

संघ राज्य प्रशासन, लद्दाख
वन, पारिस्थितिकी और पर्यावरण विभाग
पूटी सचिवालय, लद्दाख



THE ADMINISTRATION OF
UNION TERRITORY OF LADAKH
FOREST, ECOLOGY & ENVIRONMENT
DEPARTMENT
UT- SECRETARIAT, LADAKH

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New Delhi
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No: Com.Secy/FE&E/UTL/2025/Misc./744-48

Dated: 24 /03/2026

Subject: Submission of Compliance Affidavit in O.A. No. 618/2025 titled "*Transforming Food, Land and Water Systems to Combat Climate Crises in Ladakh, India,*" published in *Current Science*, Volume 129, Number 8 dated 25.10.2025.

Reference: Order dated 02.12.2025 in O.A. No. 618/2025.

Sir,

Kindly refer to the subject and reference cited above. In this regard, the Compliance Affidavit, bearing No. 618/2025 dated 02/12/2025, to be filed on behalf of the Union Territory of Ladakh, in compliance with the directions issued by the Hon'ble National Green Tribunal in O.A. No. 618 of 2025, titled "*Transforming Food, Land and Water Systems to Combat Climate Crises in Ladakh, India,*" published in *Current Science*, Volume 129, Number 8 dated 25.10.2025, is enclosed herewith.

You are requested to kindly file the enclosed Compliance Affidavit before the Hon'ble National Green Tribunal at the earliest and to appear and attend the proceedings in the said matter on 21.05.2026 on behalf of the Union Territory of Ladakh.

Encl: Compliance Affidavit (39 leaves)
Annexures- R-1 (3 leaves)

(अनुपम भारद्वाज, ज क प्र से / Anupam Bhardwaj, JKAS)

अवर सचिव/ Under Secretary,
Forest, Ecology and Environment
Department, UT Ladakh

Copy to:

- i. Administrative Secretary, Department of Forest, Ecology & Environment, UT Ladakh, for favour of kind information.
- ii. Member Secretary LPCC/, APCCF/CWLW, Forest, Ecology & Environment Department, UT Ladakh, for favour of kind information.
- iii. Office Records.

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

Original Application No. 618/2025

IN THE MATTER OF:-

News item titled: "Transforming food land and water systems to combat climate crises in Ladakh India, appearing in Current Science Volume 129 Number 8 dated 25.10.2025."

INDEX

S. No	PARTICULARS	PAGES
1.	Response by way of a Compliance Affidavit of Respondent 08 (Principal Secretary, Forest, Ecology and Environment, Civil Secretariat, UT Ladakh on behalf of UT Ladakh)	2-38
2.	<u>ANNEXURE R-I</u> Order No. 91-LA (PHE/I&FC) of 2024 dated 23.12.2024 issued by the Irrigation and Flood Control, Department, UT Ladakh	39-41

Filed by :-

NEW DELHI
DATED:

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BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL



PRINCIPAL BENCH, NEW DELHI

Original Application No. 618/2025

IN THE MATTER OF:-

News item titled: *“Transforming food land and water systems to combat climate crises in Ladakh India, appearing in Current Science Volume 129 Number 8 dated 25.10.2025.”*

RESPONSE BY WAY OF AFFIDAVIT BY RESPONDENT-08
THE PRINCIPAL SECRETARY, FOREST, ECOLOGY AND
ENVIRONMENT; CIVIL SECRETARIAT, LEH LADAKH: ON
BEHALF OF UT LADAKH

I, Mr. Anupam Bhardwaj, JKAS working as Under Secretary, Department of Forest, Ecology & Environment, Union Territory of Ladakh, having its office at Civil Secretariat, Leh, Union Territory of Ladakh, 194101, do hereby solemnly affirm and state as under:

1. That the aforementioned matter relates to a *suo moto* the Hon'ble Tribunal has taken cognizance of a news item published in *Current Science*, Volume 129 Number 8 dated 25.10.2025, titled, *“Transforming food land and water systems to combat climate crises in Ladakh India, appearing in Current Science Volume 129 Number 8 dated 25.10.2025.”*
2. That the present Compliance Affidavit is being filed by and on behalf of Union Territory of Ladakh (Respondent No. 08), in terms of directions issued by the Hon'ble National Green Tribunal in para 07 of its Order dt: 02.12.2025 in OA 618 of



2025. Vide the said Order, the Hon'ble National Green Tribunal directed the various Respondents to file their response with respect to the aforementioned news item published in *Current Science*, Volume 129 Number 8 dated 25.10.2025, highlighting environmental issues in UT Ladakh arising on account of Climate Change, as well as to the observations made by the Hon'ble National Green Tribunal in its Order dated 02.12.2025 in the said Original Application.

