transfer. Under MOVCDNER, assistance of **₹46,500 per hectare over three years** is provided, including **₹32,500 per hectare** for organic inputs and **₹15,000 per hectare through DBT (Direct Benefits Transfer)**.
- 24 That achievements under PKVY include conversion of **16.90 lakh hectares** of land to organic farming and benefits to **28.35 lakh farmers** as on 31.10.2025. Since 2015-16, a total of **₹2,548.99 crore** (central share) has been released under the scheme as on 31.12.2025. *Achievement of PKVY in Ladakh 10000.00 Hectare of land have been converted to organic farming, 18929 Farmers have benefited under the scheme. Since 2015-16, a total of 541.85 lakhs (Central share) has been released to Ladakh under the PKVY Scheme.*
- 25 That under MOVCDNER, **2.36 lakh hectares** have been brought under organic farming and **2.70 lakh farmers** have been benefited as on

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31.10.2025. Since 2015-16, ₹1,480.48 crore (central share) has been released under the scheme as on 31.12.2025.

26 That in National Resources Management/ National Mission for Sustainable Agriculture, it is submitted that Indian agriculture is highly vulnerable to climate change, with approximately **45% of cultivated areas being rain-fed**. Climate change has caused significant shifts in weather patterns, adversely affecting agricultural production systems, while the agriculture and allied sector contributes more than **13% of national greenhouse gas emissions**.

27 That the National Mission for Sustainable Agriculture (NMSA) aims to transform Indian agriculture into an ecologically sustainable and climate-

resilient production system by ensuring food security, employment and livelihood opportunities in rural areas. The Mission supports scaling up of adaptation technologies through various schemes of DA&FW.

28 That the key adaptation measures under NMSA include climate-ready crops and resilient varieties, livestock and fish culture systems, water use efficiency and micro-irrigation, pest surveillance and forewarning, agricultural waste management, insurance and risk management, integrated farming systems, agro-forestry, bamboo mission, value chain strengthening, energy management, farm mechanization, organic and natural farming, and soil health and nutrient management.

29 That while significant climate actions are being undertaken in the agriculture sector, the efforts require substantial financial resources to enable farmers to adapt to climate change, build resilience and reduce emissions. Greater investments, innovative financial models and improved access to capital for small and marginal farmers are essential. The Government is continuously assessing financial requirements and

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working towards mobilizing resources to achieve national climate goals.

30 That in view of the above facts and initiatives, it is denied that the Respondent authorities have failed in their statutory or constitutional obligations. On the contrary, comprehensive and sustained efforts are being undertaken to combat climate crisis, promote sustainable agriculture, and protect natural resources in an environmentally responsible manner. ***Distribution of drought-resistant crop varieties in Ladakh is being undertaken to address declining water availability due to climate change.***

31 That in view of the above submissions, it is respectfully prayed that this Hon'ble Tribunal may be pleased to take the present affidavit reply on record, and pass such further orders as this Hon'ble Tribunal may deem fit and proper in the facts and circumstances of the case.


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Verification

I, Chandra Shekhar Prasad, do hereby verify on _ February 2026 at New Delhi the contents of the above paragraphs which are true to my own knowledge and/or are in the nature of legal submissions which I believe to be true and no material has been suppressed herewith.


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