



6 CLEAN WATER  
AND SANITATION



### SDG 6: Clean Water and Sanitation

Report 2023-24

#### 6.1: Research on Water

K.R. Mangalam University has made significant research contributions toward achieving **Sustainable Development Goal 6 (SDG-6): Clean Water and Sanitation**, focusing on water quality, wastewater treatment, pollution mitigation, and sustainable water resource management. Between 2014 and 2024, the University produced **1,042 Scopus-indexed publications**, of which **25 research papers** are aligned with SDG-6. These publications collectively received **490 paper views**, achieved a **citation index of 21.52**, and recorded a **Field Citation Average (FCA) of 7.10**, demonstrating the University's impactful presence in global water sustainability research.

##### 6.1.1: Clean Water and Sanitation – CiteScore

In 2024, the **cumulative CiteScore** for SDG-6 publications reached **60**, reflecting a consistent record of publishing high-quality research in reputed international journals. The research outputs span areas such as clean water technologies, eco-friendly purification materials, hydrological modeling, and efficient sanitation systems. This high CiteScore underscores the scholarly recognition and global visibility of the University's research in advancing water conservation and management strategies.

##### 6.1.2: Clean Water and Sanitation – FWCI

The SDG-6 aligned research at K.R. Mangalam University recorded an **average Field-Weighted Citation Index (FWCI) of 1.92**, indicating above-average global impact. This performance demonstrates that the University's publications are widely cited and relevant to researchers and practitioners working on sustainable solutions for water treatment, reuse, and sanitation. The impact reflects the interdisciplinary strength of the University's environmental and engineering research teams.



### **6.1.3: Clean Water and Sanitation – Publications**

Out of the total Scopus-indexed publications, **25 research papers** are directly aligned with SDG-6, with **490 paper views** and a **Field Citation Average of 7.10**. These studies highlight the University's commitment to environmental stewardship, innovation in water purification, and the promotion of safe sanitation practices, supporting the objectives of the SDG-6.

### **6.2 Water Consumption per Person**

K.R. Mangalam University, built in the vast Aravalli foothills of Gurugram, is committed to fulfilling the global goal of ensuring the availability and sustainable management of water and sanitation for all by involving an integrated approach toward the sustainable management of water. The University's green campus involves rainwater harvesting structures, a fully functional STP for recycling wastewater, and sensor-based taps that reduce wastage. Active outreach programs and experiential learning initiatives on water conservation and hygiene awareness are also being carried out by this institution for students and the local communities. Sustainability principles integrated into the operations of the campus, research, and community engagement at K.R. Mangalam University advance the vision of Clean Water and Sanitation by ensuring prudent use of water for present and future generations.

#### **6.2.1 Water consumption tracking Year: 2024**

K.R. Mangalam University monitors water through a combination of municipal supply, borewell extraction and on-campus storage and recycling systems. The campus draws water primarily for hostel and academic block operations, supplemented by rainwater harvesting and treated wastewater reuse.



*Overhead water tank in University for potable water storage*



***Bore wells are also one of the major water resources in the University. It is 3 inches wide & 220 feet. Deep***

The University campus consists of underground tank (Pump Room) of total capacity 4 lakh liters near Block A (Pump Room) wherein underground tanks no.1 & no.2 have a capacity of 1 lakh liters each for domestic use and underground tanks no.3 & no.4 have a capacity of 1 lakh liters each for Fire Fighting purpose & overhead tanks on block A, B, C & hostel building



***Underground Domestic Tank 2 nos. and Fire Fighting Tanks 2 nos.***



**Each block has two tanks for domestic water supply as well as for the firefighting system with a capacity of 50,000 litres each. In hostel building 25,000 liters capacity tank is provided. Maintenance and cleaning of overhead water tanks are done periodically.**

As per the university's data:

- **~65,000 litres/day** of water is used in hostels
- **~30,000 litres/day** in Academic Blocks A, B & C (approximation due to non-installed meters)
- **Total approx. daily usage  $\approx 95,000$  litres/day ( $\sim 95$  m<sup>3</sup>/day)**

On an average 65,000 Ltr water per day is used in hostel and approx 30,000 Ltrs water is consumed in A, B & C block.



### Water Consumption Tracking

#### Assessment of Water Usage Measurement: Monitoring Total Water Volume from Various Sources 2023-24

Months	Water received				Water used		Water recycled
	Municipal piped supply (KL)	Borewell (KL)	Water brought by tanker (KL)	Total water received (KL)	Water used (Academic blocks)	Water used (Hostel blocks)	Water recycled (Through STP)
June '23	2,000	1,500	0	3,500	1,400	1,800	300
July '23	2,200	1,400	0	3,600	1,500	1,900	350
Aug '23	2,100	1,400	0	3,500	1,400	1,800	300
Sept '23	2,000	1,300	0	3,300	1,300	1,700	300
Oct '23	2,300	1,200	0	3,500	1,400	1,700	400
Nov '23	2,400	1,100	0	3,500	1,400	1,700	400
Dec '23	2,100	1,100	0	3,200	1,200	1,600	400
Jan '24	2,000	1,000	0	3,000	1,100	1,500	400
Feb '24	2,100	1,100	0	3,200	1,200	1,600	400
March '24	2,300	1,200	0	3,500	1,400	1,800	400
April '24	2,400	1,300	0	3,700	1,500	1,900	400
May '24	2,600	1,400	0	4,000	1,600	2,000	400
June '24	2,500	1,400	0	3,900	1,500	2,000	400



### 6.2.2 Water consumption per person

Water usage is being handled proactively at the University. The University remains committed to environmental stewardship, aligning its efforts with global initiatives that promote responsible consumption.