3. Submission of information in compliance to directions of Hon'ble NGT in the order dated 02.12.2025 in the matter of O. A. No. 618 of 2025

S. No.	Key Point in the news item and Order dated 02.12.2025 of the Hon'ble NGT in O.A. No. 618 of 2025	RESPONSE
	Glacier Retreat and Scarcity of Water	Based on the report furnished by the PHE/I&FC Department, UT Ladakh it is respectfully submitted for the kind consideration of the Hon'ble Tribunal that the Public Health Engineering (PHE) Department, Union Territory of Ladakh, has already taken concrete regulatory and enforcement measures to address issues relating to



		<p>groundwater extraction in Leh District, in line with environmental protection and sustainable water management objectives.</p> <p>In this connection, it is submitted that the Administration of UT of Ladakh, PHE/I&FC Department, vide Order No. 91-LA (PHE/I&FC) of 2024 dated 23.12.2024 (annexed as Annexure R-I hereto), <u>has regulated and effectively banned the digging of new borewells and further extraction of groundwater in identified semi-critical areas of Leh District w.e.f. 01.12.2024</u>, except with prior permission of the competent authority, i.e., the Deputy Commissioner & District Magistrate, Leh.</p> <p>The said order has been issued in pursuance of:</p> <p>The provisions of the Environment (Protection) Act, 1986,</p> <p>Directions of the Central Ground Water Authority, and</p> <p>The Jammu & Kashmir Water</p>
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		<p>Resources (Regulation & Management) Act, 2010 read with the Rules of 2011.</p> <p>It is further submitted that the above order has been circulated to all concerned Departments and field functionaries, and the PHE Department is ensuring strict compliance and enforcement of the same in co-ordination with the District Administration. Field-level instructions have been issued to;</p> <p>Prevent unauthorised drilling of borewells, Regulate existing groundwater extraction, and safeguard limited groundwater resources in the fragile cold desert ecosystem of Ladakh.</p> <p>Accordingly, it is respectfully submitted that steps for regulation and prohibition of illegal groundwater extraction are already in place and operational, and the PHE Department remains committed to full compliance with environmental norms and any further directions issued by the</p>
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		<p>Hon'ble Tribunal.</p> <p>It is further submitted that regarding, harnessing digital technologies remote sensing to monitor glaciers, etc. – UT Administration of Ladakh had already sponsored a mega project (Geo-Spatial Ladakh) to ISRO which has been completed.</p> <p>Besides, the Rural Development Department has been actively undertaking various activities and works for the conservation of water and water resources across the Union Territory.</p> <p><u>Since the formation of the Union Territory of Ladakh, the Department has constructed 811 Water Harvesting and Water Conservation Structures under schemes such as MGNREGA, SSP, SDP, and the District Capex Budget.</u> These works include renovation of traditional water bodies, flood control and protection bunds, and other allied structures aimed at strengthening water conservation infrastructure.</p>
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Additionally, 42 Water Tanks, Ponds, Irrigation Khuls, Check Dams, and bench terracing works have been constructed under the Integrated Watershed Management Programme (IWMP) to further enhance conservation, recharge, and sustainable management of water resources.

Moreover, during Gram Sabhas the Department has been consistently sensitizing the general public about climate change and its adverse impacts. The community members are encouraged to propose and prioritize works that contribute to water conservation, recharge of water sources, and long-term sustainable management of water resources.

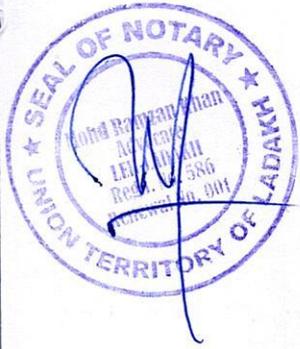
In response to the concern regarding glacial retreat and its resultant scarcity of water in Ladakh, it is submitted that Municipal Committee, Leh, in coordination with the PHE & IFC Department and other concerned Departments, has undertaken various



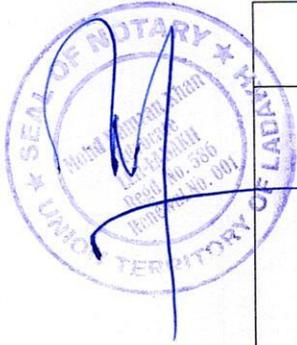
	<p>measures to strengthen urban water resilience and climate adaptation.</p> <p>Municipal Committee, Leh, is aligned with the Leh Climate Action Plan, which addresses climate change impacts including glacial retreat, declining snow reserves, and increasing water stress. The Committee integrates climate-responsive planning in urban infrastructure development, stormwater management, and water conservation strategies within municipal limits.</p> <p>The Rejuvenation of the T-Trench Project in Leh town has been undertaken under the AMRUT scheme, a natural water resource, in Ward No. 1 to enhance groundwater recharge and revive natural water sources.</p> <p>Under a pilot initiative undertaken in collaboration with Ladakh Ecological Development Group(LEDeG), a 24x7 water supply system has been implemented for 38 households in</p>
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	<p>Ward No. 1. The pilot project is aimed at assessing the sustainability, operational efficiency, and performance of the system, particularly during the winter season, considering the extreme climatic conditions of Leh.</p> <p>A Detailed Project Report (DPR) for providing 24x7 water supply to the entire Leh town has been prepared and submitted to the competent authority for administrative approval under AMRUT Project.</p> <p>Public awareness campaigns are being conducted on water conservation, judicious use of water, and prevention of wastage, especially during lean seasons.</p> <p>It is submitted that these measures collectively contribute towards mitigating the adverse impacts of glacial retreat and improving water security in the urban area.</p> <p>It is further submitted that the</p>
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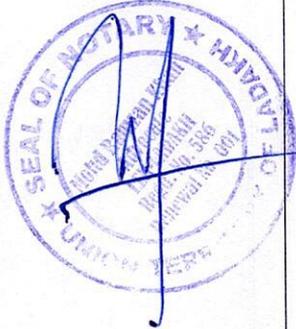
		<p>Municipal Committee, Kargil, in coordination with the PHE & IFC Department and other concerned Departments, is undertaking suitable measures to strengthen urban water resilience and climate adaptation.</p> <p>1. <i>Preparation of DPR for 24x7 Water Supply Scheme:</i></p> <p>A Detailed Project Report (DPR) for providing 24x7 water supply to the entire Kargil town has been prepared by the PHE Department and submitted to the competent authority for administrative approval under the Atal Mission for Rejuvenation and Urban Transformation (AMRUT).</p> <p>2. <i>Initiatives for Water Conservation:</i></p> <p>Awareness campaigns are conducted regarding water conservation, prevention of wastage, and discouraging the</p>
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		in-vain use of potable water.
	Shrinking of Agriculture Land and Soil Health	As per the report of the Agriculture and Horticulture Department_Ladakh's fragile mountain ecosystem is increasingly challenged by the shrinking of agricultural land and deterioration of soil health, largely due to urban expansion, infrastructure development, climate change, and changing land-use patterns. In the context of transforming food, land, and water systems to combat the climate crisis in Ladakh, the Horticulture Department plays a crucial role by promoting sustainable and climate-resilient horticulture. Emphasis is laid on climate-resilient crops such as Apricot, Apple, Walnut, and other locally adapted species, along with protected cultivation and efficient water-use practices. The Department encourages organic and natural farming, improved soil health management, and adoption of water-efficient technologies such as drip irrigation system. Strengthening these interventions have been pursued for



		<p>ensuring food security, ecological sustainability, and climate-resilient livelihoods in Ladakh.</p>
	<p>Extreme Events such as Glacier Lake Outburst, Frost flash Floods etc.</p>	<p><u>GEWS (Glacial Lake Early Warning System) Architecture:</u></p> <p>As per a report furnished by Disaster Management Authority, UT Ladakh, it has proposed a GEWS which links high-altitude lake sites to the Emergency Operations Centre (EOC) Leh through a layered architecture. A proposal in this regard has been submitted to the National Disaster Management Authority.</p> <p>As per the proposal, at each glacial lake site, solar-powered instruments—automatic weather stations, lake and river level / flow sensors, accelerometers, trigger lines, seismographs and cameras—monitor meteorological, hydrological and geotechnical conditions. Data are aggregated through a LoRa gateway and outdoor Wi-Fi access point for</p>



transmission offsite.

A relay site, typically on an intermediate ridge or settlement, uses a solar-powered point-to-point Wi-Fi link to forward data to a downstream control room located in a community hall, police station or Army/ITBP camp. Here, a computer dashboard visualises maps, sensor graphs and automatic triggers and alarms (via Apps, WhatsApp and SMS); an MQTT server and LoRa mesh devices support local alerting, while relay modules and hooters provide audible warnings.

At EOC/SEOC Leh, a central dashboard aggregates information from multiple lakes and control rooms for real-time monitoring, data storage and analysis. The centre is planned with solar-backed power to remain functional during grid failures, and is intended to operate as part of the wider ICCC, enabling coordinated, multi-hazard decision-making and rapid dissemination of GLOF



warnings to communities and authorities across Ladakh.

Flash Flood control and risk mitigation.

Flash floods in Ladakh are frequently driven by cloudbursts—intense, highly localised rainfall over 10–50 km², often exceeding 100–200 mm per hour due to orographic uplift of moist air over Himalayan slopes. In September 2010, more than 200 mm of rain in less than 24 hours triggered a devastating flash flood in Leh, killing over 200 people, destroying communications, blocking the airport, crippling the hospital, washing away roads and severely damaging homes, businesses and fields. The August 2025 rainfall again caused widespread power and network outages, exposing weak backups and extreme dependence on the single 220 kV Srinagar–Leh line.

The Department is in the process to propose adoption LoRA based Alternative Communication



technology. The submission of the project of LoRA technology for approval and funding is in early stage.

LORA-BASED ALTERNATIVE COMMUNICATION INFRASTRUCTURE:

The adoption of a LoRa-based alternative communication system for Ladakh, provides a multi-functional platform for multiple natural disasters. LoRa is a low-power wide-area technology that can transmit sensor data 2–40 km on battery or solar power, remaining functional during grid outages. Networks of LoRa sensors monitor rainfall, river and lake levels, temperature, humidity, seismic activity, infrastructure health and avalanche indicators, sending data via gateways to ICCC dashboards for real-time decisions. The same infrastructure can trigger sirens, notice boards, solar pumps and microgrid switches for resilient, two-way communication.