Total approx. daily water usage: 30 litres per capita/day

Total Campus population: 3,200 persons

Total no of students: 2,700

Total no of staff: 500

Total approx. daily water usage for 3200 persons  $\approx$  96,000 litres/day ( $\sim$ 96 m<sup>3</sup>/day)

Annual water consumption volume:

$$96 \text{ m}^3/\text{day} \times 365 \text{ days} = 35,040 \text{ m}^3/\text{year}$$

$$\text{Per capita water consumption} = \frac{\text{Annual water use (m}^3/\text{year})}{\text{Total Campus population}}$$

$$\text{Per capita water consumption} = \frac{35,040 \text{ m}^3/\text{year}}{3200}$$

$$= 10.95 \text{ m}^3/\text{person/year}$$

The university's estimated per-capita freshwater consumption is approximately 10.95 m<sup>3</sup> per person per year for the 2023–24 reporting period. This reflects the University's ongoing emphasis on responsible water management, supported by campus systems such as a 100 KLD sewage treatment plant with reuse provisions, rainwater harvesting across 17 pits, borewell recharge structures, and underground water storage tanks. Conscious conservation practices are encouraged across the campus, including the use of sensor-based taps in several locations to minimise wastage, efficient plumbing fixtures in hostels, and continued awareness initiatives that promote mindful water use among students and staff. It is important to note that this figure represents freshwater intake only, as treated wastewater is reused for landscaping and flushing, supporting a circular and resource-efficient approach. K. R. Mangalam University remains committed to strengthening water stewardship and expanding conservation efforts as part of its sustainability mission.



***Water-efficient washbasins installed at K.R. Mangalam University, Sohna — equipped with sensor-based taps to minimise water wastage and promote responsible water usage across campus***

### Water Management Infrastructure

Component	Details	Evidence
Total campus area	26.4 acres	Campus layout
Water supply sources	Municipal Water, Borewell; earlier tanker supply discontinued	Utility bills / Logs
RO Drinking Units	29 units installed	Photos + AMC
Rainwater Harvesting Pits	17 pits (3 × 3 m each, 3 m deep)	RWH layout & photos
Overhead water tanks	4 tanks, 100,000 L each (academic & hostel blocks)	Photos
OH1- Location (Block A)	Capacity 100,000 L litres	Cleaning logs
OH2- Location (Block B)	Capacity 100,000 L litres	Cleaning logs
OH3- Location (Block C)	Capacity 100,000 L litres	Cleaning logs
OH4- Location (Hostel Block)	Capacity 100,000 L litres	Cleaning logs
Underground water tanks	4 UG tanks, including firefighting reserve ≈ 200,000 L total	Photos
UG1- Location (Block A)	Capacity 50,000 litres,	Cleaning logs
UG2- Location (Block B)	Capacity 50,000 litres	Cleaning logs



UG3- Location (Block C)	Capacity 50,000litres	Cleaning logs
UG4- Location (Hostel Block)	Capacity 50,000 litres	Cleaning logs
Sewage Treatment Plant (STP)	100 KLD operational + new 300 KLD under installation	STP Purchase order + photos
Sprinkler / Drip irrigation	Yes, 100 % coverage	Photos

### Water Conservation Measures

Indicator	Status	Evidence
Sensor-based taps	Yes	Photos
Dual flush + Low-flow fixtures	Yes	BOQ
Leak detection system	Manual inspection and audit each semester	Maintenance logs
Plumbing audits	Bi-annual (2 per year)	Audit log
Hygiene signage	Displayed in the washrooms and canteen areas	Photos

### Wastewater Treatment & Pollution Prevention

Parameter	Value	Evidence
STP Capacity	100 KLD (existing) + 300 KLD (new)	STP PO
Average operation/day	24 hours	STP log
Wastewater treated/day	50 KL	Log sheet
Effluent reused	80 % (for gardening & bus washing)	Reuse register
TDS/pH values	Within CPCB limits (pH 7.7 / BOD 2.3 / COD 19.6 mg/L)	Lab reports
Rainwater drains covered	Yes	Photo
Grease traps / Lab waste segregation	Yes – canteen & labs	Photo



### Drinking Water & Hygiene

Indicator	Details	Evidence
Free drinking water access	Yes – RO points in each building & public RO at main gate	Photos
RO maintenance	AMC maintained quarterly	AMC
Water quality checks	Quarterly testing from ISO lab	Test reports
Public RO facility at main gate	Yes	Photo

### Water-Conscious Buildings & Landscaping

Indicator	Value / Status	Evidence
RWH pits	17	Photos
Drip irrigation	Installed – 72,000 sq m coverage	Photos
Native & medicinal plant species	1,409 trees (Pipal, Ashok, Coro carpus etc.)	Horticulture register
Organic composting for irrigation	Yes – wet waste converted to compost	Compost logs

### Water Reuse Data

Metric	Value	Evidence
STP treated	18,000 m <sup>3</sup> / year	STP log
Recycled water used	14,000 m <sup>3</sup> / year	Reuse log
Reuse applications	Irrigation and flushing	Photos
Reuse % of total demand	75–80 %	Calculation sheet



### **6.3 Water usage and care**

K.R. Mangalam University has established on-campus wastewater treatment infrastructure to support responsible water management and reduce freshwater dependence. The University operates a 100 KLD Sewage Treatment Plant (STP), which enables treatment of wastewater generated from academic buildings, hostels, and common facilities. As per institutional documentation, treated water is primarily reused for landscape irrigation and toilet flushing, helping conserve potable water resources and encouraging a circular water-use approach.

Routine operational checks, maintenance schedules, and repair records for the STP are maintained to ensure consistent functioning. Periodic laboratory testing of treated effluent is carried out to monitor water quality parameters in compliance with regulatory requirements. Rainwater harvesting systems and borewell recharge structures work in tandem with the STP to support groundwater replenishment and sustainable water use across the campus.

The University promotes conscious water practices through awareness efforts and facility-level interventions, including sensor-based taps in washrooms to minimize water wastage, regular plumbing checks to avoid leakages, and student-driven campaigns encouraging thoughtful consumption. K.R. Mangalam University remains committed to enhancing wastewater monitoring, transparently reporting effluent quality, and strengthening reuse practices, contributing to efficient resource management and long-term groundwater conservation.

#### **6.3.1 Wastewater treatment**

K.R. Mangalam University demonstrates a strong institutional commitment to environmental stewardship through the installation and operation of an on-campus 100 KLD Sewage Treatment Plant (STP) that ensures all wastewater generated within the university premises is effectively treated before being released or reused.

The K.R. Mangalam University, through an effectively working Sewage Water Treatment Plant, achieved a wastewater treatment coverage of 4.6% with an enhanced water reuse efficiency of 1.2%, highlighting the effort toward ecological balance and sustainability of campus operations.



*STP infrastructure at K R Mangalam University — enabling efficient wastewater treatment and reuse, contributing to campus water sustainability.*



*Sewage Treatment Plant (STP) at K.R. Mangalam University, Sohna — designed for efficient wastewater treatment and reuse for landscaping and non-potable purposes*



### 6.3.2 Preventing water system pollution

K.R. Mangalam University has implemented an effective mechanism wherein polluted water cannot come into the main water supply and drainage system to maintain environmental sustainability and campus safety. The University has a 100 KLD STP that treats all generated wastewater from hostels, academic blocks, and cafeterias before it is discharged or reused. Treated effluent is reused for non-potable applications such as landscaping and toilet flushing, reducing environmental burden and preventing wastewater contamination of soil and groundwater.

For this purpose, strict wastewater management protocols are followed to avoid the accidental discharge of chemical or contaminated water. Rainwater harvesting structures and borewell recharge pits are monitored to ensure that only clean rainwater enters recharge systems. Routine plumbing maintenance helps prevent leakages and contamination risks. In addition, awareness messages are periodically shared across campus to promote responsible disposal practices and discourage littering or waste discharge into storm-water drains.

The University also undertakes periodic checks in the drainage pipeline, tanks, and storage areas to locate and prevent leakages or blockages. The University remains committed to strengthening monitoring processes and continuing to improve pollution-prevention practices in alignment with sustainable campus operations.



*Rainwater harvesting structures are monitored to ensure that only clean rainwater enters recharge systems.*



*All stormwater drain openings are covered to curtail waste and debris from entering the drainage system*