Besides the Ladakh Disaster Management Authority (LDMA),



		<p>State Executive Committee (SEC) and District Disaster Management Authority(DDMA) have been institutional addressing the challenges and risks of Disaster and Management in UT Ladakh .</p>
	<p>Rapid Tourism Growth</p>	<p>As per the report submitted by the Tourism Department overall tourist inflow to Ladakh has increased in recent years; and to ensure that environmental concerns are effectively addressed, various schemes, policies and guidelines have been put in place. The Steps taken by the Tourism Department, UT of Ladakh in this direction include;</p> <p>Ladakh Mountaineering 2024: The Tourism Department, UT of Ladakh has notified the Ladakh Mountaineering Policy, 2024 along with the Registration and Renewal Guidelines for Adventure Tour Operators (land, water, and air-based activities) on 08.11.2024. The objective is to promote clean, high-quality, safe, eco-friendly, and</p>



		<p>sustainable adventure activities by ensuring responsible practices and bringing operators into an organized regulatory framework.</p> <p><i>STP Policy 2024 and Draft STP Incentive Scheme, 2025:</i></p> <p>The Tourism Department, UT of Ladakh has introduced the Sewage Treatment Plant (STP) Policy 2024 to support accommodation units in establishing STPs, to ensure sustainable tourism and protect Ladakh's fragile environment by promoting decentralized STP installation in hotels and guest houses thereby treating wastewater, preventing pollution, safeguarding water bodies, and improving public health amidst growing tourism pressure. Subsequently, the policy has been revised and the new draft Ladakh STP Incentive Scheme 2025 has been circulated for comments and suggestions from stakeholders and the general public.</p> <p>Mandatory NOC from Ladakh</p>
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		<p>Pollution Control Board</p> <p>Submission of an NOC from the Ladakh Pollution Control Board is mandatory for registration/ renewal of accommodation units (Hotels, Guest Houses, Lodges, etc.) with more than 06 rooms.</p> <p>Regulation of Trekking and Mountaineering Activities</p> <p>The Department issues limited permissions for trekkers on designated trekking routes and expedition permissions for mountain peaks such as Mt. Kang Yatse, Mt. Dzo Jongo, Mt. Kun, Mt. Nun and other peaks to regulate environmental impact.</p> <p>Promotion of Renewable Energy and Sustainable Homestays:</p> <p>Renewable energy-based products (Solar Lanterns, Solar Rice Cookers, Solar Water Heaters) and dustbins for waste management are provided as part of Homestay Kits under the Homestay Policy 2023.</p>
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		<p>Tourist Advisories for Responsible Tourism: The Department has issued detailed tourist advisories covering mountaineering expeditions, trekking, wildlife-watching ethics, safe highway travel, motorcycle tours, and other activities to promote responsible behaviour and support ecosystem preservation.</p> <p>Cleanliness Drives: With regard to environmental protection, regulation of commercial activities, and control of plastic waste, the Tourism Department in close coordination with other line departments undertakes several measures. Cleanliness drives are conducted from time to time which are aimed at collection, removal and segregation of plastic and solid waste at tourist congregation zones, cleaning of roadside stretches and sensitization of local stakeholders and visitors on responsible waste disposal.</p>
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	<p>Water Sustainability and strengthening ground water management</p>	<p>Municipal Committee-Leh reports that to ensure water sustainability and effective groundwater management, the following measures have been adopted;</p> <p>AMRUT Supply Project: 24x7 Water:</p> <p>The 24x7 Water Supply Project under AMRUT is being implemented in Leh town to ensure continuous and equitable water supply. The project includes rehabilitation of the distribution network, reduction of non-revenue water, installation of monitoring systems, and improved service delivery, which will significantly reduce dependency on unregulated groundwater extraction.</p> <p>Regulation and Metering of Private Borewells:</p> <p>The District Administration, Leh, has imposed restrictions on granting permissions for new private borewells within Leh municipal limits. Further, metering of existing borewells is being introduced to regulate groundwater extraction and ensure sustainable</p>
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utilization. Municipal Committee, Leh, extends full cooperation in enforcement and compliance within its jurisdiction.

AMRUT Mitra Initiative:

Under the AMRUT Mitra program, regular water quality testing is conducted at household and institutional levels to ensure safe drinking water and to enhance community participation in water resource management.