### 6.3.3 Free drinking water provided

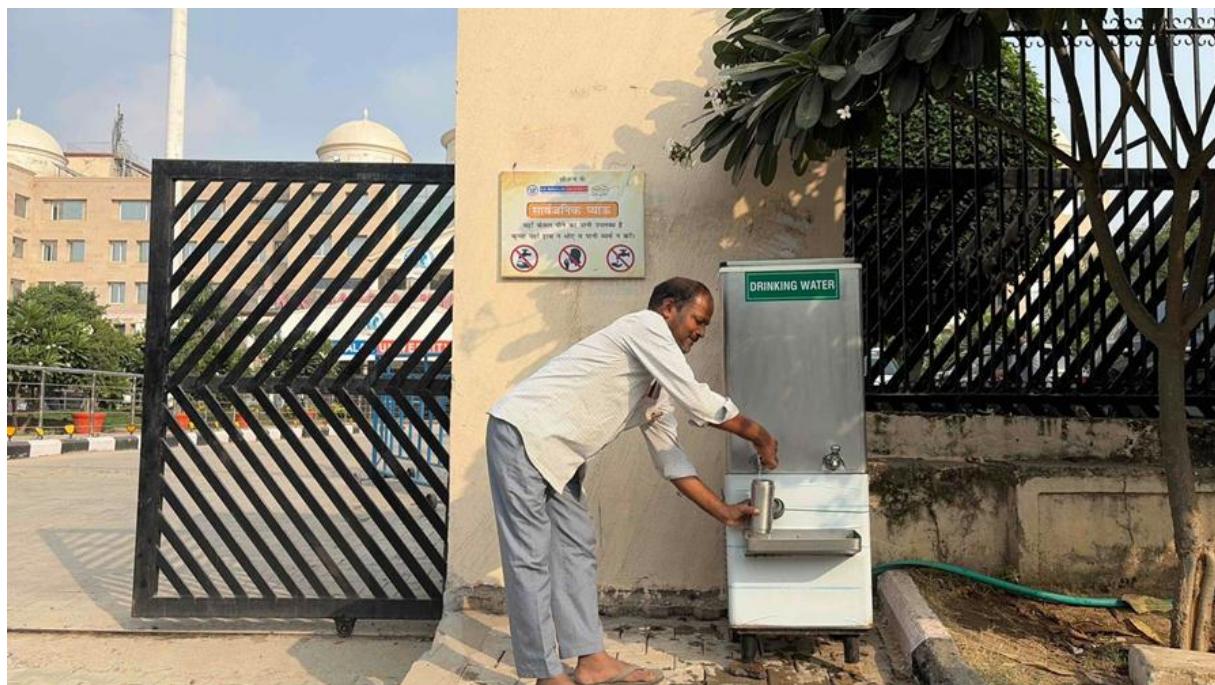
K.R. Mangalam University provides free access to purified drinking water for all students, faculty, staff, and visitors across the campus. Drinking-water points equipped with RO purification units and water coolers are installed in all academic blocks, administrative buildings, hostel areas, cafeterias, and public corridors to ensure uninterrupted availability.

Water quality is monitored through periodic testing, and RO units are maintained under annual service contracts with scheduled filter replacement and sanitation checks. These measures ensure that safe, hygienic drinking water is consistently supplied. The University also encourages the campus community to use personal refill bottles to reduce dependence on disposable packaged drinking water and support waste-free hydration practices.

K R MANGALAM UNIVERSITY remains committed to strengthening access, improving monitoring systems, and maintaining transparency in drinking-water safety and delivery through regular maintenance, quality checks, and awareness initiatives.



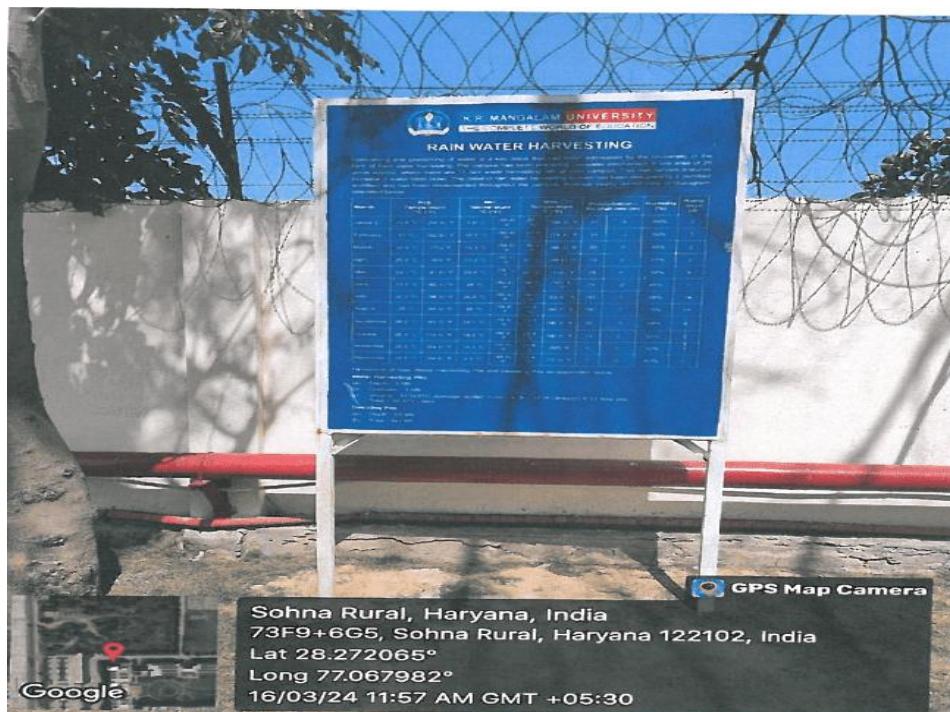
*RO-based drinking water facility installed in academic block to ensure safe and free water access.*



*Public drinking water facility at the entrance of K.R. Mangalam University, ensuring free and safe access to potable water for visitors, campus workers, and community members.*

**6.3.4 Water-conscious building standards** K.R. Mangalam University is committed to ensuring access to safe and free drinking water to all its students, faculty, staff, and visitors within the 28-acre campus of the university, aligning with SDG 6 - Clean Water and Sanitation. The University has installed a network of RO systems and water Coolers in every academic block, hostel, cafeteria, administrative office, and public area to ensure uninterrupted availability of potable water.

During the assessment period, around 15,00,000 litres of purified drinking water were supplied across the campus. All RO units are maintained on annual service contracts that include routine cleaning, replacement of filters, and testing to check whether they conform to health and safety standards. Water quality is tested on a regular basis through accredited laboratories for TDS and purity monitoring, thus ensuring water is fit for human consumption. Besides these contributions, K.R. Mangalam University reaffirms its commitment to sustainability and community health by ensuring safe, clean, and free drinking water is a basic right for all within the campus ecosystem.

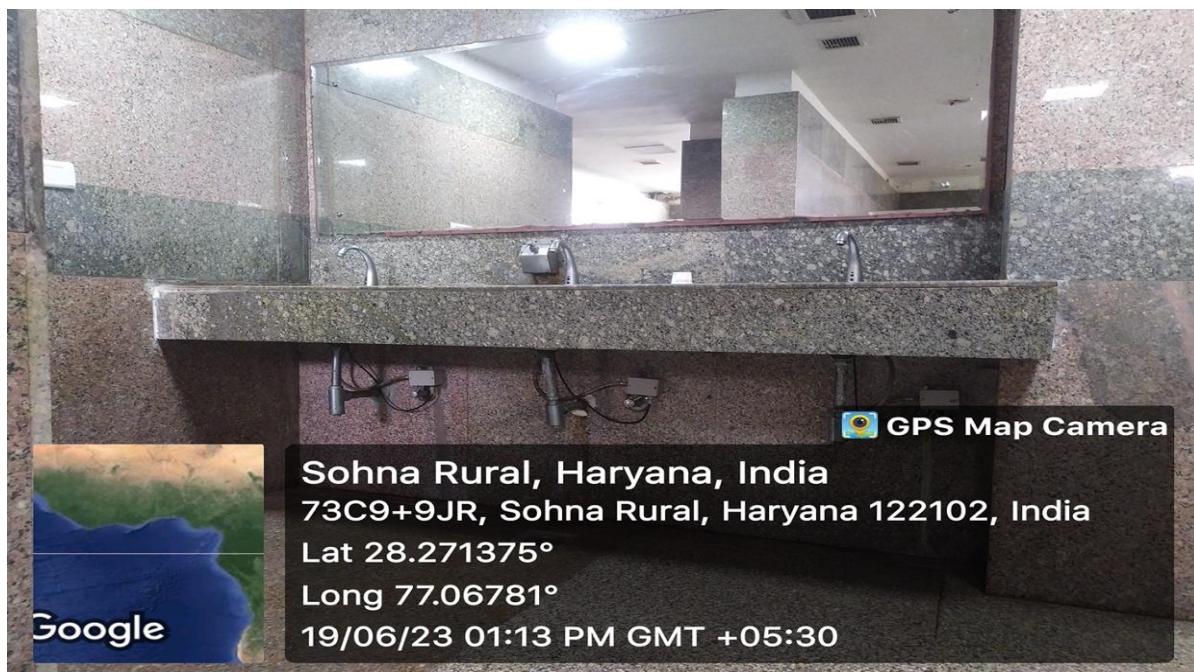


*Rainwater Harvesting Information Board installed at K.R. Mangalam University, displaying details of recharge pits and collection systems*



**GPS Map Camera**  
Sohna Rural, Haryana, India  
NH 248A, Sohna Rural, Haryana 122103, India  
Lat 28.272038°  
Long 77.067953°  
16/03/24 11:58 AM GMT +05:30

*Rainwater Harvesting Pits at K.R. Mangalam University, Sohna — constructed to collect and recharge rainwater into the groundwater table, promoting sustainable water conservation practices*



**GPS Map Camera**  
Sohna Rural, Haryana, India  
73C9+9JR, Sohna Rural, Haryana 122102, India  
Lat 28.271375°  
Long 77.06781°  
19/06/23 01:13 PM GMT +05:30

*Water-efficient washbasins installed at K.R. Mangalam University, Sohna — equipped with sensor-based taps to minimize water wastage and promote responsible water usage across campus*



***Drip irrigation system under protected cultivation at K.R. Mangalam University, promoting efficient water use in agriculture by minimizing wastage and ensuring sustainable farming practices***

### **6.3.5 Water-conscious planting**

K.R. Mangalam University follows water-conscious landscape practices to support long-term ecological balance and reduce the demand on freshwater resources. The campus landscaping programme prioritizes native and climate-appropriate plant species that can thrive in local conditions with lower irrigation needs. Treated wastewater from the 100 KLD Sewage Treatment Plant (STP) is utilised for horticulture, reducing reliance on potable water for maintaining green areas. Along the campus perimeter, two-tier plantations have been completed. Shade-bearing and fruit-bearing plants such as Ashok, Sondana, Kusum, Vismarkya, Kachnar, Pilkan, Sashut, Champa, and others are planted. There is a nursery, a fully operational greenhouse, a composting unit to supply organic manure, and skilled labour to perform horticultural tasks. Numerous horticultural plant varieties are housed in an organic orchard. The university is ecologically sound and is home to many birds and butterflies because of its natural vegetation patches. During the biodiversity survey, 40 butterflies and 120 birds were recorded on campus.