Revival of Springs and Spring shed Management:

Municipal Committee, Leh, in coordination with concerned Departments, supports spring shed revival initiatives aimed at restoration of traditional water sources, strengthening recharge zones, and protection of catchment areas. of Wastewater:

Reuse of Treated Wastewater:

Treated effluent from the Sewage



		<p>Treatment Plant (STP) is being promoted for reuse in non-potable purposes such as Construction, horticulture, landscaping, and irrigation. This reduces freshwater demand and promotes sustainable and circular water management practices.</p> <p>It is submitted that Municipal Committee, Leh, remains committed to sustainable water resource management and climate-resilient urban planning in view of the fragile ecosystem of Ladakh.</p> <p>Municipal Committee-Kargil also undertakes the following measures;</p> <p>AMRUT 24x7 Water Supply Project:</p> <p>The 24x7 Water Supply Project under AMRUT is being implemented to ensure continuous and accountable water supply in Kargil town. The project includes rehabilitation of non-revenue water components, installation of monitoring systems, and improvement in service delivery, which will significantly reduce</p>
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		<p>dependency on unregulated groundwater extraction.</p> <p>Revival of Springs and Spring-shed Management:</p> <p>In coordination with the concerned Departments, the Municipal Committee Kargil is supporting spring-shed revival initiatives aimed at restoration and sustainable management of natural water sources. The project plan which includes installation of monitoring systems and improvement in service delivery, which significantly reduces dependency on unregulated groundwater extraction.</p>
<p>S. No.</p>	<p>Solutions Highlighted in the news item and in para 2 & 3 of the Order dated 02.12.2025 in O.A. No. 618 of 2025</p>	<p style="text-align: center;"><u>RESPONSE</u></p>
	<p>Crop diversification and the use of climate resilient varieties</p>	<p>The Horticulture Department promotes diversification through</p>



	<p>introduction of cold-tolerant and short-duration fruit and vegetable crops, expansion of apricot, apple, seabuckthorn and walnut, and promotion of protected cultivation for off-season vegetable production. Emphasis is laid on climate-resilient varieties that are tolerant to frost, drought, temperature fluctuations, and pests, thereby ensuring stable yields under changing climatic conditions.</p> <p>By encouraging high-density plantations, improved rootstocks, quality planting material, and integrated crop management practices, the Department supports efficient land use and sustainable productivity. These interventions contribute to transforming food systems in Ladakh by enhancing climate resilience, improving farm incomes, conserving natural resources, and ensuring long-term sustainability of horticulture-based livelihoods.</p> <p>In order to address these challenges, the Department has taken the</p>
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		<p>following climate-resilient and sustainability-oriented initiatives in the region:</p> <p><i>Crop Diversification and Climate-Resilient Varieties</i></p> <p>The Department is promoting the cultivation of climate-resilient crops such as buckwheat, local peas and indigenous barley varieties, which are well-suited to the harsh agro-climatic conditions of Ladakh.</p> <p>During year 2024-25, the Department distributed 789.5 quintals of vegetable seeds (including peas), 679.2 quintals of Wheat seeds, 3.33 quintals of buckwheat, 281 quintals of Potato seeds, 2800 quintals of fodder seeds such as oats, maize and sorghum and 275 quintals of pulses including beans among the farming community of Ladakh. Superfoods like buckwheat and millets receive further encouragement under National Food security mission component Nutri-cereals.</p>
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	<p>Conservation and promotion of local species such as apples, apricots, peas, barley, wheat etc</p>	<p>The Agriculture and Horticulture Department promotes local horticultural species such as apricot and apple form the backbone of Ladakh's traditional farming systems and are well adapted to the region's harsh climatic and agro-ecological conditions.</p> <p>Conservation and promotion of these indigenous and locally adapted varieties are crucial for maintaining agrobiodiversity, enhancing climate resilience, and sustaining rural livelihoods.</p> <p>The Horticulture Department emphasizes conservation of local germplasm, rejuvenation of old and senile orchards, and promotion of locally adapted apple and apricot varieties that are tolerate to frost, low moisture availability and temperature extremes.</p> <p>Apricot, in particular, plays a vital role in local nutrition, traditional food systems, and income generation</p>



		<p>through value-added products such as dried apricots, apricot oil etc. Through distribution of quality planting material, orchard management support, capacity building of farmers, and promotion of value addition, the Department seeks to strengthen the production and economic viability of these local species. Conservation and promotion of apple and apricot not only support sustainable horticulture development but also contribute to climate resilient food systems, biodiversity conservation, and cultural heritage preservation in Ladakh.</p> <p>Conservation of Local Species</p> <p>Concrete efforts are being made to conserve and promote indigenous crop species like wheat, barley and local peas. These crops form an integral part of Ladakh's agricultural heritage and are naturally adapted to the local climate.</p>
	<p>Revival of traditional farming practices and</p>	<p>Agriculture and Horticulture Department takes measures for revival</p>



climate suited crops

of traditional farming practices and promotion of climate-suited crops are essential for strengthening sustainable and resilient horticulture in Ladakh's fragile mountain ecosystem.

Indigenous practices such as use of farmyard manure, composting, intercropping, water efficient irrigation channels (yuras) and community-based land management have historically sustained soil fertility, moisture conservation, and productivity under extreme climatic conditions.

The Horticulture Department has been emphasizing on the reintegration of these time-tested practices with modern scientific interventions to improve soil health, reduce external input dependency, and enhance climate resilience.

Promotion of locally adapted and climate-suited crops, including traditional varieties of apple, apricot, seabuckthorn, and cold-tolerant vegetables, helps ensure stable yields



		<p>under conditions of low rainfall, frost, and temperature variability. By supporting organic and natural farming approaches, protected cultivation, and farmer capacity building, the revival of traditional practices contributes to conservation of agrobiodiversity, efficient use of land and water resources, and strengthening of local food systems. This approach plays a critical role in transforming food, land, and water systems in Ladakh while safeguarding ecological balance and traditional knowledge.</p>
	<p>Increasing cropping intensity in the middle belt of Ladakh and promoting millets</p>	<p>Agriculture and Horticulture Department has been taking measures to enhance cropping intensity in the middle belt of Ladakh for improving land productivity, food security, and farmers incomes within the constraints of limited arable land.</p> <p>The Horticulture Department promotes efficient crop planning, use of short-duration and climate-resilient varieties, protected cultivation, and improved agronomic practices to</p>



maximize productive use of land during the short growing season. Adoption of improved irrigation methods and soil fertility management further supports higher cropping intensity. Promotion of millets such as finger millet, foxtail millet, and barnyard millet is being encouraged due to their low water requirement, short maturity period, high nutritional value, and resilience to climate stress. Integrating millets into existing cropping systems enhances dietary diversity, strengthens local food systems, and reduces dependence on external food supplies. Together, increased cropping intensity and millet promotion contribute to sustainable, climate-resilient agriculture and horticulture development in Ladakh.

Increased Cropping Intensity:

To optimize agricultural productivity, the department has revived the cultivation of buckwheat and millets as second crops in the lower belt of the region. This not only increases



		<p>cropping intensity but also improves soil health and provides additional income for farmers. <u>Also to increase the cropping intensity department has introduced Ladakh Green House.</u> As Ladakh being a cold arid region, the climate is harsh and very cold during winter season the temperature drip to below -20 degree centigrade which restrict the cultivation of crops under open condition, besides this, under Ladakh topography condition only one crops can be cultivated in one season i.e. from April to August and the region is fully depend on other neighbouring States/UT for vegetables and fruits during lean period but with the introduction of Ladakh Green House the farmers of region can now grow different types of vegetables throughout the season which not only control the carbon emission created due to trucks loaded with vegetables outside the state to Ladakh but also increase the health and income of farmers. <u>For this initiative Prime Minister Award for excellence in</u></p>
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		<p><u>Public Administration has been received for Ladakh Green House in the year 2022. Till date the department has constructed 3924 units of Ladakh Green House across the UT.</u></p>
	<p>Multi-tier agroforestry to enhance productivity and resilience</p>	<p><u>Agriculture and Horticulture Department also promotes</u> multi-tier agroforestry being it as a sustainable land-use approach with high relevance for Ladakh's fragile and resource-constrained agro-ecosystems. <u>By integrating horticultural trees, shrubs, crops, and fodder species in vertical layers, this system optimizes land use, enhances overall productivity, and improves climate resilience. Under this approach, fruit trees such as apple, apricot, and walnut form the upper tier, berry crops such as Seabuckthorn occupy the middle layer, while vegetables, millets, legumes, and fodder crops are grown in the lower tier. This diversified structure improves soil moisture retention, organic matter build-up, nutrient</u></p>



		<p><u>recycling, and protection against wind and soil erosion, which are critical in Ladakh's cold desert conditions.</u> The Horticulture Department promotes multi-tier agroforestry to ensure efficient utilization of shrinking land resources, diversification of farm income, and reduced risk from climate variability. By combining traditional knowledge with scientific planning, this system strengthens food security, ecological stability, and livelihood resilience, contributing significantly to the transformation of food, land, and water systems in Ladakh.</p>
	<p>Use of Organic manures and compost to main soil health</p>	<p>The agriculture and horticulture departments also promotes the use of organic manures and compost is vital for maintaining and stability, and livelihood resilience, contributing significantly to the improving soil health in Ladakh's fragile cold desert ecosystem. Soils in the region are naturally low in organic matter and moisture-holding capacity, making them highly dependent on organic inputs for sustained productivity. The</p>