List of medicinal and aromatic plants at K.R. Mangalam University requiring low water for cultivation

S. No.	Plant (Common Name)	Botanical Name	Family	Qty.	Uses
1	Ajwain	Trachyspermum ammi	Umbelliferae	10	Stimulant, Carminative
2	Curry-patta	Murraya koenigii	Rutaceae	8	Treatment of diarrhoea & gastrointestinal diseases
3	Datura	Datura metel	Solanaceae	10	Antiasthmatic and Anticholinergic
4	Amla	Emblica officinalis	Phyllanthaceae	7	Antiscorbutic, Antioxidant
5	Ashwagandha	Withania somnifera	Solanaceae	7	Glaucoma, Diuretic
6	Brahmi	Bacopa monnieri	Scrophulariaceae	10	Memory enhancer, Antipyretic
7	Tulsi	Ocimum sanctum	Lamiaceae	8	Immunity Booster, antipyretic Astringent
8	Lemon Grass	Cymbopogon flexuosus	Graminae	10	Flavouring agent, Carminative
9	Neem	Azadirachta indica	Meliaceae	10	Antimalarial, Antimicrobial

#### 6.4 Water reuse

K.R. Mangalam University has established an effective water reuse system that reflects a strong commitment to SDG 6, Clean Water and Sanitation, through sustainable campus management. The Sewage Treatment Plant (STP) at the University has a pivotal role in recycling wastewater coming from hostels, academic blocks, and cafeterias. Then, this treated water is used safely



for gardening purposes, landscaping, and flushing toilets to ensure that untreated wastewater is not disposed of into the environment.

A well-designed sprinkler irrigation network has been installed across the campus gardens and green areas, utilizing treated wastewater efficiently while preventing waterlogging and wastage. The sprinklers work on a scheduled system to retain moisture at an optimum level without overutilizing the resources.

Further, to minimize the wastage of water, sensor-based taps are fitted in restrooms and public wash areas. The automatic taps help in controlling the unnecessary flow of water, thereby using water only when needed. Regular maintenance checks are conducted by the facilities team to ensure all systems—STP, pipelines, and sensors—are working efficiently and sustainably.



*On-campus sprinkler irrigation system at K.R. Mangalam University utilizing treated wastewater for landscape maintenance.*

#### **6.4.1 Water reuse policy**

K.R. Mangalam University follows a structured approach through its Sustainable Environment and Green Campus policy to treat and reuse water as part of its campus water management and conservation efforts. The University operates an on-site 100 KLD Sewage Treatment Plant (STP) that enables recycling of wastewater generated from hostels, academic blocks, and common facilities. Treated water is used primarily for landscape irrigation and toilet flushing, reducing dependence on freshwater resources and supporting a circular-use model.



Water distribution pipelines are connected from the STP to designated irrigation zones, and sprinkler-based watering systems are deployed in selected areas to minimise wastage. Routine plant checks, maintenance work, and scheduled desludging support continuous operation. The University continues to enhance reuse system efficiency by improving piped distribution, strengthening monitoring practices, and promoting the conscious use of recycled water as part of sustainable campus operations.

#### Sustainable Environment and Green Campus Policy

#### **6.4.2 Water reuse measurement**

K.R. Mangalam University maintains an on-campus STP and measures and reuses treated wastewater. Treated wastewater from the 100 KLD STP is reused for campus horticulture and flushing. Recycled water is utilized for gardening, landscape irrigation, and sanitation, which greatly reduces the demand on freshwater sources. Regular monitoring and reuse logs are performed to ensure sustainable water management. During AY 2024, the university reused  $\sim 18,250 \text{ m}^3$  of treated wastewater for campus landscaping and non-potable uses, based on the STP's average daily treated volume of  $\sim 50 \text{ m}^3/\text{day}$  (plant run  $\sim 12 \text{ hours/day}$ ).

STP capacity **100 KLD** (max treatable).

The plant is **run  $\sim 12 \text{ hours/day}$** , treating  $\approx 50 \text{ KLD}$  on average,

Calculation for water reuse measurement:  $50,000 \text{ L/day} \times 365 = 18,250,000 \text{ L/year}$   
 $= 18,250 \text{ m}^3/\text{year}$ .