		<p>Horticulture Department promotes application of farmyard manure, compost, vermin compost, green manures, and bio-inputs to enhance soil organic carbon, improve soil structure, and increase water retention. Organic manures also support beneficial soil microorganisms, improve nutrient availability, and reduce dependence on chemical fertilizers, which is particularly important under conditions of limited water and short growing seasons.</p> <p>Revival of traditional composting practices, combined with scientific nutrient management, helps restore soil fertility, reduce land degradation, and sustain horticultural productivity. Adoption of organic manures and compost contributes to climate-resilient farming, long-term soil health, and sustainable horticulture development in Ladakh.</p> <p>Use of Organic Manures</p> <p>Organic farming plays a vital role in promoting sustainable agriculture and</p>
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		<p>ensuring a healthier environment. By avoiding synthetic pesticides and fertilizers, it maintains soil fertility, conserves water, and reduces pollution. Organic farming also supports biodiversity, promotes ecosystem balance, and produces nutrient-rich food. Additionally, it empowers local farmers and contributes to a more sustainable food system. By adopting organic practices, we can create a healthier planet and healthier food for generations to come.</p> <p><u>Under the Paramparagat Krishi Vikas Yojana (PKVY), 135 villages have been brought under organic certification covering an area of 10000 hectares, with a long-term vision of transforming Ladakh into a complete organic farming zone.</u> To support this initiative, subsidies are being provided for the construction of vermi-compost pits, enabling farmers to produce organic manure locally and achieve self-sufficiency. Distribution of organic inputs like vermicompost and biofertilizers are steadily</p>
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		<p>increasing, alongside corresponding decline in chemical fertilizer usage.</p> <p>The Department is taking measures to promote biofertilizers and vermicompost as well. The data on comparative Procurement of different fertilizers is given below (2021 vs 2025)</p>												
		<table border="1"> <thead> <tr> <th data-bbox="798 795 949 1008">Fertilizer Type</th> <th data-bbox="949 795 1069 1008">2021 Procurement</th> <th data-bbox="1069 795 1197 1008">2025 Procurement</th> <th data-bbox="1197 795 1377 1008">Trend/ Observation</th> </tr> </thead> <tbody> <tr> <td data-bbox="798 1008 949 1579">Urea</td> <td data-bbox="949 1008 1069 1579">7,936 qtls</td> <td data-bbox="1069 1008 1197 1579">1,000 qtls</td> <td data-bbox="1197 1008 1377 1579">Significant reduction (focus away from chemical fertilizers)</td> </tr> <tr> <td data-bbox="798 1579 949 1944">Vermicompost</td> <td data-bbox="949 1579 1069 1944">7300 qtls</td> <td data-bbox="1069 1579 1197 1944">17,250 qtls</td> <td data-bbox="1197 1579 1377 1944">Large-scale introduction to promote organic</td> </tr> </tbody> </table>	Fertilizer Type	2021 Procurement	2025 Procurement	Trend/ Observation	Urea	7,936 qtls	1,000 qtls	Significant reduction (focus away from chemical fertilizers)	Vermicompost	7300 qtls	17,250 qtls	Large-scale introduction to promote organic
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			farming
Bio fertilize r	-	15,00 0 qtls	Strong emphasis on sustainab le soil health
<p>In addition, 200 hectares of land have been brought under Natural Farming under the National Mission on Natural Farming (NMNF).</p>			

I hereby state that I have gone through the contents of the Affidavit and further state that the contents thereof are true and correct on the basis of the records maintained by various Departments of Union Territory of Ladakh in the ordinary course of business. The information contained herein has been duly submitted by the respective Departments of UT Ladakh for compilation of this Compliance Affidavit. I further state that nothing material has been concealed therefrom or mis-stated, and that the answering Respondent is duty bound to obey the directions and orders of this Hon'ble Tribunal.

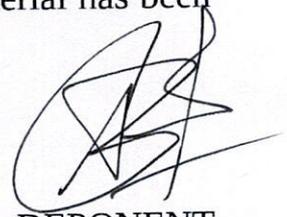
I further state and crave leave of this Hon'ble tribunal that the Hon'ble Tribunal may kindly give liberty to file additional affidavit of compliance if found necessary to assist the Hon'ble Tribunal.



VERIFICATION


DEPONENT
Forest, Ecology and Environment
UT of Ladakhⁿ

Verified at Leh, UT Ladakh on this 23rd day of March 2026 that the contents of the above Affidavit are true and corrected on the basis of the official records maintained in regular course of business by the responding Departments of UT Ladakh and nothing material has been concealed therefrom or mis-stated herein.


DEPONENT
Forest, Ecology and Environment
UT of Ladakh

Certified that Smt. Anupam Bhardwaj (Ks)
Who is identified by Sonam Yangyel (Yangyel)
and witnessed by Legal Assistant (Forest, Ecology and Environment)
presented this affidavit before me today
the 23rd day of March 2026
& administered Oath to her/him who
Swere/Solemnly affirmed to the contents
of this affidavit, Hence attested


NOTARY PUBLIC
VH-LADAKH

ad
23/3/2026

REGD. NO. 780
DATE 23rd March / 2026.