Upper-bound reuse capacity (at full design run):  **$36,500 \text{ m}^3/\text{year}$**

#### **6.5 Water in the community**

K.R. Mangalam University undertakes initiatives to promote water awareness, conservation practices, and responsible resource use in the surrounding community. Campus activities include student-led outreach through NSS and schools of the university, plantation and maintenance drives, and sensitisation programmes on wastewater reuse, rainwater harvesting, and mindful water consumption.

The University provides free drinking-water access at the main entrance, supporting visitors, daily commuters, and campus labourers. Signage encouraging refillable bottles and reduced



single-use plastic supports responsible hydration practices. Campus gardeners are guided in efficient irrigation methods, particularly through the use of treated water from the on-site STP. Awareness sessions, group discussions, and observation days such as Environment Day are conducted annually. Students participate in neighbourhood sensitisation efforts, including visits to nearby communities and interaction with school students and campus staff, promoting the importance of water conservation and clean-water hygiene. These initiatives help foster a culture of water responsibility, extending University values beyond the campus boundary.

### **6.5.1 Water management educational opportunities**

The K.R. Mangalam University integrates education on sustainable water resources into various programs for inspiring a culture of environmental stewardship and responsible management of natural resources. Several academic courses under Clean Water and Sanitation are specifically designed to familiarize students with scientific, technical, and practical details related to water management systems, groundwater sustainability, and water-efficient infrastructure design.

#### **List of Academic courses**

<b>Program</b>	<b>Batch</b>	<b>Period</b>	<b>Course Code</b>	<b>Course Name</b>
B.Sc. (H) Agriculture	2021-2025	Semester-V	SAAG311A	RAINFED AGRICULTURE AND WATERSHED MANAGEMENT
B.Sc. (H) Chem (Research)	2023-2027	Semester-I	SEC007	GROUNDWATER MODELING
B.Tech Civil	2020-2024	Semester-VII	ETCE417A	GROUND WATER DEVELOPMENT
B.Arch	2022-2027	Semester-IV	APCE230A	BUILDING SERVICES-I (WATER SUPPLY & SANITATION)
B.Sc. (H) Agriculture	2023-2027	Semester-II	SAAG114A	SOIL AND WATER CONSERVATION ENGINEERING

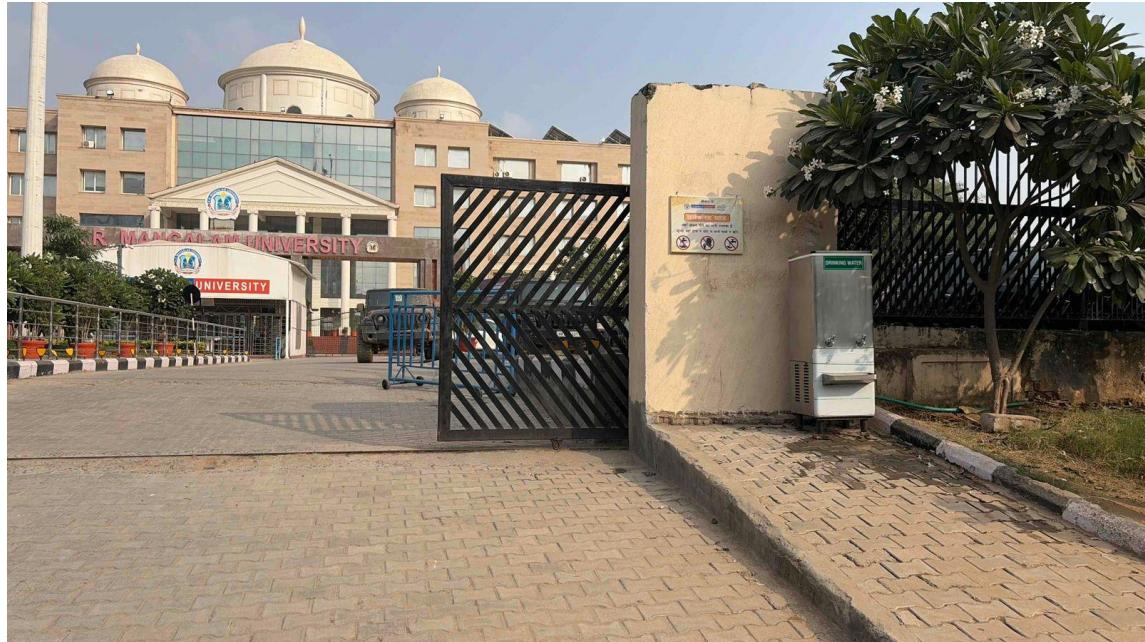


Also, the NSS conducts many extension activities and programs for educating the people from the nearby areas of the University. The extension activities taken by the various schools of the university conduct awareness sessions to inculcate knowledge and understanding of good water management.

#### **6.5.3 Off-campus water conservation support**

K.R. Mangalam University extends its commitment to environmental sustainability beyond campus boundaries through a range of community-oriented water conservation initiatives. In tune with SDG 6, Clean Water and Sanitation, the University actively supports nearby villages and local communities in promoting responsible usage of water, safe drinking practices, and sustainable resource management.

Key initiatives include setting up free drinking-water stations at and around the campus premises for use by the general public, daily commuters, and visitors from surrounding communities. Such stations ensure available safe, purified RO water is free of cost to reduce dependency on single-use bottled water and minimize plastic wastes.



***Free purified drinking water facility at K.R. Mangalam University promoting community welfare and sustainable water use.***

### 6.5.4 Sustainable water extraction on campus

K.R. Mangalam University follows sustainable water extraction and management throughout its 28-acre campus to help achieve the goals of SDG 6: Clean Water and Sanitation. The University ensures that the water drawn from underground sources, such as through bore wells, is managed through eco-friendly, regulated extraction systems that ensure the prevention of overexploitation and the maintenance of the groundwater balance.



*Groundwater extraction and recharge inspection point at K.R. Mangalam University*

### 6.5.5 Cooperation on water security

A Memorandum of Understanding was signed between K.R. Mangalam University and the National Mission for Clean Ganga, under the Ministry of Jal Shakti, Government of India, on 12th April 2023. This MoU focuses on collaborative efforts in river rejuvenation, water conservation, and environmental sustainability. It centers around research, awareness campaigns, student internships, and the establishment of 'Ganga Activity Centres' to support the Namami Gange Programme. The initiative encourages students to become 'Ganga Champions,' adopt ghats, and integrate river studies into academics. This partnership strengthens the university's commitment to sustainable development and environmental stewardship in alignment with national priorities.

[MoU with Ministry of Jal Shakti](#)

### 6.5.6 Promoting conscious water usage on campus

K.R. Mangalam University has pledged to ensure that water is used in a very responsible manner on campus. Sensor-based taps, efficient plumbing systems, and recycling of wastewater are in place to minimize wastage and utilize the resource judiciously. Continuous education, participatory activities, and visible signage on sustainability have helped in integrating responsible behavior and collective action, conforming to the spirit of Promotion of Conscious and Sustainable Water Use towards a greener and water-secure future.

### 6.5.7 Promoting conscious water usage in the wider community

K.R. Mangalam University supports the wider community through the provision of free drinking water facilities, provided at several points near the campus and accessible to local residents, visitors, and commuters. These purified RO water stations promote responsible use of water and ensure equity in access to safe drinking water, contributing to community water responsibility.



*Save water signage at drinking water facility at the campus entrance, promoting mindful water use and responsible hydration for community members and visitors.*



*Drinking water station with 'Save Water' signage, promoting responsible water use and sustainable campus hygiene practices.*



***Awareness session conducted at Government Senior Secondary School, Daulah, where K R MANGALAM UNIVERSITY volunteers sensitized students on wastewater health impacts, safe water practices, and hygiene through interactive discussions and street theatre.***



***NSS Coordinator with NSS volunteers and members during plantation drive***

These initiatives reflect K R MANGALAM UNIVERSITY's continued efforts to build awareness on clean water, safe sanitation, and green campus values, while fostering responsible citizenship and community participation in sustainable water and environmental practices.

The University will continue to strengthen its community partnerships, expand practical demonstrations of sustainable water-use systems, and enhance awareness through academic-community collaboration and student leadership programs.



S. No.	Title	Date	Link
1	Sewage Treatment Visit	01/03/2024	<a href="#">Report</a>
2	Cleanliness Drive at Lakhwa Village	01/10/2023	<a href="#">Report</a>
3	Field Visit for the Collection and Survey of Wild Flora Diversity – supports ecosystem conservation and watershed health	7/03/2024	<a href="#">Report</a>
4	Exploring Nature's richness & medicinal plant potential to broaden understanding of Pharmacognosy & sustainable healthcare practices	28/02/2024	<a href="#">Report</a>
5	Vriksha Ropan with NSS	29/10/2023	<a href="#">Report</a>
6	Plantation Drive Under the Theme “Green Earth Clean Earth”	29/06/2024	<a href="#">Report</a>
7	Poster Making Competition on World Environment Day	05/06/2024	<a href="#">Report</a>
8	Field Visit Report on Sultanpur Lake at Sultanpur Lake Gurugram	14/09/2023	<a href="#">Report</a>

K.R. Mangalam University's efforts under Clean Water and Sanitation reflect a robust and future-focused water-management ecosystem grounded in infrastructure, monitoring, and community engagement. With a 100 KLD STP enabling ~18,250 m<sup>3</sup>/year wastewater reuse, rainwater harvesting across 17 recharge structures, and sensor-based fixtures reducing wastage, the campus demonstrates strong stewardship of freshwater resources and circular-water use practices. Free potable water access, periodic water-quality testing, and strategic tank-based storage highlight a commitment to health, equity, and responsible consumption. Academic integration and outreach—including NSS initiatives, school-level awareness campaigns, and MoUs such as with the National Mission for Clean Ganga—extend impact beyond campus to strengthen community resilience and behaviour change. As the University advances towards championing inclusive, efficient, and climate-responsive water governance, reinforcing its role as a leader in institutional water sustainability.