I/29616/2024

संघ राज्य प्रशासन, लद्दाख

जन स्वास्थ्य अभियांत्रिकी/
सींचाई एवं बाढ़ नियंत्रण विभाग

सत्यमेव जयते

THE ADMINISTRATION OF
UNION TERRITORY OF LADAKH

PHE/I&FC DEPARTMENT

F. No. M/995/2023-(PHE, I&FC) SECTION/2569-2588

ई-मेल/email:pstocomsecutl@gmail.comयूटी सचिवालय, लेह/UT Secretariat, Leh,
Dated:23.12.2024.**Subject: Illegal extraction of Ground Water Resources in Leh District.****Order No.91-LA(PHE/I&FC) of 2024,
Dated:23.12.2024.**

WHEREAS, Ladakh is an arid to semi-arid region with limited water resources, and most of the water sources are seasonal such as glacial, and permafrost melt water and the visible effects of climate change, in the form of decrease in snowfall, thinning glaciers, retreating glacial lakes and streams have been witnessed in the region;

WHEREAS, some parts of the Union territory have become water stressed and with the rapid growth in demand for water due to rapid urbanization, high tourist growth and migrating population including traders and labourers, may pose a serious challenges to water security in future; which coupled with growth in economic activity inevitably may further lead to an increase in water demands for a variety of purposes, including domestic, commercial, industrial, irrigation, hydropower generation, and recreation;

WHEREAS, due to limited water resources in the Union territory, some areas particularly in the Leh District have become increasingly dependent on groundwater, resulting in over-exploitation of groundwater resources, raising concerns about the need for scientific management, conservation, and regulation of the ground water resources;

WHEREAS, the Ground Water Resources Estimation report as of March,2024 of the Central Ground Water Board, Ministry of Jal Shakti has reported that

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the following areas in Leh Block in Leh District as '**Semi Critical**' for extraction and use of the ground water resources;

S.No	District/Tehsil	Areas
1.	Leh	Gompa Gangless
2.		Sankar Yourtung
3.		Leh
4.		Skara
5.		Choglamsar
6.		Saboo
7.		Spituk
8.		Phey
9.		Phyang

WHEREAS, further extraction of the Ground Water Resources in the above areas may lead to critical situation of the availability of ground water resources in these areas for meeting the increased demand of water resources;

WHEREAS, the Central Ground Water Authority in light of the directions of the Hon'ble Green Tribunal, Principal Bench, New Delhi in the O.A. No. 694/2023 tilted "*UN predicts Groundwater level in India will reduce to low by 2025*" and in exercise of Section 5 of the Environment (Protection) Act, 1986 read with paragraph (2) of the Notification of Government of India vide S.O. 38 (E) dated: 14.01.1997, has passed the following direction to the Union territory;

- 1. Enforce and monitor the Groundwater drawl in the UT of Ladakh and an action taken report on the illegal borewells in be provided to the Authority by 20.12.2024.*
- 2. Environmental Compensation (EC) as per MoJS guidelines be imposed on the illegal ground water withdrawal by Housing Complexes, Industrial units, commercial establishment and several other entities, till the EC provision is being incorporated in the State Ground Water Authority guidelines.*

NOW THEREFORE, in view of the above, extraction of ground water through borewells in the above areas will be regulated strictly as per provisions of the Jammu & Kashmir Water Resources (Regulation & Management) Act, 2010 read with J&K Water Resources (Regulation & Management) Rules, 2011 and digging of new

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borewells for extraction of ground water resources in the above semi critical areas of Leh district shall be deemed to have been banned and declared as illegal borewells w.e.f. 01st of December, 2024; except those permitted by authority obtained from the Deputy Commissioner & District Magistrate, Leh.

By order of the Administration of UT of Ladakh.

Sd/-

(माइकल एम. डिसूज़ा / Michael M. D'Souza) IAS

प्रशासनिक सचिव/Administrative Secretary,
PHE/I&FC Department.

Copy to the: -

1. Chairman, Central Water Commission, Department of Water Resources, River Development & Ganga Rejuvenation, Ministry of Jal Shakti, Government of India.
2. Chairman, Central Ground Water Resources Authority, Ministry of Jal Shakti, Government of India.
3. Joint Secretary (JKL), Ministry of Home Affairs, Government of India.
4. Joint Secretary, Department of Water Resources, River Development & Ganga Rejuvenation, Ministry of Jal Shakti, Government of India.

Copy also to the: -

1. All Administrative Secretaries, UT of Ladakh.
2. Director General of Police, UT of Ladakh.
3. Commissioner/Secretary to Hon'ble Lieutenant Governor.
4. Deputy Commissioners/CEOs, LAHDC, Leh/Kargil.
5. All Heads of the Departments.
6. Joint Director, Information.
7. Chief Engineer, PHE/I&FC (Prescribed Authority) for circulation and enforcement of the of above Order.
8. Superintending Engineers, PHE/I&FC Circles, Leh/Kargil.
9. State Informatics Officer, NIC, Ladakh.
10. OSD to Lieutenant Governor for information of the Hon'ble Lieutenant Governor.
11. Pvt. Secretary to Advisor, Ladakh for information of the Advisor.
12. Superintendent, Archives, Archaeology & Museums.
13. Pvt. Secretaries to Chief Executive Councilors, LAHDC, Leh/Kargil *for information of the Hon'ble CECs.*
14. Pvt. Secretary to Administrative Secretary, PHE/I&FC Department for information of the Secretary.
15. Order/Stock file (w.2.s.c)/e-file No.13986.

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(जाकिर हुसैन/Zakir Hussain), JKAS

प्रशासन के उप सचिव/Deputy Secretary to the Administration.